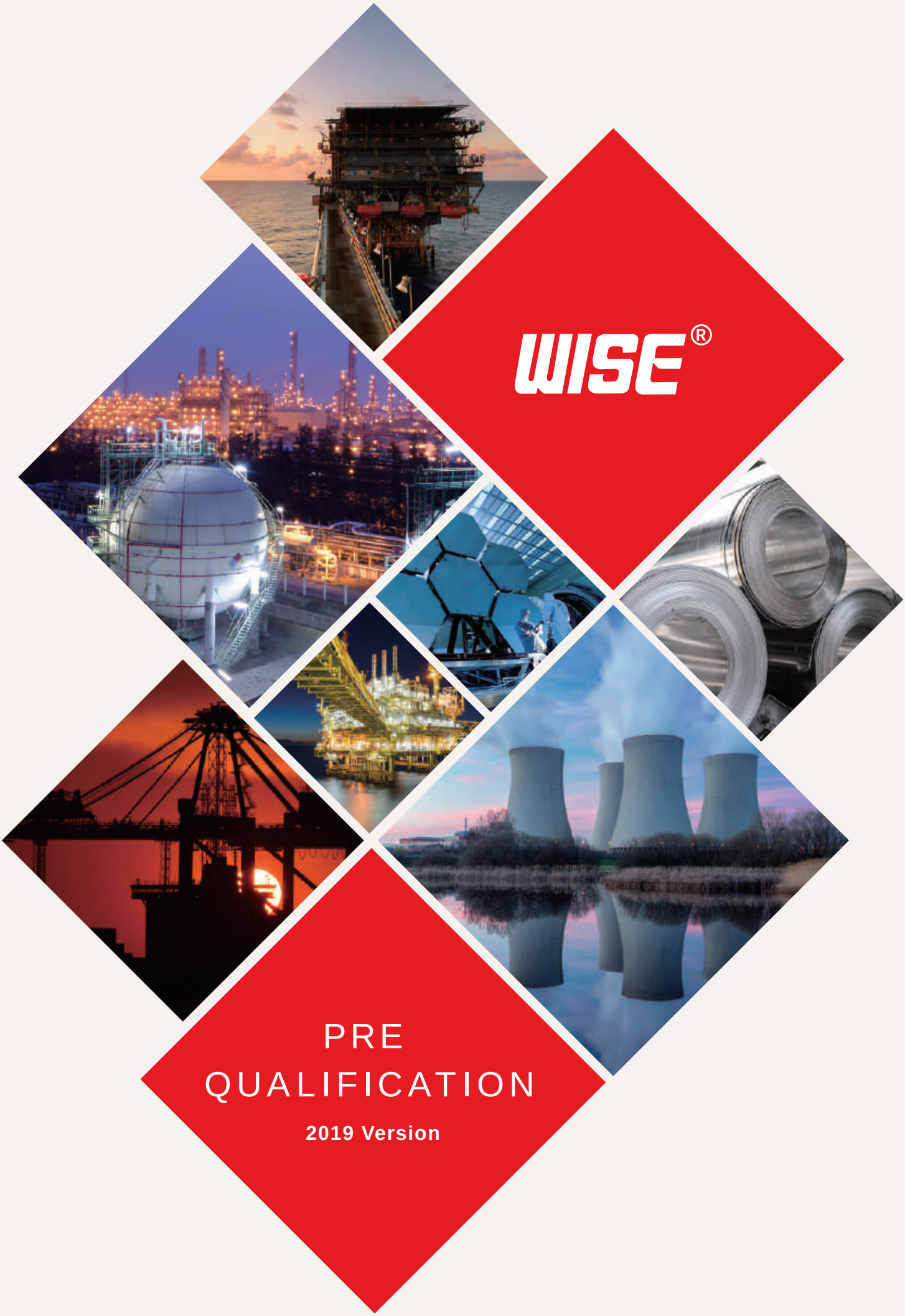


WISE®

# PRE QUALIFICATION

**2019 Version**

# Contents


| | |
|---|---|
| **COMPANY PROFILE** | Company profile |
| | Brief History |
| | The status of specialized Technical Lab Force |
| | Organization & Manpower |
| | Performance Within 3 Years |
| | Overseas sales results for the last 5 years |
| | Quality Policy |
| | HSE Record and Policy |
| | Major Products |
| | Capability |
| | Major Facilities |
| **FINANCIAL STATEMENT** | Financial Statement |
| | Main Award Records |
| **EXPERIENCE** | Experience |
| **CERTIFICATES** | Certificates |
| **VENDOR STATUS** | Overseas Vendor Registration Status |
| **DISTRIBUTORS & LOCATION** | Worldwide local distributors and business partners |
| | Company location |
| | Distributors |

Model No. SMT Series

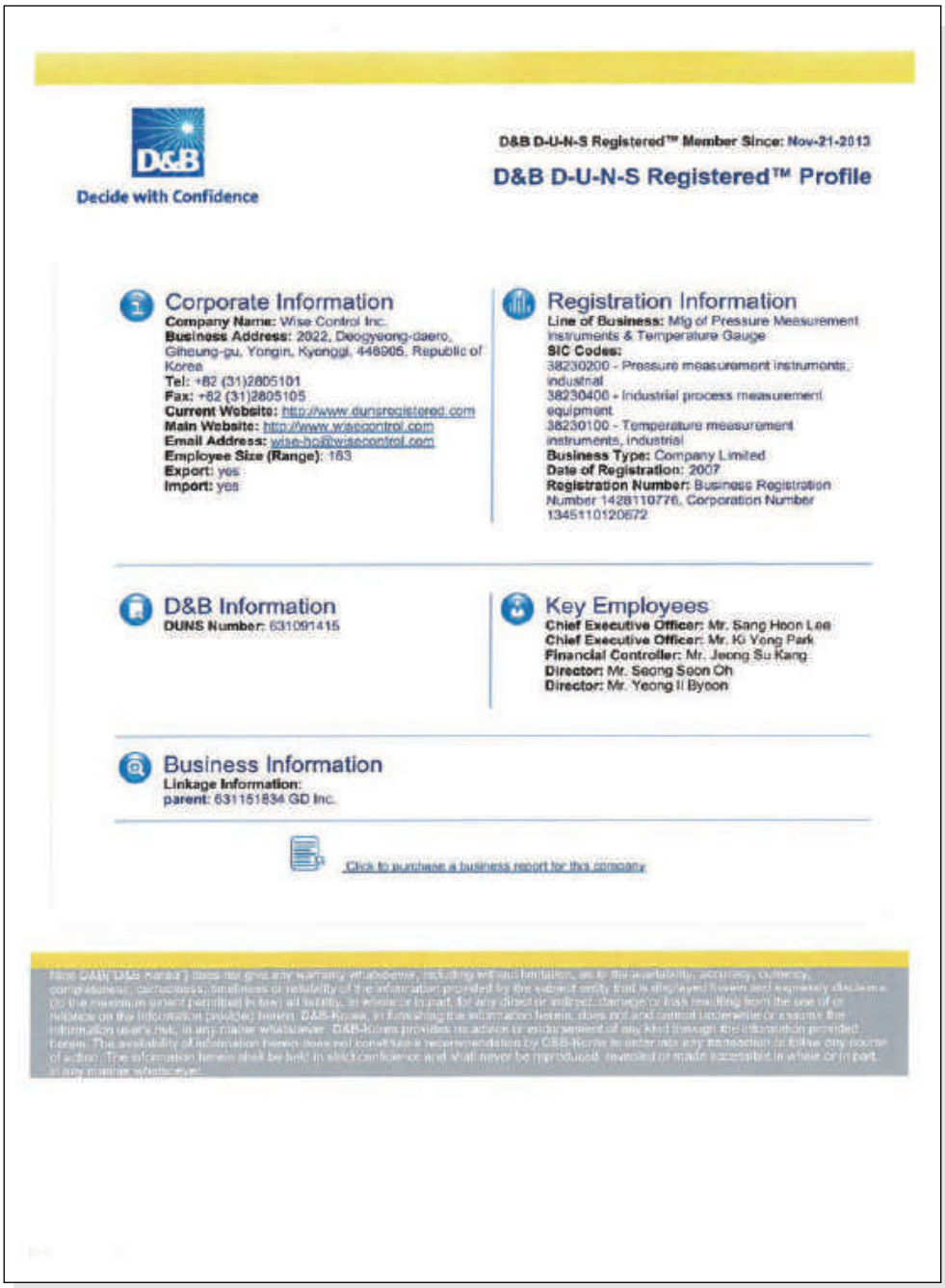
Company Profile l Brief History l The status of specializes Technical Lab Force l Organization & Manpower l Performance Within 3 years l Overseas sales results for the last 5 years l Quality Policy l HSE Record and Policy l Major Products l Capability l Major Facilities

section

# Company Profile 01

# Company Profile

| | |
|---|---|
| **Business Founded** | 1965-05-06 |
| **Original Company Name** | WISE Control Inc. |
| **Date of Commencement of Supplying the Item for Application** | 1965-12-10 |
| **Name of Parent Company** | GD Inc. |



Decide with Confidence

D&B D-U-N-S Registered™ Member Since: Nov-21-2013

## D&B D-U-N-S Registered™ Profile

### Corporate Information

**Company Name:** Wise Control Inc.
**Business Address:** 2022, Deogyeong-daero, Giheung-gu, Yongin, Kyonggi, 446906, Republic of Korea
**Tel:** +82 (31)2805101
**Fax:** +82 (31)2805105
**Current Website:** http://www.dunsregistered.com
**Main Website:** http://www.wisecontrol.com
**Email Address:** wise-ho@wisecontrol.com
**Employee Size (Range):** 183
**Export:** yes
**Import:** yes

### Registration Information

**Line of Business:** Mfg of Pressure Measurement Instruments & Temperature Gauge
**SIC Codes:**
38230200 - Pressure measurement instruments, industrial
38230400 - Industrial process measurement equipment
38230100 - Temperature measurement instruments, industrial
**Business Type:** Company Limited
**Date of Registration:** 2007
**Registration Number:** Business Registration Number 1428110776, Corporation Number 1345110120672

### D&B Information

**DUNS Number:** 631091415

### Key Employees

**Chief Executive Officer:** Mr. Sang Heon Lee
**Chief Executive Officer:** Mr. Ki Yong Park
**Financial Controller:** Mr. Jeong Su Kang
**Director:** Mr. Seong Seon Oh
**Director:** Mr. Yeong Il Byeon

### Business Information

**Linkage Information:**
**parent:** 631151834 GD Inc.

Click to purchase a business report for this company

# Brief History

## 1965 - 2006

| | |
|---|---|
| 1965.12 | Established in Seoul (Woojin Instrument IND. CO., LTD) |
| 1982.04 | Acquired KS (Korea Industrial Standard) |
| 1988.06 | Established R&D |
| 1994.09 | Acquired ISO 9001 Certification for QA System |
| 1997.09 | Company name change to Woojin Industrial system INC. |
| 1999.06 | Acquired certification of EN837-1 for Pressure Gauges |
| 2000.03 | Company name change to Woojin Instrument & System Engineering INC. |
| 2004.11 | Acquired certification of IECEx for Thermocouple, R.T.D & Switch |
| 2006.01 | Acquired 3-A symbol marking by 3-A Sanitary Standards, Inc. |
| 2006.08 | Acquired certificate of ATEX (CE Marking) for Pressure & Temperature switch |
| 2006.08 | Acquired certificate of ATEX (CE Marking) for Thermocouple & R.T.D |

## 2007 - 2018

| | |
|---|---|
| 2007.12 | Company name change to WISE Control Inc. |
| 2009.12 | Acquired certificate of KEMA for Temperature Sensor (ATEX Ex ia IIC T6 to T1) |
| 2011.09 | Acquired of Quality System Certificate for Manufacturing of Class 1E Thermocouple & RTD (KEPIC-EN)<br>Acquired of Quality System Certificate for Supplying Thermowell (KEPIC-MN Except for Welding & Repair Welding) |
| 2012.04 | Relocate an Office - Flow & Level Business |
| 2013.01 | Revised certificate of Bureau Veritas for Space Heater (ATEX Ex e II Gb) |
| 2013.01 | Acquired of Quality System Certificate for Manufacturing of Class 1,2,3 Fabrication for Parts & Appurtenances (Inclusion of design scop) - MN |
| 2013.03 | Acquired Pressure Equipment Directive Certification (97/23/EC)<br>Selected as KB Bank's Global Hidden Champion |
| 2015.02 | Entire Wise Control Employee's 50th Anniversary Trip to HongKong |
| 2017.04 | Launched "GAM SENSOR",a specialized brand of MEMS sensor |
| 2018.07 | Established Seoul Office |

# About us

For more than 50 years, the name WISE has been standing for innovation and quality in the field of Pressure, Temperature, Flow, Level and Gas measurement. WISE is comprised of several products divisions, state-of-the art manufacturing facilities, service center and over 60 distributors worldwide. WISE is a unique organization of individuals linked by the pursuit of excellence in product design, manufacture, service and distribution.

Major markets are served by WISE including the power generating industry, oil & gas, petrochemical and chemical processing, the pulp & paper industry, semicondustor manufacturing, the metallurgical industry, biopharmaceutical and food & beverage industry.

WISE will continue its efforts to make WISE products an integral part of the development plans of its customers.

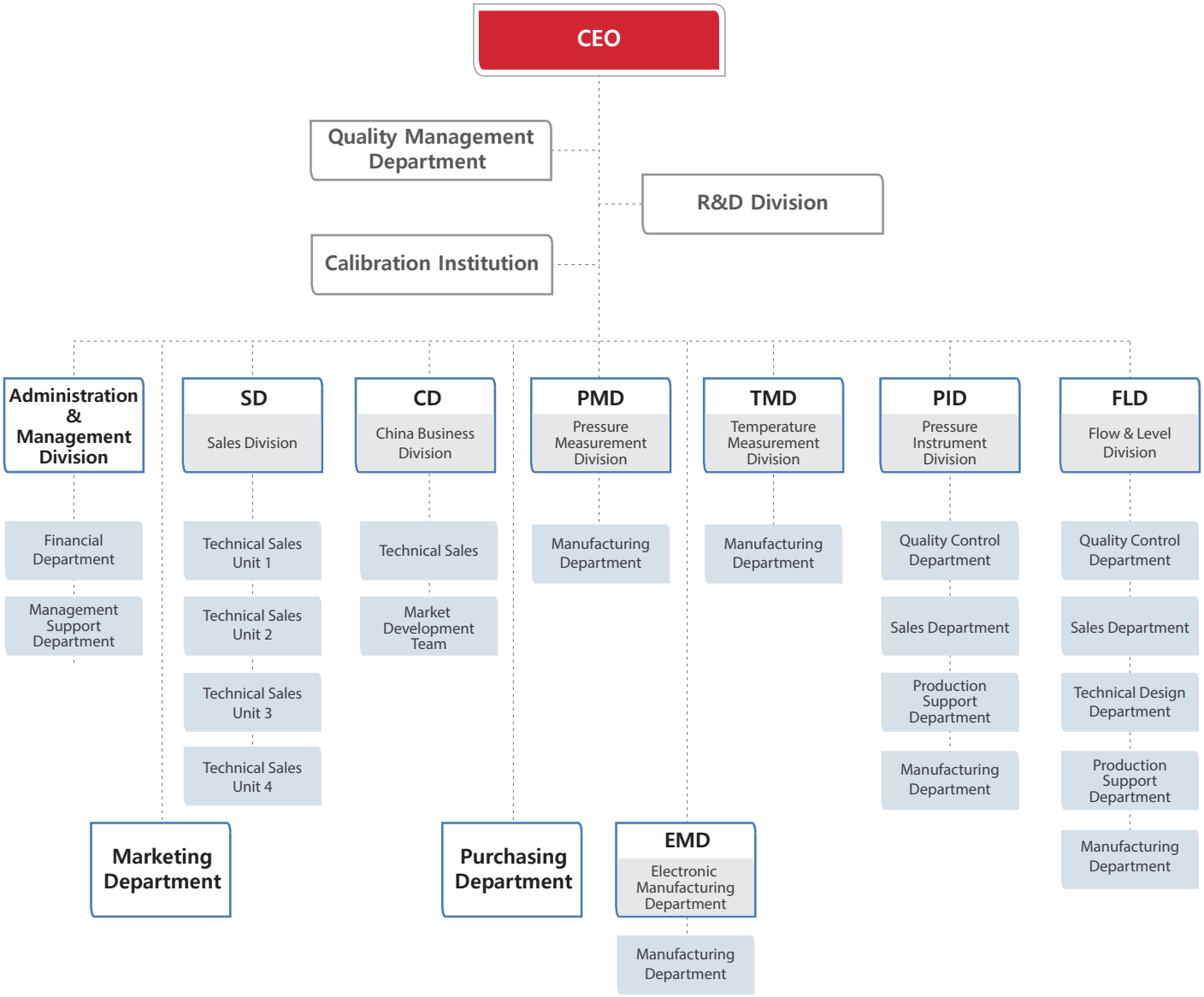
The new and exciting challenges will be met by building on a successful part rooted in recognizing and responding to customer needs, designing and producing quality products to meet those needs, providing premier customer service, and building a strong & lasting business relationship.

# The Status of specialized Technical Lab Force

| Licensed Field | Name of License | Career Record(approx.) | No. of Licensee |
|---|---|---|---|
| Instrumentation & Control | Instrumentation & Control Engineer 2nd Level | 37 Years | 1 |
| | Industrial Instrumentation & Control Engineer | 17 Years | 1 |
| Mechanical Drawing | Mechanical Drawing Engineer 2nd Level | 32 Years | 1 |
| | CAD Engineer | 17 Years | 2 |
| | CAD Engineer | 12 Years | 2 |
| Precision Measuring | Precision Measuring Engineer | 22 Years | 1 |
| Metal Porcessing (Lathe) | Lathe Engineer | 37 Years | 1 |
| | Lathe Engineer 2nd Level | 27 Years | 2 |
| | Jig Design Engineer 2nd Level | 32 Years | 1 |
| | Numerical Control lathe Engineer | 17 Years | 2 |
| | Computer Application lathe Engineer | 12 Years | 2 |
| | Computer Application lathe Engineer | 7 Years | 1 |
| | Numerical Control lathe Engineer | 7 Years | 1 |
| Welding Master Craftman | Welding Master Craftman | 12 Years | 1 |
| Special Welding | Special Welding Engineer 2nd Level | 32 Years | 1 |
| | Special Welding Engineer 2nd Level | 17 Years | 1 |
| | Speicial Welding Engineer | 7 Years | 1 |
| Electirc Welding | Electric Welding Engineer | 32 Years | 1 |
| | Electric Welding Engineer 2nd Level | 27 Years | 1 |
| | Electric Welding Engineer 2nd Level | 17 Years | 1 |
| Regular Welding | Welding Engineer 2nd Level | 32 Years | 1 |
| | Welding Engineer | 7 Years | 1 |
| | Industrial Welding Engineer | 7 Years | 2 |
| Electricity | Electricity Engineer | 37 Years | 1 |
| | Electricity Engineer | 22 Years | 1 |
| | Electricity Engineer | 17 Years | 1 |
| | Electricity Engineer | 12 Years | 1 |
| | Electricity Engineer | 7 Years | 3 |
| Etc. | Heat Treatment Engineer 2nd Level | 27 Years | 2 |
| | Arson Control Manager 2nd Level | 7 Years | 1 |
| | Gas Control Engieneer 1st Level | 12 Years | 1 |
| | Mechanical Processing Engineer 2nd Level | 27 Years | 1 |
| | Mechanical Assembly Engineer | 22 Years | 1 |
| | Mechanical Assembly Engineer | 17 Years | 1 |
| | General Mechanical Engineer | 12 Years | 1 |
| | General Mechanical Engineer 2nd Level | 42 Years | 1 |
| | Automated Prodcution Engineer | 12 Years | 1 |

# Organization & Manpower

## Organization




## Manpower

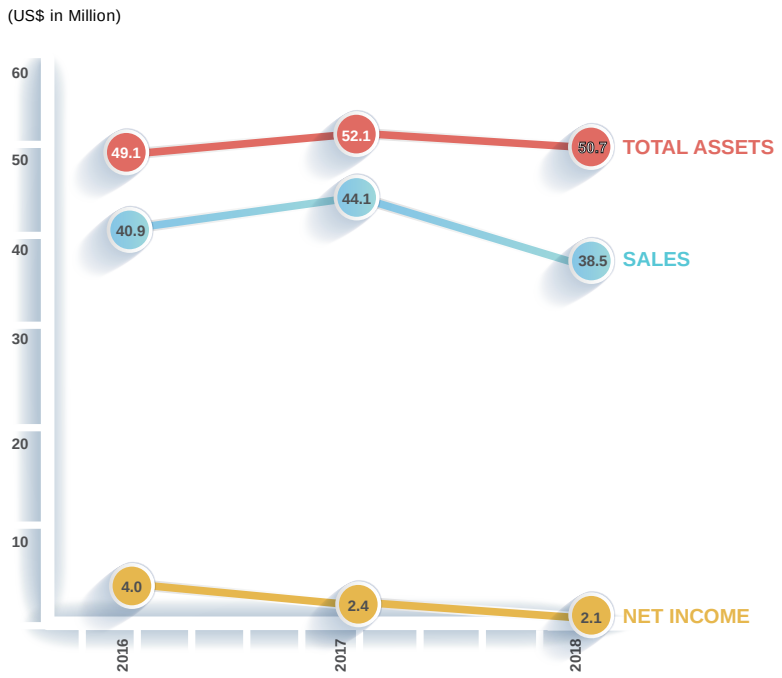
| | |
|---|---|
| Total Number of Employees | 240 |
| Research & Development | 11 |
| Design & Engineering | 16 |
| Manufacturing | 113 |
| Overseas Sales Department | 7 |
| Quality Control | 9 |
| Other ( Management ) | 84 |

# Performance
# Within 3 years

(Unit : US$ in Million)

| | 2016 | 2017 | 2018 |
|---|---|---|---|
| Sales | 40.9 | 44.1 | 38.5 |
| Net Income | 4.0 | 2.4 | 2.1 |
| **Total Assets** | **49.1** | **52.1** | **50.7** |

- SALES
- NET INCOME
- TOTAL ASSETS



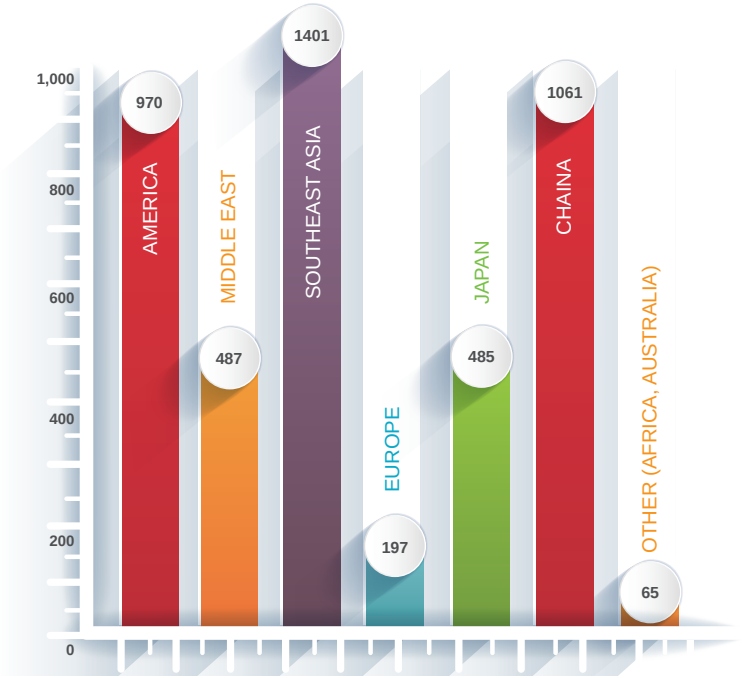
# Overseas sales results for the last 5 years

(Unit : US$ in Thousand)

| Country | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|
| America | 733 | 735 | 633 | 933 | 970 |
| Middle East | 248 | 220 | 415 | 161 | 487 |
| Southeast Asia | 935 | 1,163 | 1,206 | 1,125 | 1,401 |
| Europe | 314 | 225 | 145 | 282 | 197 |
| Japan | 658 | 1125 | 843 | 989 | 485 |
| China | 811 | 300 | 511 | 879 | 1,061 |
| Other(Africa, Australia) | 2 | 69 | 51 | 41 | 65 |
| **Total** | **3,701** | **3,837** | **3,804** | **4,410** | **4,666** |

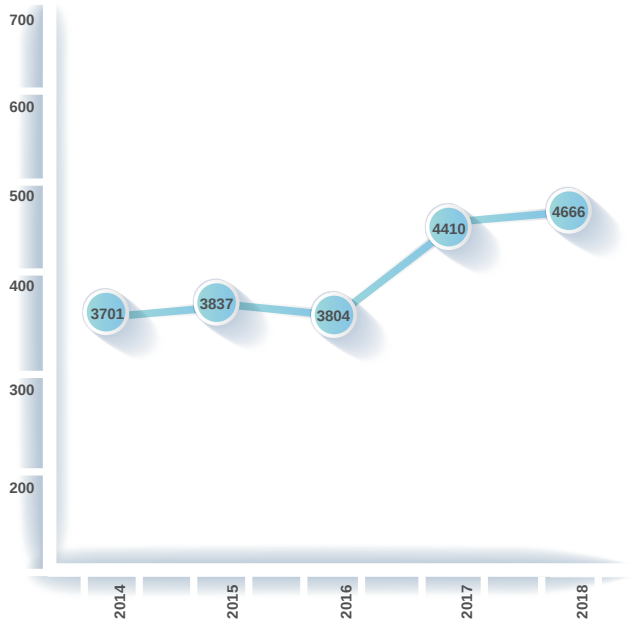
**Sales by Country**

(Unit : US$ in Thousand)




**Sales by Years**

(Unit : US$ in Thousand)



# Quality Policy

## Quality Policy

WISE Control Inc. is a company engaged in the development, manufacturing and sales of a range of measuring controllers and indicators that measure and indicate pressures, temperatures and flows in various industrial fields as well as after-sales service. It is not only to recognize the fact that "Customer satisfaction is the highest value and the top priority for the Company to accomplish", but to achieve corporate development through customer satisfaction.

### ▪ Establishment of Quality Goal

### ▪ Compliance with the requirements of quality management system and continuous improvement of the system

### ▪ Continuous promotion of system to staff

I, the CEO of the Company, shall assign a quality management representative to establish and implement a quality management system for the Company in accordance with the corporate quality policy, quality goal, ISO 9001:2008, ATEX 94/9/EC and PED 97/23/EC standards, and grant him or her the responsibility and authority to verify and report the implementation status of the quality management system. In order to ensure the system to be effective and appropriate, I shall receive reports from the representative, have consultation with him or her, develop appropriate action to take and implement it as planned.
All corporate staff shall not only be familiar with the corporate quality policy, quality goal and quality management system requirements, but apply them to daily activities to provide customers services of excellent quality, and shall devote their utmost efforts to establish, maintain and implement a quality management system which ensures continuous quality improvement in response to customer requirments.

**WISE Control Inc.**

**CEO Sanghoon Lee**

# Certificate

CERTIFICATE

QUALITY MANAGEMENT SYSTEM

kfq Korean Foundation for Quality

| | |
|---|---|
| Registration Date | 2018-08-27 |
| Expiration Date | 2021-08-26 |
| Initial Registration Date | 1994-08-27 |
| Revision Date | 2018-08-05 |
| Certificate Number | AC-00019 |

WISE CONTROL INC.

- HEAD OFFICE & YONGIN FACTORY : 2022, Deogyeong-daero, Giheung-gu, Yongin-si, Gyeonggi-do, Korea (Zip code : 17097)
- HWASEONG FACTORY : 6, Madogongdan-ro 4-gil, Mado-myeon, Hwaseong-si, Gyeonggi-do, Korea (Zip code : 18542)
- BUCHUN FACTORY : 122, Jomaru-ro 385beon-gil, Bucheon-si, Gyeonggi-do, Korea (Zip code : 14558)
- SEOUL OFFICE : 181, Gasan digital 1-ro, Geumcheon-gu, Seoul, Korea(Zip code : 08503)

*Korean Foundation for Quality certifies that The Quality Management System of the above organization has been audited and has complied with the requirements of the following standard*

Standard

ISO 9001:2015/KS Q ISO 9001:2015

Scope of certification

- HEAD OFFICE & YONGIN FACTORY :
- DESIGN, DEVELOPMENT, PRODUCTION AND SALES OF PRESSURE AND TEMPERATURE INSTRUMENTS(FLAMEPROOF TYPE INCLUDED)
- DESIGN, DEVELOPMENT, PRODUCTION AND SALES OF PRESSURE AND TEMPERATURE TRANSMITTER(FLAMEPROOF TYPE INCLUDED)
- DESIGN, DEVELOPMENT AND SALES OF GAS SENSOR
- DESIGN, DEVELOPMENT AND SALES OF FLOW AND LEVEL MEASURING INSTRUMENTS(ORIFICE PLATE, FLOW NOZZLES, VENTURI TUBES, LEVEL GAUGES AND ULTRASONIC LIQUID FLOW METER)
- HWASEONG FACTORY : DESIGN, DEVELOPMENT AND SALES OF FLOW AND LEVEL MEASURING INSTRUMENTS(ORIFICE PLATE, FLOW NOZZLES, VENTURI TUBES, LEVEL GAUGES AND ULTRASONIC LIQUID FLOW METER)
- BUCHUN FACTORY :
- DESIGN, DEVELOPMENT, PRODUCTION AND SALES OF PRESSURE AND TEMPERATURE INSTRUMENTS(FLAMEPROOF TYPE INCLUDED)
- DESIGN, DEVELOPMENT, PRODUCTION AND SALES OF PRESSURE AND TEMPERATURE TRANSMITTER(FLAMEPROOF TYPE INCLUDED)
- DESIGN, DEVELOPMENT AND SALES OF GAS SENSOR
- DESIGN, DEVELOPMENT, PRODUCTION AND SALES OF BELLOWS AND HIGH VACUUM VALVES

IQNet

KAB [KAB-QC-01]

IAF

KFQ has been accredited in respect of ISO 9001 covered by the KAB(Accreditation Certificate Number KAB-QC-01)

Baehyun Nam

Bae Hyun Nam
President & CEO of KFQ

www.kfq.or.kr

13F, Woolim Lion's Valley Bldg.B,168,Gasan digital 1-ro,Geumcheon-gu,Seoul,08591,Korea

# Certificate

IQNet

THE INTERNATIONAL CERTIFICATION NETWORK

CERTIFICATE

*KFQ has issued an IQNet recognized certificate that the organization:*

**WISE CONTROL INC.**

- HEAD OFFICE & YONGIN FACTORY : 2022, Deogyeong-daero, Giheung-gu, Yongin-si, Gyeonggi-do, Korea (Zip code : 17097)
- HWASEONG FACTORY : 5, Madogongdan-ro 4-gil, Mado-myeon, Hwaseong-si, Gyeonggi-do, Korea (Zip code : 18542)
- BUCHUN FACTORY : 122, Jomaru-ro 385beon-gil, Bucheon-si, Gyeonggi-do, Korea (Zip code : 14556)
- SEOUL OFFICE : 181, Gasan digital 1-ro, Geumcheon-gu, Seoul (Zip code : 08503)

*for the following scope*

- YONGIN FACTORY :
- DESIGN, DEVELOPMENT, PRODUCTION AND SALES OF PRESSURE AND TEMPERATURE INSTRUMENTS(FLAMEPROOF TYPE INCLUDED)
- DESIGN, DEVELOPMENT, PRODUCTION AND SALES OF PRESSURE AND TEMPERATURE TRANSMITTER(FLAMEPROOF TYPE INCLUDED)
- DESIGN, DEVELOPMENT AND SALES OF GAS SENSOR
- DESIGN, DEVELOPMENT AND SALES OF FLOW AND LEVEL MEASURING INSTRUMENTS(ORIFICE PLATE, FLOW NOZZLES, VENTURI TUBES, LEVEL GAUGES AND ULTRASONIC LIQUID FLOW METER)
- HWASEONG FACTORY : DESIGN, DEVELOPMENT AND SALES OF FLOW AND LEVEL MEASURING INSTRUMENTS(ORIFICE PLATE, FLOW NOZZLES, VENTURI TUBES, LEVEL GAUGES AND ULTRASONIC LIQUID FLOW METER)
- BUCHUN FACTORY :
- DESIGN, DEVELOPMENT, PRODUCTION AND SALES OF PRESSURE AND TEMPERATURE INSTRUMENTS(FLAMEPROOF TYPE INCLUDED)
- DESIGN, DEVELOPMENT, PRODUCTION AND SALES OF PRESSURE AND TEMPERATURE TRANSMITTER(FLAMEPROOF TYPE INCLUDED)
- DESIGN, DEVELOPMENT AND SALES OF GAS SENSOR
- DESIGN, DEVELOPMENT, PRODUCTION AND SALES OF BELLOWS AND HIGH VACUUM VALVES

*has implemented and maintains a*

**Quality Management System**

*which fulfils the requirements of the following standard*

**ISO 9001:2015**

Issued on : 2018-08-27

First Issued on : 1994-08-27

*For the validity date, please refer to the original certificate* issued by KFQ*

**Registration Number : KR - 00019**

IQNet

kfq

*Alex Stoichitoiu*
*President of IQNet*

*Dae Hyeoun Nam*
*President & CEO of KFQ*

IQNet Partners*:
AENOR Spain AFNOR Certification France APCER Portugal CCC Cyprus CISQ Italy
CQC China CQM China CQS Czech Republic Cro Cert Croatia DQS Holding GmbH Germany FCAV Brazil
FONDONORMA Venezuela ICONTEC Colombia Inspecta Sertifiointi Oy Finland INTECO Costa Rica
IRAM Argentina JQA Japan KFQ Korea MIRTEC Greece MSZT Hungary Nemko AS Norway NSAI Ireland
SYCE-SGS México PCBC Poland Quality Austria Austria RR Russia SII Israel SIQ Slovenia
SIRIM QAS International Malaysia SQS Switzerland SRAC Romania TEST St Petersburg Russia TSE Turkey YUQS Serbia
IQNet is represented in the USA by: AFNOR Certification, CISQ, DQS Holding GmbH and NSAI Inc.

* The list of IQNet partners is valid at the time of issue of this certificate. Updated information is available under www.iqnet-certification.com

# HSE Record and Policy

## HSE Record and Policy

### HSE (Health Safety Environment) Policy

The members of WISE Control Inc. will put all efforts to minimize and eliminate all potential environmental, safety and health related risks on all activities. When developing, purchasing and manufacturing, the company will also put moral and humane responsibilities as top priorities as well. The following will be executed:
- Safety Inspection Checklist for construction equipment shall be executed before any major item of construction equipment is placed into service. The original, completed resident engineer's office as a part of original file.
- Resident of equipment shall be performed at interval specified in a. above, to assure safe operating condition. Performance tests and inspections of hoisting equipment shall be repeated in accordance with Contract prior to unusual or critical lifts and after alterations, repair, or modification to the equipment

### Project Safety Manual Control
### 1. Use of this Manual

All major management efforts such as those that promote safety and health must have guidelines (called policies, procedures, or standards) to ensure that work is accomplished in a manner designed to optimize all aspects of performance. The guidelines are normally put in writing to ensure understanding and minimize confusion and conflict as to how the work is to be done. This manual represents a "game plan" to protect the employees and to ensure the successful, profitable, and accident-free completion of the project.
To have effective program, all levels of management must accept that safety is apart of the way work is performed. Safe construction will optimize profit; therefore, safety, like profit is a result of how well we do our work. Consequently, the guidelines set forth in this manual must be followed. All levels of management are responsible for the effectiveness and implementations of these guidelines.

### 2. Manual Revisions

No manual can remain useful if the contents are not reviewed and updated on a regular basis.
Accordingly, the project manager will manage all project supervision at the beginning of the project and every month thereafter.
Recommendations for changes or additions shall be provided to the Safety Departments, which will be responsible for implementing appropriate updates.

### 3. Subcontractor Operations (If Required)

Construction operations performed by subcontractors to WISE shall conform to the provisions of this and shall be in compliance with the requirements contained in the applicable provisions of the occupational Safety and Health Administration Code, Construction and general industry standards, and local laws, requirements, standards.
Subcontractors shall be responsible for their own implementation of these provisions, and standards and shall provide WISE with all required and supporting reports and documentation that they generate during this implementation. Subcontractors shall coordinate all of their accident prevention efforts with the WISE site safety manager. Subcontractors or subcontractor personnel who demonstrate an unwillingness to comply with these provisions, requirements, and standards shall not be allowed to continue operation on the project. References in this manual such as "employee", or "personnel" shall apply to employees of both WISE and of subcontractors to WISE

# Certificate

CERTIFICATE

ENVIRONMENTAL MANAGEMENT SYSTEM

kfq Korean Foundation for Quality

| | |
|---|---|
| Registration Date | 2018-08-05 |
| Expiration Date | 2021-08-04 |
| Initial Registration Date | 2012-11-05 |
| Revision Date | 2018-08-05 |
| Certificate Number | EAC-05427 |

WISE CONTROL INC.

- HEAD OFFICE & YONGIN FACTORY : 2022, Deogyeong-daero, Giheung-gu, Yongin-si, Gyeonggi-do, Korea (Zip code : 17097)
- SEOUL OFFICE : 181, Gasan digital 1-ro, Geumcheon-gu, Seoul (Zip code : 08503)

*Korean Foundation for Quality certifies that The Environmental Management System of the above organization has been audited and has complied with the requirements of the following standard*

Standard

ISO 14001:2015/KS I ISO 14001:2015

Scope of certification

- DESIGN, DEVELOPMENT, PRODUCTION AND SALES OF PRESSURE AND TEMPERATURE INSTRUMENTS(FLAMEPROOF TYPE INCLUDED)
- DESIGN, DEVELOPMENT, PRODUCTION AND SALES OF PRESSURE AND TEMPERATURE TRANSMITTER(FLAMEPROOF TYPE INCLUDED)
- DESIGN, DEVELOPMENT AND SALES OF GAS SENSOR
- DESIGN, DEVELOPMENT AND SALES OF FLOW AND LEVEL MEASURING INSTRUMENTS(ORIFICE PLATE, FLOW NOZZLES, VENTURI TUBES, LEVEL GAUGES AND ULTRASONIC LIQUID FLOW METER)

IQNet

KAB [KAB-EC-01]

IAF

KFQ has been accredited in respect of ISO 14001 covered by the KAB Accreditation Certificate Number KAB-EC-01

Baehyun Nam

President & CEO of KFQ

www.kfq.or.kr

13F, Woolim Lion's Valley Bldg.B,168,Gasan digital 1-ro,Geumcheon-gu,Seoul,08591,Korea

# Certificate

IQNet

THE INTERNATIONAL CERTIFICATION NETWORK

## CERTIFICATE

*KFQ has issued an IQNet recognized certificate that the organization:*

**WISE CONTROL INC.**

- HEAD OFFICE & YONGIN FACTORY : 2022, Deogyeong-daero, Giheung-gu, Yongin-si, Gyeonggi-do, Korea (Zip code : 17097)
- SEOUL OFFICE : 181, Gasan digital 1-ro, Geumcheon-gu, Seoul (Zip code : 08503)

*for the following scope*

- DESIGN, DEVELOPMENT, PRODUCTION AND SALES OF PRESSURE AND TEMPERATURE INSTRUMENTS (FLAMEPROOF TYPE INCLUDED)
- DESIGN, DEVELOPMENT, PRODUCTION AND SALES OF PRESSURE AND TEMPERATURE TRANSMITTER (FLAMEPROOF TYPE INCLUDED)
- DESIGN, DEVELOPMENT AND SALES OF GAS SENSOR
- DESIGN, DEVELOPMENT AND SALES OF FLOW AND LEVEL MEASURING INSTRUMENTS (ORIFICE PLATE, FLOW NOZZLES, VENTURI TUBES, LEVEL GAUGES AND ULTRASONIC LIQUID FLOW METER)

*has implemented and maintains a*

**Environmental Management System**

*which fulfils the requirements of the following standard*

**ISO 14001:2015**

Issued on : 2018-08-05

First Issued on : 2012-11-05

*For the validity date, please refer to the original certificate* issued by KFQ*

**Registration Number : KR - 05427**

IQNet

*Alex Stoichitoiu*
*President of IQNet*

*Dae Hyeoun Nam*
*President & CEO of KFQ*

kfq

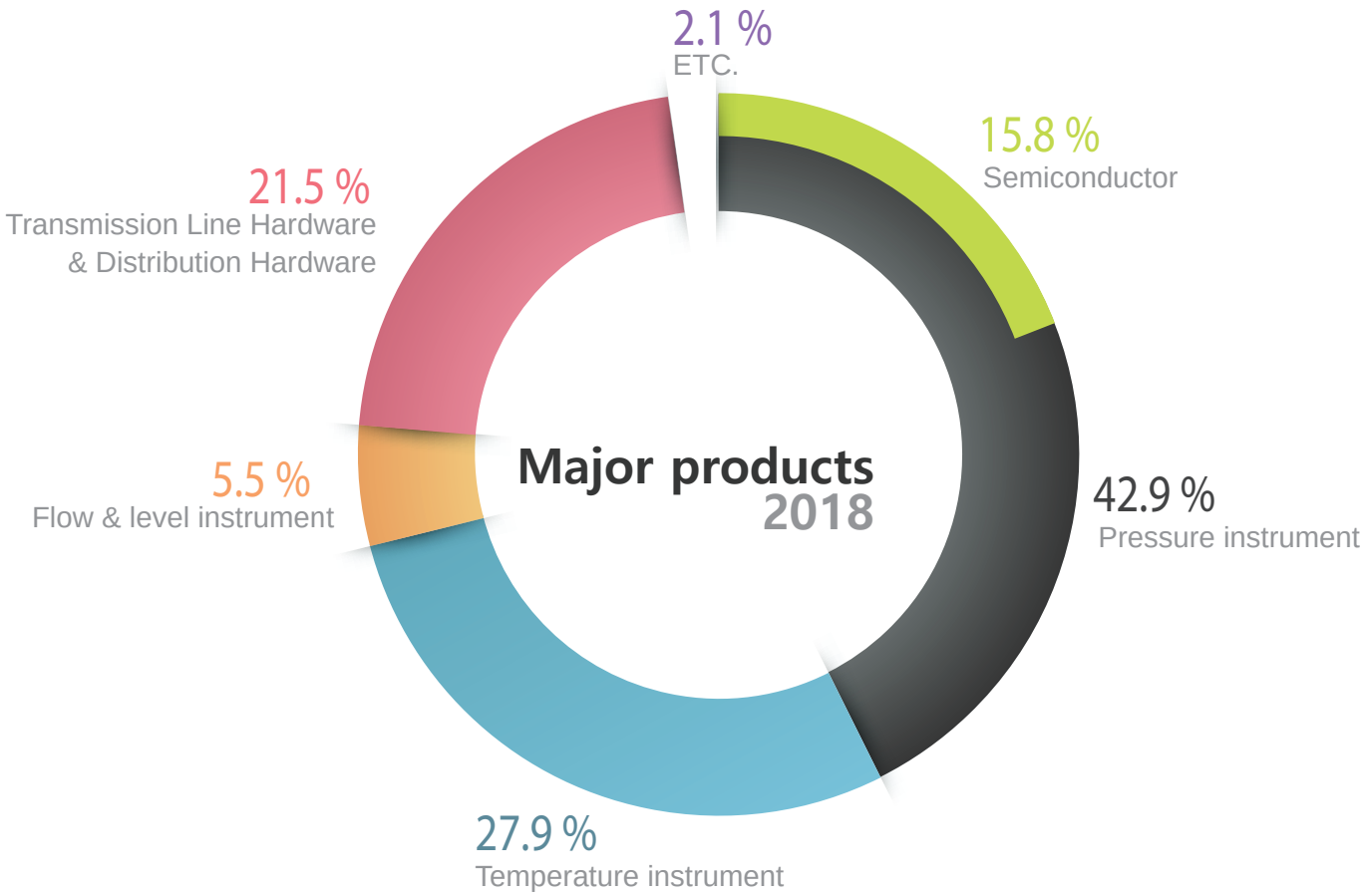
IQNet Partners*:
AENOR Spain AFNOR Certification France APCER Portugal CCC Cyprus CISQ Italy
CQC China CQM China CQS Czech Republic Cro Cert Croatia DQS Holding GmbH Germany FCAV Brazil
FONDONORMA Venezuela ICONTEC Colombia Inspecta Sertifiointi Oy Finland INTECO Costa Rica
IRAM Argentina JQA Japan KFQ Korea MIRTEC Greece MSZT Hungary Nemko AS Norway NSAI Ireland
NYCE-SIOE México PCBC Poland Quality Austria Austria RR Russia SI Israel SIQ Slovenia
SIRIM QAS International Malaysia SQS Switzerland SRAC Romania TEST St Petersburg Russia TSE Turkey YUQS Serbia
IQNet is represented in the USA by: AFNOR Certification, CISQ, DQS Holding GmbH and NSAI Inc.

* The list of IQNet partners is valid at the time of issue of this certificate. Updated information is available under www.iqnet-certification.com

# Major Products

**Major Products 2018 year**

- Pressure Instrument (42.9 %) _Semiconductor (15.8 %)
- Temperature Instrument (27.9 %)
- Flow & Level Instrument (5.5 %)
- Transmission Line Hardware & Distribution Line Hardware (21.5 %)
- ETC. (2.1 %)



# New Products

## SMT2001

### Differential Pressure Transmitter

Accuracy : ±0.05 % of Calibrated Span. ±0.075 % of Calibrated Span.
Range limits : 1 kPa ~ 3 MPa
Degrees of Protection : IP66/67
Measurement medium : Gas, Steam and Liquid

## SMT2002

### Gauge Pressure Transmitter

Accuracy : ±0.05 % of Calibrated Span. ±0.075 % of Calibrated Span.
Range limits : 6 kPa ~ 40 MPa
Degrees of Protection : IP66/67
Measurement medium : Gas, Steam and Liquid

## SMT2003

### Absolute Pressure Transmitter

Accuracy : ±0.05 % of Calibrated Span. ±0.075 % of Calibrated Span.
Range limits : 40 kPa ~ 3 MPa
Degrees of Protection : IP66/67
Measurement medium : Gas, Steam and Liquid

## TMT180 I TMT182

### Temperature Transmitter

Accuracy : -50...250 ºC; 0,2 K / 0,08 % span
Configuration Connection : RTD 3-Wire
Low range value : 0.000 °C / Upper range value : 100.000 °C
Approval : IECEx Ex d T6 Gb, Ex tb IIC Db

## GLD3101 I GLD3102

### Metal film leak sensor

Size : Width_26 mm, 44mm
Product type : Water, Chemical detection
Detection liquid : Acid, Alkali, Water, etc ..
Rated voltage : 24 V(DC) / ≤ 50 ㎂

## GLD3201 I GLD3202 I GLD3203

### Controller

Sensor output : 1 ch (5ch) / Contact output / Display
Detection liquid : Acid, Alkali
Size : 100*75*20 / 120*110*30 / 160*115*30 mm
Power : 7.2 W / 24 W

## GLD1000 Series

### Leak detector Gas sensor type

Measuring gas : CH4, CO, HCl, Naphthalene(C10H8), Penol, NH3, H2S, NaOH, H2O2, C2H2, Acetone(CH3COCH3), Quinoline (C9H7N) ..
Measuring limits : 0.5 ~ 1000 ppm / EtOH

## PT850 Series

### Ultra high purity pressure transmitter

Accuracy : ±0.25 of full scale
Input pressure range : -15 ~ 30 psi to -15 ~ 3000 psi gauge pressure
Long term stability : ≤ ± 0.1% FSO over 1 year
Operating temperature range : -20 ~ 80 °C

# Pressure Instrument

## P110

### General service pressure gauge

Dial : 40,50,60,75,100,150 and 200 mm
Range : -0.1~0.2, 0~100 MPa
Case : Black finished steel / Element:Brass, 316SS

## P113

### Air regulator service pressure guage fully stainless steel wetted parts

Dial : 50 mm (2 ")
Range : 0~40 MPa
Case : Nickel plated steel / Movement : Brass

## P140

### General purpose pressure gauge

Dial : 60 and 100 mm
Range : -0.1~0, 0~35 MPa
Case and cover : Polycarbonate / Element : Brass,316SS

## P163

### Heavy duty service pressure gauge

Dial : 80 mm
Range : -0.1~0, 0~6 MPa
Case : Bronze / Element : Brass

## P221 I P253

### Industrial service pressure gauge

Dial:40 and 50 mm
Range:0 ~ 0.2, 0.3, 0.4, 0.6, 1, 1.5, 3.5 MPa
Case 304SS, Element 316SS(P221)/Brass(P253)

## P235S I P235B

### Miniature pressure gauge

Dial:35 mm
Range:0 ~ 0.2 MPa to 0 ~ 3.5 MPa
Case 304SS, Element 316SS/Brass

## P252

### Industrial service pressure gauge

Dial:63, 80, 100 and 160 mm
Range:-0.1~200 MPa
Case 304SS, Element 316SS

## P257

### Safety pattern type pressure gauge

Dial : 63, 100 and 160 mm I Range : -0.1~0 to 0~200 MPa
Case 304SS, Element 316SS
Option : Zero adjustable pointer

## P258

### Liquid filled industrial pressure gauge

Dial:63, 80, 100 and 160 mm
Range:0.1~200 MPa
Case 304SS, Element 316SS

## P359

### Safety pattern type pressure gauge
### Solid-front & Turret style thermoplastic case

Dial : 125 mm I Range : -0.1 to 0~200 MPa
Case : PBTB, Element : 316SS
Option : External zero adjustment

## P410 I P420

### Draft gauge

Dial : 192 mm (W) x 96 mm (H), 96 mm (W) x 192 mm (H),
Pressure Range : 0~0.5 to 0~10 kPa
P410 : Case (Black finished steel), Element (316L SS)
P420 : Case (304SS), Element (316L SS)

## P422

### Low pressure gauge

Dial : 63, 80, 100 and 160 mm I Range : -35~0 to 0~35 kPa
Case : 304SS, Element : 316L SS, Movement : Stainless steel
Option : Silicone filling

## P428 I P429

### Diaphragm type low pressure gauge

Dial:100 and 150 mm
Range:-1~0, 0~35 kPa
Diaphragm:316L SS,
Upper flange(Gauge side):304SS, 316SS

## P500

### Inductive contact type pressure gauge

Dial : 100 and 160 mm I Range : -0.1~0 to 0~200 MPa
Case : 304SS Element : 316SS
Optional : Damping movement

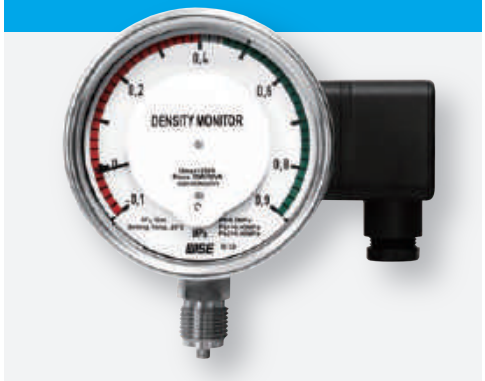
## P535 I P536

### Indicating type pressure switch

Dial:100 and 150 mm
Range:-0.1~2, 0~35 MPa
Case:ALDC 12.1, Element:316SS

## P590

### $SF_6$ gas density monitor




Dial:100 mm
Range:-0.1~2 MPa at $SF_6$ gas pressure 20ºC
Case:304SS, Element:316SS

## P620 I P630

### Differential pressure gauge

Dial : 100 and 160 mm I Range : 0~1kPa to 0~1.5 MPa
Case : 304SS, Element : 316L SS
Option : Remote seal
Static pressure : 5 MPa (P620), 25 MPa (P630)

## P640

### Indicating type differential pressure switch with bellows element

Dial:150 mm
Range:0~25 MPa(P641),0~2.3 MPa(P642)
Case:ALDC12.1
Element:316L SS, Monel and Hastelloy-C

## P650

### Differential pressure gauge with Electrical contact type

Dial:160 mm
Range:0~25 kPa, 0~2.0 MPa
Case:304SS
Element:316L SS, Monel and Hastelloy-C

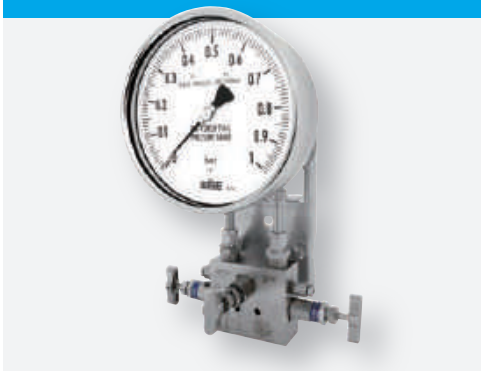
## P660

### Differential pressure gauge with Diaphragm element

Dial:100 and 160 mm
Range:0~40 kPa, 0~2.5 MPa
Case & Cover:304SS, Element:316Ti, 316L SS

## P670

### Differential pressure gauge with Bellows element



Dial:100 and 160 mm
Range:0~10 kPa, 0~0.25 MPa, 0~2.0 MPa
Case & Cover:304SS
Element:316L SS, Monel & Hastelloy-C

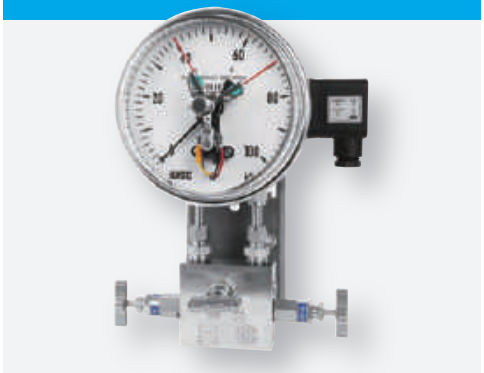
## P680

### Differential pressure gauge with Reed switch

Dial:150 mm
Range:0~25 MPa, 0~2 MPa
Case & Cover:ALDC12.1
Element:316L SS, Monel and Hastelloy-C

## P690

### Differential pressure gauge with Inductive contact type



Dial:160 mm
Range:0~0.25 MPa, 0~2 MPa
Case & Cover:304SS, Element:316L SS

## P710 I P720 I P730

### Diaphragm seal type pressure gauge

Design:Internal diaphragm
Working temperature:Ambient -20~65ºC, Max.100ºC
Diaphragm:316L SS, Monel, Hastelloy-C, Titanium...

## P750 series

### Sanitary pressure gauge

Dial:63, 80 and 100 mm
Temp:-20~65ºC(Max.121ºC)
Diaphragm:316L SS, Body:316SS

## P752S

### Sanitary pressure gauge (3-A marking)

Dial:50, 63, 80 and 100 mm
Range:-0.1~7 MPa
Case:304SS, Diaphragm:316L SS

## P753S

### Sanitary pressure gauge - Male connection (3-A marking)

Dial:63 and 100 mm
Range:0~3.5 MPa
Case & cover:304SS
System filling:USP grade glycerin (FDA approved)

## P761 I P762 I P763

### Pressure gauge with Diaphragm seal

Design:Internal diaphragm
Range:-0.1~0.1 to -0.1~35 MPa
Diaphragm:316L SS, Monel, Hastelloy-C, Titanium, Tantalum, Nickel, Alloy20

## P810 P820 P830

### Ultra high purity pressure gauge

Nominal diameter : 35,50 and 63mm I
Range : -0.1~0 to 0~28 MPa I Case : 304SS
Cover & window : Twist-lock polycarbonate
Optional : 100mm (P252 dimension)

## P840 series (316L type)

### Ultra high purity pressure switch

Dial:50 mm (2")
Range:0~28 MPa
Case:304SS, Element:316L SS
Max.power:10 W/DC, 12 VA/AC

## P870

### Anti-corrosion pressure gauge

Dial:50 mm
Range:0~0.1 to 0~1 MPa
Case:PP resin
Element:Bellows-Fluorine resin(PFA)

## P880

### Low differential pressure gauge

Dial:100 mm
Accuracy : ±2.0 % of full scale
-5 ~ 5, -25 ~ 25 and 0 ~ 10 mm : ±3.0 % of full scale
0 ~ 3000 mm : ±4.0 % of full scale
Working temperatire : Ambient -10 ~ 60°C

## P930 series

### Chart recorder

Case dimension:246(W)x271(H)
Range: 0~5 kPa to 0~100 MPa
Case and cover: ALDC 12.1

## P940 series

### Weatherproof type pressure switch

Range: -0.1~2.5 MPa, 0~35 MPa
Working temp.: -20~65 ºC (Max.100 ºC)
Element material: 316SS
Case and cover: ALDC 12.1

## P945

### Weatherproof type pressure switch

Range: 0.3 kPa to 15 MPa
Working temp.: -20~65 ºC I Case and cover: ALDC 12.1
Element material: 316SS
EN60529/IEC529/IP65

## P953 series

### Explosion proof pressure switch

Fluid: Gas and oil
Working temperature: -40~65 ºC (Max. 100 ºC)
Element: 316L SS, Monel, Hastelloy-C and Viton
KCS Ex d IIC T6, ATEX II 2G Ex d IIC T6 Gb, IECEX Ex d IIC T6 Gb

## P970

### Explosion proof type differential pressure switch

Fluid: Gas and oil
Working temperature: Ambient -40~65 ºC (Max. 100 ºC)
Element: 316L SS, Monel, Hastelloy-C and Viton
KCS Ex d IIC T6, ATEX II 2G Ex d IIC T6 Gb, IECEx Ex d IIC T6 Gb

## A070

### Gauge protector

Material:316SS, 316L SS, Monel, Hastelloy-C
Accuracy:±10%

## A080T,F I A080S,W

### Instrument valve

Material : Hastelloy-C, CS, 316SS, 316L SS, Monel, Inconel
Max. static pressure : Up to 25 MPa(S,W), Up to 41 MPa(T,F)
A080T,F type Manifold type : 3 way, 5 way

## A090

### Sunshade

Size : 230 X 370 X 125 (mm), 410 X 350 X 170 (mm)
Sunshade Material : GRP, FRP, 304SS, 316SS, Carbon steel
Gauge bracket material : 304SS, 316SS, 316L SS

# Temperature Instrument

## T110

### Industrial Bimetal Thermometer

Dial:50,65,75,100,125 and 150 mm
Range:-50~50, 0~600 ˚C
Case:304SS, ATEX Ex II GD c IIC TX

## T111

### Industrial Bimetal Thermometer

Dial:75, 100, 125 and 150 mm
Range:-50~50 to 0~600ºC
Case:304SS, Elememt:Coiled bimetal

## T219

### Liquid filled remote reading Thermometer

Dial:100 and 150 mm
Range:-200~100 to 0~700ºC
Case:304SS

## T240

### Remote reading thermometer with full compensation

Dial:125 and 150 mm
Measuring system:0~300 ˚C(Organic gas)
Case & cover:304SS
Armored tube:304SS

## T930

### Temperature recorder (Case compensation system)

Case dimension:246(W)x271(H)
Measuring system : 0~200 ºC(Organic gas)
-200~700 ºC(Inert gas)
Case and cover: ALDC

## T941 I T942

### Weatherproof temperature switch

Measuring system: 0~200 ºC (Only T932)(Organic gas)
-200~700 ºC (Inert gas)
Case and cover: Silver gray finished aluminium

## T953

### Explosion proof temperature switch

Certificates : Ex d IIC T6 Gb, ATEX II 2G Ex d IIC T6 Gb, IECEx Ex d IIC T6 Gb
Measuring system : 0~200℃ (Organic gas), -200~700℃ (Inert gas)
Case & cover : Silver gray finished aluminium
Switch form : One SPDT(T953-1B3), Two SPDT(T953-2B3)

## T990

### Explosion type indicating temperature switch

Certificates : Ex d IIB+$H_2$ T6
Measuring system : 0~200℃ (Organic gas), -200~700℃ (Inert gas)
Case & cover : Silver gray finished aluminium
Switch form : One SPDT or Two SPDT, One DPDT

## R120 series (R series)

### Sheathed thermocouple

Element : K, E, J, T, N
Head material : ALDC, 304SS, 316SS

## R190 RL series

### Cool-down and leak detector

Certificates : KCS Ex d IIC T6
Element : Pt 100Ω at 0℃
Temperature range : -200~100 ℃
Sheath material : 316L SS

## R231 I R232

### Sanitary resistance temperature detector

Element : Pt 100Ω at 0℃
Head type : Weatherproof (304SS)
Stem material : 304SS, 316SS

## R810

### Increased safety type stator winding resistance temperature detector

Working temperature : -50 ~ 180 ℃
Certificates : KCS Ex e IIC Gb, ATEX II 2G Ex e IIC Gb,
IECEx Ex e IIC Gb

## R300 series

### Extension lead wire thermocouple & resistance temperature detector

Element : K, E, J, T, N, R, S, B
R.T.D : Pt 100 Ω

## R500 series

### Multi point thermocouple & resistance temperature detector

Element : K, E, J, T, N
R.T.D : Pt 100 Ω
Junction box mat'l : Alumium(Standard), Stainless steel

## R600 series

### Tubeskin thermocouple & resistance temperature detector

Element : K, E, J, T, N
R.T.D : Pt 100 Ω

## R700

### Non-metallic protection tube thermocouple

Element : R, S, B, K

## R940 series (ETR series)

**Explosion proof type thermocouple & resistance temperature detector**

Element : K, E, J, T, N
R.T.D : Pt 100 Ω
Certifications : ATEX II 2 G Ex d IIC T6 Gb, IECEx Ex d IIC T6 Gb

## H100 series

**Explosion proof type space heater**

Tube material : 304SS
Certifications : ATEX Ex II 2G  Ex e II Gb, IECEx Ex e IIC Gb, KCS Ex e II

## A600 series

**Bar stock thermowell with thread connection**

## A603

**Sanitary thermowell (3-A marking)**

# Flow & Level Instrument

## F100

### Orifice plate

Concentric, Eccentric, Segmental, Quadrant and Conical
Flange rating : JIS 10, 16, 20, 30, 40 and 63K
ANSI 150, 300, 600, 900, 1500 and 2500 Lb
Plate material : 304SS, 316L SS

## F200

### Orifice plate with ring

Concentric, Quadrant, Minimum quadrant
Flange rating : JIS 5, 10, 16 and 20K
ANSI 150 and 300 Lb Lb
Plate material : 304SS, 316L SS, Monel and Other

## F300

### Orifice plate with a holding ring

Concentric, Quadrant edged orifice
Flange rating : ANSI 300, 600, 900 and 1500 Lb
Plate material : 304SS, 316L SS

## F400

### Restriction orifice plate

Restriction plates, Multi-hole, Multi-stage
Line size : DN15 to DN1,800

## F500

### Orifice flange assembly

Flange mounting type : Welding neck, Slip-on, Socket-weld
Ring-joint welding neck
Nominal diameter : 25 ~ 600 mm, 1" ~ 24"
Flange rating : JIS 10, 20, 30, 40 and 63 K
ANSI 150, 300, 600 and 900 Lb RF

## F510

### Integral flow orifice assembly

Line size : Liquid (15 mm), Gas (25 mm), Steam (40 mm)
Body : 316SS
Orifice plate : 316SS, 316L SS, Alloy C-276, Alloy 400

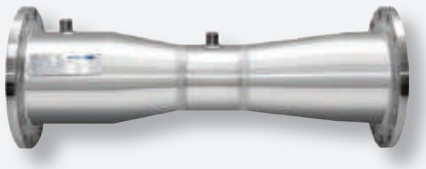
## F600

### Flow nozzle

Nozzle mounting type : Flange, Weld-in, Holding ring
Nominal pipe size : 50 ~ 630 mm
Material : A182-F11, F22, F91, A-182-F304, A182-F316, F316L

## F700

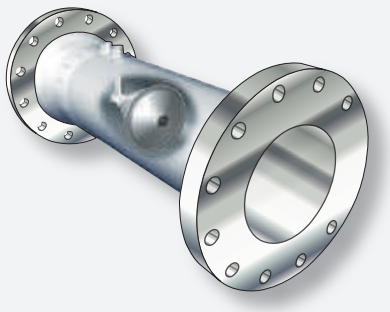
### Venturi tube



Venturi type : Fabricated flange, Fabricated weld-on,
Machined flange, Machined weld-on
Flange rating : JIS 10, 16, 20, 30, 40 and 63K
ANSI 150, 300, 600 and 900 Lb

## F750

### Venturi cone



Accuracy : ±0.5 % of actual flow
Line size : 0.5 ~ 120" or larger
Material : Duplex SS, 304SS or 316SS, Hastelloy C-276,
Carbon steel, Special materials on request

## F770

### Wedge meter

Pipe size : 0.5” ~ 24”
Material : 304SS, 316SS, 316L SS and Carbon steel

## F801

### Glass tube flowmeter flange connection

Size : 15A ~ 100A I Connection : Flanged
Max.Temperature : 120 ℃
Material : Steel, 304SS, 316SS I Accuracy : ±2.0 % of full scale

## F820

### Orifice flowmeter

Size : 10A ~ 500A I Connection : Flanged
Temperature rating : STD. 120℃, Max. 200℃
Material : Steel, 304SS, 316SS I Accuracy : ±3.0% of full scale

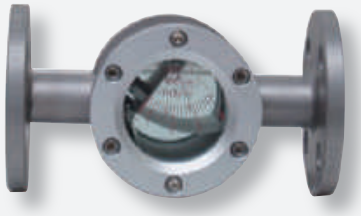
## F821

### Metal tube flowmeter

Contact type : 1 SPDT, 2 SPDT I Output : 4 ~ 20 mA.DC
Operating temperature : Max. 300 ℃

## F850

### Flow switch and sight flowmeter



Size : 10A ~ 300A, 350A ~ 500A
Connection : Screw, Flanged type
Pressure rating : STD. 1 MPa, max. 6 MPa
Temperature rating : 120 ℃, Max. 300 ℃
Material : 304SS, 316SS, 316L SS I Accuracy : ±5.0% of full scale

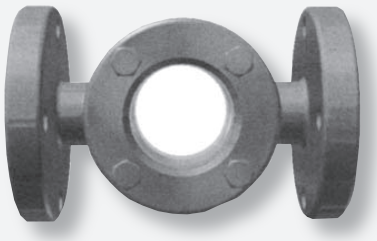
## F901

### Turbine flowmeter

Size : 10A ~ 250A I Connection : Screw, Flange type
Pressure rating : STD. 1 MPa, max. 35 Mpa (Option)
Temperature rating : STD. 120 ℃, Max. 200 ℃ (Option)
Material : 304SS, 316SS, 316L SS
Accuracy : ±1.0% of F.S. I Enclosure : Ex d IIB T6

## S110

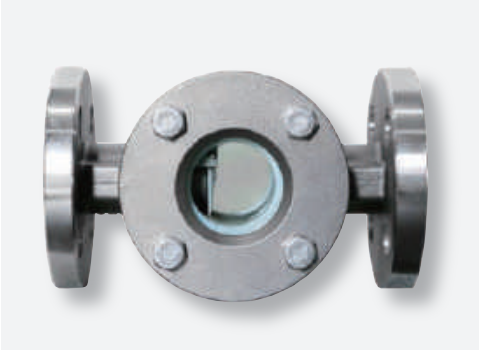
### Flapper type sight glass



Line size : 1/2" ~ 8" I Connection : Flange type
Max. pressure : 2.9 MPa I Max. temp. : 300℃
Glass : Tempered

## S210

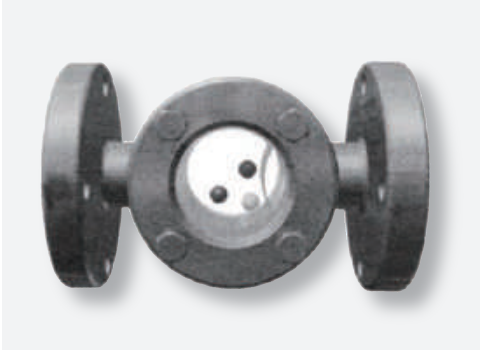
### Flapper type sight glass



Line size : 1/2" ~ 8" I Connection : Flanged end
Max. pressure : 2.9 MPa I Max. temperature : 300 ℃
Glass : Tempered

## S310

### Ball type sight glass



Line size : 1/2" ~ 8" I Connection : Flanged end
Max. pressure : 2.9 MPa I Max. temperature : 100 ℃
Glass : Tempered

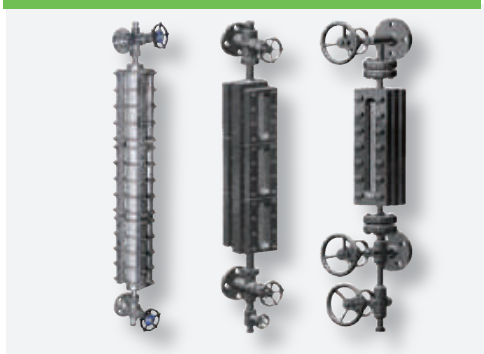
## L100

### Reflex type level gauge

Visible length : 90 ~ 3,510 mm

## L200

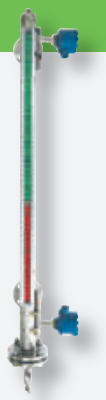
### Transparent type level gauge



Visible length : 90 mm ~ 3,510 mm

## L300

### Magnetic float type level gauge



Chamber size : 50A, 65A
Flange rating : 150~900 Lb, 150~1500 Lb
Max. temperature : 300 ℃ I Max. pressure : 6 MPa, 15 MPa

## L400 series

### Tubular gauge

Valve material : Carbon steel, Stainless steel, PVC
Valve type : Straight type
Size : ½" ~ 1" flanged

## L500

### Transparenent & two-color type level gauge

Max. pressue : 10 Mpa
Max. temperature : Sat. temperature
Material : Carbon steel, Stainless stell

## L510

### Multi-port type two-color level gauge

Max. pressure : 21.5 Mpa
Max. temperature : Sat. temperature
Material : Carbon steel, Stainless steel

Model No. P680

# Capability

## Product

### Pressure Instrument

- Dial size - Min : 50 mm, Max : 200 mm or etc./ Range - Min : -0.1 MPa, Max : 200 MPa
- Sun Shade Size : 230 mm × 370 mm × 125 mm / 410 mm × 350 × 170 mm / Other

### Temperature gauge

- Dial Size : Min : 75 mm, Max 150 mm or etc. / Range – Min : - 50℃, Max : 700℃

### Temperature sensor

- Length - Min : 50 mm, Max : Unlimited / Range - Min : - 200℃, Max : 1,700℃

### Thermowell

- Length - Min : 50 mm, Max :10,000 mm or more than

### Level Instrument

- Length - Max. 5 m /Vessel connection - Max : 2” or more than Length : 5 m

### Flow element

- Out diameter - Max : 3 m / Length - Max :10m / Thickness – Max : 100 mm

## Production

| Item | Capability |
|---|---|
| Pressure Instrument | 25,000 ea / month |
| Sun Shade | 3,000 ea / month |
| Temperature Instrument | 15,000 ea / month |
| Flow and Level Instrument | 1,000 ea / month |

# Major Facilities

## Testing Equipments

| No. | Test Equipment Name | Description | Q'ty |
|---|---|---|---|
| 01 | Dielectric Strength Tester | 0~5 ㎸ | 1 |
| 02 | Tensile Tester | 30 t | 1 |
| 03 | Micrometer (Outdiameter) | 0~25 mm | 1 |
| 04 | Micrometer (Indiameter) | 5~25 mm | 1 |
| 05 | Dial type thickness Gauge | 0.01~10 mm | 1 |
| 06 | Vernier Calipers | 0 ~ 150, 200, 300 mm | 10 |
| 07 | Ring gauge, Plug gauge | PT, NPT, PF, UNF, BSPT | 1 |
| 08 | Height Gauge | 0~600 mm | 1 |
| 09 | Multi Tester | multi | 1 |
| 10 | Insulation Resistance Tester | DC 500 V / 100㏁ | 1 |
| 11 | Vaccum Gauge | 60*-76 cmHg | 2 |
| 12 | Hardness Tester | Vickers | 1 |
| 13 | Temperature Chamber | -20 ~ +100℃ | 1 |
| 14 | Suface & Radius Tester | 800 ㎛, LCD 100 * 70 mm | 2 |
| 15 | X-RAY ANALYSER(PMI Tester) | X-MET 5,000 | 1 |
| 16 | Suface & Radius Tester | 800 ㎛, LCD 100 * 70 mm | 2 |
| 17 | Hydrostatic Tester | 35 Mpa | 2 |

## Manufacturing Equipments

| No. | Manufacturing Equipment Name | Description | Q'ty |
|---|---|---|---|
| 01 | CNC Machining Center | LC V-550 C | 3 |
| 02 | CNC Lathe Machine | PL-25 A/500 | 3 |
| 03 | DG TIG Welder | Captain-500 T | 3 |
| 04 | CO2 Welder | Captain-500 C | 1 |
| 05 | Plasma Cutting Machine | Captain-130 P | 1 |
| 06 | PVC Welder | - | 1 |
| 07 | Marking Machine | ADM-200 F | 1 |
| 08 | Drill Tapping Machine | STD-360 | 2 |
| 09 | Drill Tapping Machine | NBTG-540 | 1 |
| 10 | Milling Machine | NSM-T | 1 |
| 11 | Lathes Machine | NARA-5010 | 1 |
| 12 | Lathes Machine | NARA-6010 | 1 |
| 13 | Cutting Machine | HA-250 (Ø250) | 1 |
| 14 | Machining Center | PV-40 | 1 |
| 15 | CNC Lathe Machine | PL-20 A | 5 |
| 16 | CNC Machining Center | PL-6 G | 1 |
| 17 | CNC Machining Center | HIT-160 | 1 |
| 18 | Machining Center | TC-221 | 1 |
| 19 | Tap Drill Mate | BT-30 | 2 |
| 20 | Index Drill Machine | ESD-350 S | 2 |
| 21 | Index Drill Machine | STD-410 | 5 |
| 22 | Index Drill Machine | STD-360 | 2 |
| 23 | High Speed Precision Lathe | - | 2 |

| No. | Manufacturing Equipment Name | Description | Q'ty |
|---|---|---|---|
| 24 | Marking Machine (Stencil) | - | 2 |
| 25 | CNC Bend Sawing Machine | WBS-C400AN | 1 |
| 26 | Micro Spot Welder | 100V * 40 W/S | 2 |
| 27 | TIG Welding M/C | HB-300 P | 4 |
| 28 | High Speed Precision Lathe | Ø400* 1,060 mm, 3.7-4 kw | 1 |
| 29 | Knee Type Milling Machines | 1,350 mm * 70 mm, 70 ~ 1,800 rpm | 1 |
| 30 | Grinder | 220~380 V | 7 |
| 31 | Bench Turret Lathe | LB6T-3 (90 mm * 660 mm) | 1 |
| 32 | Furnace | Kanthal A-1 wire 0~1200℃ | 1 |
| 33 | Furnace | Kanthal A-1 wire 0~700℃ | 1 |
| 34 | Vacuum Heat Treatment Furnaces | Kanthal A-1 wire 0~800℃ | 1 |
| 35 | Drying oven | 0 ~ 250℃ | 2 |
| 36 | Drying Oven | 0 ~ 200℃ | 1 |
| 37 | TIG Welding Machines | 300 GTS | 1 |
| 38 | Plasma Welding Machines | EG PXS 050-1 (208 ~ 460 V) | 1 |
| 39 | Stud Bolt Welding Machines | Primary Power : 230 V/Capacity : 60,000 nF | 1 |
| 40 | TIG Welding Machines | SAXOTECH-2200 SAF, 230 V | 1 |
| 41 | TIG Welding Machines | 350AD, 350 A | 1 |
| 42 | Suction Air Blast (Sanding) Machines | 1,000 W * 800 L * 150 H | 1 |
| 43 | TIG Welding Machines | HB-500 P | 1 |
| 44 | TIG Welding Machines | HB-350 P | 1 |
| 45 | Glove Box | For 2.5 | 3 |
| 46 | TIG Welding Machines | 3~180 A | 2 |
| 47 | Ultrasonic Cleaner | 1st / 50℃ | 1 |
| 48 | Micro TIG Welding Machines | High 1 ~ 99.9 V, Low 0.1 ~ 99 A | 1 |
| 49 | Vacuum Package Machine | 4 ~ 5 kg/㎠ | 1 |
| 50 | A Thermo-Hygrostat | 1G (21℃, 50 %) | 1 |
| 51 | N2 Tank | 10 kg/㎠ (575 mm*1420 mm*1280 mm) | 1 |
| 52 | A Thermo-Hygrostat | 2G (21℃, 50 %) | 1 |
| 53 | Particule Measuring Instrument | 10,000 Zone / 100 Zone | 1 |
| 54 | Inverter Micro TIG Welding Machines | 0 ~ 150 A | 4 |
| 55 | Precision TIG Welding Machines | High Range 1 ~ 99.9 A | 1 |
| 56 | Chamber Welding Machines | 1,300 mm*1,000 mm*1,630 mm /1 Ton | 1 |
| 57 | Vacuum Package Machine | 35 Kg/㎠ | 1 |
| 58 | UV Rays Irradiateur | UV-100 S | 1 |
| 59 | Milling Machine | TMV-2 | 1 |
| 60 | CNC Lathe Machine | PUMA-240 A | 1 |
| 61 | CNC Lathe Machine | PUMA-240 S | 1 |
| 62 | Lathe Machine | TIPL-4 | 3 |
| 63 | Lathe Machine | TIPL-410 | 3 |
| 64 | Saw Machine | - | 1 |
| 65 | CNC Sawing Machine | WBS-C450AN | 1 |
| 66 | Gun Drill Machine | MEG-1000 | 1 |
| 67 | TIG Welding Machines | TIG-300 | 1 |
| 68 | TIG Welding Machines | TIG-L500 A | 1 |
| 69 | TIG Flange Welding System | - | 1 |
| 70 | Auto Marking Machine | ADM-200F(Max.Ø400) | 1 |
| 71 | CNC Lathe Machine | PL-24B/500-8" | 1 |
| 72 | Collect Chuck Type Benchleath | DK-32(6.4, 8, 10, 12, 13.8, 15, 17.3, 21.7,25.4, 27) | 1 |
| 73 | CNC Machining Center | LCV-550 C / BT-50 | 1 |
| 74 | CNC Gun Drill Machine | KEG-800-2CNC (Max. Depth : 800 L) | 1 |

# Capability

## Pressure Instrument

- Dial size - Min : 50mm, Max : 200mm or etc./ Range - Min : -0.1 MPa, Max : 200 MPa
- Sun Shade Size : 230mm× 370mm×125mm / 410mm×350 ×170mm / Other

## Temperature gauge

- Dial Size : Min : 75mm, Max 150mm or etc. / Range – Min : - 50℃, Max : 700℃

## Temperature sensor

- Length - Min : 50mm, Max : Unlimited / Range - Min : - 200℃, Max : 1700℃

## Thermowel l

- Length - Min : 50mm, Max :10000mm or more than

## Level Instrument

- Length - Max. 5 m /Vessel connection - Max : 2” or more than) Length : 5m

## Flow element

- Out diameter -Max : 3 m / Length- Max :10m / Thickness – Max : 100 mm

| Item | Capability |
|---|---|
| Pressure Instrument | 25,000 ea / month |
| Sun Shade | 3,000 ea / month |
| Temperature Instrument | 15,000 ea / month |
| Flow and Level Instrument | 1,000 ea / month |

# Major Facilities

## Materials Control

Warehouse for raw materials

Scale plate storage

Sensor head storage

Movement storage

## Machining

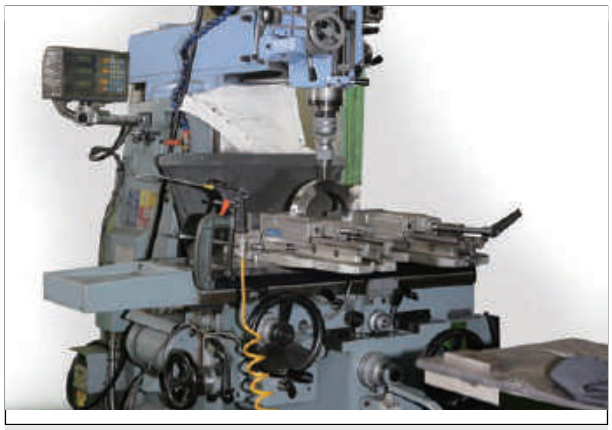
Raw material process machining center

Raw material processing CNC

8″ Raw material processing lathe

3″ Raw material process milling machine

## Machining



Raw material process milling machine

Tap processing machine

8″ Raw material processing lathe

6″ Raw material processing lathe

## Machining

Raw material process machining center

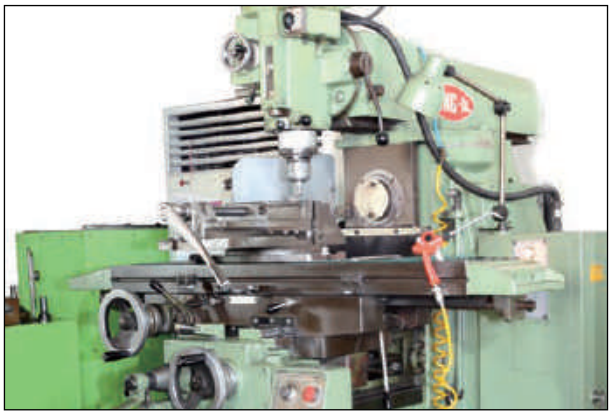
Raw material process machining center

Raw material processing CNC

Raw material processing CNC

## Machining

Tapping machine (Shank processing)



2″ Raw material process milling machine

Raw material processing CNC

Raw material processing CNC

## Machining

Raw material processing CNC

Raw material processing CNC

Raw material processing CNC

Raw material process machining center

## Machining

Raw material process machining center

Raw material processing CNC

6″ Lathe (Raw material processing)

2″ Raw material process milling machine

## Machining

Gundrill for thermowell processing

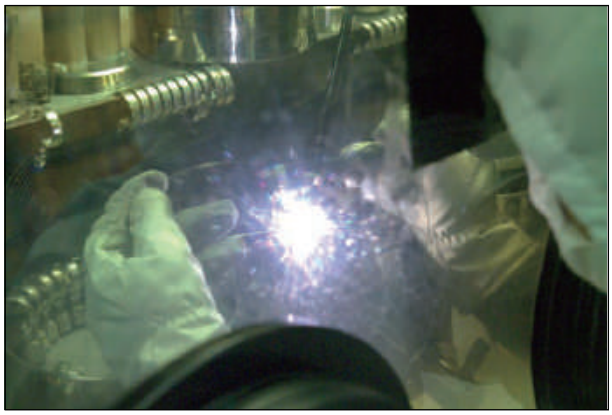
Gundrill for thermowell processing

Raw material cutting machine

Raw material cutting machine

## Welding

TIG welding machine for bellows



Chamber welding machine for BT

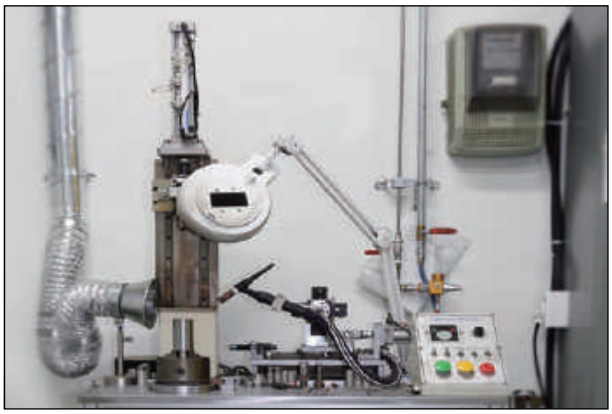
Argon welding machine

Argon welding machine

## Welding

Laser welding machine for element

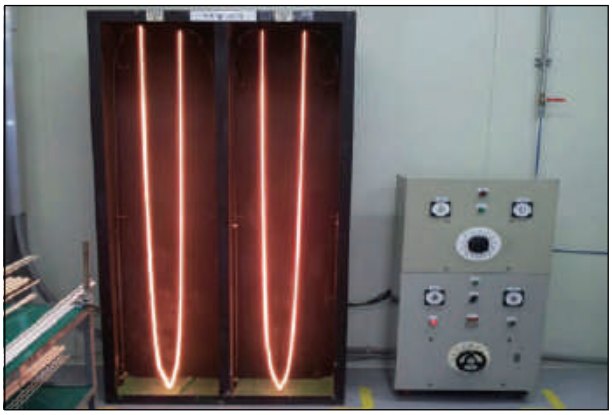
Laser welding machine for sheath and tube



TIG welding machine for TW

TIG welding machine for TW

## Heat Treatment



Heat treatment equipment for temperature sensor wire (B,R,S type)

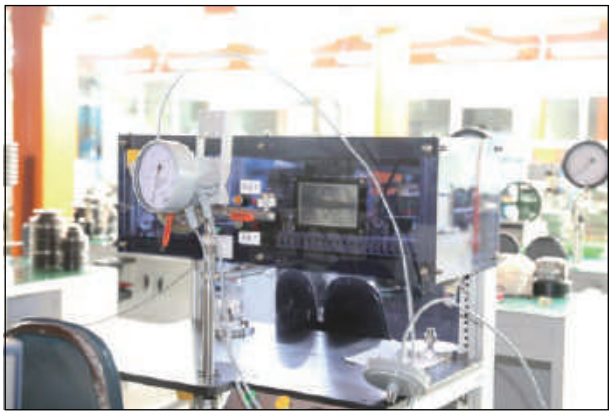
Ceramic heat treatment equipment for removing impurities

Sheath drying furnace

Epoxy drying furnace for temperature sensor

## Assembly

Epoxy drying furnace for temperature sensor



Low pressure calibration for DP gauge

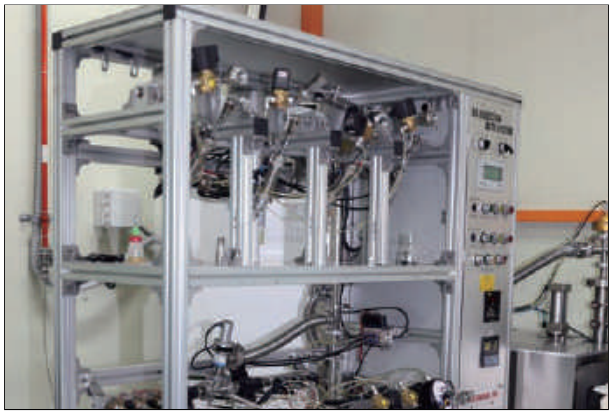
Sheath straightening machine

Ultrasonic washer for cleaning the processed products

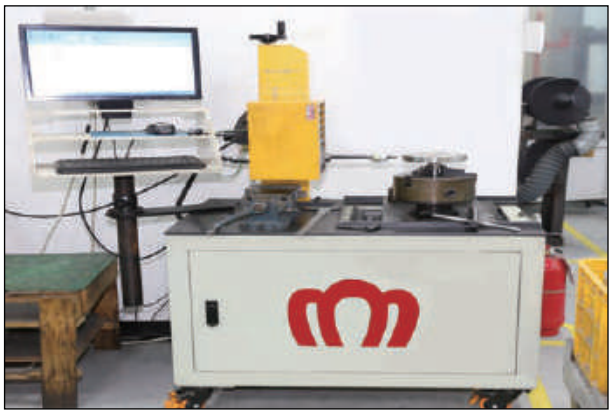
## Assembly

BT welding leak test machine waterlogging

Flange bolt assembly machine for diaphragm type PG

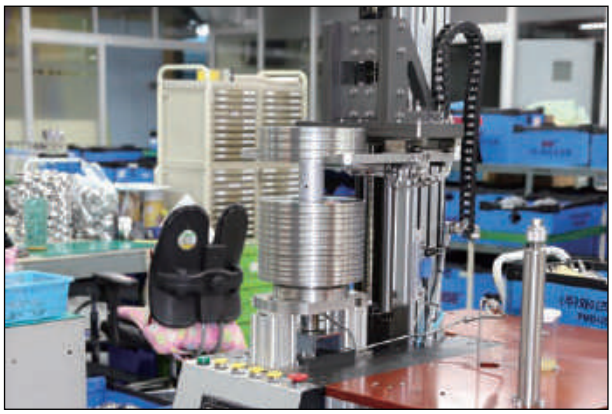


Oil filling machine for diaphragm type PG



Flange marking machine

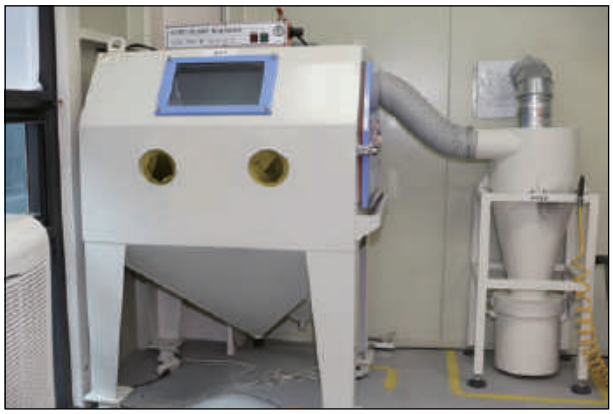
## Assembly



Dead-weight calibrating machine for high pressure PG

Oil filling station for P6

Bolt assembling machine for DP gauge



Sand blast machine for temperature sensor

## Test and Calibration

Electronic pressure calibrating machine

Hardness tester for pressure gauge parts

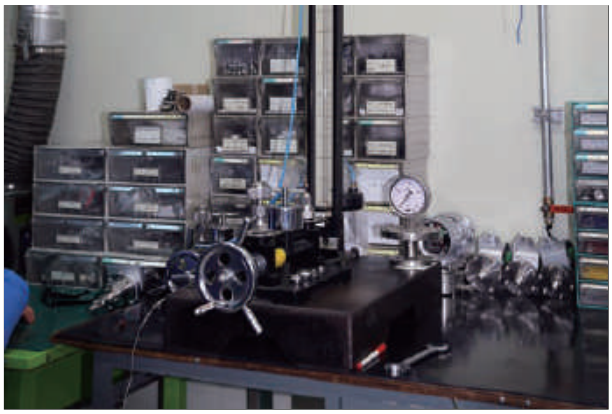
Oil bath for temperature control

Oil bath for temperature control

## Test and Calibration

Helium leak tester for bellows and vaccum valve

Pressure calibrating machine for a low pressure



Pressure calibrating machine for low pressure

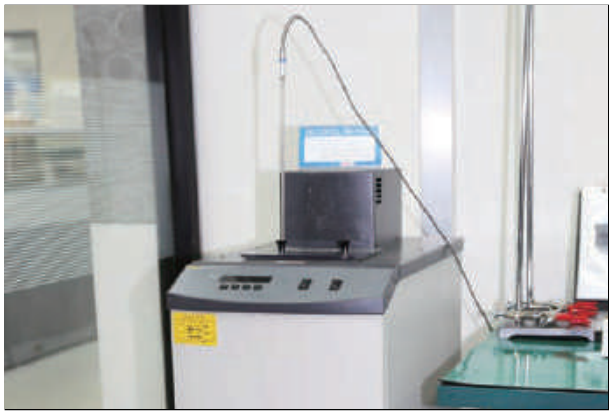
Pressure calibrating machine for low pressure

## Test and Calibration

Helium leak tester for the welding area (for PG)

Electronic furnace for calibrating temperature

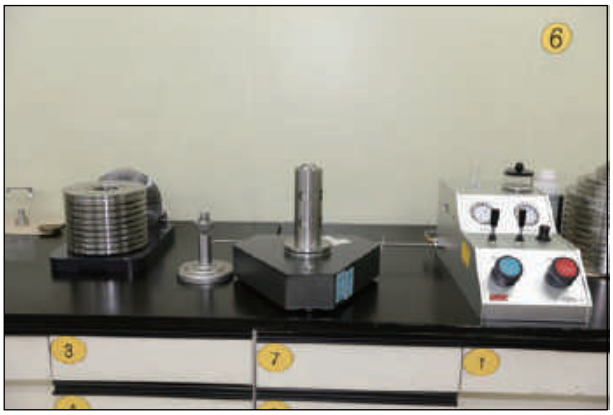
Furnace for calibrating temperature



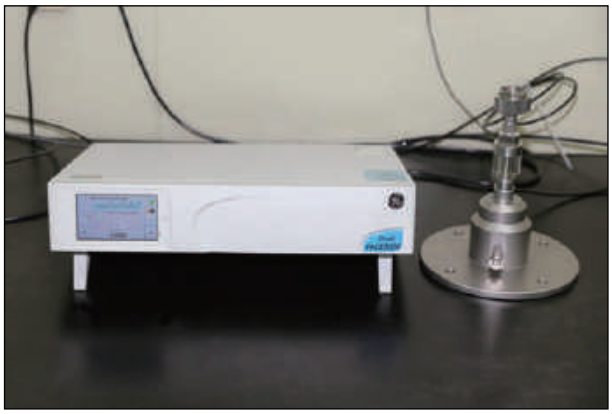
Furnace for calibrating temperature for -℃
(Below zero temperature)

## Test and Calibration

Furnace for calibrating temperature for -℃
(Below zero temperature)



Dead-weight pressure controller for high pressure



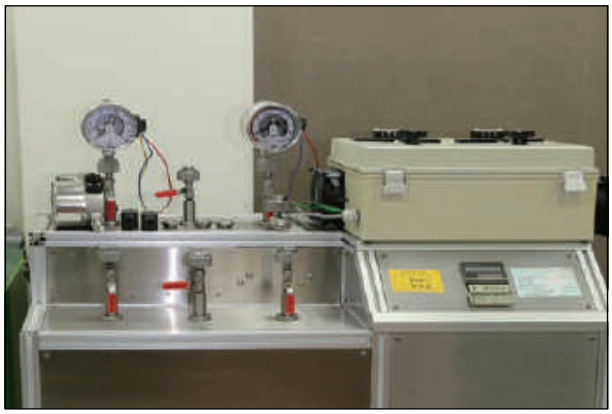
Electronic pressure controller for
mid pressure

Electronic pressure controller for
low pressure

## Test and Calibration

Furnace for calibrating temperature

Hardness measuring machine



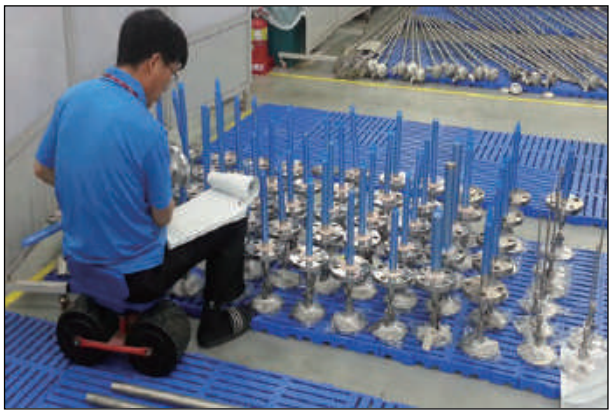
Repitition test machine for contact type PG

Profilometer

## Final Inspection

Quality inspection before dispatching

PMI test

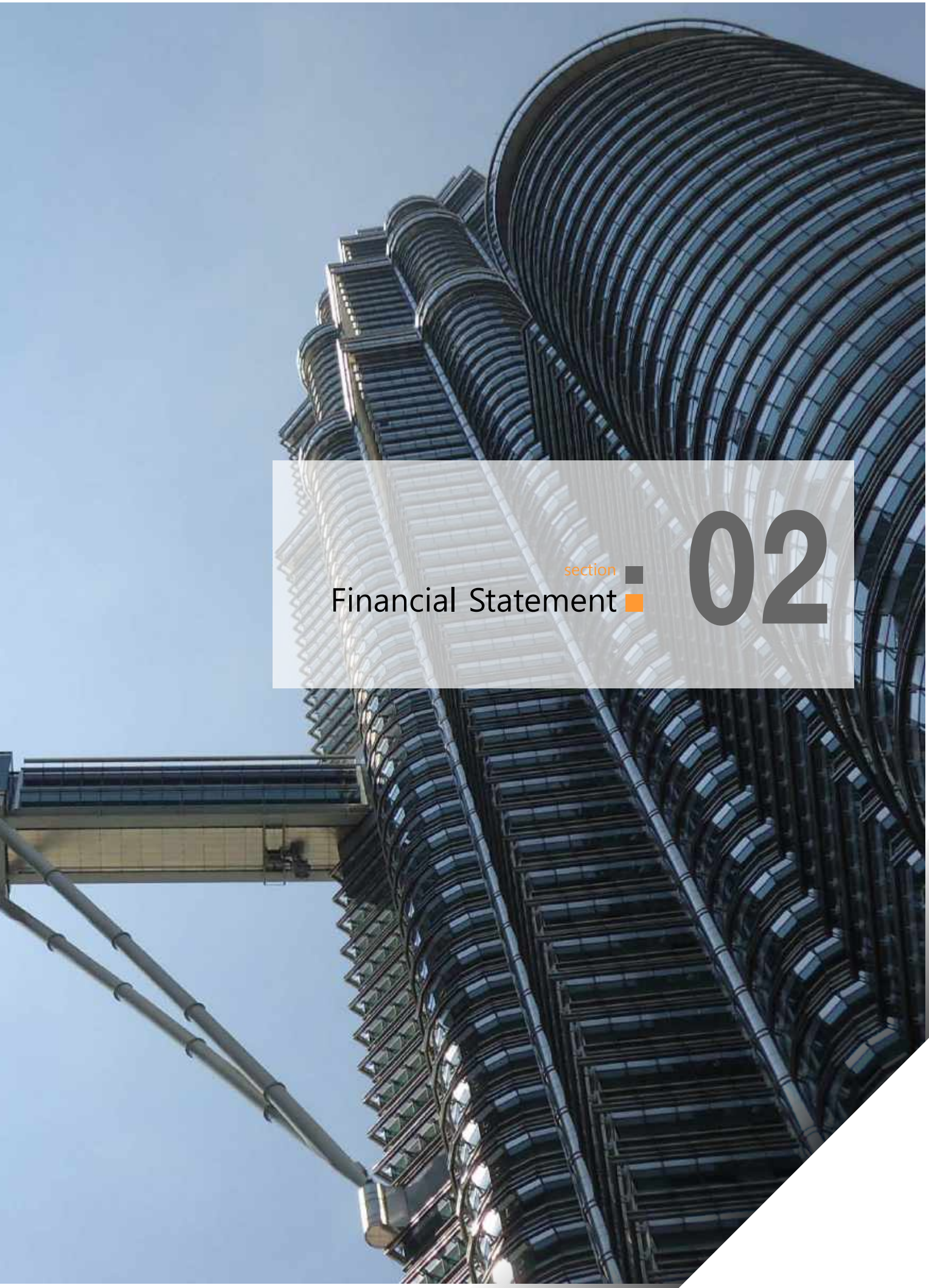


Quality inspection before dispatching

Shape measuring machine for diaphragm or bellows

Manufacturing process

Financial Statement | Main Award Records



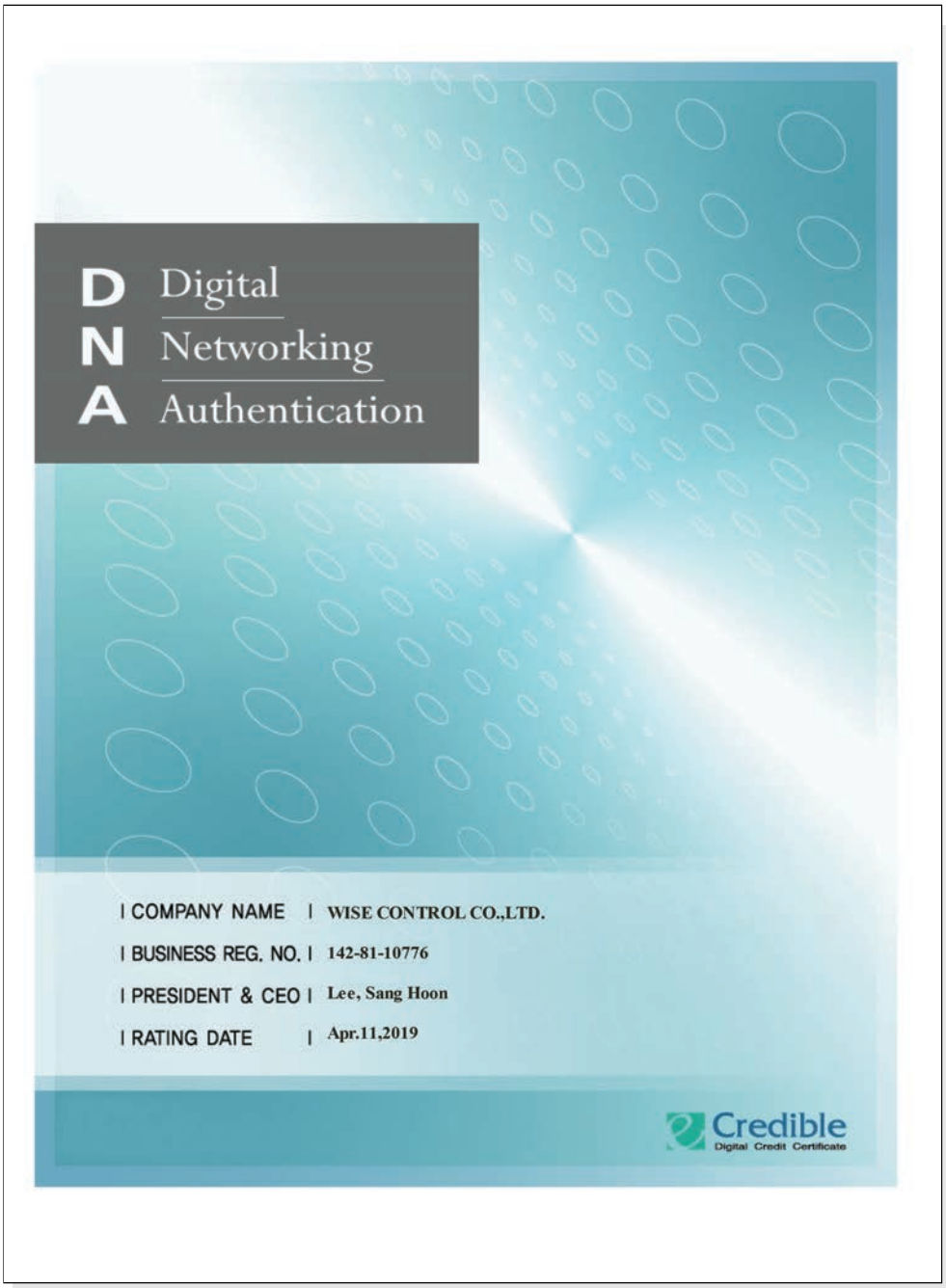
section

# Financial Statement

# 02

# Financial Statement

## Company Credit Certificate



D Digital
N Networking
A Authentication

| COMPANY NAME | WISE CONTROL CO.,LTD.
| BUSINESS REG. NO. | 142-81-10776
| PRESIDENT & CEO | Lee, Sang Hoon
| RATING DATE | Apr.11,2019

Credible
Digital Credit Certificate

## Company Credit Certificate

# CREDIT RATING

ECC2019040056663 | WISE CONTROL CO.,LTD. | Lee, Sang Hoon | 142-81-10779

### Company Information

| | |
|---|---|
| Company Name | WISE CONTROL CO.,LTD. |
| President | Lee, Sang Hoon |
| Head Office | (17007) 199 Sanggal-dong, Kiheung-gu, Gyeonggi-do |
| TEL | 031-288-5103 |
| Business Reg. Number. | 142-81-10779 |
| Line of Business | Manufacturing of distribution panels and automatic control panels |
| Date of Registration | Dec.11,2007 |
| Fiscal Year | Dec.31,2018 |
| Credit Rating Effective Date | Apr.11,2019~Apr.10,2020 |

Credit Rating

**BBB+**

Credit Rating Date

Apr.11,2019

Credit Rating History

| Reporting Date | Fiscal Year | Credit Rating | Cash Flow Rating |
|---|---|---|---|
| Apr.11,2019 | Dec.31,2018 | BBB+ | A |
| Apr.13,2018 | Dec.31,2017 | BBB+ | A |
| Apr.11,2017 | Dec.31,2016 | BBB+ | A |

### Company Overview

| Main Items | Business Profile | | Customer(%) | | Major Shareholders | |
|---|---|---|---|---|---|---|
| Measuring Instrument | No. of Employees | 233 | WISE CONTROL CO., LTD. | 18% | Lee, Sang Hoon | 37.7% |
| Supply of electric power machine | Company Size | Medium | Korea Electric Power Corporation | 13% | Jang, Choon Soon | 14.3% |
| Commission fees | Legal Status | Audited Company | Wise Tech Co.Ltd. | 6% | Lee, Jong Won | 8.7% |
| | Paid-in Capital (KRW million) | 6,327 | Woojin Machinery Co., Ltd. | 5% | Kwon, Yoon Kyung | 9.8% |

(Unit: KRW million)

| Fiscal Year | Total Asset | Total Liabilities | Total Stockholders' Equity | Sales | Operating Income | Net Income |
|---|---|---|---|---|---|---|
| Dec.31,2018 | 58,749 | 16,268 | 42,482 | 44,803 | 2,140 | 2,482 |
| Dec.31,2017 | 55,756 | 15,557 | 40,199 | 47,161 | 2,042 | 2,520 |
| Dec.31,2016 | 50,715 | 10,915 | 39,199 | 39,598 | 4,965 | 5,677 |
| Dec.31,2015 | 52,441 | 12,400 | 40,041 | 46,814 | 4,531 | 3,730 |

This DNA Report is analyzed by eCredible Co.,Ltd. based on all object data submitted by the Subject Company also issued by eCredible Co.,Ltd. Therefore, eCredible Co.,Ltd. shall not be liable for any loss caused by your decision-making from reliance on the report. The information in DNA Report is a reference for credit ability and is provided for your legitimate business purposes only. The rating grade will be valid for a year from the rating date. The rating can be changed or cancelled when important changes that can be influenced on its credit occur. The DNA Report is not used for public bid.

## Company Credit Certificate

I | Digital Networking Authentication

# Financial Summary

WISE CONTROL CO.,LTD. | 142-81-10729
Lee, Sang Hoon
ECOM1-904805865

### Summary Balance Sheet

| Account | (Unit: KRW million) | | | Ratio(%) | | |
|---|---|---|---|---|---|---|
| | 2016 | 2017 | 2018 | 2016 | 2017 | 2018 |
| Current Assets | 30,096 | 26,649 | 17,339 | 55.0 | 47.8 | 29.5 |
| Quick Assets | 22,590 | 18,131 | 7,299 | 41.2 | 32.5 | 12.4 |
| Inventories | 7,506 | 8,517 | 10,040 | 13.8 | 15.3 | 17.1 |
| Non-Current Assets | 24,619 | 29,107 | 41,400 | 45.0 | 52.2 | 70.5 |
| Investment Assets | 368 | 3,603 | 4,060 | 0.7 | 6.5 | 6.9 |
| Tangible Assets | 22,580 | 22,894 | 23,728 | 41.2 | 41.0 | 37.4 |
| Intangible Assets | 426 | 1,145 | 1,809 | 0.8 | 2.1 | 3.1 |
| Other Non-Current Assets | 1,246 | 1,503 | 1,794 | 2.3 | 2.7 | 3.1 |
| **Total Assets** | **54,715** | **55,756** | **58,740** | **100.0** | **100.0** | **100.0** |
| Current Liabilities | 8,707 | 7,138 | 7,769 | 16.1 | 12.8 | 13.2 |
| Non-Current Liabilities | 1,718 | 8,418 | 8,289 | 3.1 | 15.1 | 14.1 |
| **Total Liabilities** | **10,515** | **15,557** | **16,058** | **19.2** | **27.9** | **27.3** |
| Capital Stock | 1,600 | 6,326 | 6,326 | 2.9 | 11.3 | 10.8 |
| Capital Surplus | 9,174 | -86 | 44,386 | 16.8 | -0.2 | 75.4 |
| Capital Adjustment | 0 | 0 | -44,382 | 0.0 | 0.0 | -75.6 |
| Other Accumulated Earnings and Comprehensive Income | 6,299 | 6,299 | 6,299 | 11.5 | 11.3 | 10.7 |
| Retained Earnings | 27,124 | 27,658 | 30,141 | 49.6 | 49.6 | 51.3 |
| (Net Income For The Year) | 4,477 | 2,533 | 2,482 | 8.2 | 4.5 | 4.2 |
| **Total Stockholders' Equity** | **44,199** | **40,199** | **42,682** | **80.8** | **72.1** | **72.7** |
| **Total Liabilities and Stockholders' Equity** | **54,715** | **55,756** | **58,740** | **100.0** | **100.0** | **100.0** |

### Summary Income Statements

| Account | (Unit: KRW million) | | | Ratio(%) | | |
|---|---|---|---|---|---|---|
| | 2016 | 2017 | 2018 | 2016 | 2017 | 2018 |
| 1. Sales | 45,298 | 47,181 | 44,640 | 100.0 | 100.0 | 100.0 |
| 2. Cost of Sales | 29,653 | 33,206 | 31,418 | 65.7 | 70.4 | 70.4 |
| 3. Gross Profit | 15,646 | 13,975 | 13,221 | 34.3 | 29.6 | 29.6 |
| 4. Selling And Administrative Expenses | 10,680 | 11,033 | 11,081 | 23.4 | 23.4 | 24.8 |
| 5. Operating Income | 4,966 | 2,942 | 2,140 | 10.9 | 6.2 | 4.8 |
| 6. Non-Operating Income | 686 | 690 | 874 | 1.5 | 1.0 | 2.0 |
| 7. Non-Operating Expense | 435 | 697 | 166 | 0.9 | 1.4 | 0.4 |
| 8. Income from Continuing Operations before Income Tax | 5,216 | 2,936 | 2,848 | 11.5 | 6.2 | 6.4 |
| 9. Income from Continuing Operations | 4,477 | 2,533 | 2,482 | 9.9 | 5.4 | 5.6 |
| 10. Income from Discontinued Operations | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 |
| 11. Net Income | 4,477 | 2,533 | 2,482 | 9.9 | 5.4 | 5.6 |

## Company Credit Certificate

I | Digital Networking Authentication
**Opinion**

WISE CONTROL CO.,LTD. | 142-81-10779
Lee Sang Hoon
EC03013040100B3

<Financial Summary>

– Company Profile

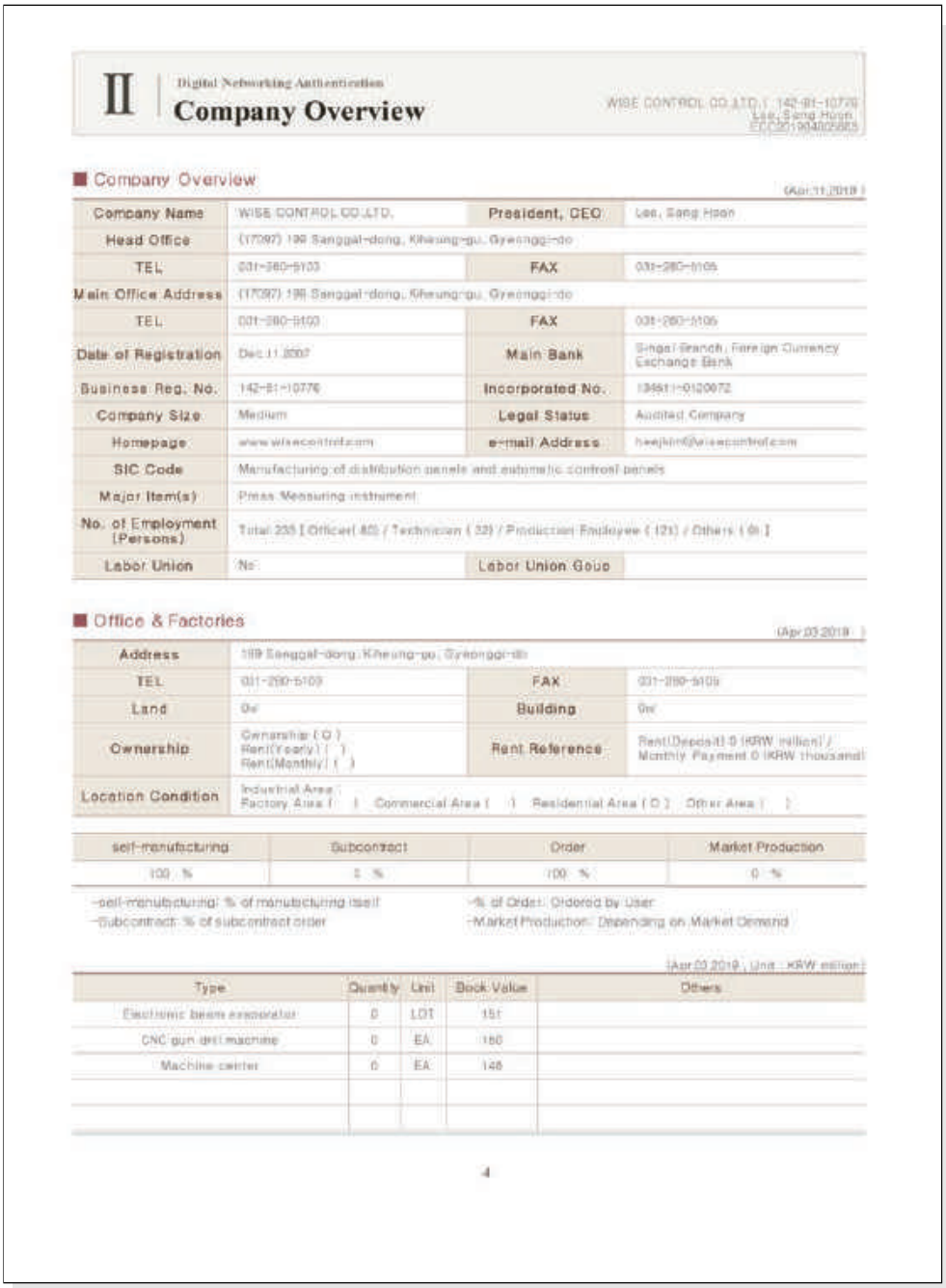
Wise Control Inc. was established in December 2017 for manufacturing of distribution and automatic control panels by president Lee Sang-Hoon. Capital rose to KRW 6.32 billion after the merge with Wise Co., Ltd. in June 2017. As of FY2018, it is a small to mid-sized company with 233 employees which holds KRW 58.74 billion of total assets and KRW 42.48 billion of equity.

– Financial Analysis

In 2018, sales fell 5.4% from the previous year to KRW 44.64 billion. Operating cash flow continued a net influx, and the company repaid entire borrowings with the operating cash and internal liquid fund. Financial structure appeared to be stable with 37.6% of debt to equity ratio.
* As of 3 April 2019, the company was operating KRW 1.74 billion of borrowings and set building and site as collateral.

3

## Company Credit Certificate



II | Digital Networking Authentication

**Company Overview**

WISE CONTROL CO.,LTD. | 142-81-10776 | Lee, Sang Hoon | 110201-1904205815

■ Company Overview

(Apr.11.2019)

| | | | |
|---|---|---|---|
| Company Name | WISE CONTROL CO.,LTD. | President, CEO | Lee, Sang Hoon |
| Head Office | (17097) 199 Sanggal-dong, Kiheung-gu, Gyeonggi-do | | |
| TEL | 031-280-5103 | FAX | 031-280-5105 |
| Main Office Address | (17097) 199 Sanggal-dong, Kiheung-gu, Gyeonggi-do | | |
| TEL | 031-280-5103 | FAX | 031-280-5105 |
| Date of Registration | Dec.11.2007 | Main Bank | Singal Branch, Foreign Currency Exchange Bank |
| Business Reg. No. | 142-81-10776 | Incorporated No. | 134511-0120072 |
| Company Size | Medium | Legal Status | Audited Company |
| Homepage | www.wisecontrol.com | e-mail Address | heejkim@wisecontrol.com |
| SIC Code | Manufacturing of distribution panels and automatic control panels | | |
| Major Item(s) | Press, Measuring instrument | | |
| No. of Employment (Persons) | Total 255 [ Officer( 80) / Technician ( 32) / Production Employee ( 121) / Others ( 9) ] | | |
| Labor Union | No | Labor Union Going | |

■ Office & Factories

(Apr.03.2019)

| | | | |
|---|---|---|---|
| Address | 199 Sanggal-dong, Kiheung-gu, Gyeonggi-do | | |
| TEL | 031-280-5103 | FAX | 031-280-5105 |
| Land | 0㎡ | Building | 0㎡ |
| Ownership | Ownership ( O )<br>Rent(Yearly) ( )<br>Rent(Monthly) ( ) | Rent Reference | Rent(Deposit) 0 (KRW million) / Monthly Payment 0 (KRW thousand) |
| Location Condition | Industrial Area ( )<br>Factory Area ( ) Commercial Area ( ) Residential Area ( O ) Other Area ( ) | | |

| self-manufacturing | Subcontract | Order | Market Production |
|---|---|---|---|
| 100 % | 0 % | 100 % | 0 % |

-self-manufacturing: % of manufacturing itself
-Subcontract: % of subcontract order
-% of Order: Ordered by User
-Market Production: Depending on Market Demand

(Apr.03.2019 , Unit : KRW million)

| Type | Quantity | Unit | Book Value | Others |
|---|---|---|---|---|
| Electronic beam evaporator | 0 | LOT | 151 | |
| CNC gun drill machine | 0 | EA | 160 | |
| Machine center | 0 | EA | 148 | |
| | | | | |
| | | | | |
| | | | | |

4

## Company Credit Certificate

# II Digital Networking Authentication
# Company Overview

WISE CONTROL CO.,LTD. | 142-81-10779
Lee Sang Hoon
ECO3N3040005R5

### History

| | |
|---|---|
| 2004/11 | Acquired IECEx certification (pressure and temperature switch). |
| 2005/02 | Acquired IECEx certification (temperature sensor) |
| 2006/08 | Selected as Best SME |
| 2007/12 | Established by president Lee Sang-Hoon for manufacturing of distribution panels and automatic control panels. |
| 2007/12 | Head office: 2022, Deokyeongdae-ro, Giheung-gu, Yongin-si, Gyeonggi-do, Paid-in capital: KRW 2 billion |
| 2008/12 | Received national award |
| 2011/09 | Acquired KEPIC Certificate. |
| 2012/07 | Acquired GOST-R certification (pressure/temperature sensor). |
| 2015/12 | Acquired TRCU certification. |
| 2017/06 | Increased capital to KRW 6.32 billion. |

### Affiliated Companies

( Fiscal Y/E: , Unit: KRW million )

| | | | |
|---|---|---|---|
| Company Name | Wise Sensing Co., Ltd. | President & CEO | |
| Line of Business | | Business Reg. No. | 1428132411 |
| Sales | 0 | Operating Income | 0 |
| Net Income | 0 | Total Asset | 0 |
| Relationship | Parent Company( ), Affiliated Company( ), Subsidiary Company( ), Others( ) / | | |

( Fiscal Y/E: , Unit: KRW million )

| | | | |
|---|---|---|---|
| Company Name | Woosoung Farm Co., Ltd. | President & CEO | |
| Line of Business | | Business Reg. No. | 1268633368 |
| Sales | 0 | Operating Income | 0 |
| Net Income | 0 | Total Asset | 0 |
| Relationship | Parent Company( ), Affiliated Company( ), Subsidiary Company( ), Others( ) / | | |

( Fiscal Y/E: , Unit: KRW million )

| | | | |
|---|---|---|---|
| Company Name | | President & CEO | |
| Line of Business | | Business Reg. No. | |
| Sales | | Operating Income | |
| Net Income | | Total Asset | |
| Relationship | | | |

## Company Credit Certificate

III | Digital Networking Authentication
**Management**

WISE CONTROL CO.,LTD. | 142-81-10720
Lee, Sang Hoon
EC0201904205825

■ President & CEO

CEO 1: President

| Name | Lee, Sang Hoon | Resident ID No. | 630910-******* |
|---|---|---|---|
| Adderss | 50, Hyoryeong-ro 33-gil, Seocho-gu, Seoul | | |
| TEL | 031-260-**** | | |
| License | | | |
| Ownership | Founder | Prize | |
| Date of Inauguration | Dec.11.2007 | Career History as a CEO | 21 years 1 month |
| Final Education | 1983 Seoul Univ. Graduation | Major | Politics |

Major Experience

| Period | Company Name | Type of Business | Position |
|---|---|---|---|
| 2007/12~ | WISE CONTROL CO., LTD. | Manufacturing | President |
| 1989/03-2008/01 | Wise Control Inc. | Manufacturing | President |
| 1989/04-2007/12 | Wise Control Inc. | Manufacturing | Director |
| 1980/10-1989/04 | Wise Control Inc. | Manufacturing | Department head |
| 1980/11-1986/10 | Wise Control Inc. | Manufacturing | Staff |

6

## Company Credit Certificate

# III Digital Networking Authentication Management

WISE CONTROL CO.,LTD. | 142-81-10779
Lee, Sang Hoon
E-COMMERCE

### Management

| Position | Name | Resident ID No. | Relationship With Owner | Education | Major Career |
|---|---|---|---|---|---|
| President | Lee, Sang Hoon | 530916-******* | owner | Seattle Univ. | Wise Control Inc. |
| Director | Jang, Cheon Soon | 570629-******* | Family | | WISE CONTROL CO., LTD. |
| Director | Oh, Sung Suc | 660107-******* | unaffiliated | Kwangwoon University | Wise Control Inc. |
| Director | Choi, Jung Soo | 661224-******* | unaffiliated | | WISE CONTROL CO., LTD. |
| Auditor | Son, Soon Yong | 630913-******* | unaffiliated | | WISE CONTROL CO., LTD. |

### Shareholders

Stock Issue (Apr.03.2018)

| The face Value per Share (KRW won) | Share Issued (1,000 shares) |
|---|---|
| 500 | 12,652 |

Major Shareholders (Unit: KRW million, %)

| Name Of Shareholder | Relationship With Owner | Amount | Ratio |
|---|---|---|---|
| Lee, Sang Hoon | owner | 2,322 | 37.7 |
| Jang, Cheon Soon | Family | 901 | 14.3 |
| Lee, Jung Woo | Family | 529 | 8.7 |
| Kwon, Yoon Kyung | Relative | 618 | 9.8 |
| WISE CONTROL CO., LTD. | unaffiliated | 1,875 | 29.8 |
| | | 0 | 0 |
| | | 0 | 0 |
| | | 0 | 0 |
| Total | | 6,326 | 100.00 |

7

## Company Credit Certificate

# IV Digital Networking Authentication
# Operating & Banking

WISE CONTROL CO.,LTD. | 142-81-10726
Lee, Sang Hoon
EC2201-904205825

### Suppliers

| Name | Business Reg. No. | Transaction Period(Jan.01,2018~Dec.31,2018) | |
|---|---|---|---|
| | | Ratio(%) | Amount(KRW million) |
| WISE CONTROL CO.,LTD. | 142-81-10726 | 20 | 9,601 |
| SCS Pro Co.,Ltd. | 113-81-77478 | 7 | 3,344 |
| Gasan Knowledge Industry Center | 356-04-00215 | 5 | 2,661 |
| SB Development Project Co.,Ltd. | 130-87-05739 | 5 | 2,297 |
| Incheon Main Customs | 121-83-00561 | 4 | 1,879 |

### Customers

| Name | Business Reg. No. | Transaction Period(Jan.01,2018~Dec.31,2018) | |
|---|---|---|---|
| | | Ratio(%) | Amount(KRW million) |
| WISE CONTROL CO.,LTD. | 142-81-10726 | 15 | 9,601 |
| Korea Electric Power Corporation | 120-82-00052 | 13 | 7,301 |
| Wise Tech Co.,Ltd. | 135-81-59499 | 5 | 2,844 |
| Woojin Machinery Co., Ltd. | 142-81-47083 | 5 | 2,810 |
| Woojin Machinery Co. | 810-42-88876 | 3 | 1,624 |

### Financial Transaction Summary

(Apr.11,2019)

| | | | |
|---|---|---|---|
| Main Bank | Singal Branch, Foreign Currency Exchange Bank | Overdraft Bank | |
| National Tax | No Delinquency | Local Tax | No Delinquency |
| Negative Record | - | | |
| CEO Creditibility | Normal | | |
| Negative Information | | | |

### Financial Debt

(Date:Apr.11,2019 , Unit:KRW million)

| Banks | Branch | Financial Debt(Balance) | Reference |
|---|---|---|---|
| | | | |

8

## Company Credit Certificate

V | Digital Networking Authentication

# Financial Statement

WISE CONTROL CO.,LTD. | 142-81-10778
Lee Sang Hoon
EC0301908100883

■ Financial Ratio

| Subject | Ratio(Unit) | Formular | 2016 | 2017 | 2018 | 2017 (INDUSTRY AVERAGE) |
|---|---|---|---|---|---|---|
| Stabilization | Current Ratio(%) | Current Asset/Current Liabilities x 100 | 3401 | 3733 | 2232 | 1607 |
| | Quick Ratio(%) | Quick Asset/Current Liabilities x 100 | 2562 | 2940 | 938 | 1295 |
| | Non-Current Asset Ratio(%) | Non-Current Asset / Stockholders' Equity x100 | 59.7 | 72.4 | 97.0 | 97.3 |
| | Non-Current Assets to Invested Capital Ratio(%) | Non-Current Asset/(Stockholders' Equity+Non-Current Liabilities)x100 | 53.6 | 58.9 | 61.2 | 72.0 |
| | Debt Ratio(%) | Total Liabilities / Stockholders' Equity x 100 | 23.8 | 38.7 | 37.6 | 96.2 |
| | Equity Ratio(%) | Stockholders' Equity / Total Asset x 100 | 80.8 | 72.1 | 72.7 | 50.5 |
| | Account Receivables to Account Payables(%) | Accounts Receivables/Account Payables x 100 | 169.8 | 156.7 | 165.5 | 152.0 |
| Profitability | Net Income to total assets (%) | Net Income/Total Asset* x 100 | 8.4 | 4.6 | 4.3 | 3.7 |
| | Income from Continuing Operations before Income Tax to Total Assets(%) | Income from Continuing Operations before Income Tax/Total Asset* x 100 | 9.7 | 6.1 | 6.0 | 4.8 |
| | Net Income to Sales(%) | Net Income/Sales* x 100 | 9.8 | 5.4 | 5.6 | 3.7 |
| | Income from Continuing Operations before Income Tax to Sales(%) | Income from Continuing Operations before Income Tax / Sales x 100 | 11.4 | 5.9 | 6.4 | 4.6 |
| Activity | Total Asset Turnover | Sales/Total Asset* | 0.9 | 0.9 | 0.8 | 1.0 |
| | Equity Turnover | Sales/Stockholders' Equity* | 1.1 | 1.1 | 1.1 | 2.0 |
| | Business Asset Turnover | Sales/(Current Asset+Tangible Asset+Intangible Asset+Construction in Progress)* | 0.9 | 0.9 | 0.9 | 1.1 |
| | A/R Turnover(Times) | Sales/Account Receivables* | 6.4 | 7.6 | 8.0 | 4.9 |
| | A/P Turnover | Sales/Account Payables* | 10.5 | 12.9 | 13.0 | 8.7 |
| Productivity | Value Added to Net Sales (%) | Value-Added/ Sales X 100 | 41.9 | 36.5 | 40.2 | 26.8 |
| | Efficiency of Investment-avg and Tangible Assets(%) | Value-Added (Tangible Asset-Construction in Progress) X 100 | 84.6 | 75.0 | 53.5 | 74.7 |
| | Efficiency of investment-avg. total assets (%) | Value-Added/ Total Asset*X 100 | 35.9 | 30.3 | 31.4 | 27.4 |
| | Depreciation Ratio(%) | Depreciation/(Tangible Asset+Intangible Asset-(Construction in Progress+Land)+Depreciation) X 100 | 12.7 | 10.6 | 7.1 | 10.3 |
| Growth | Total Asset Growth(%) | (Total Asset for Current Year/ Total Asset for Prior Year-1) | 4.3 | 1.9 | 5.4 | 6.9 |
| | Sales Growth(%) | (Sales for Current Year/ Sales for Prior Year-1) X 100 | -2.6 | 5.5 | -5.4 | 6.2 |
| | Net Income Growth Ratio(%) | (Net Income for Current Year/ Net Income for Prior Year-1) X 100 | 26.0 | -43.4 | -2.8 | -15.7 |
| | Tangible Asset Growth Ratio(%) | (Total Asset for Current Year/ Total Asset for Prior Year-1) X 100 | -2.5 | 1.2 | 47.6 | 10.2 |

* Industry Average : Bank of Korea
* * : (prior year+current year) / 2

## Company Credit Certificate

V | Digital Networking Authentication

# Financial Statement

WISE CONTROL CO.,LTD. | 142-81-10720
Lee, Sang Hoon
EC020190405825

### Balance Sheet

(Unit : KRW million)

| Asset | | | |
|---|---|---|---|
| Fiscal Year | Dec 31,2016 | Dec 31,2017 | Dec 31,2018 |
| Reference | Unqualified | Unqualified | Unqualified |
| 1. Current Assets | 30,096 | 26,649 | 17,339 |
| 1) Quick Assets | 22,506 | 18,131 | 7,288 |
| Cash And Cash Equivalents | 16,057 | 11,591 | 696 |
| Short-Term Financial Instrument | 0 | 0 | 0 |
| Short-Term Marketable Securities | 100 | 0 | 0 |
| Accounts Receivable | 6,722 | 5,319 | 5,784 |
| Accounts Receivables -Other | 0 | 0 | 0 |
| Short-Term Loans | 0 | 0 | 0 |
| Note Receivables | 156 | 110 | 54 |
| Accrued Revenue Receivable | 0 | 17 | 0 |
| Advance Payment | 0 | 0 | 491 |
| Advance Payment In Costs | 0 | 0 | 285 |
| The Other Of Current Asset | 499 | 1,092 | 0 |
| 2)Inventories | 7,558 | 8,517 | 10,040 |
| Merchandise | 0 | 0 | 0 |
| Finished Goods | 992 | 896 | 1,517 |
| Semi-Finished Goods | 0 | 0 | 0 |
| Work-in Process | 2,093 | 2,562 | 3,576 |
| Construction In-Process | 0 | 0 | 0 |
| Raw Materials | 4,291 | 4,781 | 4,892 |
| Others | 78 | 177 | 65 |
| 2. Non-Current Assets | 24,619 | 29,107 | 41,400 |
| 1) Investments | 366 | 3,603 | 4,069 |
| Long-Term Financial Instruments | 0 | 1,236 | 1,794 |
| Long-Term Marketable Securities | 312 | 2,180 | 2,082 |
| Long-Term Loans | 54 | 177 | 292 |
| Investment Properties | 0 | 0 | 0 |
| The Other Of Investments | 0 | 0 | 0 |
| 2)Tangible Assets | 22,580 | 22,894 | 32,728 |
| Land | 16,751 | 16,756 | 19,291 |
| Buildings | 3,144 | 2,949 | 10,935 |
| Structures | 999 | 934 | 853 |
| Machinery | 1,190 | 1,566 | 1,408 |
| Equipment | 86 | 63 | 36 |
| Construction In-Progress | 5 | 63 | 115 |
| The Others Of Tangible Assets | 112 | 96 | 0 |
| 3)Intangible Assets | 425 | 1,149 | 1,809 |
| Goodwill | 0 | 0 | 0 |
| Pre-Operating Costs | 0 | 780 | 873 |
| The Others Of Intangible Assets | 424 | 369 | 936 |
| 4) The Others Of Non-Current Assets | 1,246 | 1,565 | 1,794 |
| Guarantee Deposits | 1,246 | 1,565 | 1,794 |
| Deferred Income Tax Debits | 0 | 0 | 0 |
| Long-Term Account Receivables | 0 | 0 | 0 |
| Others | 0 | 0 | 0 |
| Total Assets | 54,715 | 55,756 | 58,740 |

## Company Credit Certificate

**V** Digital Networking Authentication

# Financial Statement

WISE CONTROL CO.,LTD. | 142-81-10779
Lee Sang Hoon
FCCO3n90405863

### Balance Sheet

(Unit : KRW million)

| Liabilities And Stockholders' Equity | | | |
|---|---|---|---|
| Fiscal Year | Dec.31.2016 | Dec.31.2017 | Dec.31.2018 |
| Reference | Unqualified | Unqualified | Unqualified |
| **1. Current Liabilities** | 8,797 | 7,138 | 7,769 |
| Account Payables | 3,958 | 3,052 | 3,436 |
| Short-Term Borrowings | 100 | 100 | 0 |
| Non-trade Payables | 1,773 | 1,456 | 1,606 |
| Accrued Expenses | 0 | 0 | 74 |
| Advance from Customers | 27 | 66 | 108 |
| Advance from Customers (construction & building sales) | 0 | 0 | 0 |
| Withholdings | 2,213 | 2,002 | 2,087 |
| Income Taxes Payable | 724 | 117 | 377 |
| Suspense Receipt | 0 | 0 | 0 |
| Current Portion Of Long-Term Debt | 0 | 0 | 0 |
| Unearned Revenue | 0 | 0 | 0 |
| Liability Provisions | 0 | 0 | 0 |
| The Others Of Current Liabilities | 0 | 0 | 26 |
| **2. Non-Current Liabilities** | 1,718 | 8,418 | 8,288 |
| Bonds | 0 | 0 | 0 |
| Discount on Bond Issued | 0 | 0 | 0 |
| Long-term Borrowings | 0 | 0 | 0 |
| Long-Term Account Payable | 0 | 0 | 0 |
| Leasehold Deposits Received | 0 | 0 | 0 |
| Allowanced | 0 | 0 | 0 |
| Deferred Income Tax Credit | 1,718 | 8,418 | 8,288 |
| The Others Of Non-Current Liabilities | 0 | 0 | 0 |
| **Total Liabilities** | **10,515** | **15,557** | **16,058** |
| **1. Capital Stock** | 1,630 | 6,336 | 6,336 |
| **2. Capital Surplus** | 9,174 | -85 | 40,296 |
| Paid-in Capital In Excess Of Par Value | 9,174 | -85 | 9,174 |
| Gain On Capital Reduction | 0 | 0 | 0 |
| Market Adjustments | 0 | 0 | 0 |
| The Others Of Capital Surplus | 0 | 0 | 35,121 |
| **3. Capital Adjustment** | 0 | 0 | -44,382 |
| Discount On Stock Issuance | 0 | 0 | 0 |
| Treasury Stock | 0 | 0 | -44,382 |
| The Others Of Capital Adjustments | 0 | 0 | 0 |
| **4. Other Accumulated Earnings and Comprehensive Income** | 6,299 | 6,299 | 6,299 |
| Gain/Loss on overseas Operations Translation | 0 | 0 | 0 |
| Gain/Loss on Investment Securities | 0 | 0 | 0 |
| Foreign Exchange Translation Credit/Debit | 0 | 0 | 0 |
| Others | 6,299 | 6,299 | 6,299 |
| **5. Retained Earnings** | 27,124 | 27,606 | 30,141 |
| Legal Reserve | 800 | 800 | 800 |
| The other Reserves | 2,890 | 1,476 | 490 |
| Appropriated Retained Earnings | 22,434 | 25,382 | 26,850 |
| Net Income | 4,477 | 2,535 | 2,482 |
| **Stockholders' Equity** | **44,199** | **40,199** | **42,682** |
| **Total Liabilities And Stockholders' Equity** | **54,715** | **55,756** | **58,740** |

## Company Credit Certificate

**V** Digital Networking Authentication

### Financial Statement

WISE CONTROL CO.,LTD. | 142-81-10720
Lee, Sang Hoon
EC0201904205805

■ Income Statement

(Unit : KRW million)

| Account | Jan.01.2016 Dec.31.2016 | Jan.01.2017 Dec.31.2017 | Jan.01.2018 Dec.31.2018 |
|---|---|---|---|
| 1. Sales | 45,598 | 47,181 | 43,643 |
| 2. Cost Of Sales | 29,953 | 33,206 | 31,418 |
| Beginning Inventory Of Merchandise | 0 | 0 | 0 |
| Cost Of Goods Manufactured During The Year | 0 | 0 | 0 |
| Transfer to Other Accounts | 0 | 0 | 0 |
| Ending Inventory Of Merchandise | 0 | 0 | 0 |
| Cost of Construction | 0 | 0 | 0 |
| Cost of House & Office Sales | 0 | 0 | 0 |
| Others | 0 | 0 | 0 |
| 3. Gross Profit | 15,645 | 13,975 | 12,225 |
| 4. Selling And Administrative Expenses | 10,630 | 11,032 | 11,085 |
| Salaries | 4,740 | 4,879 | 5,085 |
| Retirement Allowance | 627 | 575 | 607 |
| Employee Benefits | 556 | 624 | 598 |
| Rent | 35 | 42 | 34 |
| Reception Expenses | 57 | 31 | 40 |
| Depreciation | 110 | 122 | 105 |
| Amortization On Intangible Asset | 65 | 87 | 103 |
| An Insurance Bill | 79 | 406 | 383 |
| Taxes And Dues | 207 | 284 | 299 |
| Advertising | 28 | 26 | 17 |
| Research Expense | 0 | 0 | 0 |
| R&D Expense | 2,011 | 1,667 | 1,309 |
| Bad Debt Expense | 12 | 19 | -5 |
| Maintenance Expense on Real-estate Held for Sale | 0 | 0 | 0 |
| Other Expense | 499 | 489 | 652 |
| 5. Operating Income | 4,955 | 2,943 | 2,140 |
| 6. Non-Operating Income | 696 | 490 | 574 |
| Interest Income | 134 | 114 | 46 |
| Dividend Income | 49 | 48 | 80 |
| Rental Income | 92 | 63 | 82 |
| Gain On Disposition Of Marketable Securities | 0 | 0 | 293 |
| Gain On Valuation Of Marketable Securities | 0 | 0 | 0 |
| Gain On Foreign Currency Transaction | 135 | 38 | 148 |
| Gain On Foreign Currency Translation | 76 | 3 | 14 |
| Gain On Valuation Of Using Equity Method Of Accounting | 0 | 0 | 0 |

## Company Credit Certificate

V | Digital Networking Authentication

# Financial Statement

WISE CONTROL CO.,LTD. | 142-81-10779
Lee Sang Hoon
E0000139480585

### Income Statement

(Unit : KRW million)

| Account | Jan.01.2016 Dec.31.2016 | Jan.01.2017 Dec.31.2017 | Jan.01.2018 Dec.31.2018 |
|---|---|---|---|
| Recovery Of Investment Securities Impairment Loss | 0 | 0 | 0 |
| Gain On Disposition Of Investements | 0 | 0 | 0 |
| Gain On Disposition Of Tangible Assets | 0 | 11 | 0 |
| Gain On Redemption of Debentures | 0 | 0 | 0 |
| Gain From Assets Contributed | 0 | 0 | 0 |
| Gain On Cancellation Of Debts | 0 | 0 | 0 |
| Gain On Insurance Settlement | 0 | 0 | 0 |
| Repayment of IncomeTax | 0 | 0 | 0 |
| The Others of Non-Operating Income | 199 | 189 | 246 |
| **7. Non-Operating Expense** | 425 | 537 | 166 |
| Interest Expense | 16 | 8 | 42 |
| The Others Bad Debt Expense | 245 | 78 | -1 |
| Loss On Disposition Of Marketable Securities | 0 | 0 | 7 |
| Loss On Valuation Of Marketable Securities | 0 | 0 | 0 |
| Loss On Valuation Of Inventories | 0 | 0 | 0 |
| Loss On Foreign Currency Transactions | 81 | 125 | 39 |
| Loss On Foreign Currency Translation | 4 | 221 | 8 |
| Donations | 86 | 0 | 0 |
| Loss On Valuation Using Equity Method Of Accounting | 0 | 0 | 0 |
| Marketable Securities Impairment Loss | 0 | 0 | 0 |
| Loss On Disposition Of Investment Assets | 0 | 0 | 0 |
| Loss On Disposition Of Tangible Assets | 13 | 0 | 0 |
| Loss On Redemption Of Debentures | 0 | 0 | 0 |
| Casualty Losses | 0 | 0 | 0 |
| Compensation | 0 | 0 | 0 |
| Additional Payment Of Income Tax Applicable To Prior Years | 0 | 0 | 0 |
| The Others Of Non-Operating Income | -1 | 195 | 70 |
| **8. Income from Continuing Operations before Income Tax** | 5,216 | 2,796 | 2,848 |
| **9. Income Tax from Continuing Operations** | 739 | 363 | 366 |
| **10. Income from Continuing Operations** | 4,477 | 2,533 | 2,482 |
| **11. Income from Discontinued Operations** | 0 | 0 | 0 |
| **Income Tax Effect** | 0 | 0 | 0 |
| **12. Net Income** | 4,477 | 2,533 | 2,482 |
| **13. Earning Per Share-Net Income** | - | - | - |
| Earnings Per Share (Unit:won) | 0 | 0 | 0 |
| Diluted Earnings Per Share (Unit:won) | 0 | 0 | 0 |

## Company Credit Certificate

V | Digital Networking Authentication

### Financial Statement

WISE CONTROL CO.,LTD. | 142-81-10720
Lee, Sang Hoon
ECOM1-904205825

■ Cash Flow Analysis

(Unit : KRW million)

| Account | Dec.31,2017 | Dec.31,2016 |
|---|---|---|
| Sales | 47,161 | 44,043 |
| Account Receivables Increase(-), Decrease(+) | 1,353 | -458 |
| Advance Receipts Increase(+), Decrease(-) | 41 | 39 |
| Cost of Sales | -33,206 | -31,418 |
| Inventories Increase(-), Decrease(+) | -958 | -1,523 |
| Account Payables Increase(+), Decrease(-) | -606 | 142 |
| Advance Payment (-) | 0 | -481 |
| Depreciation(-)(CR) | 733 | 1,132 |
| Gross Cash Profit | 14,668 | 12,076 |
| Selling And Administrative Expenses(-) | -11,032 | -11,086 |
| Prepaid Expenses Increase(-), Decrease(+) | 0 | -285 |
| Accrued Expenses Increase(+), Decrease(-) | 0 | 74 |
| Non-Cash Transactions | 808 | 1,008 |
| Cash Profit | 4,442 | 1,790 |
| Interest Income / Dividend Income(+) | 160 | 180 |
| Income Tax(-) | 5,830 | -235 |
| Other Operating Cash In and Out (±) | -887 | -732 |
| Cash Flow from Operating Activities | 9,549 | 958 |
| Interest Expense(-) | -6 | -42 |
| Cash Flow after Interest Expense | 9,543 | 916 |
| Other Asset Increase and Decrease | -609 | 1,108 |
| Other liabilities Increase and Decrease | 0 | 20 |
| Other Ordinary Cash Flow | -316 | 377 |
| Cash Flow from Ordinary Activities | 8,617 | 2,420 |
| Short-Term Financial Asset Increase(-) Decrease(+) | 0 | 0 |
| Securities Increase(-) Decrease(+) | 100 | 246 |
| Short-Term Loan Increase(-) Decrease(+) | 0 | 0 |
| Accrued Receivable Increase(-) Decrease(+) | -209 | 164 |
| Investment Asset Increase(-) Decrease(+) | -3,206 | -465 |
| Tangible Asset Increase(-) Decrease(+) | -1,117 | -12,108 |
| Intangible Asset Increase(-) Decrease(+) | -808 | -766 |
| Other Non-Current Assets Increase(-) Decrease(+) | -257 | -290 |
| Cash flows from Investing activities | 3,067 | -10,799 |
| Payment for Current Portion of LtDebt | 0 | 0 |
| Short-Term Debt Increase(+) Decrease(-) | 0 | -100 |
| Long-Term Debt Increase(+) Decrease(-) | 0 | 0 |
| Equity Change Increase(+) Decrease(-) | -6,633 | 0 |
| Dividends(-) | 0 | 0 |
| Cash Flows from Financing Activities | -3,465 | -10,896 |
| Net Change in Cash(Ending-Beginning) | -3,465 | -10,896 |
| Cash Ratio | 96,283.2 | 1,637.4 |
| Total Debt to Net Cash Operation | 4,672.0 | 99,283.9 |

## Company Credit Certificate

**V** Digital Networking Authentication

# Financial Statement

WISE CONTROL CO.,LTD. | 142-81-10779
Lee Sang Hoon
E0030190805863

### Statement of Cost of Goods Manufactured

(Unit : KRW million)

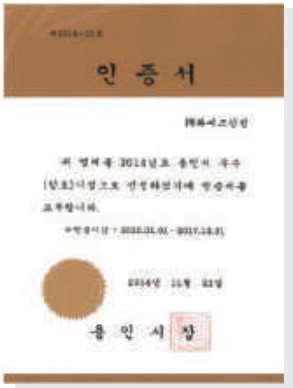
| Account | Dec.31,2018<br>Jan.01,2018 | Dec.31,2017<br>Jan.01,2017 | Dec.31,2016<br>Jan.01,2016 |
|---|---|---|---|
| 1. Raw Material Cost | 14,595 | 16,261 | 16,974 |
| 2. Labor Cost | 6,057 | 6,066 | 6,296 |
| 3. Manufacturing Expenses | 6,188 | 6,472 | 6,489 |
| Electricity | 231 | 210 | 250 |
| Fuel/Utilities | 10 | 8 | 10 |
| Transportation | 50 | 46 | 50 |
| Depreciation | 800 | 733 | 1,132 |
| Repair Expenses | 68 | 66 | 78 |
| Vehicle Run Cost | 12 | 11 | 9 |
| Employee Benefits | 694 | 674 | 626 |
| Travel expenses | 30 | 20 | 41 |
| Communication Expense | 0 | 0 | 0 |
| Patent Fees | 0 | 0 | 0 |
| Manufacturing Costs in Outside/Sub-Contract Process | 0 | 0 | 0 |
| Others | 466 | 454 | 373 |
| 4. Total Construction(Manufacturing) Costs | 26,812 | 30,799 | 29,760 |
| 5. Beginning Construction in Process/Work in Process | 2,302 | 2,266 | 2,793 |
| 6. Ending Construction in Process/Work in Process | 2,268 | 2,793 | 3,789 |
| 7. Transfer to other accounts | 0 | 0 | 0 |
| 8. Cost of Goods manufactured | 26,846 | 30,274 | 28,764 |

### Statements of Retained Earnings

(Unit : KRW million)

| Account / Period / Appropriation Date | Dec.31,2018<br>Feb.28,2017 | Dec.31,2017<br>Mar.30,2018 | Dec.31,2016<br>Mar.05,2018 |
|---|---|---|---|
| 1. Retained Earnings before Appropriations | 23,434 | 26,092 | 28,860 |
| 1)Adjusted Prior Year Unappropriation Retained Earnings | 18,957 | 22,849 | 26,368 |
| Unappropriation Retained Earnings from Prior Year | 18,906 | 22,849 | 26,367 |
| Accumulated Effect of Changes in Accounting Policy | 0 | 0 | 0 |
| Gain/Loss on Prior Period Error Correction | 0 | 0 | 0 |
| Interim Dividends | 0 | 0 | 0 |
| Others | 0 | 0 | 0 |
| 2)Net income | 4,477 | 3,530 | 2,492 |
| 2. Transfer from Discretionary Reserve | 1,416 | 996 | 490 |
| 3. Appropriation of Retained Earnings | 2,000 | 0 | 0 |
| Legal Reserve | 0 | 0 | 0 |
| Reserve for Rationalization | 0 | 0 | 0 |
| Reserve for Financial Structure | 0 | 0 | 0 |
| Amortization of Discount on Stock Issuance | 0 | 0 | 0 |
| Dividends | 2,000 | 0 | 0 |
| Other Reserves | 0 | 0 | 0 |

# Main Award Records



| | | |
|---|---|---|
| 1995 | 1995. 11 | Million Dollar Export Tower |
| 2006 | 2006. 06 | Small Business Corporation - World Class Company |
| 2008 | 2008. 07 | SK energy - Certificate of Appreciation |
| | 2008. 09 | Yong-In City Council - Industrial peace destination |
| | 2008. 11 | HART communication foundation - Certificate of Membership |
| | 2008. 12 | Governor of Gyeonggi-do - Midsize businesses of Kyeonggi-Do |
| 2009 | 2009. 03 | Korea University - Certificate of Appreciation |
| | 2009. 11 | Kyeonggi Regional Office Small & Medium Administration - Award Certificate |
| 2010 | 2010. 10 | The University of TEXAS at Austin - Certificate of Accomplishment |
| 2012 | 2012. 11 | Woori Bank - Certificate of Appreciation |
| 2013 | 2013. 03 | KB Bank - KB Hidden Star 500 Selected |
| | 2013. 03 | EBARA Corparation - Certificate of Appreciation |
| 2014 | 2014. 04 | Small & medium Business Corporation - Selected as outstanding company with the best working conditions |
| | 2014. 11 | Yong-In City - Certificates of Excellent enterprise selection |
| 2015 | 2015. 12 | Samcheok Meister high school - Certificate of Appreciation |
| 2017 | 2017. 12 | Youth Friendly Corporate Certificate - Ministry of Employment and Labor (MOEL) |
| 2018 | 2018.01 | Certificate of Membership - FieldComm Group |
| | 2018.02 | Sincere Taxpayer Certificate - Yongin City |

Experience

section

# Experience

# 03

# Experience List

## CHEMICAL

| No. | PROJECT NAME | CUSTOMER | END USER | LOCATION | DATE DELIVERED | SCOPE OF SUPPLY |
|---|---|---|---|---|---|---|
| 001 | STAVROLEN PE | TOYO ENG.KOREA | LUKOIL | RISSIA | 2017 | OF/VT/RO |
| 002 | Lotte EG Feed Project | SAMSUNG Engineering | LOTTE CHEMICAL | U.A.E | 2017 | PG/TG |
| 003 | KPIC ONE PROJECT | GS E & C | KPIC | KOREA | 2017 | PG/TE |
| 004 | TE-3 | GS E & C | LOTTE CHEMICAL | MALAYSIA | 2016 | OF/VT |
| 005 | CDP 3 | SK CHEMICAL | SK CHEMICAL | KOREA | 2016 | RO/LG |
| 006 | YMDI VIII | POSCO ENG. | Kumho Mitsui Chemical | KOREA | 2016 | OF/RO |
| 007 | BTX DBNK | OCI | OCI | KOREA | 2016 | LG |
| 008 | Iraq ZUBAIR Project | SAMSUNG Engineering | ENI | IRAQ | 2016 | PG/TG |
| 009 | CDP-3 PROJECT | SK Chemicals | SK Chemicals | KOREA | 2016 | PG /TG/ TE |
| 010 | Basf Expansion Ultrason Capacity Yeosu Project | GS E & C | BASF | KOREA | 2016 | PG /TG/ TE |
| 011 | YNCC C5 SEPARATION PROJECT | HANWHA E & C | YNCC | KOREA | 2015 | PG /TG/ TE |
| 012 | KPA IV PROJECT | POSCO Engineering | POSCO Engineering | KOREA | 2015 | TG/ TE |
| 013 | PB2 75,000MTA REVAMPING PROJECT | DAELIM INDUSTRIAL | PETROCHEMICAL DIVISION OF DAELIM | KOREA | 2015 | PG /TG/ TE |
| 014 | ETHANE CRACKER AND PE/PP PLANT | PETRO-CHEM KOREA CO.,LTD. | Turkmengas state Concern | TURKMENISTAN | 2015 | TE |
| 015 | C5 SEPARATION | DAELIM/HANWHA | YNCC | KOREA | 2015 | OF/RO |
| 016 | CA5, OXY 5 | ETEC | HANWHA CHEMICAL | KOREA | 2015 | OF/RO |
| 017 | EDISON Ⅱ Project(HVAC) | SAMSUNG ENG. | SAMSUNG BIOLOGICS | KOREA | 2014 | PG/TG/TC/RTD/TW |
| 018 | Samsung Memc Ploysilicon -W-1 PROJECT | SAMSUNG ENG. | SAMSUNG C&T | KOREA | 2014 | P/G |
| 019 | UGCC Ethylene Plant Project | GS E & C | Akchalak | UZBEKISTAN | 2014 | P/G |
| 020 | Elastomer Project | DAELIM INDUSTRIAL | KEMYA | SAUDI ARABIA | 2014 | P/G |
| 021 | ESCONDIDA Main & Chemical dosing | DOOSAN HEAVY | BLACK & VEATCH | CHILE | 2014 | P/G |
| 022 | BUTANOL & SYNGAS | DAELIM INDUSTRIAL | BUTANOL COMPANY | SAUDI ARABIA | 2014 | TG/TC/RTD/TW |
| 023 | UGCC Ethylene Plant | GS E & C | Uz-kor Gas Chemical | UZBEKISTAN | 2014 | TG/TC/RTD/TW/MULTI |
| 024 | Linear Alkyl Benzene | HYUNDAI Engineering | Thaioil | THAILAND | 2014 | TG/TC/RTD/TW |
| 025 | ORANGE PROJECT | HANWHA E & C | HANWHA CHEMICAL | KOREA | 2013 | P/G |
| 026 | STC NO.2 Aromatics Complex | SAMSUNG ENG. | SAMSUNG TOTAL | KOREA | 2013 | PG/TG/TC/TW |
| 027 | JUBAIL POLYSILICON | HYUNDAI HEAVY | JUBAIL WATER & POWER COMPANY | SAUDI ARABIA | 2013 | P/G |
| 028 | Jurong Aromatics Complex | SK E & C | JAC | SINGAPORE | 2013 | TC/RTD/TW |
| 029 | SAMSUNG TOTAL NO.2 AROMATICS | JNK HEATER | SAMSUNG TOTAL | KOREA | 2013 | TC |
| 030 | YEP-IV | DAELIM INDUSTRIAL | KUMHO P&B | KOREA | 2013 | TG/RTD/TW |
| 031 | Yeosu ORANGE | HANWHA E & C | HANHWA CHEMICAL | KOREA | 2013 | TG/TC/TW |
| 032 | JUBAIL POLYSILICON | EMERSON | PTC | SAUDI ARABIA | 2013 | RTD/MULTI RTD/TW |
| 033 | RAS-AI-KHAIR | DOOSAN HEAVY | SWCC | SAUDI ARABIA | 2013 | TG/RTD/TW |

# CHEMICAL

| No. | PROJECT NAME | CUSTOMER | END USER | LOCATION | DATE DELIVERED | SCOPE OF SUPPLY |
|---|---|---|---|---|---|---|
| 034 | Petron Bataan Refinery Master Plan2 | DAELIM INDUSTRIAL | PETRON | PHILIPPINES | 2013 | TG/TC/RTD/MULTI TC/TW |
| 035 | STC No.3 Utility & Offsite | SAMSUNG ENG. | SAMSUNG TOTAL | KOREA | 2013 | TG/TC/TW |
| 036 | STC EVA No.2 | SAMSUNG ENG. | SAMSUNG TOTAL | KOREA | 2013 | RTD/TW |
| 037 | PD-1 | SCT | KOLON INDUSTRIES | KOREA | 2013 | TG/RTD/TW |
| 038 | Alkalij Project(No.2,3,4) | DOOSAN HEAVY | GECOL | LIBYA | 2013 | TG/TC/TW |
| 039 | STC EVA No.2 (Local Panel) | SAMSUNG ENG. | SAMSUNG TOTAL | KOREA | 2013 | CONTROL PANEL |
| 040 | SMP W-1 | SAMSUNG ENG. | SMP | KOREA | 2013 | TG/TC/RTD/MULTI RTD/TW |
| 041 | EVA | LG TOYO ENG. | LG CHEM. | KOREA | 2013 | LG |
| 042 | VCM, 3MT DBN | LG CHEMICAL | LG CHEM. | KOREA | 2013 | LG/OF |
| 043 | EVA 2 | SAMSUNG ENG. | SAMSUNG TOTAL | KOREA | 2013 | LG |
| 044 | SSBR | LG TOYO ENG. | LG CHEM. | KOREA | 2013 | LG |
| 045 | VGOFCC PROJECT | GS E & C | GS Caltex Corporation. | KOREA | 2012 | PG/DPG/TG/TC/T/W/RTD/Multi TC/TW |
| 046 | EVA-PROJECT | HANWHA E&C | Sipchem-HCC | SAUDI ARABIA | 2012 | PG/SKIN TC/TC/TG/TW |
| 047 | Shiraz Third Ammonia & UREA Complex Project | SC ENGINEERING | - | IRAN | 2012 | PG/TG/RTD/TC/TW |
| 048 | NAPHTHA CRACKER PROJECT | DAELIM INDUSTRIAL | JG Summit Petrochemical Co. | PHILIPPINES | 2012 | PG/TG/RTD/TC/TW |
| 049 | SADARA MIXED FEED CRACKER PROJECT | JNK HEATERS | AOC and DOW EUROPE HOLDING | SAUDI ARABIA | 2012 | SONIC NOZZLE |
| 050 | ORANGE POLYSILICON | HANWHA E&C | HANWHA CHEMICAL | KOREA | 2012 | ORIFICE |
| 051 | REPLACEMENT | GI | BASF KOREA | KOREA | 2012 | V CONE |
| 052 | 2D-PROJECT | HYUNDAI HEAVY | DEASAN MMA Corporation | KOREA | 2012 | Multi RTD/RTD/TC/TW |
| 053 | P3.5 PROJECT | OCI | OCI Company Ltd. | KOREA | 2011 | PG/PS/TG/TC/RTD/TW |
| 054 | P3.7 PROJECT | OCI | OCI Company Ltd. | KOREA | 2011 | PG/TG/TC/TW |
| 055 | U1 PROJECT | KCC | KCC | KOREA | 2011 | PG/PS |
| 056 | KPA-2 PROJECT | KOLON PLASTICS | KOLON PLASTICS, INC | KOREA | 2011 | PG/TG/RTD/TC/TW |
| 057 | KPA II REVAMP | DAEWOO E&C | KUMHO P&B | KOREA | 2011 | ORIFICE |
| 058 | AMMONIA UNLOADING STORAGE AND DISTRIBUTION SYSTEM | DOOSAN HEAVY | SNC LAVALIN, | CANADA | 2010 | PG/TG/TC/TW |
| 059 | HOU PROJECT | HYUNDAI HEAVY | HYUNDAI OIL BANK | KOREA | 2010 | PG/TG/TW |
| 060 | YDR Project | KUMHO PETROCHEMICAL | KUMHO PETROCHEMICAL | KOREA | 2010 | LG |
| 061 | SP-1 | WOONGJIN POLYSILICON | WOONGJIN POLYSILICON | KOREA | 2010 | LG |
| 062 | NO.3 HOU PROJECT | GS CALTEX | KOREA | KOREA | 2009 | PG/TG/TC/TW |
| 063 | SAUDI KAYAN HDPE PROJECT | DAELIM INDUSTRIAL | SAUDI KAYAN PETROCHEMICAL COMPANY | SAUDI ARABIA | 2009 | PG/TG/TC/TW/RTD |
| 064 | AAC ETHYLENE AMINES PROJECT | HYUNDAI HEAVY | ARABIAN AMINES | SAUDI ARABIA | 2009 | PG/TG/TC/TW/RTD |
| 065 | POLYCARBONATE PROJECT | DAELIM INDUSTRIAL | SAUDI KAYAN PETROCHEMICAL COMPANY | SAUDI ARABIA | 2008 | PG/TG/TC/TW/RTD |
| 066 | SOHAR AROMATICS PROJECT | GS E & C | AROMATICS OMAN LLC | OMAN | 2008 | PG/TG/TW |
| 067 | PG REVAMP | SKEC | SKC | KOREA | 2008 | ORIFICE/LEVEL GAUGE |
| 068 | LGPC B2 | GS E&C | LGPC | KOREA | 2008 | LEVEL GAUGE/SIGHT GLASS |
| 069 | GDC | DAEWOO E&C | GREENSOFT CHEM | KOREA | 2008 | LEVEL GAUGE |
| 070 | MEX | KP CHEMICAL | KP CHEMICAL | KOREA | 2007 | ORIFICE/LEVEL GAUGE |
| 071 | HPPO | SKEC | SKC | KOREA | 2007 | ORIFICE/LEVEL GAUGE |
| 072 | EDC CAPA-UP | HAN WHA E&C | HAN WHA CHEMICAL | KOREA | 2007 | ORIFICE |
| 073 | SILICONE NO.2 PROJECT | KCC | KCC | KOREA | 2006 | PG/TG/RTD/TW |
| 074 | HOU PROJECT | GS E & C | GS GALTEX | KOREA | 2006 | TG/TC/TW |

## CHEMICAL

| No. | PROJECT NAME | CUSTOMER | END USER | LOCATION | DATE DELIVERED | SCOPE OF SUPPLY |
|---|---|---|---|---|---|---|
| 075 | TDI PLANT | GS E & C | BASF | CHINA | 2005 | PG/TG |
| 076 | S-PROJECT | DAEWOO E & C | SODIFF | KOREA | 2005 | ORIFICE |
| 077 | EB REVAMP | SKEC | SKC | KOREA | 2005 | ORIFICE |
| 078 | ABS III-2 | GS E & C | NINGBO LG PETROCHEMICAL | CHINA | 2003 | PG/RTD |
| 079 | PTA CO REMOVAL | DOOSAN HEAVY | NIOC | IRAN | 2001 | P/G |

## GAS

| No. | PROJECT NAME | CUSTOMER | END USER | LOCATION | DATE DELIVERED | SCOPE OF SUPPLY |
|---|---|---|---|---|---|---|
| 080 | Kandym Gas Processing Complex | HYUNDAI Engineering | LUOC | UZEBEKISTAN | 2016 | PG/TG |
| 081 | BORYEONG LNG TERMINAL | SK E & C | BORYEONG LNG TERMINAL | KOREA | 2015 | PG |
| 082 | BORYEONG LNG TERMINAL | SK E & C | BORYEONG LNG TERMINAL | KOREA | 2015 | OF/RO/VT |
| 083 | MGP PJT | HYUNDAI Engineering | OOCEP | OMAN | 2015 | TG |
| 084 | HOUT | DAEWOO E & C | KJO | SAUDI ARABIA | 2014 | OF/RO |
| 085 | North LPG Tank Farm | GS E&C | KNPC | KUWAIT | 2013 | RTD/MULTI RTD/TW |
| 086 | Musandam Gas Plant | HYUANDAI ENG | Oman Oil Company Exploration & Production LLC | OMAN | 2013 | TG/TW |
| 087 | North LPG Tank Farm Project | GS E&C | KNPC | KUWAIT | 2013 | TG/TW |
| 088 | ZUBAIR OIL FIELD DEVELOPMENT | STX Heavy Industries | ENI IRAQ B.V. | IRAQ | 2013 | OF |
| 089 | SOUTH PARS 9&10 | SUNGJIN GOTECH | POGC | IRAN | 2012 | ORIFICE |
| 090 | OFFSHORE ASSOCIATED GASES | Hitachi Plant Technologies Tokyo. Japan | GASCO | JAPAN | 2008 | VENTURI TUBE |

## IRON

| No. | PROJECT NAME | CUSTOMER | END USER | LOCATION | DATE DELIVERED | SCOPE OF SUPPLY |
|---|---|---|---|---|---|---|
| 091 | Brasil CSP BF Instrument 2 | POSCO E & C | POSCO | BRASIL | 2014 | TG/TC/RTD/TW |
| 092 | ACL,CAL | POSCO E & C | POSCO INDIA | INDIA | 2012 | ORIFICE |
| 093 | CDQ 3&4 | POSCON | POSCO | KOREA | 2002 | ORIFICE/VENTURI |

## OFFSHORE

| No. | PROJECT NAME | CUSTOMER | END USER | LOCATION | DATE DELIVERED | SCOPE OF SUPPLY |
|---|---|---|---|---|---|---|
| 094 | BARONIA | HHI | PETRONAS | MALAYSIA | 2016 | SG |
| 095 | TOD CHEVRON DRILLSHIP, 3511 | DSME | TRANSOCEAN | KOREA | 2015 | RO |

## OIL & GAS

| No. | PROJECT NAME | CUSTOMER | END USER | LOCATION | DATE DELIVERED | SCOPE OF SUPPLY |
|---|---|---|---|---|---|---|
| 096 | Carbon Black & Delayed Coker | SAMSUNG ENG. | TAKREER / ABU DHABI | UAE | 2014 | P/G |
| 097 | EPC CPF PHASE 2 AT BADRA OILFIELD | SAMSUNG ENG. | Gazprom Neft Badra B.V. | IRAQ | 2014 | P/G |
| 098 | IRAQ DGS PROJECT | STX HEAVY | Electricity State Commission | IRAQ | 2014 | P/G |
| 099 | KNPC TGTU PROJECT | SAMSUNG C & T | KNPC | KUWAIT | 2014 | P/G |
| 100 | SK-V | HYUNDAI HEAVY | SK ENERGY | KOREA | 2013 | P/G |
| 101 | CILACAP RFCC (RESIDUAL FLUID CATALYTIC CRACKING) | | PT.PERTAMINA(PERSERO) | INDONESIA | 2013 | P/G |
| 102 | RMP-2 PJT(REFINERY MASTER PLAN2) | DAELIM INDUSTRIAL | Petron Corporation | PHILIPPINES | 2013 | P/G |
| 103 | SOUTH PAR PROJECT | DAELIM INDUSTRIAL | NATIONAL IRANIAN OIL COMPANY | IRAN | 2012 | PG/TG/RTD/TW/MULTI TC |
| 104 | LNG PLANT R&D CENTER PROJECT | GS E & C | LNG PLANT R&D CENTER | KOREA | 2012 | PG/TG/TW/ORIFICE PLATE |
| 105 | ESMERALDAS REFINERY REHABILITATION PROJECT | SK E&C | PETRO ECUADOR | ECUADOR | 2012 | P/G |
| 106 | INTER REFINERIES PIPELINES-II (IRP-II) PROJECT | GS E & C | TAKREER / ABU DHABI | UAE | 2012 | PG/TG/TW |
| 107 | LPG TRAIN PJT AT MAA | DAELIM INDUSTRIAL | KNPC | KUWAIT | 2012 | PG/TG/RTD/TC/TW |
| 108 | SPGD 12 / EPC 2 (SOUTH PAR) | DAELIM INDUSTRIAL | PARS OIL AND GAS COMPANY | IRAN | 2012 | PG/TG/RTD/TC/TW |
| 109 | IRAN LNG PROJECT | DAELIM INDUSTRIAL | IRAN LNG COMPANY | IRAN | 2010 | T/C |
| 110 | NCP SOUTH PLOT PROJECT | DAELIM INDUSTRIAL | SAUDI POLYMER | SAUDI ARABIA | 2010 | PG/TG/TC/TW |
| 111 | MANZANILLO LNG TERMINAL PROJECT | SAMSUNG ENG. | TERMINAL KMS DE GNL, S. DE R.L. DE C.V. | MEXICO | 2010 | PG/TG/TC/TW |
| 112 | GREEN DIESEL PROJECT | GS E & C | ABUDABI OIL REFINERY | U.A.E | 2010 | PG/TG/TC/TW |
| 113 | GREEN DIESEL PROJECT | GS CALTEX | ABUDABI OIL REFINERY | U.A.E | 2009 | PG/TG/TW |
| 114 | NCP SOUTH PLOT PROJECT | DAELIM INDUSTRIAL | SAUDI POLYMER | SAUDI ARABIA | 2010 | PG/TG/TC/TW |
| 115 | 9TH CRUDE OIL PROJECT | DAELIM INDUSTRIAL | KOC | KUWAIT | 2008 | PG/TG/TW |
| 116 | LIDONG AROMATICS COMPLEX PROJECT | GS E & C | LIDONG CHEMICAL | CHINA | 2006 | P/G |
| 117 | KIRIKKALE DHP-CCR PROJECT | GS E & C | KIRIKKALE | TURKEY | 2006 | PG/TG/RTD |
| 118 | ARAMCO THIRD PARTY PROJECT | HYUNDAI HEAVY | ARAMCO | SAUDI ARABIA | 2006 | PG/TG/TC/TW |
| 119 | EFFLUENT WATER DISPOSAL PLANT | DAELIM INDUSTRIAL | KOC | KUWAIT | 2005 | PG/TG/RTD |
| 120 | IZMIT REFINERY DIESEL/KEROSENE HYDROPROCESSING | HANSU | TUPRAS | TURKEY | 2005 | PG/TG/TC/TW |
| 121 | MAA RECONSTRUCTION | SK E&C | KNPC | KUWAIT | 2003 | PG/TG |
| 122 | NEW OIL PIER | HYUNDAI HEAVY | KNPC | KUWAIT | 2002 | P/G |

## POWER

| No. | PROJECT NAME | CUSTOMER | END USER | LOCATION | DATE DELIVERED | SCOPE OF SUPPLY |
|---|---|---|---|---|---|---|
| 123 | SHINKORI #5,6, NPP | KHNP | KHNP | KOREA | 2019 | OP/LG |
| 124 | SHINKORI #5,6, NPP | KHNP | KHNP | KOREA | 2019 | PT/UF |
| 125 | SHINSEOCHEON THERMAL PP, 1x1018MW | DAELIM | KOREA MIDLAND POWER | KOREA | 2018 | OF/NZ |
| 126 | JIMAH EAST POWER 2x1000MW COAL FIRED POWER PLANT | HYUNDAI Engineering | Jimah East Power | MALAYSIA | 2017 | PG/TG |
| 127 | KALSEL-1 COAL FIRED POWER PLANT PROJECT | HYUNDAI Engineering | Tanjung Power Indonesia | INDONESIA | 2017 | PG/TG |
| 128 | SONG HAU-1 Project | DOOSAN HEAVY | Petro Vietnam | VIETNAM | 2017 | PG/TG |

# Experience List

## POWER

| No. | PROJECT NAME | CUSTOMER | END USER | LOCATION | DATE DELIVERED | SCOPE OF SUPPLY |
|---|---|---|---|---|---|---|
| 129 | ASSUIT HRSG | DOOSAN E & C | GE ENERGY | EYGPT | 2017 | PG/TG/TE |
| 130 | Mega CCPP Plant(1600MW) NAAMA | SAMSUNG C & T | SONELGAZ SPE | ALGERIA | 2017 | PG/TG/TE |
| 131 | JEJU Combined Cycle Power Plant FIELD INSTRUMENT | DOOSAN E & C | KOMIPO | KOREA | 2017 | PG/TG/TE |
| 132 | NAAMA/MOSTAGHANEM HRSG | BHI | SONELGAZ | ALGERIA | 2017 | DRUM LG/LG |
| 133 | SBPL CFPP, 500MW | DAELIM | SBPL | PHILIPPINE | 2017 | OF/NZ/RO |
| 134 | JEJU CCPP, 2 x HRSG | GEPSK | KOREA MIDLAND POWER | KOREA | 2017 | OF/NZ |
| 135 | POSEUNG BIOMASS COGENERATION | DAELIM | POSUENG GREEN POWER | KOREA | 2017 | OF/RO/VT/VC/LG |
| 136 | TVEP PROJECT | HYUNDAI Engineering | Therma Visayas, Inc., | PHILLIPPINES | 2016 | PG/TG |
| 137 | LVSR PROJECT | HYUNDAI Engineering | LOTTE VERSALIS ELASTOMERS CORP. | KOREA | 2016 | PG/TG |
| 138 | YANBU PHASE 3 POWER PLANT | SAMSUNG Engineering | SWCC | SAUDI ARABIA | 2016 | PG/TG/TE |
| 139 | Mega CCPP Plant(1600MW) NAAMA | BHI | SONELGAZ SPE | ALGERIA | 2016 | PG/TG/TE |
| 140 | PACO Coal Fired Power Plant Project | SK E & C | MINERA PANAMA S.A | PANAMA | 2016 | PG/TG/TW |
| 141 | Facility D IWPP | SAMSUNG C & T | Umm Al Houl Power | QATAR | 2016 | PG/TG/TE |
| 142 | BANPONG UTILITIES SPP PROJECT | Integrated system Provider for Electric & Control | EGCO | THAILAND | 2016 | PG/TG/TE |
| 143 | SAFI IPP, 693MWx2 | DAEWOO E & C | SAFI ENERGY | MOROCCO | 2016 | OF/NZ/LG/RO |
| 144 | PIEM BOILER, 360MWx1 | DHI | IEM S.A. | CHILE | 2016 | OF/NZ/SG |
| 145 | KIRIKKALE IPP, 950MW | SAMSUNG C & T | ACWA POWER | TURKEY | 2016 | OF/PT |
| 146 | KARABATAN CCPP | DOOSAN | Karabatan Utility Solutions Limited Liability Partnership | KAZAKHSTAN | 2016 | OF/NZ |
| 147 | CHUNCHEON CHP, 1x HRSG | BHI | CHUNCHEON ENERGY | KOREA | 2016 | LG |
| 148 | Qatar Facility D IWPP, 2400MW | HHI | Qatar General Electricity & Water Corporation | QATAR | 2016 | FS |
| 149 | KIRIKKALE IPP, 950MW | SAMSUNG C & T | ACWA POWER | TURKEY | 2016 | OF/PT |
| 150 | JJP BIOMASS STG 2 | BHI | JJP | KOREA | 2016 | DRUM LG |
| 151 | IGD-E ONSHORE PIPELINE & HABSHAN MODIFICATION | HANSOL SEENTEC | GASCO | UAE | 2016 | OF/NZ |
| 152 | Qatar Facility D IWPP, 2400MW | SAMSUNG C & T | Qatar General Electricity & Water Corporation | QATAR | 2016 | OF/NZ/PT/RO/VC |
| 153 | WEST DAMIETTA, 4x125MW | DOOSAN | GE/Egyptian Electricity Holding Company | EGYPT | 2016 | OF/NZ |
| 154 | CHILE KELAR Project | SAMSUNG Engineering | BILLITON | CHILE | 2015 | PG/TG |
| 155 | KHABAT Thermal Power Plant FGD | STX Co.,Ltd., | KOGAS AKKAS B.V | IRAQ | 2015 | PG |
| 156 | SHUQAIQ STEAM POWER PLANT | HYUNDAI HEAVY | SEC | SAUDI ARABIA | 2015 | PG/TG/TE |
| 157 | PAGBILAO 420MW #3 CFPP PROJECT | DAELIM INDUSTRIAL | PAGBILAO ENERGY | PHILLIPPINES | 2015 | PG/TG |
| 158 | MALAYSIA TNB FAST TRACK 3A PROJECT (BOP) | DAELIM INDUSTRIAL | TNB | MALAYSIA | 2015 | PG/TG |
| 159 | SHUQAIQ SPP | HHI | SEC | SAUDI ARABIA | 2014 | ORIFICE |
| 160 | TUNG HSIAO HRSG #6 | DOOSAN | MHPS | TAIWAN | 2015 | OF/NZ |
| 161 | KHABAT THERMAL POWER, 1&2 | BHI/POSCO E&C | MOE | KURDISTAN | 2015 | NZ/DRUM LG/LG |

# POWER

| No. | PROJECT NAME | CUSTOMER | END USER | LOCATION | DATE DELIVERED | SCOPE OF SUPPLY |
|---|---|---|---|---|---|---|
| 162 | RABIGH II IPP | BHI/SC&T | ALMOURJAN | SAUDI ARABIA | 2015 | OF/NZ/RO |
| 163 | KUMHO CHP S1 | SC&T | KUMHO PETROCHEMICAL | KOREA | 2015 | OF/RO/LG/VC |
| 164 | PACO POWER 160MW | SKEC | MPSA | PANAMA | 2015 | OF/NZ/RO/LG/SG |
| 165 | SEOUL CCPP 400MWx2 | DHI | KOREA MIDLAND POWER | KOREA | 2015 | NZ/VT |
| 166 | POCHEON LNG CCPP(1600MW) | DAEWOO E&C | DAEWOO ENERGY | KOREA | 2015 | OF/NZ/RO/LG/SG |
| 167 | HDO NEW FBC BOILER #10 | HHI | HDO | KOREA | 2015 | OF/NZ |
| 168 | VINH TAN 4 | DHI | EVN | VIETNAM | 2015 | ORIFICE/LG |
| 169 | JEDDAH SOUTH THERMAL POWER PLANT STAGE I | HHI | SEC | SAUDI ARABIA | 2015 | LG |
| 170 | SAFI IPP, 693MWx2 | DAEWOO E&C | SAFI ENERGY | MOROCCO | 2015 | OF/NZ/LG/RO |
| 171 | Jeddah South Thermal Power Plant Project | HYUNDAI HEAVY | SEC(Saudi Electricity Company) | SAUDI ARABIA | 2014 | PG/FI/FS/VC |
| 172 | SHUQAIQ SPP EPC PJT | HYUNDAI HEAVY | SEC(Saudi Electricity Company) | SAUDI ARABIA | 2014 | P/G |
| 173 | IGCC(Integrated Gasification Combined Cycle) | DOOSAN HEAVY | KOREA WESTERN POWER | KOREA | 2014 | P/G |
| 174 | Dangjin Thermal Power Plant Unit 9&10 | DAELIM INDUSTRIAL | Korea East-West Power Co., Ltd | KOREA | 2014 | TG/TC/RTD/TW/Metal TC |
| 175 | Mexico Intergen SLP Project | SAMSUNG ENG. | Energia San Luis de la Paz, S.A. de C.V | MEXICO | 2014 | TG/TC/RTD/TW |
| 176 | AZ ZOUR NOTRH IWPP(1500MW) | HHI | PTB | KUWAIT | 2014 | ORIFICE/NZ/FI/FS/LS/LT/LG |
| 177 | ICHTHYS LNG CCPP(5xHRSG) | S&TC | CH2M Hill - UGL JV and GE consortium | AUSTRALIA | 2014 | OF/NZ/VT/DRUM LG |
| 178 | DANGJIN TPP 9&10 1000MWx2 | DAELIM INDUSTRIAL | KOREA EAST-WEST POWER | KOREA | 2014 | OF/NZ |
| 179 | HANAM CHPP HRSGx1 | DHI | KEPCO | KOREA | 2014 | OF/NZ |
| 180 | Samcheok Green Power Plant Unit 1,2 / HDE | HDEC | KOREA SOUTHERN POWER | KOREA | 2014 | FI/FS |
| 181 | PRAI HRSG | DOOSAN | TNB NORTHERN ENERGY | MALAYSIA | 2014 | OF/NZ |
| 182 | SM 200 PHASE I | DAELIM INDUSTRIAL | SARANGANI ENERGY | PHILIPPINE | 2014 | OF/LG/SG |
| 183 | THAI BINH II TPP(2x600MW) | DAELIM INDUSTRIAL | PETRO VIETNAM | VIETNAM | 2014 | LG/SG/OF/LG/FI |
| 184 | BUK PYEONG TPP 1,2(595MWx2) | BHI | KOREA EAST-WEST POWER | KOREA | 2014 | NZ/LG |
| 185 | Ras Djinet CCPP, 400MWx3 | DAEWOO E&C | SPE | ALGERIA | 2014 | OF/NZ/RO/LG/SG |
| 186 | SHUQAIQ SPP | S&TC | HHI/SEC | SAUDI ARABIA | 2014 | LG |
| 187 | TAEAN IGCC ASU | DHI | KOREA WESTERN POWER | KOREA | 2014 | OF/VT |
| 188 | SAEMANGUM , 151.5MWx2 | DHI | OCISE | KOREA | 2014 | DRUM LEVEL GAUGE/NZ/OF/VC |
| 189 | JEDDAH SOUTH THERMAL POWER PLANT STAGE I | S&TC | HHI/PTB | KUWAIT | 2014 | LG |
| 190 | WONJU RDF(Refuse Derived Fuel) | SEENTEC | KOREA MIDLAND POWER | KOREA | 2014 | DRUM LEVEL GAUGE |
| 191 | PRAI CCGT | SAMSUNG C&T | TNB NORTHERN ENERGY | MALAYSIA | 2014 | OF/RO |
| 192 | TNB FAST TRACK 3A | DAELIM E&C | TNB NORTHERN ENERGY | MALAYSIA | 2014 | NZ/SG |
| 193 | TAEAN THERMAL POWER PLANT #9/10 | S&TC | KOREA WESTERN POWER | KOREA | 2014 | OF/LG |
| 194 | MONG DUONG II 2*560MW(NET) COAL FIRED POWER | DOOSAN HEAVY | AES-VCM MONZUON | VIETNAM | 2013 | PG |
| 195 | DANG JIN Thermal Power Plant #5~6 | DAEWOO E&C | HYUNDAI GREEN POWER | KOREA | 2013 | TG/TC/RTD |
| 196 | Tufanbeyli Thermal Power Plant | HYUNDAI HEAVY | ENERJI SA | TURKEY | 2013 | TC/RTD/TW |
| 197 | RABIGH POWER PLANT | DOOSAN HEAVY | SEC | SAUDI ARABIA | 2013 | TC/RTD/TW |
| 198 | MONG DUONG Boiler | DOOSAN HEAVY | AES-VCM MONG DUONG POWER COMPANY | VIETNAM | 2013 | TG/TC/TW |
| 199 | YANBU II POWER&WATER | DOOSAN HEAVY | MARAFIQ | SAUDI ARABIA | 2013 | TG/TC/TW |
| 200 | YANBU II PKG1 Power and Water | HANWHA E&C | MARAFIQ | SAUDI ARABIA | 2013 | TG/TC/TW |
| 201 | YULCHON CCPP | SEDAE ENERTECH | YULCHON MPC | KOREA | 2013 | TG/TC/TW |
| 202 | GE3 | HYUNDAI HEAVY | SK E&C | KOREA | 2013 | TG/TC/RTD/TW |

# Experience List

## POWER

| No. | PROJECT NAME | CUSTOMER | END USER | LOCATION | DATE DELIVERED | SCOPE OF SUPPLY |
|---|---|---|---|---|---|---|
| 203 | MONG DUONG BOP No.1&2 | DOOSAN HEAVY | AES-VCM MONG DUONG POWER COMPANY | BIETNAM | 2013 | TG/TC/RTD/TW |
| 204 | Fertil-2 | KOREA YOKOGAWA | Ruwais Fertilizer Industry | UAE | 2013 | TC/RTD/MULTI TC/TW |
| 205 | YANBU PHASE-3 | DOOSAN HEAVY | MARAFIQ | SAUDI ARABIA | 2013 | TW |
| 206 | ULSAN #4 CCPP | DAELIM INDUSTRIAL | EWP | KOREA | 2013 | TG/TC/TW |
| 207 | NEW FBC BOILER #9 | HYUNDAI HEAVY | HYUNDAI OIL BANK | KOREA | 2013 | TG/TC/RTD/MULTI TC/TW |
| 208 | The 2nd Pyeongtaek CCPP | DAELIM INDUSTRIAL | EWP | KOREA | 2013 | TG/TC/TW |
| 209 | BRAKA NUCLEAR PP | KEPCO/HHI | UAE Nuclear Energy | UAE | 2013,2012 | ORIFICE/LG |
| 210 | SINULJIN #1,2 NUCLEAR PP | KHNP | KHNP | KOREA | 2013 | ORIFICE/LG |
| 211 | TAEAN IGCC | DHI/GS E & C | KOREA WESTERN POWER | KOREA | 2013 | OF/VT/RO/LG/SG |
| 212 | SHOAIBA II CCPP | DAELIM E & C | SEC | SAUDI ARABIA | 2013 | OF/VT/RO |
| 213 | UTE BAIXADA FLUMINENSE STAG 207FA 04 MS CCCP | HANGZHOU BOILER | GE | MEXICO | 2013 | OF/NZ |
| 214 | KUDGI STPP 3X800MW | DOOSAN HEAVY | NTPC | INDIA | 2013 | NZ |
| 215 | TRIPOLI WEST 4x350MW POWER PLANT | BHI | GECOL | LIBYA | 2013 | LG |
| 216 | POSCOENERGY COMBINED CYCLE POWER PLANT UNIT 7,8&9 | BHI | POSCO ENERGY | KOREA | 2013 | DRUM LEVEL GAUGE |
| 217 | ANDONG CCPP | SIEMENS KOREA | KOREA SOUTH POWER | KOREA | 2013 | OF |
| 218 | RAS AZ ZAWR POWER AND DESALINATION PLANT PROJECT | DOOSAN HEAVY | SALINE WATER CONVERSION CORPORATION | SAUDI ARABIA | 2012,2011 | PG/DPG/TG/TC/TW |
| 219 | Ruwais Refinery Expansion Project PROJECT | GS E & C | TAKREER / ABU DHABI OIL REFINING COMPANY | UAE | 2012 | PG/DPG/RTD/TG/TC/Sun Shade/ Multi TC/ Skin TC/TW |
| 220 | RABIGH POWER PLANT PROJECT | DOOSAN HEAVY | SALINE WATER CONVERSION CORPORATION | SAUDI ARABIA | 2012 | PG/TG/RTD/TC/TW/LT/OP/LG/LS |
| 221 | El Ain El Sokhna Supercritical Thermal Power Plant PROJECT | DOOSAN HEAVY | PGESCO | EGYPT | 2012 | PG/TG/TC/TW |
| 222 | New Haripur CC Power Plant PROJECT | DOOSAN HEAVY | EGCB | BANGLADESH | 2012 | PG/TG/TC/TW |
| 223 | 2x60MW MERAK CFPP PROJECT | POSCO | MERAK ENERGY | INDONESIA | 2012 | PG/TG/TC/TW/RTD/OF/NZ/RO |
| 224 | RABIGH POWER PLANT NO.2(2400MW) | DOOSAN HEAVY | SEC | SAUDI ARABIA | 2012 | ORIFICE/NOZZLE/LG/LS/LT |
| 225 | RABIGH POWER PLANT NO.2 | TORISHIMA PUMP | DHI/SEC | SAUDI ARABIA | 2012 | V CONE |
| 226 | 1200 MW DGEN MEGA POWER | DHI | TORRENT ENERGY | INDIA | 2012 | ORIFICE/NOZZLE |
| 227 | 2X685 MW THERMAL POWER RAIPUR | DHI | GMR | INDIA | 2012 | ORIFICE/NOZZLE |
| 228 | MERAK CFPP | POSCO E & C | MERAK ENERGY | INDONESIA | 2012 | ORIFICE/NOZZLE/VT |
| 229 | POCHEON LNG PP(1600MW) | BHI | POCHEON ENERGY | KOREA | 2012 | ORIFICE/NOZZLE |
| 230 | YANBU 2 POWER & WATER(690MW) | HANWHA E & C | MARAFIQ | SAUDI ARABIA | 2012 | ORIFICE/NOZZLE/SG/V-CONE/TG/TC/TW |
| 231 | YANBU 2 POWER & WATER(690MW) | DOOSAN HEAVY | MARAFIQ | SAUDI ARABIA | 2012 | TG/TC/TW |
| 232 | BUGOK 3 CCPP | BHI | SIEMENS | KOREA | 2012 | DRUM LEVEL GAUGE |
| 233 | MONG DUONG II(560MWx2) | DHI | AES-VCM | VIETNAM | 2012 | ORIFICE/NZ/LG |
| 234 | MONG DUONG II(560MWx2) | TORISHIMA PUMP | DHI/AES-VCM | VIETNAM | 2012 | V CONE |
| 235 | QURAYYAH IPP(1000MWx4) | BHI/Samsung C & T | Hajr for Electricity Production Company | SAUDI ARABIA | 2012 | ORIFICE/NZ/LG |

# POWER

| No. | PROJECT NAME | CUSTOMER | END USER | LOCATION | DATE DELIVERED | SCOPE OF SUPPLY |
|---|---|---|---|---|---|---|
| 236 | TIHAMA EXPANSION II | HHI | TIHAMA POWER GENERATION | SAUDI ARABIA | 2012 | ORIFICE/LG |
| 237 | EMAL Smelter Phase II(1000MW) | BHI | EMAL | UAE | 2012 | ORIFICE/NZ/LG |
| 238 | Rabigh Power Plant Extension - Stage 6 | DOOSAN HEAVY | Saudi Electricity Co | SAUDI ARABIA | 2011 | PG/TG/TW |
| 239 | Ruwais Refinery Expansion Project PKG 1 | SK E & C | Abu Dhabi Oil Refining Co. | UAE | 2011 | PG/PS/TG/TC/RTD/TW |
| 240 | RIYADH PP11 IPP PROJECT | HYUNDAI HEAVY | DHURUMA ELECTRICITY COMPANY | SAUDI ARABIA | 2011 | PG/DPG/TG/TW/RTD/TC |
| 241 | MARAFIQ Steam Turbine Generator units 5&6 PROJECT | HANWHA E & C | MARAFIQ | SAUDI ARABIA | 2011 | PG/TG/TS/RTD/TC/TW/FE/NOZZLE/SG |
| 242 | OMAN BARKA 3 IPP (EARLY POWER) | GS E & C | SAOC | OMAN | 2011 | PG/DPG/TG/TW |
| 243 | OMAN SOHAR 2 IPP (EARLY POWER) | GS E & C | SAOC | OMAN | 2011 | PG/DPG/TG/TW |
| 244 | GENAVEH COMBINED CYCLE POWER PLANT | DOOSAN HEAVY | MAPNA GENAVEH POWER GENERATION Co. | IRAN | 2011 | PG/PS/TG/TS/TW |
| 245 | OSEONG HRSG PROJECT | DOOSAN HEAVY | General Electric International, Inc. | KOREA | 2011 | PG/DPG/TG/TC/FLOW NOZZLE/ORIFICE ASS'Y |
| 246 | Chilca Uno Power Station Combined Cycle PROJECT | POSCO | Enersur.S.A | PERU | 2011 | PG/TG/TC/RTD/TW/SKIN TC/SG/OF/VT |
| 247 | Barka 3 Independent Power Plant PROJECT | DOOSAN HEAVY | AL SUWADI POWER COMPANY | OMAN | 2011 | PG/TG/RTD/TC/TW |
| 248 | MARAFIQ BOILER#5,6 PJT | DOOSAN HEAVY | MARAFIQ | SAUDI ARABIA | 2011 | RTD/TC/TG/TW |
| 249 | KALLPA 830MW CCCP | BHI | KALLPA BENERACION S.A. | PERU | 2011 | ORIFICE/NOZZLE |
| 250 | RIYADH P11 IPP | DECATEC | SEC | SAUDI ARABIA | 2011 | LG |
| 251 | CHILCAUNO CCPP | POSCO E & C | ENERSUR S.A | PERU | 2011 | ORIFICE/NOZZLE/SG |
| 252 | OSEONG HRSG | DHI & SKEC | GE | KOREA | 2011 | ORIFICE/NOZZLE |
| 253 | HSINTA POWER STATION PROJECT | DOOSAN HEAVY | TAIWAN POWER | TAIWAN | 2010 | PG/TG/TC/TW |
| 254 | AL-KHALIJ PROJECT | HYUNDAI HEAVY | GENERAL ELECTRIC CO | LIBYA | 2010 | PG/TG/TC/TW |
| 255 | AL DUR PROJECT | HYUNDAI HEAVY | Al Dur Power and Water Company BSC | BAHRAIN | 2010 | PG/TG/TC/TW |
| 256 | SINWEOLSEONG NUCLEAR POWER | KHNP | KOREA HYDRO & NUCLEAR POWER | KOREA | 2010 | PG/TG/TW |
| 257 | INCHEON LPG BASE HEATPOWER CONTROL FACILITIES PROJECT | GS E & C | E1 | KOREA | 2010 | PG/TG/TC/TW |
| 258 | GUNJANG GP | HAN WHA E & C | GUN JANG CO-GEN | KOREA | 2010 | ORIFICE/NOZZLE |
| 259 | GHECO ONE COAL FIRED POWER PLANT | DOOSAN HEAVY | GHECO ONE(SUEZ GROUP) | THAILAND | 2010 | ORIFICE/NOZZLE |
| 260 | RECONSTRUCTION OF KNPC FIRED HEATER | SK E & C | KNPC | KUWAIT | 2009 | PG/TG/TC/TW/RTD |
| 261 | AROMATICS COMPLEX PROJECT | SK E & C | KUWAIT AROMATICS COMPANY | KUWAIT | 2009 | PG/TG/TC/TW/RTD |
| 262 | CCPP PROJECT | GS CALTEX | YEREVAN THERMAL POWER PLANT | ARMENIA | 2009 | PG/TG/TC/TW/RTD |
| 263 | SONGDO COMBINED HEAT AND POWER PLANT | DAELIM E & C | INCHEON TOTAL ENERGY COMPANY | KOREA | 2009 | ORIFICE/NOZZLE |
| 264 | MA'ADEN PHOSPHATE POWER AND DESALINATION | HAN WHA E & C | MA'ADEN Phosphate Company. | SAUDI ARABIA | 2009 | ORIFICE/NOZZLE |
| 265 | Edwardsport IGCC | DOOSAN HEAVY | Duke Energy | U.S.A | 2009 | ORIFICE/NOZZLE |
| 266 | KOUDIET CCPP | DOOSAN HEAVY | SONELGAZ | ALGERIA | 2009 | ORIFICE/NOZZLE |
| 267 | CEBU COAL FIRED POWER PLANT | DOOSAN HEAVY | KSPC | PHILIPPINE | 2009 | ORIFICE/NOZZLE |
| 268 | AL-DUR IWPP | HYUNDAI HEAVY | Ministry of Finance | BAHRAIN | 2009 | LEVEL GAUGE |
| 269 | CIREBON COAL FIRED POWER PLANT | DOOSAN HEAVY | PT CEP | INDONESIA | 2009 | ORIFICE/NOZZLE |
| 270 | YOUNGWOL | SEEN TEC | KOSPO | KOREA | 2009 | DRUM LEVEL GAUGE |
| 271 | MARAFIQ HRSG PROJECT(#2,#3,#4) | DOOSAN HEAVY | JUBAIL WATER & POWER COMPANY | SAUDI ARABIA | 2008 | PG/TG/TC/TW/RTD |
| 272 | QATALUM BOP | DOOSAN HEAVY | GENERAL ELECTRONIC COMPANY | QATAR | 2008 | ORIFICE/NOZZLE |
| 273 | QATALUM HRSG | DOOSAN HEAVY | GENERAL ELECTRONIC COMPANY | QATAR | 2008 | ORIFICE/NOZZLE |
| 274 | SHUAIBA NORTH CO-GEN | HYUNDAI HEAVY | MEW | KUWAIT | 2008 | DRUM LEVEL GAUGE |
| 275 | SIPAT SUPER THERMAL POWER 3X660MW PROJECT | DOOSAN HEAVY | NATIONAL THERMAL POWER CORPORATION LTD. | INDIA | 2007 | PG/TG/TC/TW |

# Experience List

## POWER

| No. | PROJECT NAME | CUSTOMER | END USER | LOCATION | DATE DELIVERED | SCOPE OF SUPPLY |
|---|---|---|---|---|---|---|
| 276 | SHUAIBA MSF UNIT #9~#12 | DOOSAN HEAVY | FICHTNER | SAUDI ARABIA | 2007 | PG/TG/TC/TW |
| 277 | SAHARA BASELL PDH-PP PROJECT | DAELIM INDUSTRIAL | SAHARA PETROCHEMICAL COMPANY | SAUDI ARABIA | 2007 | PG/TG/TC/TW |
| 278 | HA DONG #7/8 CON & HTR | DOOSAN HEAVY | HA DONG THERMAL POWER PLANT | KOREA | 2007 | LEVEL GAUGE |
| 279 | GUNJANG CO-GENERATION | HAN WHA E & C | GUN JANG CO-GEN | KOREA | 2007 | ORIFICE/NOZZLE |
| 280 | 1100MW SUGEN CCPP | DOOSAN HEAVY | TORRENT POWER GENERATION LIIMITED | INDIA | 2006 | PG/TG/TW |
| 281 | SIPAT Super Thermal Power Project(STAGE-I 3x660MW) | DOOSAN HEAVY | National Thermal Power Corporation Ltd. | INDIA | 2006 | ORIFICE/NOZZLE |
| 282 | DANG JIN THERMAL POWER PLANT #7/8 | DOOSAN HEAVY | KOMICO. CO. KR | KOREA | 2006 | ORIFICE/NOZZLE |
| 283 | TAEAN THERMAL POWER PLANT #7/8 | DOOSAN HEAVY | KOMICO. CO. KR | KOREA | 2006 | ORIFICE/NOZZLE |
| 284 | ARAMCO THIRD PARTY POWER PLANT | HYUNDAI HEAVY | ARAMCO | SAUDI ARABIA | 2005 | PG/LG/TG/TC/TW |
| 285 | SHUAIBA SOUTH POWER GENERATION &WATER DISTILLATION | HANSU | MEW | KUWAIT | 2005 | PG/TG/TC/TW |
| 286 | RAS LAFFAN PH Ⅱ HRSG PLANT | DOOSAN HEAVY | QATAR POWER COMPANY | QATAR | 2005 | PG/LEVEL GAUGE/TG/TC/TW |
| 287 | MAPNA HRSG | DOOSAN HEAVY | MAPNA | IRAN | 2005 | PG |
| 288 | ARAMCO THIRD PARTY COGENERATION PROGRAM | HYUNDAI HEAVY | TIHAMA POWER GENERATION | SAUDI ARABIA | 2005 | LEVEL GAUGE |
| 289 | RAS LAFFAN PH Ⅱ QATAR POWER & WATER | HANSU CHEMICAL | DOOSAN HEAVY | QATAR | 2005 | LEVEL GAUGE |
| 290 | ZAIWA CCPP | DOOSAN HEAVY | General Electric Company of LIBYA | LIBYA | 2005 | ORIFICE/NOZZLE |
| 291 | RAS LAFFAN B IWPP | DOOSAN HEAVY | QATAR POWER COMPANY | QATAR | 2005 | PG/TG/TC/TW/ORIFICE ASS'Y/FLOW NOZZLE |
| 292 | PHUMY 2.1 | DOOSAN HEAVY | MARUBENI | VIETNAM | 2004 | ORIFICE/NOZZLE |
| 293 | APPC PDH/ PP WHB | DOOSAN HEAVY | SEC | SAUDI ARABIA | 2004 | ORIFICE/NOZZLE |
| 294 | CICLO COMBINADO CAMPO DE GIBRALTAR | DOOSAN HEAVY | NUEVA GENERADORA Del Sur. S.A. | SPAIN | 2003 | ORIFICE/NOZZLE/VENTURI |
| 295 | CC PALOS de la Frontera | DOOSAN HEAVY | UNION FENOSA GENERACION. S.A. | SPAIN | 2003 | ORIFICE/NOZZLE/VENTURI |
| 296 | RAS LAFFAN HRSG | DOOSAN HEAVY | QATAR POWER COMPANY | QATAR | 2002 | PG |
| 297 | FARS HRSG | HYUNDAI HEAVY | POWER COMPANY | IRAN | 2001 | PG |
| 298 | CASTEJON HRSG | DOOSAN HEAVY | HYDROCANTABRICO | SPAIN | 2001 | ORIFICE/NOZZLE |
| 299 | YOUNGKWANG 5 & 6 | KEPCO | YOUNGKWANG NUCLEAR POWER GENERATION | KOREA | 2000,1999 | ORIFICE/LEVEL GAUGE |
| 300 | DANG JIN T.P.P UNIT #4 | KHIC | DANG JIN THERMAL POWER PLANT | KOREA | 1999 | ORIFICE |
| 301 | WOLSONG 1 & 2 | KEPCO | WOLSONG NUCLEAR POWER GENERATION | KOREA | 1998 | LEVEL GAUGE |

## DESALINATION

| No. | PROJECT NAME | CUSTOMER | END USER | LOCATION | DATE DELIVERED | SCOPE OF SUPPLY |
|---|---|---|---|---|---|---|
| 302 | DESALINATION PLANT | DAELIM INDUSTRIAL | SWCC | SAUDI ARABIA | 2001 | PG/TG/TC/TW |

# REFINERY

| No. | PROJECT NAME | CUSTOMER | END USER | LOCATION | DATE DELIVERED | SCOPE OF SUPPLY |
|---|---|---|---|---|---|---|
| 303 | KNPC CLEAN FUELS PROJECT | HYUNDAI HEAVY | KNPC | KUWAIT | 2017 | PG/TG/TE/TW |
| 304 | S OIL RUC Project | DAELIM INDUSTRIAL | S-OIL | KOREA | 2017 | PG/TG/TE/TW |
| 305 | MX EPC PROJECT | HYUNDAI Engineering | Hyundai Oilbank | KOREA | 2016 | PG/TG |
| 306 | EPC CPF PHASE 2 AT BADRA OIL FIELD | SAMSUNG Engineering | GAZPROM Neft Badra BV | IRAQ | 2016 | PG/TG |
| 307 | KNPC CLEAN FUELS PROJECT | GS E & C | KNPC | KUWAIT | 2016 | PG/TG/TE/TW |
| 308 | BARDEGG-2 & BARONIA EOR DEVELOPMENT | FJORDS PROCESSING CO.,Ltd | PETRONAS | MALAYSIA | 2015 | PG/TG |
| 309 | KNPC CLEAN FUELS PROJECT | GS E & C | KNPC | KUWAIT | 2015 | PG/TG/TE/TW |
| 310 | SOHAR REFINERY IMPROVEMENT PROJECT | DAELIM INDUSTRIAL | ORPIC | OMAN | 2015 | PG/TG/TE |
| 311 | EMERSON - UHV PJT | EMERSON | IRPC | THAILAND | 2015 | TW |
| 312 | S-OIL SUPER PACKAGE#1 | DAELIM INDUSTRIAL | S-OIL | KOREA | 2015 | PG/TG/TE |
| 313 | PAKISTAN ARL UPGRADATION | HYUNDAI Engineering | ATTOCK REFINERY LIMITED | PAKISTAN | 2014 | TG/TC/RTD/TW |
| 314 | ERC Refining | JNK Heater | Egytian Refining | EGYPT | 2014 | SKIN TC |
| 315 | Oil Refinery Reconstruction | HYUNDAI Engineering | Turkmenbashi Oil Processing Complex | TURHMENISTAN | 2014 | TG/TC/RTD/TW |
| 316 | V-Project | SK E&C | SK INNOVATION | KOREA | 2013 | TG/TC/RTD/TW |
| 317 | V-Project | PETROCHEM KOREA | SKI | KOREA | 2013 | TC |
| 318 | RUWAIS REFINERY EXPANSION PKG 4 | DAEWOO E&C | TAKREER | UAE | 2012 | SG |
| 319 | RUWAIS REFINERY EXPANSION PKG 7 | GS E&C | TAKREER | UAE | 2012 | SG |
| 320 | VGO FCC | GS E&C | GS CALTEX | KOREA | 2012 | SG,LG |
| 321 | YANBU REFINERY PLANT PROJECT | DOOSAN HEAVY | ARAMCO | SAUDI ARABIA | 2012 | PG/TG/RTD/TC/TW |
| 322 | BS-132 PROJECT | SK E&C | KOC | KUWAIT | 2012 | PG/RTD/TG/TW |
| 323 | Ruwais 4th NGL Train Project | SK E&C | GASCO | U.A.E | 2011 | RTD/MULTI TC/TW |
| 324 | NEW BOOSTER STATION BS-132 & ENHANCEMENTS TO BS-131, NORTH KUWAIT | SK E&C | KUWAIT OIL COMPANY | KUWAIT | 2011 | RTD/TW |
| 325 | HABSHAN-5 UTILITIES & OFFSITES PROJECT | HYUNDAI HEAVY | GASCO | U.A.E | 2011 | RTD/TW |
| 326 | NO.4 DIESEL DEWAXING PROJECT | GS CALTEX | GS CALTEX | KOREA | 2010 | MULTI-THERMOCOUPLE |
| 327 | RRC UPGRADING PROJECT | DOOSAN HEAVY | RAYONG REFINERY PUBLIC CO.,LTD | THAILAND | 2008 | TC/TW/RTD |
| 328 | BTX PROJECT | DAELIM INDUSTRIAL | PETRON CORPORATION-REFINERY DIVISION | PHILIPPINES | 2008 | TG/TC/TW |
| 329 | IBN ZAHR PP-UTLITIES & OFFISITE PROJECT | DAELIM INDUSTRIAL | SAUDI EUROPEAN PETROCHEMICAL COMPANY | SAUDI ARABIA | 2007 | TG/TW |
| 330 | NO.6 MDU PROJECT | SK E&C | SK CORP | KOREA | 2006 | TG/TC/TW |
| 331 | FACILITY UPGRADE | SK E&C | KUWAIT OIL COMPANY | KUWAIT | 2006 | PG/TG/TC/TW |
| 332 | POCR UPGRADING EARLY PHASE | GE TECH | POCR | KAZAKHSTAN | 2005 | LG |
| 333 | SUPER PROJECT PKG 1 | DAELIM | S-OIL | KOREA | 2005 | OF/RO |
| 334 | KARBALA REFINERY | HANSOL SEENTEC | SCOP | IRAQ | 2005 | OF/NZ |
| 335 | UPGRADING OF BOOSTER STATION | DAELIM INDUSTRIAL | KOC | KUWAIT | 2005 | TG/TC/TW |
| 336 | QP PROJECT | GS E & C | QATAR PETROLEUM | QATAR | 2005 | PG/TG |
| 337 | REFINERY EXPANSION | DOOSAN HEAVY | NODCO | IRAN | 2001 | R.T.D |
| 338 | GC-25 NEW GATHERING CENTRE | GS E & C | KUWAIT OIL COMPANY | KUWAIT | 2001 | TC |

# Experience List

## TEXTILE

| No. | PROJECT NAME | CUSTOMER | END USER | LOCATION | DATE DELIVERED | SCOPE OF SUPPLY |
|---|---|---|---|---|---|---|
| 339 | SPANDEX SV-9,10 PROJECT | HYOSUNG | HYOSUNG CORP. | VIETNAM | 2015 | TG/TE |
| 340 | SV 7&8 | HYOSUNG | HYOSUNG CORP. | VIETNAM | 2014 | OF |
| 341 | SPANDEX SV5&6 | HYOSUNG | HYOSUNG CORP. | VIETNAM | 2013 | ORIFICE |
| 342 | OPTICAL FILM | HYOSUNG | HYOSUNG CORP. | KOREA | 2013 | LG |
| 343 | SPANDEX SV3 | HYOSUNG | HYOSUNG CORP. | VIETNAM | 2010 | ORIFICE |
| 344 | SPANDEX T3 | HYOSUNG | HYOSUNG CORP. | TURKEY | 2010 | ORIFICE |
| 345 | SPANDEX SV4 | HYOSUNG | HYOSUNG CORP. | VIETNAM | 2010 | ORIFICE |
| 346 | SPANDEX V2 | HYOSUNG | HYOSUNG CORP. | VIETNAM | 2009 | ORIFICE |
| 347 | SPANDEX VI | HYOSUNG | HYOSUNG CORP. | VIETNAM | 2008 | ORIFICE |
| 348 | SPANDEX TI | HYOSUNG | HYOSUNG CORP. | TURKEY | 2007 | ORIFICE |

## TIRE

| No. | PROJECT NAME | CUSTOMER | END USER | LOCATION | DATE DELIVERED | SCOPE OF SUPPLY |
|---|---|---|---|---|---|---|
| 349 | HKT Expansion | LOTTE E&C | HANKOOK TIRE | INDONESIA | 2012 | ORIFICE/LG |

## FERTILIZER

| No. | PROJECT NAME | CUSTOMER | END USER | LOCATION | DATE DELIVERED | SCOPE OF SUPPLY |
|---|---|---|---|---|---|---|
| 350 | Bolivia YPFB Ammonia/Urea Project | SAMSUNG Engineering | YPFB | BOLIVIA | 2015 | PG/TG |
| 351 | UMM WUAL PHOSPHATE PROJECT-AMMONIA PLANT | DAELIM INDUSTRIAL | MAADEN | SAUDI ARABIA | 2015 | PG/TG/TE |
| 352 | UMM WU'AL PHOSPHATED PROJECT(PHOSPHORIC ACID PLANT) | HANWHA E & C | MAADEN | SAUDI ARABIA | 2015 | PG/TG/TE |

## WATER

| No. | PROJECT NAME | CUSTOMER | END USER | LOCATION | DATE DELIVERED | SCOPE OF SUPPLY |
|---|---|---|---|---|---|---|
| 353 | Asan New City public sewage treatment facility and reuse facility private investment business | SAMSUNG Engineering | ASANSI | KOREA | 2018 | PG |
| 354 | Samsung Engineering S3 Project Phase 3 Construction | SAMSUNG Engineering | SAMSUNG ELECTRONICS | KOREA | 2017 | PG/TG/TE |
| 355 | UMM AL HOUL IWPP | HHI | Qatar General Electricity & Water Corporation | QATAR | 2016 | FS |
| 356 | S3 Line Construction (Ph-1) | SAMSUNG Engineering | SAMSUNG ELECTRONICS | QATAR | 2016 | PG/TG/TE |
| 357 | RPLC DEEP CONVERSION | KOLON EENG | PDVSA | VENEZUELA | 2015 | OF/WEDGE |
| 358 | YANBU 3 DESALINATION | DHI | SWCC | SAUDI ARABIA | 2014 | OF/NZ/LG/PITOT/PG |
| 359 | ESCONDIDA WATER SUPPLY | DHI | BHP | CHILE | 2014 | LG/FI |
| 360 | WPMP (Wara Pressure Maintenance Pjt) | GS E & C | WPMP (Wara Pressure Maintenance Pjt) | KUWAIT | 2013 | P/G |
| 361 | RAS AL KHAIR | DHI | SWCC | SAUDI ARABIA | 2012 | ORIFICE/NOZZLE/FLANGE ASS'Y |
| 362 | WASTE WATER TREATMENT | JANGSUNG GUN | JANGSUNG GUN | KOREA | 2012 | V CONE |
| 363 | WATER TREMENT PACKAGE | SK E&C | KOC | KUWAIT | 2006 | P/G |
| 364 | SABIYA DESALINATION PLANTS | DOOSAN HEAVY | MEW | KUWAIT | 2005 | ORIFICE/PG |
| 365 | SABIYA DESALINATION PLANTS | HANSU | MEW | KUWAIT | 2005 | ORIFICE/PG/TG/TC/TW |

## FOOD

| No. | PROJECT NAME | CUSTOMER | END USER | LOCATION | DATE DELIVERED | SCOPE OF SUPPLY |
|---|---|---|---|---|---|---|
| 366 | EDISON 3# | SAMSUNG Engineering | SAMSUNG BIOLOGICS | KOREA | 2016 | PG/TG |

## MACHINE INSTALL

| No. | PROJECT NAME | CUSTOMER | END USER | LOCATION | DATE DELIVERED | SCOPE OF SUPPLY |
|---|---|---|---|---|---|---|
| 367 | KAK PROJECT | SC ENGINEERING | SUMITOMO SEIKA POLYMERS KOREA | KOREA | 2016 | PG/TG/TE |

## CONSTRUCTION

| No. | PROJECT NAME | CUSTOMER | END USER | LOCATION | DATE DELIVERED | SCOPE OF SUPPLY |
|---|---|---|---|---|---|---|
| 368 | P-PROJECT | SAMSUNG Engineering | SAMSUNG ELECTRONICS | KOREA | 2016 | TE |

Certificates

section

# Certificates : 04

# Certificate list

| CERTIFICATE MARKING | CERTIFICATE NAME | ISSUE DATE | SCOPE OF CERTIFICATE | CERTIFIED BY |
|---|---|---|---|---|
| **System Certificates** | | | | |
| | Quality Management System (ISO 9001 : 2015) | Aug. 27, 2018 | Pressure Gauge, Switch, Transmitter, Temperature Gauge, Sensor, Switch, Transmitter, Level Gauge, Flow Element, Bellows | Korean Foundation for Quality |
| | Environment Management System (ISO 14001 : 2015) | Aug. 05, 2018 | Pressure Gauge, Switch, Transmitter, Temperature Gauge, Sensor, Switch, Transmitter, Level Gauge, Flow Element, Bellows | Korean Foundation for Quality |
| | KEPIC Certificate - MN | Apr. 16, 2016 | Class 1,2,3 Fabrication for Part & Appurtenances (Inclusion of Design Scope) | Korea Electric Association |
| | ASME Certificate mark with Designator "S", "U" & "PP" | Jul. 23, 2015 | Flow Instrument | ASME |
| **Pressure Instrument** | | | | |
| | KS Certificate (KS B 5305) | May. 24, 2012 | Bourdon Tube Type Pressure Gauge | Korean Standards Association |
| | Explosion Proof Certificate - Flame Proof (Ex d IIC T6) | Jan. 08, 2019 | SMART PRESSURE TRANSMITER - [SMT2001] | KTL |
| | Explosion Proof Certificate - Flame Proof (Ex d IIC T6) | Jan. 08, 2019 | SMART PRESSURE TRANSMITER - [SMT2002/3A] | KTL |
| | Explosion Proof Certificate - Flame Proof (Ex d IIC T6) | Jan. 08, 2019 | SMART PRESSURE TRANSMITER - [SMT2002/3B] | KTL |
| | Explosion Proof Certificate - Flame Proof (Ex d IIC T6) | Oct. 04, 2018 | UHP TRANSMITER - [PT850] | KTL |
| | Explosion Proof Certificate - Intrinsic Safety (Ex ia IIC T6...T4 IP65) | Jan. 05, 2018 | UHP Pressure Transmitter - [PT851] | KOSHA |
| | Explosion Proof Certificate - Type of protection (Ex nA IIC T6...T4 IP65) | Sep. 05, 2017 | UHP Pressure Transmitter - [PT852] | KOSHA |
| | Explosion Proof Certificate - Flame Proof (Ex d IIC T6) | Jan. 18, 2012 | Diff. Pressure switch [P991] | KOSHA |
| | Explosion Proof Certificate - Flame Proof (Ex d IIB+H2 T6) | Apr. 12, 2010 | Pressure indicating switch [P990] | KOSHA |
| CRN | Canadian registration number - Pressure equipment safety | May. 14, 2015 | Pressure gauge [P229, P252, P257, P258, P721-1, P721-2] Pressure switch [P953-P2, P953-P3, P970] | ABSA |
| | Canadian registration number - Pressure equipment safety | Apr. 12, 2013 | Pressure gauge [P252, P257, P359, P620, P711, P731] Accessories [A030, A040, A050, A070] | ABSA |
| | Canadian registration number - Pressure equipment safety | Apr. 11, 2012 | Instrument valve - [A080] | ABSA |
| | Explosion Proof Certificate - Flame Proof (Ex d IIC T6 Gb) | Mar. 16, 2018 | UHP Pressure Transmitter - [PT850] | NEPSI |
| | Explosion Proof Certificate - Intrinsic Safety (Ex ia IIC T6…T4 Ga) | Mar. 16, 2018 | UHP Pressure Transmitter - [PT851] | NEPSI |
| | Explosion Proof Certificate - Type of protection (Ex nA IIC T6…T4 Gc) | Mar. 16, 2018 | UHP Pressure Transmitter - [PT852] | NEPSI |
| | Explosion Proof Certificate - Flame Proof (Ex d IIC T6 Gb) | Apr. 12, 2018 | SMART PRESSURE TRANSMITER - [SMT Series] | CML |
| | Explosion Proof Certificate - Flame Proof (Ex db IIC T4/T5/T6 Gb) Dust Ignition Proof (Ex tb IIIC T80℃/T90T℃/130℃ Db) | Aug. 31, 2018 | SMART PRESSURE TRANSMITER - [SMT Series] | CML |
| **Temperature Instrument** | | | | |
| | Explosion Proof Certificate - Flame Proof (Ex d IIC T6) | Oct. 28, 2014 | Temperature sensor (Thermocouple & R.T.D) - [R Series : R121, R122, R221, R222] | KTL |
| | Explosion Proof Certificate - Flame Proof (Ex d IIC T6 IP65) | Jul. 25, 2013 | Multi-Point Temperature Sensor [R550] | KOSHA |
| | Explosion Proof Certificate - Flame Proof (Ex d IIC T6 IP65) | Jul. 25, 2013 | Multi-Point Temperature Sensor [R560] | KGS |
| | Explosion Proof Certificate - Flame Proof (Ex d IIC T6 IP56) | May. 09, 2013 | SPACE HEATER [H100] | KGS |
| | Explosion Proof Certificate - Flame Proof (Ex d IIC T6 IP56) | Dec. 25, 2012 | Temperature sensor (Thermocouple & R.T.D) - [RL Type : R190] | KGS |
| | Explosion Proof Certificate - Flame Proof (Ex d IIC T6 IP67) | Aug. 01, 2012 | Temperature sensor (Thermocouple & R.T.D) - [RC Type : R931, R932, R933, R934] | KGS |

| CERTIFICATE MARKING | CERTIFICATE NAME | ISSUE DATE | SCOPE OF CERTIFICATE | CERTIFIED BY |
|---|---|---|---|---|
| **Temperature Instrument** | | | | |
| | Explosion Proof Certificate - Flame Proof (Ex d IIC T6 IP65) | Nov. 01, 2011 | Temperature sensor (Thermocouple & R.T.D : Movable sheath type)- [RS Type : R921, R922] | KGS |
| | Explosion Proof Certificate - Flame Proof (Ex d IIB+H2 T6) | Jun. 07, 2011 | Temperature indicating switch [T990] | KOSHA |
| | Explosion Proof Certificate - Intrinsic Safety (Ex ia IIC T6) | May. 06, 2011 | Temperature sensor (Thermocouple & R.T.D) - [ETR10 Series : R951, R952] | KOSHA |
| | Explosion Proof Certificate - Intrinsic Safety (ATEX Ex ia IIC T6..T3 Ga/Gb) | Dec. 08, 2017 | Temperature sensor (Thermocouple & R.T.D) - [R950(ETR10) Series] | DEKRA |
| | Explosion Proof Certificate - Increased Safety (ATEX Ex e IIC Gb) | Nov. 21, 2017 | Coil end temperature detector and Bearing temperature sensor) - [R840 Series] | LCIE |
| | Explosion Proof Certificate - Intrinsic Safety (ATEX Ex ia IIC T6...T3 Ga) | Aug. 31, 2017 | Bearing Temperature sensor - [R840 Series] | Bureau Veritas |
| | Explosion Proof Certificate - Flame Proof (ATEX Ex d IIC T6 Gb) | Jul. 24, 2017 | Temperature sensor (Thermocouple & R.T.D) - [ETR Series : R941, R942] | LCIE |
| | Explosion Proof Certificate - Increased Safety (ATEX II 2G Ex e IIC T6…T1 Gb) | Jun. 03, 2016 | Temperature sensor R950 Series (Thermocouple & R.T.D) - [ETR10 Series] | Bureau Veritas |
| | Explosion Proof Certificate - Flame Proof / Intrinsic Safety / Increased Safety / dust ignition proof - II (1)2G Ex d ia/ib [ia/ib] IIC T6 Gb - II 2G Ex d e IIC T6 Gb- - II 2D Ex tb IIIC T85℃ Db IP66/IP67 | Nov. 27, 2015 | Field Junction Box [B500 Series] | Bureau Veritas |
| | Explosion Proof Certificate - Flame Proof (ATEX Ex d IIC T6 Gb) | Dec. 07, 2015 | ILLUMINATOR [A250] | Bureau Veritas |
| | Explosion Proof Certificate - Increased Safety (ATEX II 2G Ex e IIC Gb) | Oct. 25, 2013 | Stator Winding R.T.D - [R810 Series : R811, R812, R813, R814, R815, R816, R817, R818] | Bureau Veritas |
| | Explosion Proof Certificate - Intrinsic Safety (ATEX Ex ia IIC T6..T3 Ga) | Oct. 25, 2013 | Stator Winding R.T.D - [R820 Series : R821, R822, R823, R824, R825, R826, R827, R828] | Bureau Veritas |
| | Explosion Proof Certificate - Increased Safety (ATEX II 2G Ex e II Gb) | Jan. 08, 2013 | SPACE HEATER [H100] | Bureau Veritas |
| | Explosion Proof Certificate - Intrinsic Safety (IECEx Ex ia IIC T6..T3 Ga/Gb) | Dec. 08, 2017 | Temperature sensor (Thermocouple & R.T.D) - [R950(ETR10) Series] | DEKRA |
| | Explosion Proof Certificate - Increased Safety (IECEx Ex e IIC Gb) | Nov. 21, 2017 | Coil end temperature detector and Bearing temperature sensor) - [R840 Series] | LCIE |
| | Explosion Proof Certificate - Intrinsic Safety (IECEx Ex ia IIC T6..T3 Ga) | Sep. 01, 2017 | Bearing Temperature sensor - [R840 Series] | Bureau Veritas |
| | Explosion Proof Certificate - Flame Proof (IECEx Ex d IIC T6 Gb) | Jul. 24, 2017 | Temperature sensor (Thermocouple & R.T.D) - [ETR Series : R941, R942] | LCIE |
| | Explosion Proof Certificate - Increased Safety (IECEx Ex e IIC T6…T1 Gb) | Jun. 06, 2016 | Temperature sensor R950 Series (Thermocouple & R.T.D) - [ETR10 Series] | Bureau Veritas |
| | Explosion Proof Certificate - Flame Proof (IECEx Ex d IIC T6 Gb) | Dec. 07, 2015 | ILLUMINATOR [A250] | Bureau Veritas |
| | Explosion Proof Certificate - Flame Proof / Intrinsic Safety / Increased Safety / dust ignition proof - Ex d ia/ib [ia/ib] IIC T6 Gb - Ex d e IIC T6 Gb - Ex tb IIIC T85℃ Db IP66/IP67 | Nov. 27, 2015 | Field Junction Box [B500 Series] | Bureau Veritas |
| | Explosion Proof Certificate - Increased Safety (IECEx Ex e IIC Gb) | Feb. 19, 2014 | SPACE HEATER [H100] | Bureau Veritas |
| | Explosion Proof Certificate - Increased Safety (IECEx Ex e IIC Gb) | Nov. 04, 2013 | Stator Winding R.T.D - [R810 Series : R811, R812, R813, R814, R815, R816, R817, R818] | Bureau Veritas |

| CERTIFICATE MARKING | CERTIFICATE NAME | ISSUE DATE | SCOPE OF CERTIFICATE | CERTIFIED BY |
|---|---|---|---|---|
| **Temperature Instrument** | | | | |
| | Explosion Proof Certificate - Intrinsic Safety (IECEx Ex ia IIC T6…T3 Ga) | Nov. 04, 2013 | Stator Winding R.T.D - [R820 Series : R821, R822, R823, R824, R825, R826, R827, R828] | Bureau Veritas |
| | Canadian Registration Number - Pressure Equipment Safety | Jul. 30, 2013 | Thermowell - [ A600, A630, A631, A632, A610, A611, A612] | ABSA |
| | Explosion Proof Certificate - Intrinsic Safety / Increased Safety - R810(Ex e IIC Gb) - R820(Ex ia IIC T6…T3 Ga) - H100(Ex e IIC Gb) | Mar. 31, 2016 | Stator Winding R.T.D - [R810, R820 Series] SPACE HEATER [H100] | TECHNO STANDARD |
| | Explosion Proof Certificate - Flame Proof (Ex d IIC T6) | Jun. 08, 2016 | Explosion proof type Indicating Pressure Switch [P981, P982 Series] | KTL |
| | Explosion Proof Certificate - Flame Proof (Ex d IIC T6) | Mar. 28, 2016 | Head mounting type multi temperature transmitter [R911] | KTL |
| | Explosion Proof Certificate - Flame Proof (Ex d IIC T6) | Mar. 28, 2016 | Head mounting type temperature transmitter (RTD Only) [R912] | KTL |
| | Explosion Proof Certificate - Flame Proof (Ex d IIC T6 IP65) | Mar. 23, 2016 | Ultrasonic Gas Flow Meters [U111K] | KGS |
| | Explosion Proof Certificate - Flame Proof (Ex de IIC T6 IP67) | Apr. 07, 2016 | Metallic protection tube Thermocouple and RTD [R960 Series] | KGS |
| | Explosion Proof Certificate - Flame Proof (Ex d IIC T6 IP65) | Apr. 07, 2016 | Non-metalic protection tube thermocouple [R970 Series] | KGS |
| | Explosion Proof Certificate - Intrinsic Safety (Ex ia IIC T6…T3) | Aug. 06, 2015 | Stator Winding R.T.D - [R820 Series : R821, R822, R823, R824, R825, R826, R827, R828] | KGS |
| | Explosion Proof Certificate - Increased Safety (Ex e IIC T6…T1) | Apr. 24, 2015 | Temperature sensor (Thermocouple & R.T.D) - [ETR10 Series] | KGS |
| | Explosion Proof Certificate - Increased Safety (Ex e IIC Gb) | Jan. 16, 2015 | Stator Winding R.T.D - [R810 Series : R811, R812, R813, R814, R815, R816, R817, R818] | KGS |
| | Explosion Proof Certificate - Intrinsic Safety (Ex ia IIC T6...T1 Ga/Gb) | Apr. 14, 2017 | Temperature sensor (Thermocouple & R.T.D) - [R950(ETR10) Series] | NEPSI |
| | Explosion Proof Certificate - Increased Safety (Ex e IIC T6...T1 Gb) | Apr. 13, 2017 | Temperature sensor (Thermocouple & R.T.D) - [R950(ETR10) Series] | NEPSI |
| **Pressure and Temperature Instrument** | | | | |
| | Explosion Proof Certificate - Intrinsic Safety (Ex ia IIC T6) | Jul. 03, 2017 | Inductive Contacts Type Pressure Gauge [P500, P501, P502, P690, T500, T510 Series] | KOSHA |
| | Explosion Proof Certificate - Flame Proof (Ex d IIC T6 IP65) | Nov. 14, 2016 | Pressure & Temperature Switch [953 Series : P953, P970, T953] | KTL |
| | Explosion Proof Certificate - Flame Proof (IECEx Ex d IIC T6 Gb) | Aug. 01, 2016 | Pressure & Temperature Switch [953 Series : P953, P970, T953] | LCIE |
| | Explosion Proof Certificate - Flame Proof (ATEX Ex d IIC T6 Gb) | Jun. 15, 2016 | Pressure & Temperature Switch [953 Series : P953, P970, T953] | LCIE |
| | Explosion Proof Certificate - Constructional Safety (ATEX Ex II GD c IIC TX) | Apr. 11, 2014 | Pressure Gauge [P229, P252, P253, P257, P258, P259, P330, P335, P421, P422, P428, P429, P711, P712, P721, P722, P731, P732, P741, P742, P751, P752, P753, P754, P757, P771, P772, P810, P820, P830] Temperature Gauge [T110, T111, T112, T120, T140, T190, T191, T359, T210, T212, T219, T220, T222, T229, T230, T239, T250, T259] | Bureau Veritas |
| | Explosion Proof Certificate - Constructional Safety (ATEX Ex II GD c IIB TX) | May. 02, 2014 | Pressure Gauge [P359] Temperature Gauge [T359] | Bureau Veritas |
| | 3-A Symbol Certificate | Dec. 31, 2016 | Sanitary pressure & Temperature gauges, Temperature sensor, Transmitters, Thermowell [P752S, P753S, P426, P427, T123, R231, R232, A603] | 3-A Sanitary Standard, Inc. |
| | GOST-Pattern Approval | Feb. 27, 2015 | Pressure Gauge [P229, P235, P252, P253, P257, P258, P259, P330, P359, P500, P590, P810] Pressure Gauge(Diaphragm type) [P421, P422, P428, P710, P720, P730, P740, P751, P752, P753, P754, P755, P756, P770] Differential Pressure Gauge [P620, P640, P660, P670, P680, P690] Temperature Gauge(T100) [T110, T120, T140, T190, T191] | ROSSTANDARD |

| CERTIFICATE MARKING | CERTIFICATE NAME | ISSUE DATE | SCOPE OF CERTIFICATE | CERTIFIED BY |
|---|---|---|---|---|
| **Pressure and Temperature Instrument** | | | | |
| | GOST-Pattern Approval | Dec. 19, 2014 | Resistance Temperature Detector<br>[R211, R212, R221, R222, R311, R312, R321, R322, R331, R332, R810, R820, R830, R921, R922, R941, R942, R951, R952]<br>Temperature Gauge(T200)<br>[T210, T212, T219, T220, T229, T230, T239, T250, T259, T521, T522, T523, T524, T525, T761, T762, T763, T764]<br>Thermocouple<br>[R111, R112, R121, R122, R311, R312, R322, R331, R332, R921, R922, R941, R942, R951, R952] | ROSSTANDARD |
| | Explosion Proof Certificate - Flame Proof (Ex d IIC T6 Gb) | Mar. 10, 2017 | Pressure & Temperature Switch<br>[953 Series : P953, P970, T953] | NEPSI |
| | Explosion Proof Certificate - Intrinsic Safety (Ex ia IIC T6 Ga) | Nov. 05, 2015 | Pressure Gauge<br>[P500 Series, P501 Series, P690 Series]<br>Temperature Gauge<br>[T500 Series] | |
| **Pressure Instrument, Temperature Instrument, Flow & Level Instrument** | | | | |
| | Pressure Equipment Directive (2014/68/EU) Annex III Module H | Apr. 26, 2017 | Pressure instrument<br>[P252, P257, P258, P229, P359, P500, P510,P520, P531, P532, P533, P534, P537, P539,P535, P536, P710, P720, P740, P630, P631,P632, P633, P634, P635, P651, P652, P653,P654, P655]<br>Pressure gauge accessories<br>[A040, A070]<br>Flow elements<br>[F500, F510, F600, F700, F750]<br>Level instruments<br>[L110, L210, L140, L240, L300, L310, L500, L510] | TUV NORD Systems GmbH & Co. KG |
| | TRCU (Technical Reulation of Customs Union) | Feb. 14, 2017 | Orifice Plate<br>[F100, F200, F300, F400, F500, F510] | TECHNO STANDARD |
| | | Jun. 09, 2016 | Flow Element & Venturi Tube<br>[F600, F700, F750, F760, F770] | |
| | | Mar. 21, 2016 | Pressure Gauge | |
| | | Apr. 07, 2016 | Level Gauge | |
| | | Dec. 15, 2015 | Thermowell | |
| | | Dec. 03, 2015 | Thermometer | |
| | | Dec. 03, 2015 | Thermocouple & RTD | |
| **Flow & Level Instrument** | | | | |
| | Explosion Proof Certificate - Flame Proof (Ex d IIC T6 IP65) | Dec. 14, 2012 | ILLUMINATOR [A250] | KGS |
| **Gas Instrument** | | | | |
| | NEP (New Excellent Product) | Sep. 07, 2018 | Wireless Leak Detector<br>[GLD1000] | KOITA |
| | Explosion Proof Certificate - Flame Proof (Ex de IIC T6 IP65) | Jul. 26, 2018 | Wireless Leak Detector<br>[GLD1000] | KGS |

# System certificates

## Quality Management System - ISO 9001 : 2015

CERTIFICATE
QUALITY MANAGEMENT SYSTEM

kfq Korean Foundation for Quality

| | |
|---|---|
| Registration Date | 2018-08-27 |
| Expiration Date | 2021-08-26 |
| Initial Registration Date | 1994-08-27 |
| Revision Date | 2018-08-05 |
| Certificate Number | AC-00019 |

WISE CONTROL INC.

- HEAD OFFICE & YONGIN FACTORY : 2022, Deogyeong-daero, Giheung-gu, Yongin-si, Gyeonggi-do, Korea (Zip code : 17097)
- HWASEONG FACTORY : 5, Madogongdan-ro 4-gil, Mado-myeon, Hwaseong-si, Gyeonggi-do, Korea (Zip code : 18542)
- BUCHUN FACTORY : 122, Jomaru-ro 385beon-gil, Bucheon-si, Gyeonggi-do, Korea (Zip code : 14556)
- SEOUL OFFICE : 181, Gasan digital 1-ro, Geumcheon-gu, Seoul, Korea(Zip code : 08503)

*Korean Foundation for Quality certifies that The Quality Management System of the above organization has been audited and has complied with the requirements of the following standard*

Standard

ISO 9001:2015/KS Q ISO 9001:2015

Scope of certification

- HEAD OFFICE & YONGIN FACTORY :
- DESIGN, DEVELOPMENT, PRODUCTION AND SALES OF PRESSURE AND TEMPERATURE INSTRUMENTS(FLAMEPROOF TYPE INCLUDED)
- DESIGN, DEVELOPMENT, PRODUCTION AND SALES OF PRESSURE AND TEMPERATURE TRANSMITTER(FLAMEPROOF TYPE INCLUDED)
- DESIGN, DEVELOPMENT AND SALES OF GAS SENSOR
- DESIGN, DEVELOPMENT AND SALES OF FLOW AND LEVEL MEASURING INSTRUMENTS(ORIFICE PLATE, FLOW NOZZLES, VENTURI TUBES, LEVEL GAUGES AND ULTRASONIC LIQUID FLOW METER)
- HWASEONG FACTORY : DESIGN, DEVELOPMENT AND SALES OF FLOW AND LEVEL MEASURING INSTRUMENTS(ORIFICE PLATE, FLOW NOZZLES, VENTURI TUBES, LEVEL GAUGES AND ULTRASONIC LIQUID FLOW METER)
- BUCHUN FACTORY :
- DESIGN, DEVELOPMENT, PRODUCTION AND SALES OF PRESSURE AND TEMPERATURE INSTRUMENTS(FLAMEPROOF TYPE INCLUDED)
- DESIGN, DEVELOPMENT, PRODUCTION AND SALES OF PRESSURE AND TEMPERATURE TRANSMITTER(FLAMEPROOF TYPE INCLUDED)
- DESIGN, DEVELOPMENT AND SALES OF GAS SENSOR
- DESIGN, DEVELOPMENT, PRODUCTION AND SALES OF BELLOWS AND HIGH VACUUM VALVES

IQNet

KAB IAF

[KAB-QC-01]

KFQ has been accredited in respect of ISO 9001 covered by the KAB(Accreditation Certificate Number KAB-QC-01)

Dae Hyun Nam
President & CEO of KFQ

www.kfq.or.kr
13F, Woolim Lion's Valley Bldg.B,186,Gasan digital 1-ro,Geumcheon-gu,Seoul,08581,Korea

# System certificates

## Environment Management System - ISO 14001 : 2015

CERTIFICATE

ENVIRONMENTAL MANAGEMENT SYSTEM

kfq Korean Foundation for Quality

| | |
|---|---|
| Registration Date | 2018-08-05 |
| Expiration Date | 2021-08-04 |
| Initial Registration Date | 2012-11-05 |
| Revision Date | 2018-08-05 |
| Certificate Number | EAC – 05427 |

WISE CONTROL INC.

- HEAD OFFICE & YONGIN FACTORY : 2022, Deogyeong-daero, Giheung-gu, Yongin-si, Gyeonggi-do, Korea (Zip code : 17097)
- SEOUL OFFICE : 181, Gasan digital 1-ro, Geumcheon-gu, Seoul (Zip code : 08503)

*Korean Foundation for Quality certifies that The Environmental Management System of the above organization has been audited and has complied with the requirements of the following standard*

Standard

ISO 14001:2015/KS I ISO 14001:2015

Scope of certification

- DESIGN, DEVELOPMENT, PRODUCTION AND SALES OF PRESSURE AND TEMPERATURE INSTRUMENTS(FLAMEPROOF TYPE INCLUDED)
- DESIGN, DEVELOPMENT, PRODUCTION AND SALES OF PRESSURE AND TEMPERATURE TRANSMITTER(FLAMEPROOF TYPE INCLUDED)
- DESIGN, DEVELOPMENT AND SALES OF GAS SENSOR
- DESIGN, DEVELOPMENT AND SALES OF FLOW AND LEVEL MEASURING INSTRUMENTS(ORIFICE PLATE, FLOW NOZZLES, VENTURI TUBES, LEVEL GAUGES AND ULTRASONIC LIQUID FLOW METER)

IQNet

KAB IAF

[KAB-EC-01]

KFQ has been accredited in respect of ISO 14001 covered by the KAB Accreditation Certificate Number KAB-EC-01

Dae Hyeon Nam
President & CEO of KFQ

www.kfq.or.kr

13F, Woolim Lion's Valley Bldg.B,108,Gasan digital 1-ro,Geumcheon-gu,Seoul,08591,Korea

## KEPIC Certificate-MN

전력산업기술기준

# KEPIC CERTIFICATE

Certificate Number : MN-597

Company Name : WISE CONTROL Inc.

Address : 5, Madogongdan-ro 4-gil, Mado-myeon, Hwaseong-si, Gyeonggi-do, Korea

This is to certify that the above company has established and maintained proper quality assurance program for the scope shown below in accordance with the applicable requirements of Korea Electric Power Industry Code.

Applicable Code : KEPIC-MN

Certification Date : April 16, 2016

Expiration Date : April 15, 2019

Scope :

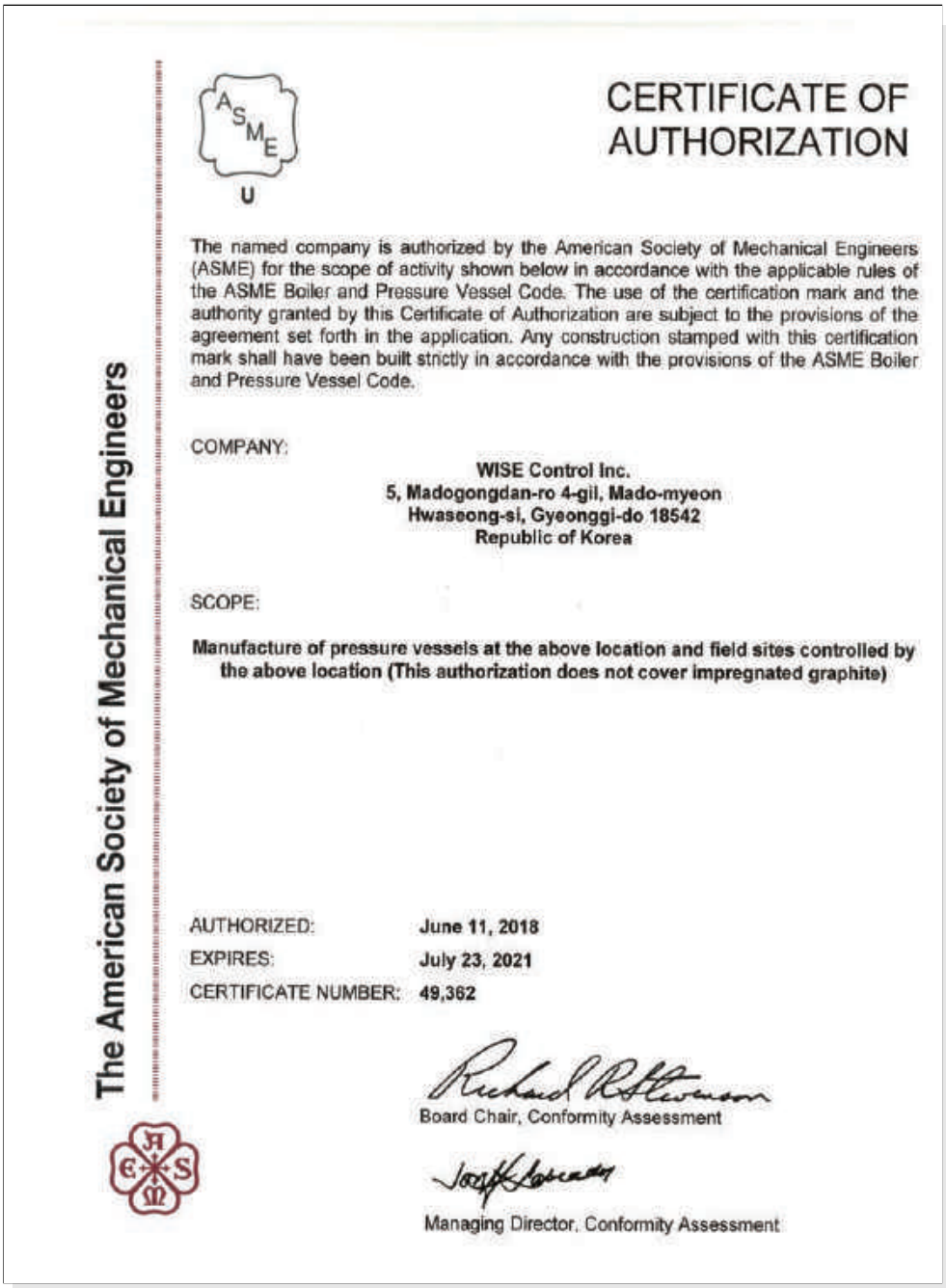
- Class 1·2·3 fabrication for parts & appurtenances (including design scope)
- Material organization supplying ferrous and welding material related to above items

대한전기협회장

Chairman of Korea Electric Association

# System certificates

## ASME Certification Mark with Designator S, U & PP Certificate



The American Society of Mechanical Engineers

U

CERTIFICATE OF AUTHORIZATION

The named company is authorized by the American Society of Mechanical Engineers (ASME) for the scope of activity shown below in accordance with the applicable rules of the ASME Boiler and Pressure Vessel Code. The use of the certification mark and the authority granted by this Certificate of Authorization are subject to the provisions of the agreement set forth in the application. Any construction stamped with this certification mark shall have been built strictly in accordance with the provisions of the ASME Boiler and Pressure Vessel Code.

COMPANY:

**WISE Control Inc.**
**5, Madogongdan-ro 4-gil, Mado-myeon**
**Hwaseong-si, Gyeonggi-do 18542**
**Republic of Korea**

SCOPE:

**Manufacture of pressure vessels at the above location and field sites controlled by the above location (This authorization does not cover impregnated graphite)**

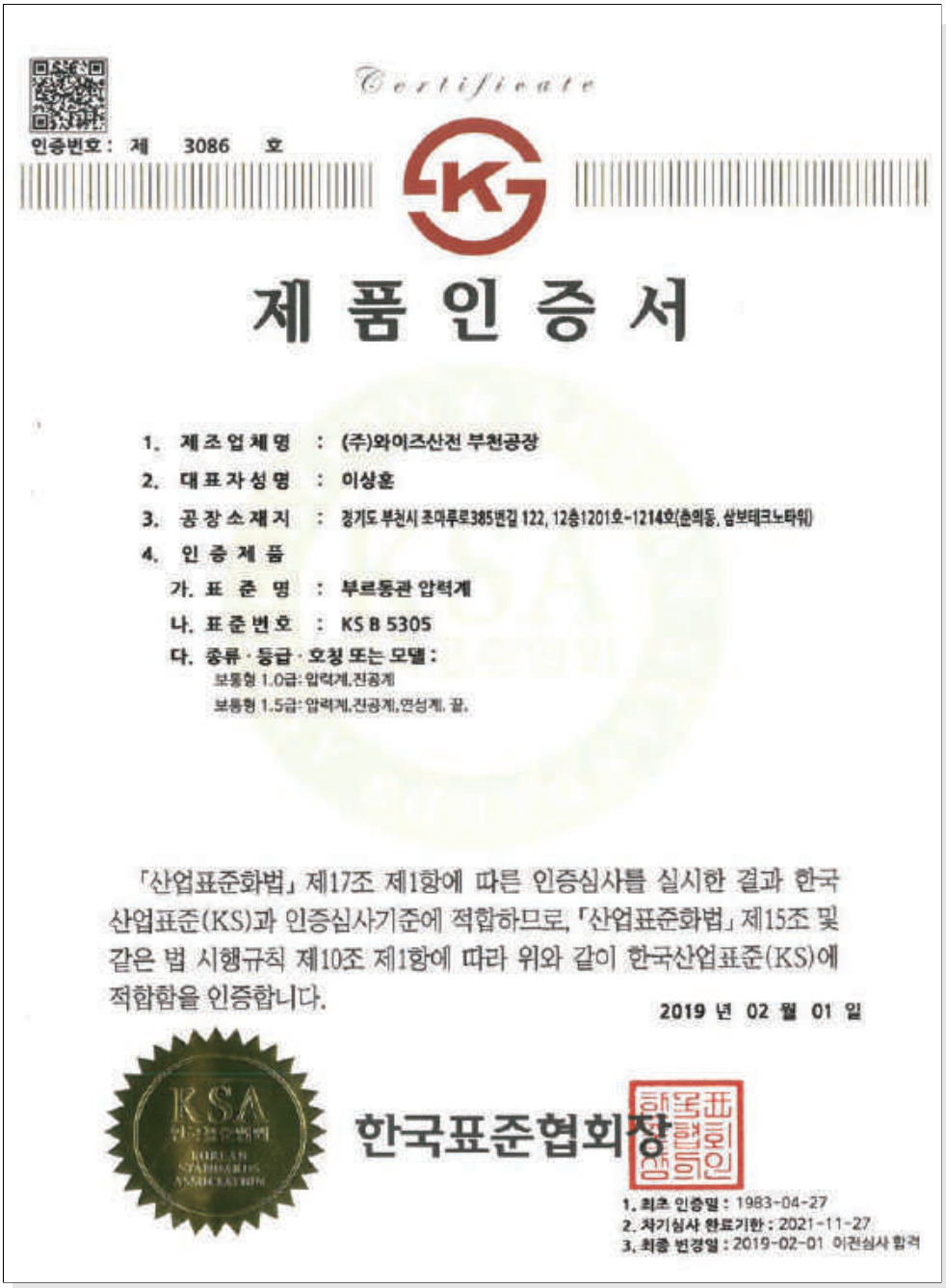
AUTHORIZED: **June 11, 2018**
EXPIRES: **July 23, 2021**
CERTIFICATE NUMBER: **49,362**

Board Chair, Conformity Assessment

Managing Director, Conformity Assessment

# Pressure Instrument

## KS Certificate (KS B 5305)



Certificate

인증번호 : 제 3086 호

# 제 품 인 증 서

1. 제조업체명 : (주)와이즈산전 부천공장
2. 대표자성명 : 이상훈
3. 공장소재지 : 경기도 부천시 초마루로385번길 122, 12층1201호~1214호(춘의동, 삼보테크노타워)
4. 인증제품
   가. 표준명 : 부르동관 압력계
   나. 표준번호 : KS B 5305
   다. 종류 · 등급 · 호칭 또는 모델 :
   보통형 1.0급 : 압력계,진공계
   보통형 1.5급 : 압력계,진공계,연성계, 끝.

「산업표준화법」 제17조 제1항에 따른 인증심사를 실시한 결과 한국산업표준(KS)과 인증심사기준에 적합하므로, 「산업표준화법」 제15조 및 같은 법 시행규칙 제10조 제1항에 따라 위와 같이 한국산업표준(KS)에 적합함을 인증합니다.

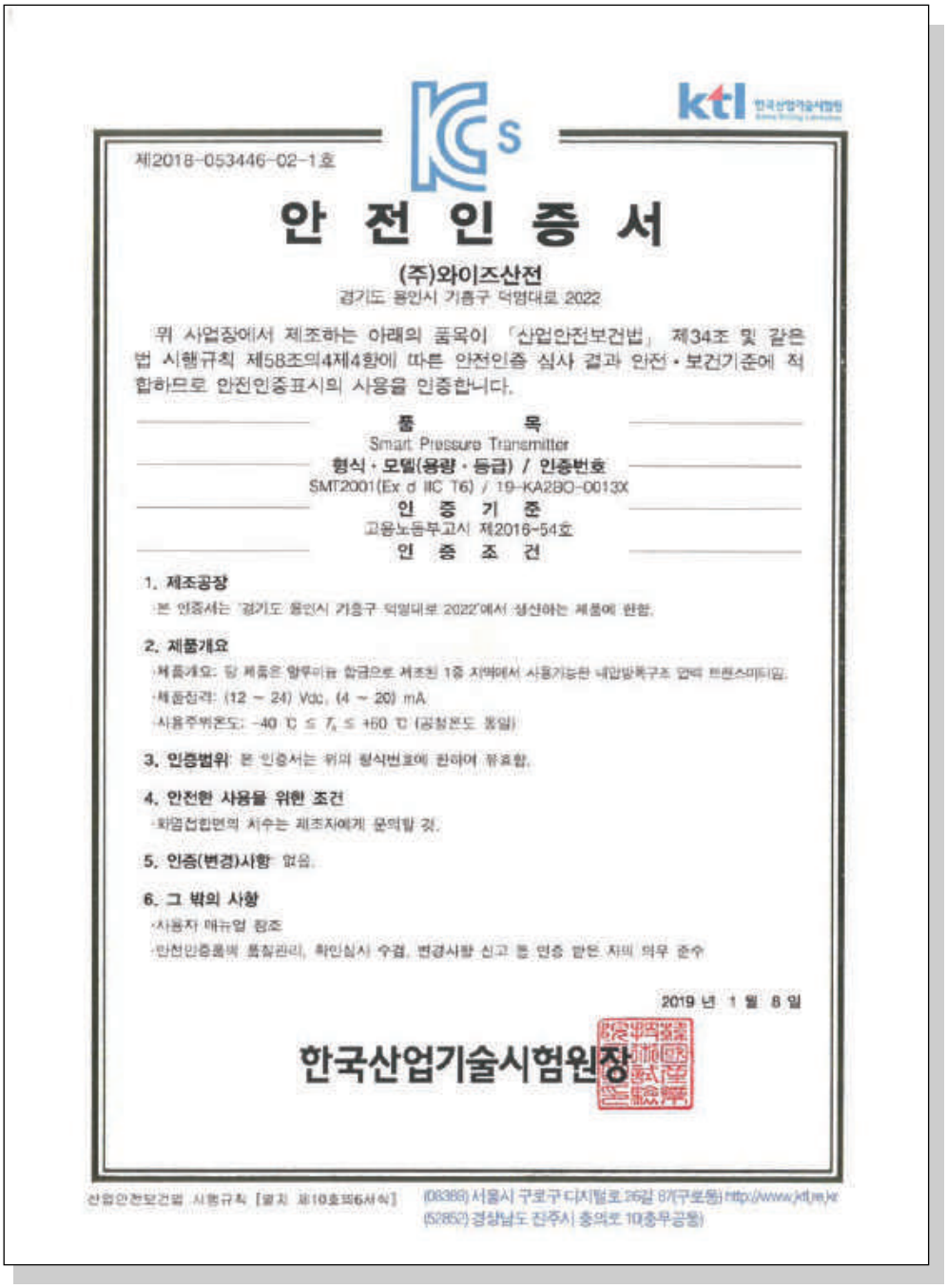
2019 년 02 월 01 일

한국표준협회장

1. 최초 인증일 : 1983-04-27
2. 차기심사 완료기한 : 2021-11-27
3. 최종 변경일 : 2019-02-01 이전심사 합격

# Pressure Instrument

## Explosion Proof Certificate - Flame Proof (Ex d IIC T6)



제2018-053446-02-1호

# 안 전 인 증 서

**(주)와이즈산전**

경기도 용인시 기흥구 덕영대로 2022

위 사업장에서 제조하는 아래의 품목이 「산업안전보건법」 제34조 및 같은 법 시행규칙 제58조의4제4항에 따른 안전인증 심사 결과 안전·보건기준에 적합하므로 안전인증표시의 사용을 인증합니다.

**품 목**

Smart Pressure Transmitter

**형식·모델(용량·등급) / 인증번호**

SMT2001(Ex d IIC T6) / 19-KA2BO-0013X

**인 증 기 준**

고용노동부고시 제2016-54호

**인 증 조 건**

**1. 제조공장**

·본 인증서는 '경기도 용인시 기흥구 덕영대로 2022'에서 생산하는 제품에 한함.

**2. 제품개요**

·제품개요: 당 제품은 알루미늄 합금으로 제조된 1종 지역에서 사용가능한 내압방폭구조 압력 트랜스미터임.

·제품정격: (12 ~ 24) Vdc, (4 ~ 20) mA

·사용주위온도: -40 ℃ ≤ $T_a$ ≤ +60 ℃ (공정온도 동일)

**3. 인증범위** 본 인증서는 위의 형식번호에 한하여 유효함.

**4. 안전한 사용을 위한 조건**

·화염전파면의 치수는 제조자에게 문의할 것.

**5. 인증(변경)사항** 없음.

**6. 그 밖의 사항**

·사용자 매뉴얼 참조

·안전인증품의 품질관리, 확인심사 수검, 변경사항 신고 등 인증 받은 자의 의무 준수

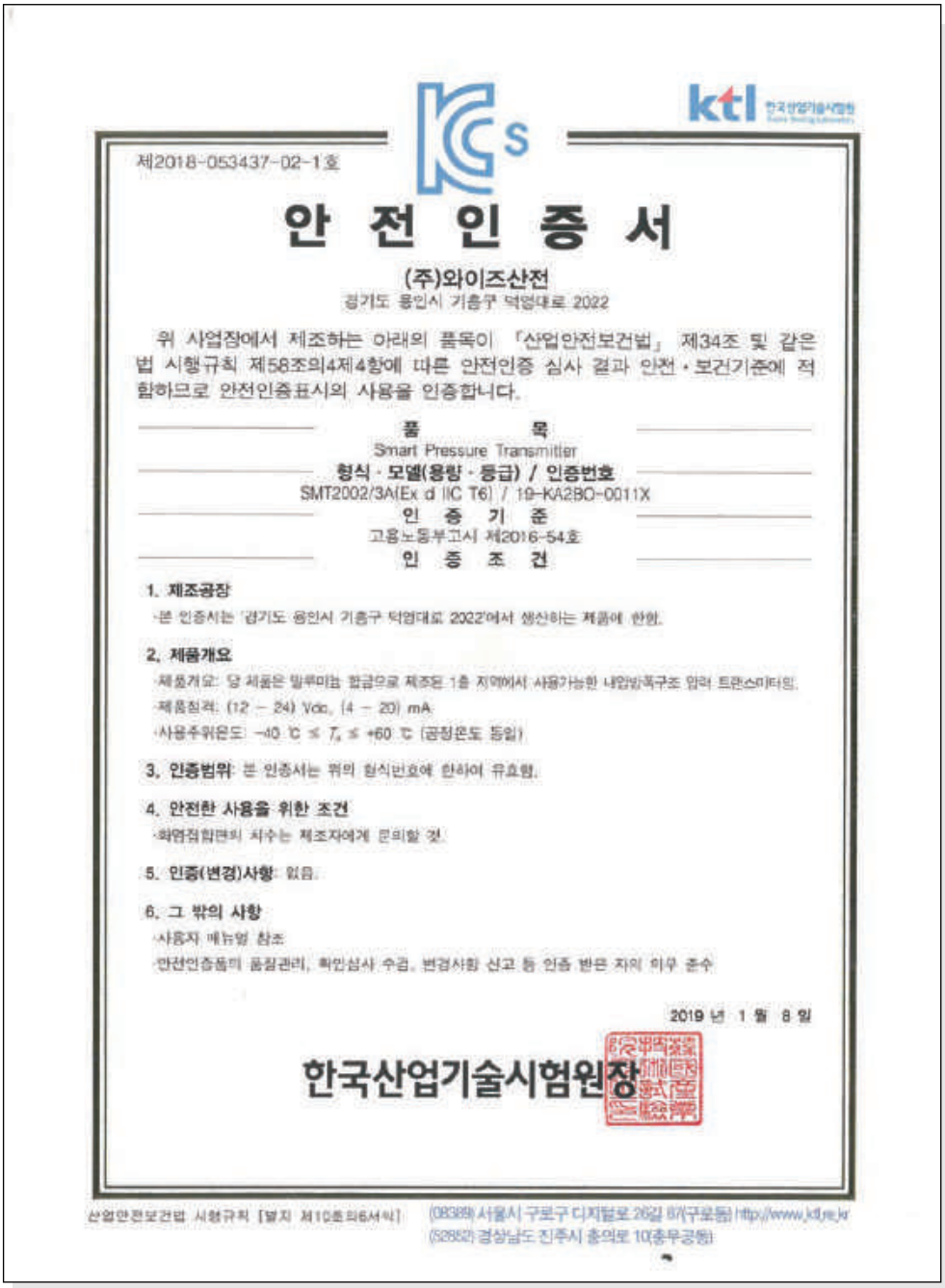
2019 년 1 월 8 일

**한국산업기술시험원장**

산업안전보건법 시행규칙 [별지 제10호의6서식]

(08389) 서울시 구로구 디지털로 26길 87(구로동) http://www.ktl.re.kr
(52852) 경상남도 진주시 충의로 10(충무공동)

## Explosion Proof Certificate - Flame Proof (Ex d IIC T6)



제2018-053437-02-1호

# 안 전 인 증 서

**(주)와이즈산전**

경기도 용인시 기흥구 덕영대로 2022

위 사업장에서 제조하는 아래의 품목이 「산업안전보건법」 제34조 및 같은 법 시행규칙 제58조의4제4항에 따른 안전인증 심사 결과 안전 · 보건기준에 적합하므로 안전인증표시의 사용을 인증합니다.

**품 목**

Smart Pressure Transmitter

**형식 · 모델(용량 · 등급) / 인증번호**

SMT2002/3A(Ex d IIC T6) / 19-KA2BO-0011X

**인 증 기 준**

고용노동부고시 제2016-54호

**인 증 조 건**

**1. 제조공장**

-본 인증서는 '경기도 용인시 기흥구 덕영대로 2022'에서 생산하는 제품에 한함.

**2. 제품개요**

-제품개요: 당 제품은 알루미늄 합금으로 제조된 1종 지역에서 사용가능한 내압방폭구조 압력 트랜스미터임.

-제품정격: (12 – 24) Vdc, (4 – 20) mA

-사용주위온도: −40 ℃ ≤ $T_a$ ≤ +60 ℃ (공정온도 동일)

**3. 인증범위**: 본 인증서는 위의 형식번호에 한하여 유효함.

**4. 안전한 사용을 위한 조건**

-화염접합면의 치수는 제조자에게 문의할 것.

**5. 인증(변경)사항**: 없음.

**6. 그 밖의 사항**

-사용자 매뉴얼 참조

-안전인증품의 품질관리, 확인심사 수검, 변경사항 신고 등 인증 받은 자의 의무 준수

2019 년 1 월 8 일

**한국산업기술시험원장**

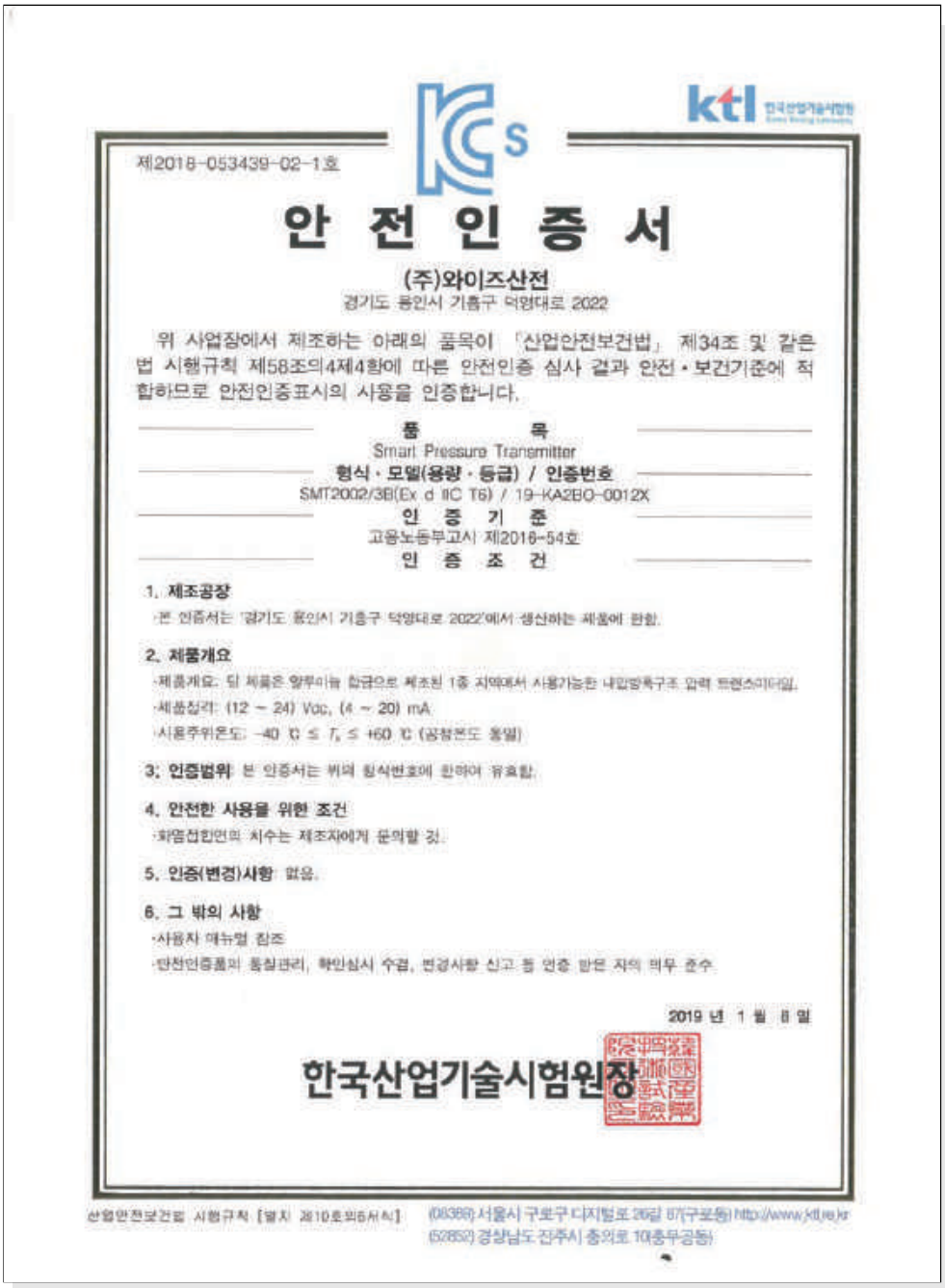
산업안전보건법 시행규칙 [별지 제10호의6서식]

(08389) 서울시 구로구 디지털로 26길 87(구로동) | http://www.ktl.re.kr

(52852) 경상남도 진주시 충의로 10(충무공동)

# Pressure Instrument

## Explosion Proof Certificate - Flame Proof (Ex d IIC T6)



제2018-053439-02-1호

# 안 전 인 증 서

**(주)와이즈산전**

경기도 용인시 기흥구 덕영대로 2022

위 사업장에서 제조하는 아래의 품목이 「산업안전보건법」 제34조 및 같은 법 시행규칙 제58조의4제4항에 따른 안전인증 심사 결과 안전·보건기준에 적합하므로 안전인증표시의 사용을 인증합니다.

**품 목**

Smart Pressure Transmitter

**형식·모델(용량·등급) / 인증번호**

SMT2002/3B(Ex d IIC T6) / 19-KA2BO-0012X

**인 증 기 준**

고용노동부고시 제2018-54호

**인 증 조 건**

**1. 제조공장**

·본 인증서는 '경기도 용인시 기흥구 덕영대로 2022'에서 생산하는 제품에 한함.

**2. 제품개요**

·제품개요: 당 제품은 알루미늄 합금으로 제조된 1종 지역에서 사용가능한 내압방폭구조 압력 트랜스미터임.

·제품정격: (12 ~ 24) Vdc, (4 ~ 20) mA

·사용주위온도: -40 ℃ ≤ $T_a$ ≤ +60 ℃ (공칭온도 동일)

**3. 인증범위** 본 인증서는 위의 형식번호에 한하여 유효함.

**4. 안전한 사용을 위한 조건**

·화염전파면의 치수는 제조자에게 문의할 것.

**5. 인증(변경)사항** 없음.

**6. 그 밖의 사항**

·사용자 매뉴얼 참조

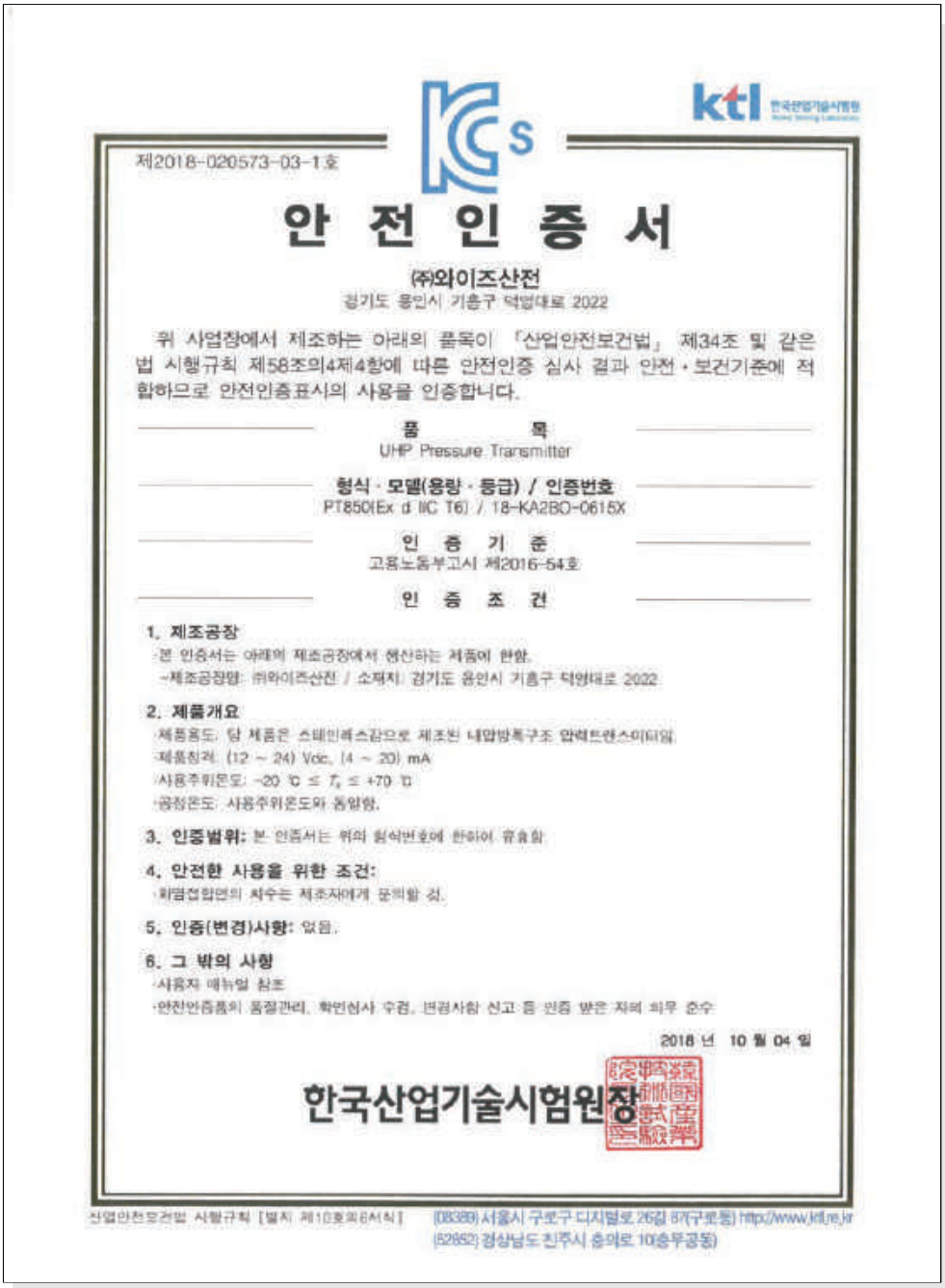
·안전인증품의 품질관리, 확인심사 수검, 변경사항 신고 등 인증 받은 자의 의무 준수

2019 년 1 월 8 일

**한국산업기술시험원장**

산업안전보건법 시행규칙 [별지 제10호의5서식] (08389) 서울시 구로구 디지털로 26길 87(구로동) http://www.ktl.re.kr (52852) 경상남도 진주시 충의로 10(충무공동)

## Explosion Proof Certificate - Flame Proof (Ex d IIC T6)



제2018-020573-03-1호

# 안 전 인 증 서

**㈜와이즈산전**
경기도 용인시 기흥구 덕영대로 2022

위 사업장에서 제조하는 아래의 품목이 「산업안전보건법」 제34조 및 같은 법 시행규칙 제58조의4제4항에 따른 안전인증 심사 결과 안전 · 보건기준에 적합하므로 안전인증표시의 사용을 인증합니다.

**품 목**
UHP Pressure Transmitter

**형식 · 모델(용량 · 등급) / 인증번호**
PT850(Ex d IIC T6) / 18-KA2BO-0615X

**인 증 기 준**
고용노동부고시 제2016-54호

**인 증 조 건**

**1. 제조공장**
·본 인증서는 아래의 제조공장에서 생산하는 제품에 한함.
-제조공장명: ㈜와이즈산전 / 소재지: 경기도 용인시 기흥구 덕영대로 2022

**2. 제품개요**
·제품용도: 당 제품은 스테인레스강으로 제조된 내압방폭구조 압력트랜스미터임.
·제품정격: (12 ~ 24) Vdc, (4 ~ 20) mA
·사용주위온도: -20 ℃ ≤ $T_a$ ≤ +70 ℃
·공정온도: 사용주위온도와 동일함.

**3. 인증범위:** 본 인증서는 위의 형식번호에 한하여 유효함

**4. 안전한 사용을 위한 조건:**
·화염접합면의 치수는 제조자에게 문의할 것.

**5. 인증(변경)사항:** 없음.

**6. 그 밖의 사항**
·사용자 매뉴얼 참조
·안전인증품의 품질관리, 확인심사 수검, 변경사항 신고 등 인증 받은 자의 의무 준수

2018 년 10 월 04 일

**한국산업기술시험원장**

산업안전보건법 시행규칙 [별지 제10호의6서식] (08389) 서울시 구로구 디지털로 26길 87(구로동) http://www.ktl.re.kr
(52852) 경상남도 진주시 충의로 10(충무공동)

# Pressure Instrument

## Explosion Proof Certificate - Intrinsic Safety (Ex ia IIC T6...T4 IP65)

제 2018-BO-0013-1 호

# 안 전 인 증 서

(주)와이즈산전

경기도 용인시 기흥구 덕영대로 2022 (상갈동)

위 사업장에서 제조하는 아래의 품목이 산업안전보건법 제34조 및 같은 법 시행규칙 제58조의4제4항에 따른 안전인증 심사 결과 안전·보건기준에 적합하므로 안전인증표시의 사용을 인증합니다.

**품 목**

UHP Pressure Transmitter

**형식 · 모델/용량 · 등급/인증번호**

| 형식·모델 | 인증번호 |
|---|---|
| PT851 | 18-AV2BO-0013 |

Ex ia IIC T4/T5/T6 IP65

용량·등급: T6: -20℃≤Ta≤+55℃, T5: -20℃≤Ta≤+70℃, T4: -20℃≤Tamb≤+80℃
입력: 12 - 24 VDC, 출력: 4 - 20 mA, Ui= 28 V, Ii= 93 mA,
Pi= 650 mW, Ci= 0.0414 uF, Li= 48.07 uH,
케이블: UL2464 AMSB(AWG26), Plug-SCK-12-4(P), 커넥터: SCN-12-4(R)

**인 증 기 준**

방호장치 안전인증 고시(고용노동부고시 제2016-54호)

**인 증 조 건**

(주)와이즈산전, 경기도 용인시 기흥구 덕영대로 2022 (상갈동)에서 생산되는 제품에 한함.

2018년 04월 30일

2018.01.05 최초 교부
2018.04.30 동일형식

한국산업안전보건공단 이사장

## Explosion Proof Certificate - Type of Protection (Ex nA IIC T6...T4 IP65)

제 2017-BO-0420-1 호

# 안 전 인 증 서

(주)와이즈산전

경기도 용인시 기흥구 덕영대로 2022 (상갈동)

위 사업장에서 제조하는 아래의 품목이 산업안전보건법 제34조 및 같은 법 시행규칙 제58조의4제4항에 따른 안전인증 심사 결과 안전·보건기준에 적합하므로 안전인증표시의 사용을 인증합니다.

**품 목**

압력전송기(Pressure Transmitter)

**형식·모델/용량·등급/인증번호**

| 형식·모델 | 인증번호 |
|---|---|
| PT852 | 17-AV2BO-0420 |

Ex nA IIC T4/T5/T6 IP65

용량·등급 T6: -20℃≤Ta≤+55℃, T5: -20℃≤Ta≤+70℃, T4: -20℃≤Ta≤+80℃
입력: 12 - 24 VDC, 출력: 4 - 20 mA,
케이블: UL2464 AMSB(AWG24), Plug-SCK-12-4(P), 커넥터: SCN-12-4(R)

**인 증 기 준**

방호장치 안전인증 고시(고용노동부고시 제2016-54호)

**인 증 조 건**

(주)와이즈산전, 경기도 용인시 기흥구 덕영대로 2022 (상갈동)에서 생산되는 제품에 한함.

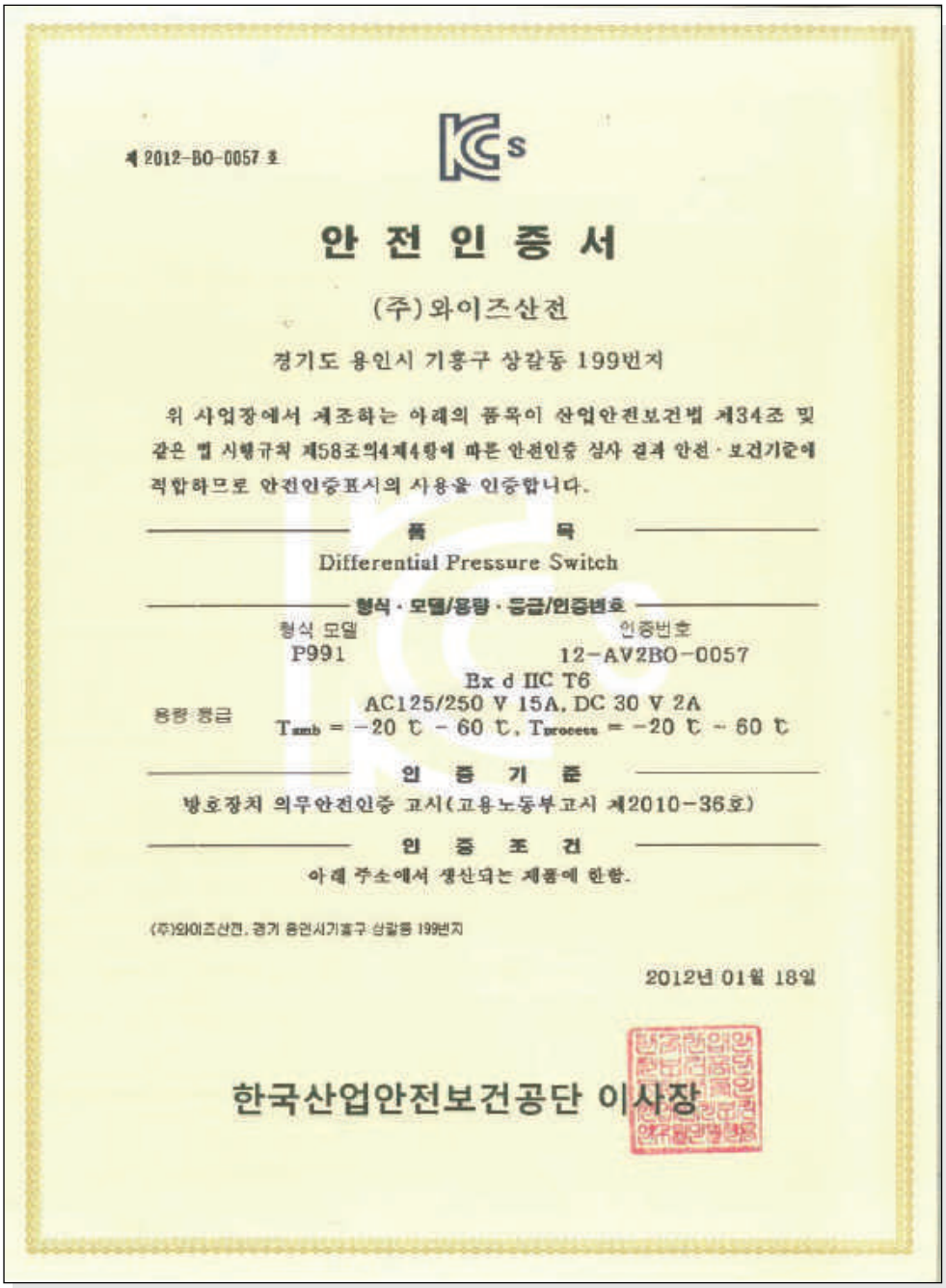
2018년 04월 30일

2017.09.05 최초 교부
2018.04.30 동일형식

한국산업안전보건공단 이사장

# Pressure Instrument

## Explosion Proof Certificate - Flame Proof (Ex d IIC T6)



제 2012-BO-0057 호

# 안 전 인 증 서

(주)와이즈산전

경기도 용인시 기흥구 상갈동 199번지

위 사업장에서 제조하는 아래의 품목이 산업안전보건법 제34조 및 같은 법 시행규칙 제58조의4제4항에 따른 안전인증 심사 결과 안전 · 보건기준에 적합하므로 안전인증표시의 사용을 인증합니다.

**품 목**

Differential Pressure Switch

**형식 · 모델/용량 · 등급/인증번호**

| 형식 모델 | 인증번호 |
|---|---|
| P991 | 12-AV2BO-0057 |

Ex d IIC T6

용량 등급 AC125/250 V 15A, DC 30 V 2A

$T_{amb}$ = -20 ℃ - 60 ℃, $T_{process}$ = -20 ℃ - 60 ℃

**인 증 기 준**

방호장치 의무안전인증 고시(고용노동부고시 제2010-36호)

**인 증 조 건**

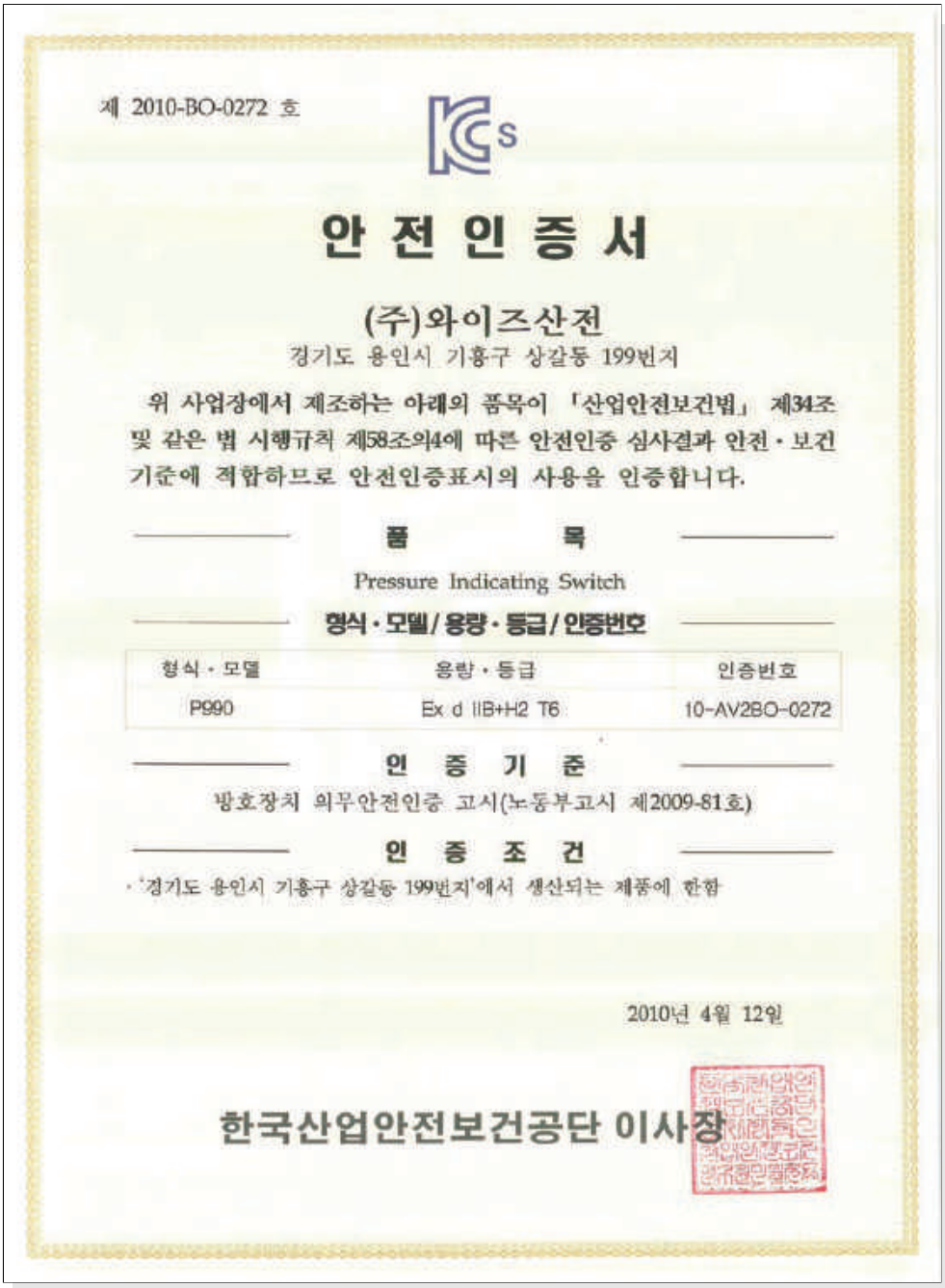
아래 주소에서 생산되는 제품에 한함.

(주)와이즈산전, 경기 용인시기흥구 상갈동 199번지

2012년 01월 18일

한국산업안전보건공단 이사장

## Explosion Proof Certificate - Flame Proof (Ex d IIB+H2 T6)



제 2010-BO-0272 호

# 안 전 인 증 서

(주)와이즈산전

경기도 용인시 기흥구 상갈동 199번지

위 사업장에서 제조하는 아래의 품목이 「산업안전보건법」 제34조 및 같은 법 시행규칙 제58조의4에 따른 안전인증 심사결과 안전·보건 기준에 적합하므로 안전인증표시의 사용을 인증합니다.

**품 목**

Pressure Indicating Switch

**형식·모델/용량·등급/인증번호**

| 형식·모델 | 용량·등급 | 인증번호 |
|---|---|---|
| P990 | Ex d IIB+H2 T6 | 10-AV2BO-0272 |

**인 증 기 준**

방호장치 의무안전인증 고시(노동부고시 제2009-81호)

**인 증 조 건**

· '경기도 용인시 기흥구 상갈동 199번지'에서 생산되는 제품에 한함

2010년 4월 12일

한국산업안전보건공단 이사장

# Pressure Instrument

## Canadian Registration Number - Pressure Equipment Safety

ABSA
the pressure equipment safety authority

*Celebrating 20 years*
*1995 – 2015*

9410 - 20 Ave N.W.
Edmonton, Alberta, Canada T6N 0A4
Tel: (780) 437-9100 / Fax: (780) 437-7787

May 14, 2015

**Attention:** Mr. CH LEE
WISE CONTROL INC
199 SANGGAL-DONG GIHEUNG-GU
YONGIN-SIM
GYEONGGI-DO,

The design submission, tracking number 2015-03108, originally received on April 21, 2015 was surveyed and accepted for registration as follows:

**CRN :** 0F15658.2 **Accepted on:** May 14, 2015
**Reg Type:** New Design **Expiry Date:** May 14, 2025
**Drawing No. :** SR-W01-REV0 - SCOPE OF REGISTRATION
**Fitting type:** PRESSURE GAUGES, SWITHCHES, & DIAPHRAGM SEALS

**The registration is conditional on your compliance with the following notes:**

*This registration is valid only for fittings fabricated at the location(s) covered by the QC certificate attached to the accepted AB-41 Statutory Declaration form. This registration is valid only until the indicated expiry date only if the Manufacturer maintains a valid quality management system approved by an acceptable third-party agency until that date. Should the approval of the quality management system lapse before the expiry date indicated above, this registration shall become void.*

An invoice covering survey and registration fees will be forwarded from our Revenue Accounts.

Enclosed are stamped prints for your reference.

Sincerely,

Zana Radisavljevic

RADISAVLJEVIC, ZANA, R.E.T.

Page 1 of 1

## Canadian Registration Number - Pressure Equipment Safety

ABSA
the pressure equipment safety authority

9410 - 20 Ave N.W.
Edmonton, Alberta, Canada T6N 0A4
Tel: (780) 437-9100 / Fax: (780) 437-7787

April 12, 2013

Mr. CH LEE
WISE CONTROL INC
199 SANGGAL-DONG GIHEUNG-GU
YONGIN-SIM
GYEONGGI-DO,

Dear Mr. CH LEE,

The design submission, tracking number 2012-02855, originally received on April 03, 2012 was surveyed and accepted for registration as follows:

**CRN :** 0F13241.2 **Accepted on:** April 12, 2013
**Reg Type :** New Design **Expiry Date:** April 12, 2023
**Drawing No. :** SOR-A-REV0 , SOR-GA-REV0
**Fitting Desc:** GAUGES AND ACCESSORIES

**The registration is conditional on your compliance with the following notes:**

*The registration covers the fittings listed in the registration summary tables SOR-A-Rev.0 dated 30.05.2012 and SOR-GA-WISE-Rev.0 dated 10.12.2012.*

*Thermowells are not covered by this registration.*
*This registration is valid only for fittings fabricated at the location(s) covered by the QC certificate attached to the accepted AB-41 Statutory Declaration form. This registration is valid only until the indicated expiry date only if the Manufacturer maintains a valid quality management system approved by an acceptable third-party agency until that date. Should the approval of the quality management system lapse before the expiry date indicated above, this registration shall become void.*

**An invoice covering survey and registration fees will be forwarded from our Revenue Accounts.**
Enclosed are stamped prints for your reference.

Sincerely,

ONSHCHENKO, TETYANA, P. Eng.
Design Survey Engineer

Page 1 of 1

# Pressure Instrument

## Canadian Registration Number - Pressure Equipment Safety

ABSA
the pressure equipment safety authority

9410 - 20 Ave N.W.
Edmonton, Alberta, Canada T6N 0A4
Tel: (780) 437-9100 / Fax: (780) 437-7787

April 11, 2012

Mr. CH LEE
WISE CONTROLS INC
199 SANGGAL-DONG GIHEUNG-GU
YONGIN-SIM
GYEONGGI-DO,

Dear Mr. CH LEE,

The design submission, tracking number 2012-00686, originally received on February 03, 2012 was surveyed and accepted for registration as follows:

**CRN :** 0C12256.2
**Reg Type :** New Design
**Drawing No. :** SOR-V Rev 0
**Fitting Desc:** NPT 1/4 & 1/2 VALVES, MODEL A080

**Accepted on:** April 11, 2012
**Expiry Date:** April 11, 2022

**The registration is conditional on your compliance with the following notes:**

*This registration is valid until the indicated expiry date only if the Manufacturer maintains a valid quality management system approved by an acceptable third-party agency until that date. Should the approval of the quality management system lapse before the expiry date indicated above, this registration shall become void.*

**An invoice covering survey and registration fees will be forwarded from our Revenue Accounts.**

Enclosed are stamped prints for your reference.

Sincerely,

ONSHCHENKO, TETYANA, P. Eng.
Design Survey Engineer

Page 1 of 1

## Explosion Proof Certificate - Flame Proof (Ex d IIC T6 Gb)

Ex NEPSI

# EXPLOSION PROTECTION
CERTIFICATE OF CONFORMITY

Cert NO.GYJ18.1093X

This is to certify that the product

Pressure Transmitter

manufactured by WISE Control Inc.
(Address:2022 Dongyeong-daero, Giheung-gu, Yongin-si, Gyeonggi-do, Korea 17097)

which model is PT850

Ex marking Ex dIIC T6 Gb

product standard —

drawing number DECZ18001-A-PT850-00

has been inspected and certified by NEPSI, and that it conforms to GB 3836.1-2010,GB 3836.2-2010

This Approval shall remain in force until 2023.03.15

Remarks
1.Conditions for safe use are specified in the attachment to this certificate.
2.Symbol "X" placed after the certification number denotes specific conditions of use, which are specified in the attachment to this certificate.
3.Safe parameters specified in the attachment to this certificate.
4.IP Code: IP65.

Director

National Supervision and Inspection Centre for Explosion Protection and Safety of Instrumentation

Issued Date 2018.03.16

This Certificate is valid for products compatible with the documents and samples approved by NEPSI.

103 Cao Bao Road
Shanghai 200233, China

http://www.nepsi.org.cn
Email: info@nepsi.org.cn

Tel: +86 21 64368180
Fax: +86 21 64844580

Edition05

# Pressure Instrument

## Explosion Proof Certificate - Intrinsic Safety (Ex ia IIC T6...T4 Ga)

Ex NEPSI

**EXPLOSION PROTECTION**
**CERTIFICATE OF CONFORMITY**

Cert NO.GYJ18.1095

This is to certify that the product

Pressure Transmitter

manufactured by WISE Control Inc.
(Address:2022 Deogyeong-daero, Giheung-gu, Yongin-si, Gyeonggi-do, Korea 17097)

which model is PT851

Ex marking Ex iaIIC T4~T6 Ga

product standard —

drawing number PT851-STA-000

has been inspected and certified by NEPSI, and that it conforms to GB 3836.1-2010,GB 3836.4-2010,GB 3836.20-2010

This Approval shall remain in force until 2023.03.15

Remarks 1.Conditions for safe use are specified in the attachment to this certificate.
2.Intrinsic safety parameters specified in the attachment to this certificate.

Director

National Supervision and Inspection Centre for Explosion Protection and Safety of Instrumentation

Issued Date 2018.03.16

This Certificate is valid for products compatible with the documents and samples approved by NEPSI.

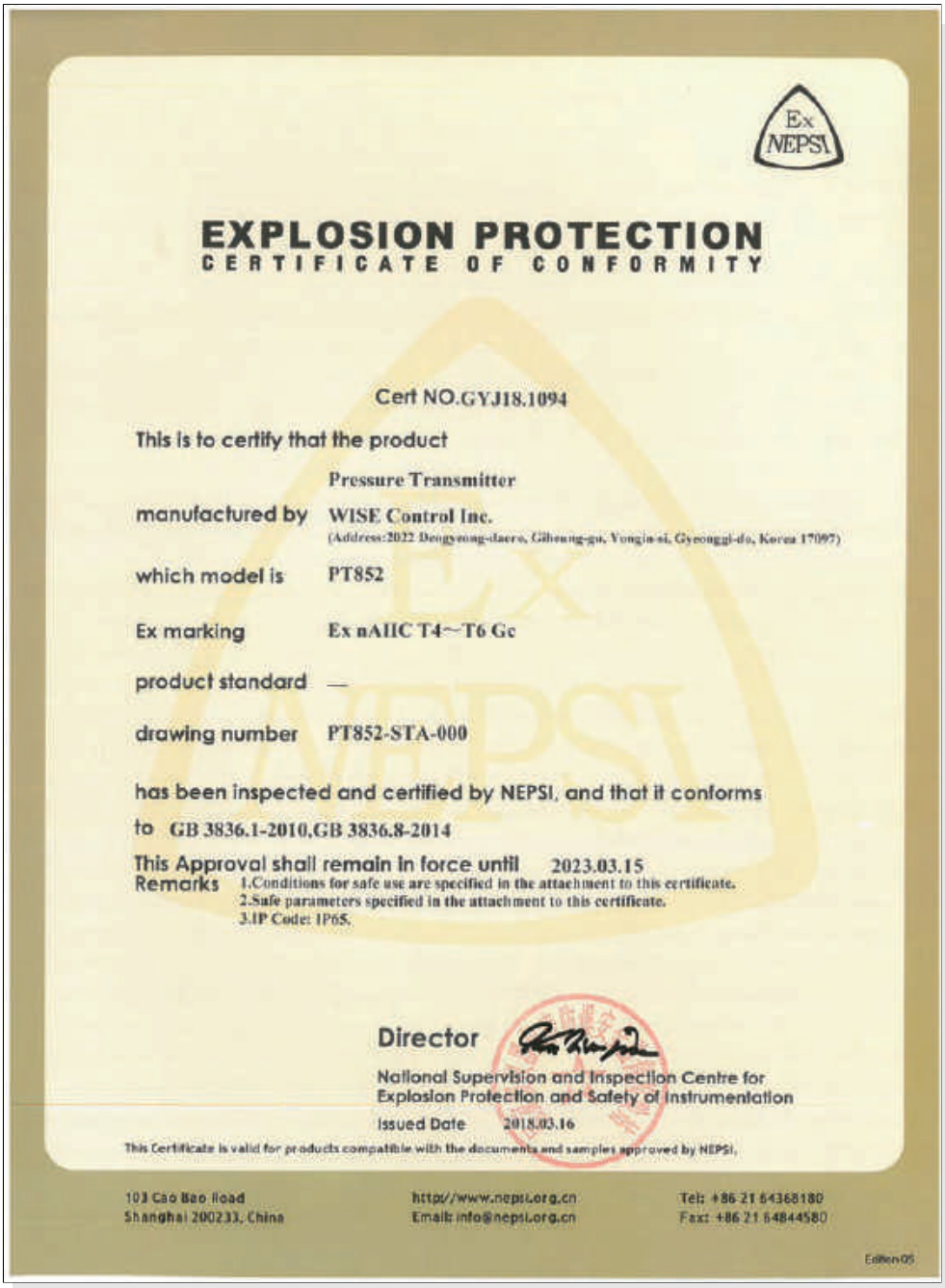
103 Cao Bao Road
Shanghai 200233, China

http://www.nepsi.org.cn
Email: info@nepsi.org.cn

Tel: +86 21 64368180
Fax: +86 21 64844580

Edition 05

## Explosion Proof Certificate - Type of Protection (Ex nA IIC T6...T4 Gc)



Ex NEPSI

# EXPLOSION PROTECTION
CERTIFICATE OF CONFORMITY

Cert NO.GYJ18.1094

This is to certify that the product

Pressure Transmitter

manufactured by WISE Control Inc.
(Address:2022 Dongyeong-daero, Giheung-gu, Yongin-si, Gyeonggi-do, Korea 17097)

which model is PT852

Ex marking Ex nAIIC T4~T6 Gc

product standard —

drawing number PT852-STA-000

has been inspected and certified by NEPSI, and that it conforms to GB 3836.1-2010,GB 3836.8-2014

This Approval shall remain in force until 2023.03.15

Remarks
1.Conditions for safe use are specified in the attachment to this certificate.
2.Safe parameters specified in the attachment to this certificate.
3.IP Code: IP65.

Director

National Supervision and Inspection Centre for Explosion Protection and Safety of Instrumentation

Issued Date 2018.03.16

This Certificate is valid for products compatible with the documents and samples approved by NEPSI.

103 Cao Bao Road
Shanghai 200233, China

http://www.nepsi.org.cn
Email: info@nepsi.org.cn

Tel: +86 21 64368180
Fax: +86 21 64844580

Edition 05

# Temperature Instrument

## Explosion Proof Certificate - Flame Proof (Ex d IIC T6 Gb)

cml Ex
certification management limited

**EU Type Examination Certificate CML 17ATEX1235X Issue 0**

1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

2 Equipment **SMT Series Smart Pressure Transmitter**

3 Manufacturer **WISE Control Inc.**

4 Address 2022 Deogyeong-daero, Giheung-gu, Yongin-si, Gyeonggi-do, Rep. of Korea

5 The equipment is specified in the description of this certificate and the documents to which it refers.

6 Certification Management Limited, Unit 1 Newport Business Park, New Port Road, Ellesmere Port CH65 4LZ, UK, Notified Body Number 2503, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 12.

7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.

8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-31:2014

10 The equipment shall be marked with the following:

Ex II 2 G D

Ex db IIC T4/T5/T6 Gb

Ex tb IIIC T80°C/T90°C/T130°C Db

Ta = -40°C to +60°C

A Snowdon

A Snowdon
Certification Officer

This certificate shall only be copied in its entirety and without change
www.CMLEx.com

1 of 4

## Explosion Proof Certificate - Flame Proof (Ex db IIC T4/T5/T6 Gb)
## Dust Ignition Proof (Ex tb IIIC T80 °C/T90T °C/130 °C Db)

# IECEx Certificate of Conformity

**INTERNATIONAL ELECTROTECHNICAL COMMISSION**
**IEC Certification Scheme for Explosive Atmospheres**

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx CML 17.0157X

Issue No: 0

Certificate history:
Issue No. 0 (2018-08-31)

Status: **Current**

Page 1 of 3

Date of Issue: **2018-08-31**

Applicant: **WISE Control Inc.**
2022 Deogyeong-daero, Giheung-gu, Yongin-si, Gyeonggi-do
**Korea, Republic of**

Equipment: **SMT Series Smart Pressure Transmitter**
*Optional accessory:*

Type of Protection: **Flameproof, Dust**

Marking:
Ex db IIC T4/T5/T6 Gb
Ex tb IIIC T80°C/T90°C/T130°C Db

Tamb = -40°C to +60°C

*Approved for issue on behalf of the IECEx Certification Body:* A Snowdon MIET

*Position:* Certification Officer

*Signature: (for printed version)*

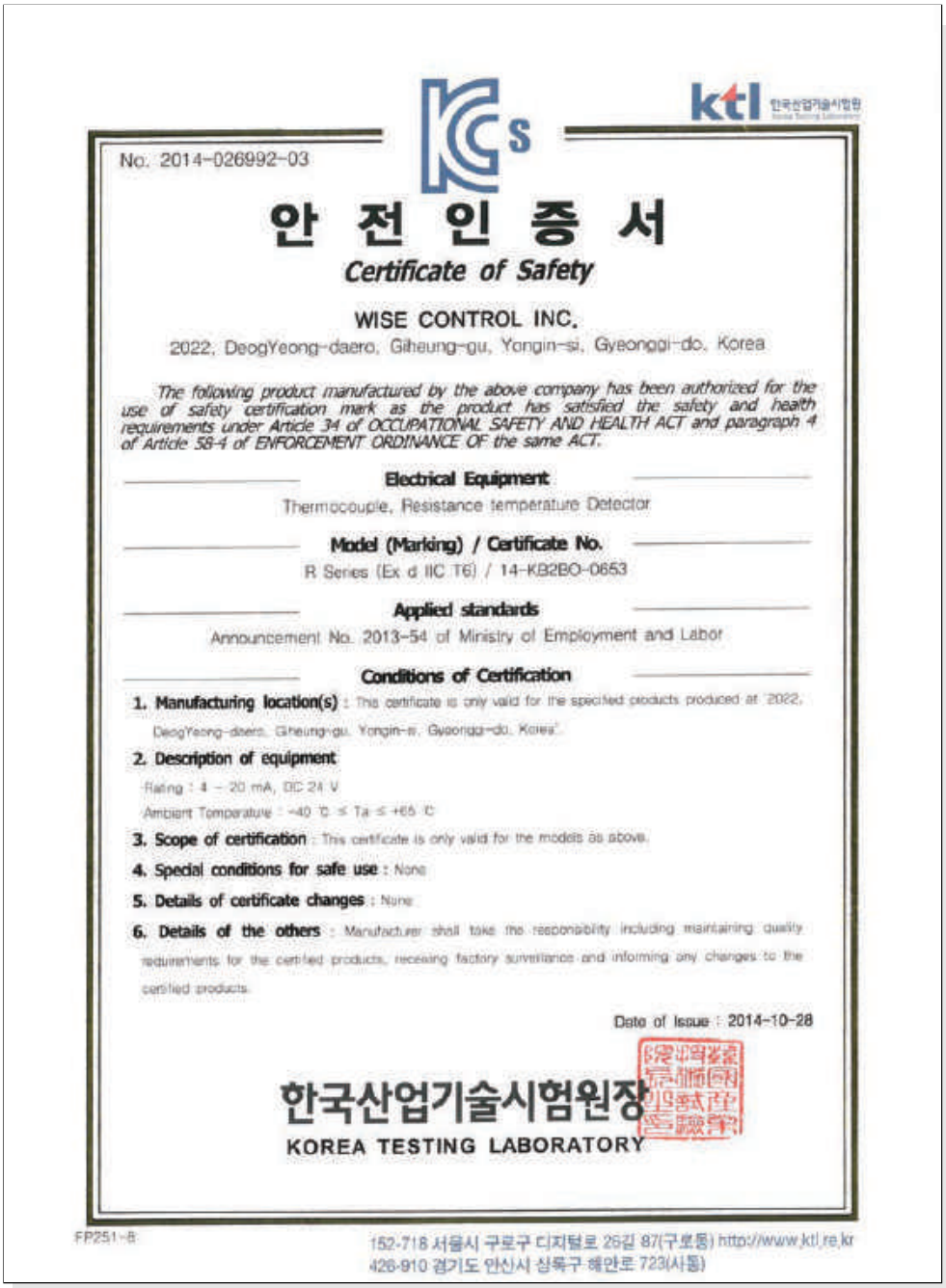
*Date:* August 31, 2018

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:
Certification Management Limited
Unit 1, Newport Business Park
New Port Road
Ellesmere Port, CH65 4LZ
United Kingdom

# Temperature Instrument

## Explosion Proof Certificate - Flame Proof (Ex d IIC T6)



No. 2014-026992-03

# 안 전 인 증 서

## *Certificate of Safety*

**WISE CONTROL INC.**

2022, DeogYeong-daero, Giheung-gu, Yongin-si, Gyeonggi-do, Korea

*The following product manufactured by the above company has been authorized for the use of safety certification mark as the product has satisfied the safety and health requirements under Article 34 of OCCUPATIONAL SAFETY AND HEALTH ACT and paragraph 4 of Article 58-4 of ENFORCEMENT ORDINANCE OF the same ACT.*

**Electrical Equipment**

Thermocouple, Resistance temperature Detector

**Model (Marking) / Certificate No.**

R Series (Ex d IIC T6) / 14-KB2BO-0653

**Applied standards**

Announcement No. 2013-54 of Ministry of Employment and Labor

**Conditions of Certification**

1. **Manufacturing location(s)** : This certificate is only valid for the specified products produced at '2022, DeogYeong-daero, Giheung-gu, Yongin-si, Gyeonggi-do, Korea'.
2. **Description of equipment**
   Rating : 4 ~ 20 mA, DC 24 V
   Ambient Temperature : -40 ℃ ≤ Ta ≤ +65 ℃
3. **Scope of certification** : This certificate is only valid for the models as above.
4. **Special conditions for safe use** : None
5. **Details of certificate changes** : None
6. **Details of the others** : Manufacturer shall take the responsibility including maintaining quality requirements for the certified products, receiving factory surveillance and informing any changes to the certified products.

Date of Issue : 2014-10-28

한국산업기술시험원장

KOREA TESTING LABORATORY

FP251-8

152-718 서울시 구로구 디지털로 26길 87(구로동) http://www.ktl.re.kr
426-910 경기도 안산시 상록구 해안로 723(사동)

## Explosion Proof Certificate - Flame Proof (Ex d IIC T6 IP65)

제 2013-BO-0415 호

# 안 전 인 증 서

(주) 와이즈산전

경기도 용인시 기흥구 덕영대로 2022

위 사업장에서 제조하는 아래의 품목이 산업안전보건법 제34조 및 같은 법 시행규칙 제58조의4제4항에 따른 안전인증 심사 결과 안전·보건기준에 적합하므로 안전인증표시의 사용을 인증합니다.

**품 목**

Multi-Point Temperature Sensor

**형식 · 모델/용량 · 등급/인증번호**

| 형식·모델 | 인증번호 |
|---|---|
| R550 | 13-AV2BO-0415X |

용량·등급: Ex d IIC T6 IP65
50 VDC, 10 mA −20℃≤Ta≤+60℃

**인 증 기 준**

방호장치 의무안전인증 고시(고용노동부고시 제2010-36호)

**인 증 조 건**

아래 주소에서 생산되는 제품에 한함.

(주)와이즈산전, 경기도 용인시 기흥구 덕영대로 2022

2013년 07월 25일

한국산업안전보건공단 이사장

# Temperature Instrument

## Explosion Proof Certificate - Flame Proof (Ex d IIC T6 IP65)

제 2013-BO-0416 호

# 안 전 인 증 서

(주)와이즈산전

경기도 용인시 기흥구 덕영대로 2022

위 사업장에서 제조하는 아래의 품목이 산업안전보건법 제34조 및 같은 법 시행규칙 제58조의4제4항에 따른 안전인증 심사 결과 안전·보건기준에 적합하므로 안전인증표시의 사용을 인증합니다.

**품 목**

Multi-Point Temperature Sensor

**형식·모델/용량·등급/인증번호**

| 형식·모델 | 인증번호 |
|---|---|
| R560 | 13-AV2BO-0416X |

용량·등급: Ex d IIC T6 IP65
50 VDC, 10 mA -20℃≤Ta≤+60℃

**인 증 기 준**

방호장치 의무안전인증 고시(고용노동부고시 제2010-36호)

**인 증 조 건**

아래 주소에서 생산되는 제품에 한함.

(주)와이즈산전, 경기도 용인시 기흥구 덕영대로 2022

2013년 07월 25일

한국산업안전보건공단 이사장

## Explosion Proof Certificate - Increased Safety (Ex e II)

제13-0346호

# 안 전 인 증 서

**(주)와이즈산전**

경기 용인시 기흥구 덕영대로2022

위 사업장에서 제조하는 아래의 품목이 「산업안전보건법」 제34조 및 같은 법 시행규칙 제58조의4제4항에 따른 안전인증 심사 결과 안전 · 보건기준에 적합하므로 안전인증표시의 사용을 인증합니다.

품 목

Space heater

형식 · 모델 / 용량 · 등급 / 인증번호

| 형식·모델 | 용량 · 등급 | 인증번호 |
|---|---|---|
| H100 series | Max 277V, Max 500W<br>Ex e II | 13-GA2BO-0346U |

인 증 기 준

방호장치 의무안전인증 고시(고용노동부고시 제2010-36호)

인 증 조 건

-40 ℃≤Tamb≤ +70 ℃, 뒷면참조

2013 년 05 월 09일

한국가스안전공사 사장

# Temperature Instrument

## Explosion Proof Certificate - Flame Proof (Ex d IIC T6 IP56)

제12-0793호

### 안 전 인 증 서

(주)와이즈산전

경기 용인시 기흥구 덕영대로2022

위 사업장에서 제조하는 아래의 품목이 「산업안전보건법」 제34조 및 같은 법 시행규칙 제58조의4제4항에 따른 안전인증 심사 결과 안전·보건 기준에 적합하므로 안전인증표시의 사용을 인증합니다.

품 목

Temperature Sensor(R, T, D)

형식·모델 / 용량·등급 / 인증번호

| 형식·모델 | 용량·등급 | 인증번호 |
|---|---|---|
| RL Series | DC 50V이하·2mA이하<br>Ex d IIC T6 IP56 | 12-GA2BO-0793 |

인 증 기 준

방호장치 의무안전인증 고시(고용노동부고시 제2010-36호)

인 증 조 건

1. Tamb = -20℃ ~ +60℃
2. 용기에 1.27MPa 압력시험 후 출고할 것

2012 년 12 월 25 일

한국가스안전공사 사장

## Explosion Proof Certificate - Flame Proof (Ex d IIC T6 IP67)

제12-0430호

# 안 전 인 증 서

(주)와이즈산전

경기 용인시 기흥구 덕영대로2022

위 사업장에서 제조하는 아래의 품목이 「산업안전보건법」 제34조 및 같은 법 시행규칙 제58조의4제4항에 따른 안전인증 심사 결과 안전·보건 기준에 적합하므로 안전인증표시의 사용을 인증합니다.

품 목

Temperature Sensor

형식 · 모델 / 용량 · 등급 / 인증번호

| 형식 · 모델 | 용량 · 등급 | 인증번호 |
|---|---|---|
| RC Series | DC 50V 이하, 2mA 이하<br>Ex d IIC T6 (IP67) | 12-GA2BO-0430 |

인 증 기 준

방호장치 의무안전인증 고시(고용노동부고시 제2010-36호)

인 증 조 건

1. Tamb = -20℃ ~ +60℃
2. 용기에 1.1MPa 이상의 압력시험 후 출고할 것

2012 년 08 월 01 일

한국가스안전공사 사장

# Temperature Instrument

## Explosion Proof Certificate - Flame Proof (Ex d IIC T6 IP65)

No. 2011 - 0267

### Safety Certificate

- Manufacturer WISE Control Inc.
- Address 2022, Deogyeong-daero, Giheung-gu, Yongin-si, Gyeonggi-do, Republic of Korea

The following equipment fabricated by the above manufacturer has been certified for the use of the Safety Certification Mark as the equipment is assessed and tested in accordance with the article 34 of the Occupational Safety & Health Act and the article 58 (4) 4 of the Enforcement Rule thereof.

| | |
|---|---|
| Product | Thermocouple and Resistance Temperature Detector |
| Type(Model) | RS series(See the back of the scope of certification) |
| Rating | 10 mA, 4 VDC |
| Type of Protection | Ex d IIC T6 IP65 |
| Certification No. | 11-GA2BO-0267 |
| Safety Certification Standards | Notification of Protective device Mandatory Safety Certification (Notice of Ministry of Employment and Labor No. 2010-36) |
| Certification condition | 1. Tamb = -20 ℃ ~ +60 ℃ |
| Date of issue | November 1h, 2011 |

Approved for issue on behalf of the president : Ki youn Song
position : General Manager

Signature

Korea Gas Safety Corporation

## Explosion Proof Certificate - Flame Proof (Ex d IIB+$H_2$ T6)

제 2011-BO-0152 호

# 안 전 인 증 서

**와이즈산전(주)**

경기도 용인시 기흥구 상갈동 199번지

위 사업장에서 제조하는 아래의 품목이 「산업안전보건법」 제34조 및 같은 법 시행규칙 제58조의4에 따른 안전인증 심사결과 안전·보건기준에 적합하므로 안전인증표시의 사용을 인증합니다.

**품 목**

Temperature Indicating Switch

**형식·모델/용량·등급/인증번호**

| 형식·모델 | 용량·등급 | 인증번호 |
|---|---|---|
| T990* | Ex d IIB+H2 T6<br>-20 ℃≤Ta≤60 ℃<br>정격: 인증조건 3항 참조(뒤쪽) | 11-AV2BO-0152X |

**인 증 기 준**

방호장치 의무안전인증 고시(고용노동부고시 제2010-36호)

**인 증 조 건**

(뒤쪽)참조

2011년 6월 7일

**한국산업안전보건공단 이사장**

# Temperature Instrument

## Explosion Proof Certificate - Intrinsic Safety (Ex ia IIC T6)

(Front page)

No. 2011-BO-0108-3

### Safety Certificate

WISE Control Inc.

2022, Deogyeong-daero, Giheung-gu, Youngin-si, Gyeonggi-do, Republic of Korea

The following product produced by the above company has been authorized for the use of the Mark as the product has satisfied the safety and health standards stipulated in the article 34 of Industrial Safety and Health Law.

**PRODUCT**

Temperature Sensor(Thermocouple, RTD)

**TYPE · MODEL/CAPACITY · GRADE/CERTIFICATION No**

| TYPE · MODEL | CERTIFICATION No. |
|---|---|
| R95X(ETR10*) | 11-AV2BO-0108 |

CAPACITY · GRADE

Ex ia IIC T6
UI =30 V, II = 100 mA, PI = 750 mA
CI = 0.1 nF, LI = 0.01 mH
Tamb: -40℃ ~ +65℃

**SAFETY CERTIFICATION STANDARDS**

Notification No. 2016-54 of the Ministry of Employment and Labor

**CERTIFICATION CONDITION**

See the (Rear page)

DATE : APR. 16. 2018

MAY. 06. 2011(Original issue)

Signature

President of Korea Occupational Safety and Health Agency

## Explosion Proof Certificate - Intrinsic Safety (ATEX Ex ia IIC T6...T3 Ga/Gb)

# CERTIFICATE

(1) **EU-Type Examination**

(2) **Equipment or protective systems intended for use in potentially explosive atmospheres - Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number: **KEMA 09ATEX0006 X** Issue Number: **4**

(4) Product: **Temperature Sensor R950 Series (ETR10) models Type R95**************

(5) Manufacturer: **Wise Control Inc.**

(6) Address: **2022 Deogyeong-daero, Giheung-gu, Yongin-si, Gyeonggi-do (17097), Korea**

(7) This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) DEKRA Certification B.V., Notified Body number 0344 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential test report number NL/DEK/ExTR16.0055/01.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN 60079-0 : 2012 + A11 : 2013** **EN 60079-11 : 2012** **EN 60079-26 : 2015**

except in respect of those requirements listed at item 18 of the Schedule.

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

(11) This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

(12) The marking of the product shall include the following:

**II 1/2 G Ex ia IIC T6...T3 Ga/Gb**

Date of certification: 8 December 2017

DEKRA Certification B.V.

R. Schuller
Certification Manager

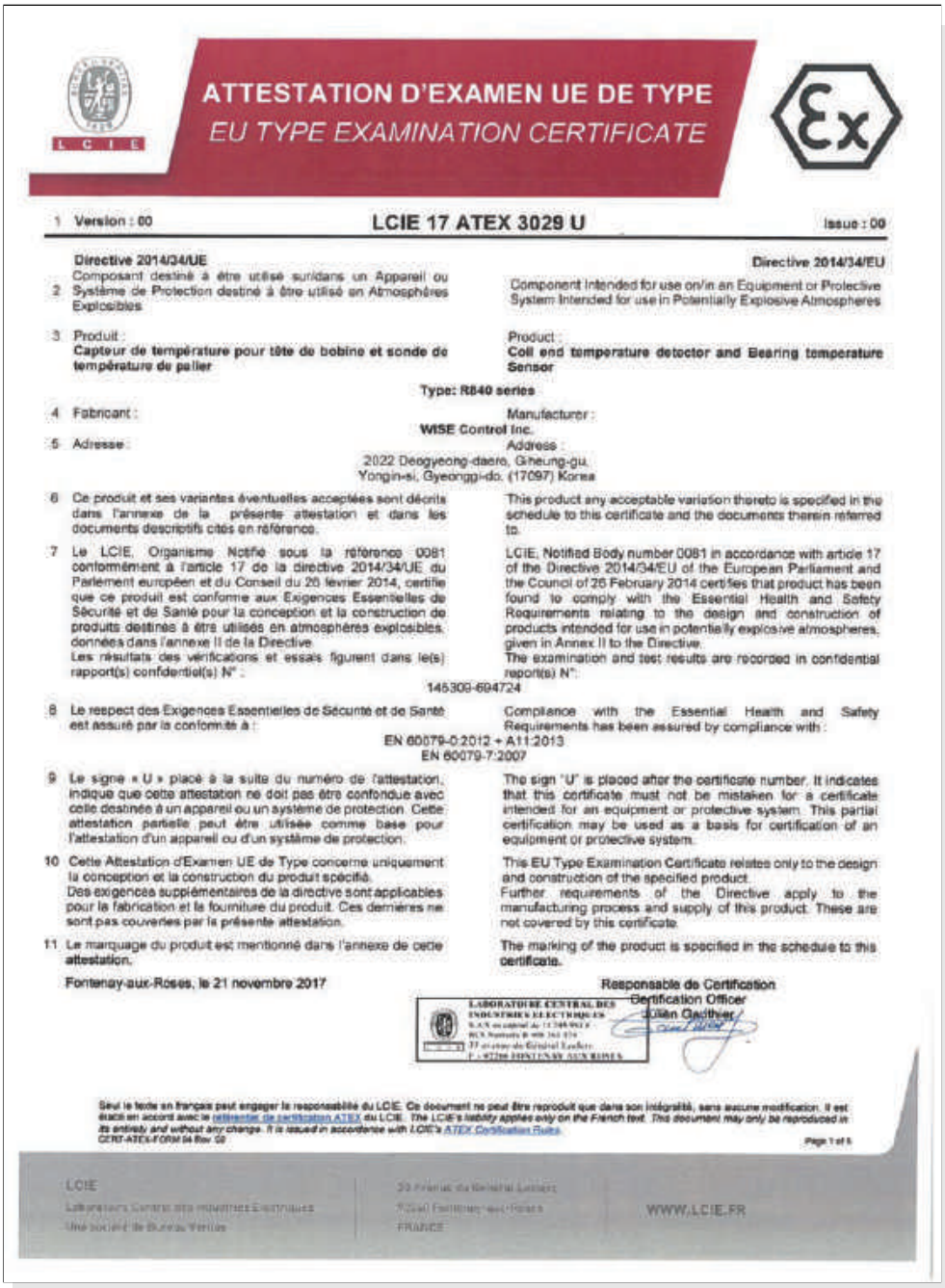
Page 1/5

* Integral publication of this certificate and adjoining reports is allowed. This Certificate may only be reproduced in its entirety and without any change.

DEKRA Certification B.V. Meander 1051, 6825 MJ Arnhem P.O. Box 5185, 6802 ED Arnhem The Netherlands
T +31 88 96 83000 F +31 88 96 83100 www.dekra-certification.com Registered Arnhem 09085396

# Temperature Instrument

## Explosion Proof Certificate - Increased Safety (ATEX Ex e IIC Gb)



**ATTESTATION D'EXAMEN UE DE TYPE**

*EU TYPE EXAMINATION CERTIFICATE*

1 Version : 00 — **LCIE 17 ATEX 3029 U** — Issue : 00

| | |
|---|---|
| **Directive 2014/34/UE** | **Directive 2014/34/EU** |
| 2 Composant destiné à être utilisé sur/dans un Appareil ou Système de Protection destiné à être utilisé en Atmosphères Explosibles | Component intended for use on/in an Equipment or Protective System Intended for use in Potentially Explosive Atmospheres |
| 3 Produit : **Capteur de température pour tête de bobine et sonde de température de palier** | Product : **Coil end temperature detector and Bearing temperature Sensor** |

**Type: R840 series**

| | |
|---|---|
| 4 Fabricant : | Manufacturer : |
| 5 Adresse : | Address : |

**WISE Control Inc.**
2022 Deogyeong-daero, Giheung-gu,
Yongin-si, Gyeonggi-do. (17097) Korea

| | |
|---|---|
| 6 Ce produit et ses variantes éventuelles acceptées sont décrits dans l'annexe de la présente attestation et dans les documents descriptifs cités en référence. | This product any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to. |
| 7 Le LCIE, Organisme Notifié sous la référence 0081 conformément à l'article 17 de la directive 2014/34/UE du Parlement européen et du Conseil du 26 février 2014, certifie que ce produit est conforme aux Exigences Essentielles de Sécurité et de Santé pour la conception et la construction de produits destinés à être utilisés en atmosphères explosibles, données dans l'annexe II de la Directive. Les résultats des vérifications et essais figurent dans le(s) rapport(s) confidentiel(s) N° : | LCIE, Notified Body number 0081 in accordance with article 17 of the Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014 certifies that product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres, given in Annex II to the Directive. The examination and test results are recorded in confidential report(s) N°: |

145309-694724

| | |
|---|---|
| 8 Le respect des Exigences Essentielles de Sécurité et de Santé est assuré par la conformité à : | Compliance with the Essential Health and Safety Requirements has been assured by compliance with : |

EN 60079-0:2012 + A11:2013
EN 60079-7:2007

| | |
|---|---|
| 9 Le signe « U » placé à la suite du numéro de l'attestation, indique que cette attestation ne doit pas être confondue avec celle destinée à un appareil ou un système de protection. Cette attestation partielle peut être utilisée comme base pour l'attestation d'un appareil ou d'un système de protection. | The sign "U" is placed after the certificate number. It indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system. |
| 10 Cette Attestation d'Examen UE de Type concerne uniquement la conception et la construction du produit spécifié. Des exigences supplémentaires de la directive sont applicables pour la fabrication et la fourniture du produit. Ces dernières ne sont pas couvertes par la présente attestation. | This EU Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate. |
| 11 Le marquage du produit est mentionné dans l'annexe de cette **attestation.** | The marking of the product is specified in the schedule to this **certificate.** |

Fontenay-aux-Roses, le 21 novembre 2017

Responsable de Certification
Certification Officer
Julien Gauthier

LABORATOIRE CENTRAL DES INDUSTRIES ELECTRIQUES

Seul le texte en français peut engager la responsabilité du LCIE. Ce document ne peut être reproduit que dans son intégralité, sans aucune modification. Il est établi en accord avec le référentiel de certification ATEX du LCIE. The LCIE's liability applies only on the French text. This document may only be reproduced in its entirety and without any change. It is issued in accordance with LCIE's ATEX Certification Rules.
CERT-ATEX-FORM 04 Rev 09

Page 1 of 5

LCIE
Laboratoire Central des Industries Electriques
Une société de Bureau Veritas

33 Avenue du General Leclerc
92260 Fontenay-aux-Roses
FRANCE

WWW.LCIE.FR

## Explosion Proof Certificate - Intrinsic Safety (ATEX Ex ia IIC T6...T3 Ga)

BUREAU VERITAS

(1) **EU - Type Examination Certificate**

(2) Equipment and protective systems intended for use in potentially explosive atmospheres – Directive 2014/34/EU

(3) EU - Type Examination Certificate Number

**EPS 17 ATEX 1 063 X** **Revision 0**

(4) Equipment: Bearing Temperature Sensor R84**

(5) Manufacturer: WISE (Wise Control Inc.)

(6) Address: 2022, Deogyeong-daero, Giheung-gu, Yongin-si, Gyeonggi-do, 17097, Korea

(7) This equipment and any acceptable variation thereto are specified in the annex to this certificate and the documentation therein referred to.

(8) Bureau Veritas Consumer Products Services Germany GmbH, notified body No. 2004 in accordance with Article 21 given in the Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014, certifies that this equipment has been found to comply with the essential health and safety requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II of the Directive. The examination and test results are recorded in the confidential documentation under the reference number 17TH0227.

(9) Compliance with the essential health and safety requirements has been assured by compliance with:

**EN 60079-0:2012+A11:2013** **EN 60079-11:2012**

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the annex to this certificate.

(11) This EU - Type Examination Certificate relates only to the design and examination of the specified equipment in accordance with Directive 2014/34/EU. Further requirements of this Directive apply to the manufacture of this equipment and its placing on the market. Those requirements are not covered by this certificate.

(12) The marking of the equipment shall include the following:

**Ex II 1G Ex ia IIC T6...T3 Ga**

Certification department of explosion protection

Nuremberg, 2017-08-31

H. Schaffer

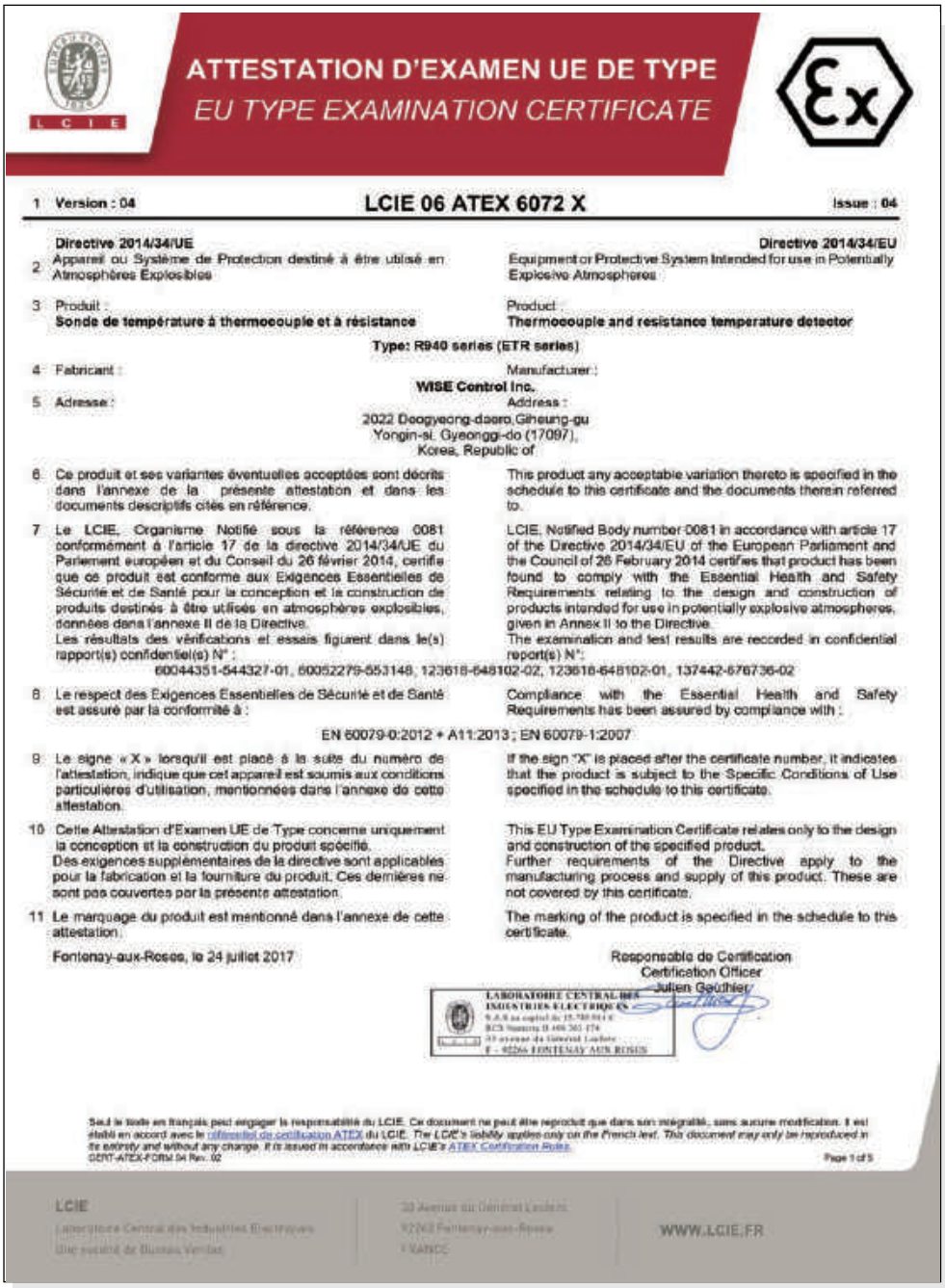
Page 1 of 3

Certificates without signature and seal are void. This certificate is allowed to be distributed only if not modified. Extracts or modifications must be authorized by Bureau Veritas Consumer Products Services Germany GmbH. EPS 17 ATEX 1 063 X, Revision 0.

BUREAU VERITAS

# Temperature Instrument

## Explosion Proof Certificate - Flame Proof (ATEX Ex d IIC T6 Gb)



**ATTESTATION D'EXAMEN UE DE TYPE**

*EU TYPE EXAMINATION CERTIFICATE*

1 Version : 04 — **LCIE 06 ATEX 6072 X** — Issue : 04

2 Directive 2014/34/UE
Appareil ou Système de Protection destiné à être utilisé en Atmosphères Explosibles

Directive 2014/34/EU
Equipment or Protective System Intended for use in Potentially Explosive Atmospheres

3 Produit :
**Sonde de température à thermocouple et à résistance**

Product :
**Thermocouple and resistance temperature detector**

**Type: R940 series (ETR series)**

4 Fabricant : Manufacturer :
**WISE Control Inc.**

5 Adresse : Address :
2022 Deogyeong-daero,Giheung-gu
Yongin-si, Gyeonggi-do (17097),
Korea, Republic of

6 Ce produit et ses variantes éventuelles acceptées sont décrits dans l'annexe de la présente attestation et dans les documents descriptifs cités en référence.

This product any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

7 Le LCIE, Organisme Notifié sous la référence 0081 conformément à l'article 17 de la directive 2014/34/UE du Parlement européen et du Conseil du 26 février 2014, certifie que ce produit est conforme aux Exigences Essentielles de Sécurité et de Santé pour la conception et la construction de produits destinés à être utilisés en atmosphères explosibles, données dans l'annexe II de la Directive.
Les résultats des vérifications et essais figurent dans le(s) rapport(s) confidentiel(s) N° :

LCIE, Notified Body number 0081 in accordance with article 17 of the Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014 certifies that product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres, given in Annex II to the Directive.
The examination and test results are recorded in confidential report(s) N°:

60044351-544327-01, 60052279-553148, 123618-648102-02, 123618-648102-01, 137442-676736-02

8 Le respect des Exigences Essentielles de Sécurité et de Santé est assuré par la conformité à :

Compliance with the Essential Health and Safety Requirements has been assured by compliance with :

EN 60079-0:2012 + A11:2013 ; EN 60079-1:2007

9 Le signe « X » lorsqu'il est placé à la suite du numéro de l'attestation, indique que cet appareil est soumis aux conditions particulières d'utilisation, mentionnées dans l'annexe de cette attestation.

If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

10 Cette Attestation d'Examen UE de Type concerne uniquement la conception et la construction du produit spécifié.
Des exigences supplémentaires de la directive sont applicables pour la fabrication et la fourniture du produit. Ces dernières ne sont pas couvertes par la présente attestation.

This EU Type Examination Certificate relates only to the design and construction of the specified product.
Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

11 Le marquage du produit est mentionné dans l'annexe de cette attestation.

The marking of the product is specified in the schedule to this certificate.

Fontenay-aux-Roses, le 24 juillet 2017

Responsable de Certification
Certification Officer
Julien Gaudhier

LABORATOIRE CENTRAL DES INDUSTRIES ELECTRIQUES
F - 92266 FONTENAY AUX ROSES

Seul le texte en français peut engager la responsabilité du LCIE. Ce document ne peut être reproduit que dans son intégralité, sans aucune modification. Il est établi en accord avec le référentiel de certification ATEX du LCIE. The LCIE's liability applies only on the French text. This document may only be reproduced in its entirety and without any change. It is issued in accordance with LCIE's ATEX Certification Rules.
CERT-ATEX-FORM 04 Rev. 02

Page 1 of 5

LCIE
Laboratoire Central des Industries Electriques
Une société de Bureau Veritas

33 Avenue du Général Leclerc
92260 Fontenay-aux-Roses
FRANCE

WWW.LCIE.FR

## Explosion Proof Certificate - Increased Safety (ATEX II 2G Ex e IIC T6...T1 Gb)

BUREAU VERITAS

(1) **EU - Type Examination Certificate**

(2) Equipment and protective systems intended for use in potentially explosive atmospheres – **Directive 2014/34/EU**

(3) EU - Type Examination Certificate Number

**EPS 14 ATEX 1 473 X** **Revision 1**

(4) Equipment: Temperature sensor R950 Series (ETR 10 Series)

(5) Manufacturer: WISE Control Inc.

(6) Address: 2022, Deogyeong-Daero, Giheung-Gu, Yongin-Si, Gyeonggi-Do, Korea

(7) This equipment and any acceptable variation thereto are specified in the annex to this certificate and the documentation therein referred to.

(8) Bureau Veritas Consumer Products Services Germany GmbH, notified body No. 2004 in accordance with Article 21 given in the Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014, certifies that this equipment has been found to comply with the essential health and safety requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II of the Directive. The examination and test results are recorded in the confidential documentation under the reference number 13TH0465.

(9) Compliance with the essential health and safety requirements has been assured by compliance with:

**EN 60079-0:2012** **EN 60079-7:2007**

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the annex to this certificate.

(11) This EU - Type Examination Certificate relates only to the design and examination of the specified equipment in accordance with Directive 2014/34/EU. Further requirements of this Directive apply to the manufacture of this equipment and its placing on the market. Those requirements are not covered by this certificate.

(12) The marking of the equipment shall include the following:

Ex II 2G Ex e IIC T6...T1 Gb

Certification department of explosion protection

Nuremberg, 2016-06-03

D. Zimmann

Page 1 of 3

Certificates without signature and seal are void. This certificate is allowed to be distributed only if not modified. Extracts or modifications must be authorized by Bureau Veritas Consumer Products Services Germany GmbH. EPS 14 ATEX 1 473 X, Revision 1.

BUREAU VERITAS
Consumer Products Services Germany GmbH
Phone: +49 40 74041-0
www.bureauveritas.de/cps

# Temperature Instrument

## Explosion Proof Certificate - Flame Proof / Intrinsic Safety / Increased Safety / Dust Ignition Proof

BUREAU VERITAS

(1) EC-Type Examination Certificate

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres – Directive 94/9/EC

(3) EC Type Examination Certificate Number

EPS 15 ATEX 1 817 X — Revision 0

(4) Equipment: Field Junction Box B500

(5) Manufacturer: WISE Control Inc.

(6) Address: 2022 Deogyeong-daero, Giheung-gu, Yongin-si, Gyeonggi-do, Korea

(7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) Bureau Veritas Consumer Products Services Germany GmbH, Notified Body No. 2004 in accordance with Article 9 of the Council Directive 94/9/EC of March 23rd 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II of the Directive. The examination and test results are recorded in the confidential report 14TH0154.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012 — EN 60079-1:2014
EN 60079-11:2012 — EN 60079-31:2014
EN 60079-7:2007

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-Type Examination Certificate relates only to the design and the construction of the specified equipment in accordance with Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this equipment.

(12) The marking of the equipment shall include the following:

II (1)2G Ex d ia/ib [ia/ib] IIC T6 Gb
II 2G Ex d e IIC T6 Gb
II 2D Ex tb IIIC T85°C Db IP66/IP67

Certification department of explosion protection — Nuremberg, November 27, 2015

D. Zitzmann

Page 1 / 2

Certificates without signature are void. This certificate is allowed to be distributed only if not modified.
Extracts or modifications must be authorized by Bureau Veritas Consumer Products Services Germany GmbH.
EPS 15 ATEX 1 817 X Rev. 0

BUREAU VERITAS
Consumer Products Services Germany GmbH
Thurn und Taxis-Straße 16, 90411 Nürnberg, Germany
Phone: +49 9129 9061-0
nue.nuernberg@de.bureauveritas.com
www.bureau-veritas.de/cps

## Explosion Proof Certificate - Flame Proof (ATEX Ex d IIC T6 Gb)

BUREAU VERITAS

### (1) EC-Type Examination Certificate

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres – Directive 94/9/EC

(3) EC Type Examination Certificate Number

**EPS 15 ATEX 1 108 X** **Revision 0**

(4) Equipment: Illuminator A250

(5) Manufacturer: WISE Control Inc.

(6) Address: 2022 Deogyeong-daero, Giheung-gu, Yongin-si, Gyeonggi-do, Korea

(7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) Bureau Veritas Consumer Products Services Germany GmbH, Notified Body No. 2004 in accordance with Article 9 of the Council Directive 94/9/EC of March 23rd 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II of the Directive. The examination and test results are recorded in the confidential report 15TH0090.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN 60079-0:2012** **EN 60079-1:2014**

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-Type Examination Certificate relates only to the design and the construction of the specified equipment in accordance with Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this equipment.

(12) The marking of the equipment shall include the following:

**II 2G Ex d IIC T6 Gb**

Certification department of explosion protection

Nuremberg, 07.12.2015

D. Zitzmann

Page 1 of 2

Certificates without signature are void. This certificate is allowed to be distributed only if not modified. Extracts or modifications must be authorized by Bureau Veritas Consumer Products Services Germany GmbH. EPS 15 ATEX 1 108 X, Revision 0.

BUREAU VERITAS
Consumer Products Services Germany GmbH

# Temperature Instrument

## Explosion Proof Certificate - Increased Safety (ATEX II 2G Ex e IIC Gb)

BUREAU VERITAS

(1) **EC-Type Examination Certificate**

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres – Directive 94/9/EC

(3) EC-Type Examination Certificate Number

EPS 13 ATEX 1 593 U — Revision: 0

(4) Component: Stator Winding R.T.D R810 Series

(5) Manufacturer: WISE CONTROL INC.

(6) Address: 2022, Deogyeong-Daero, Giheung-Gu, Yongin-Si, Gyeonggi-Do, Korea

(7) This component and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) Bureau Veritas Consumer Products Services Germany GmbH, Notified Body No. 2004 in accordance with Article 9 of the Council Directive 94/9/EC of March 23rd 1994, certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II of the Directive. The examination and test results are recorded in the confidential report 13TH0185.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012 — EN 60079-7:2007

(10) The sign "U" placed behind the certificate number indicates that this certificate should not be confounded with certificates issued for equipment or protective systems. This component certificate only serves as a basis for the issuing of certificates for equipment or protective systems.

(11) This EC-Type Examination Certificate relates only to the design and the construction of the specified component in accordance with Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this component.

(12) The marking of the component shall include the following:

Ex II 2G Ex e IIC Gb

Certification department of explosion protection — Türkheim, October 25, 2013

D. Zitzmann

Page 1 / 3

Certificates without signature are void. This certificate is allowed to be distributed only if not modified. Extracts or modifications must be authorized by Bureau Veritas Consumer Products Services Germany GmbH.

## Explosion Proof Certificate - Intrinsic Safety (ATEX Ex ia IIC T6...T3 Ga)

BUREAU VERITAS

(1) **EC-Type Examination Certificate**

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres – Directive 94/9/EC

(3) EC Type Examination Certificate Number

EPS 13 ATEX 1 595 X — Revision: 0

(4) Equipment: Stator Winding R.T.D R820 Series

(5) Manufacturer: WISE CONTROL INC.

(6) Address: 2022, Deogyeong-Daero, Giheung-Gu, Yongin-Si, Gyeonggi-Do, Korea

(7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) Bureau Veritas Consumer Products Services Germany GmbH, Notified Body No. 2004 in accordance with Article 9 of the Council Directive 94/9/EC of March 23rd 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II of the Directive. The examination and test results are recorded in the confidential report 13TH0185.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012 — EN 60079-11:2012

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-Type Examination Certificate relates only to the design and the construction of the specified equipment in accordance with Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this equipment.

(12) The marking of the equipment shall include the following:

Ex II 1G Ex ia IIC T6...T3 Ga

Certification Department of explosion protection — Türkheim, October 25, 2013

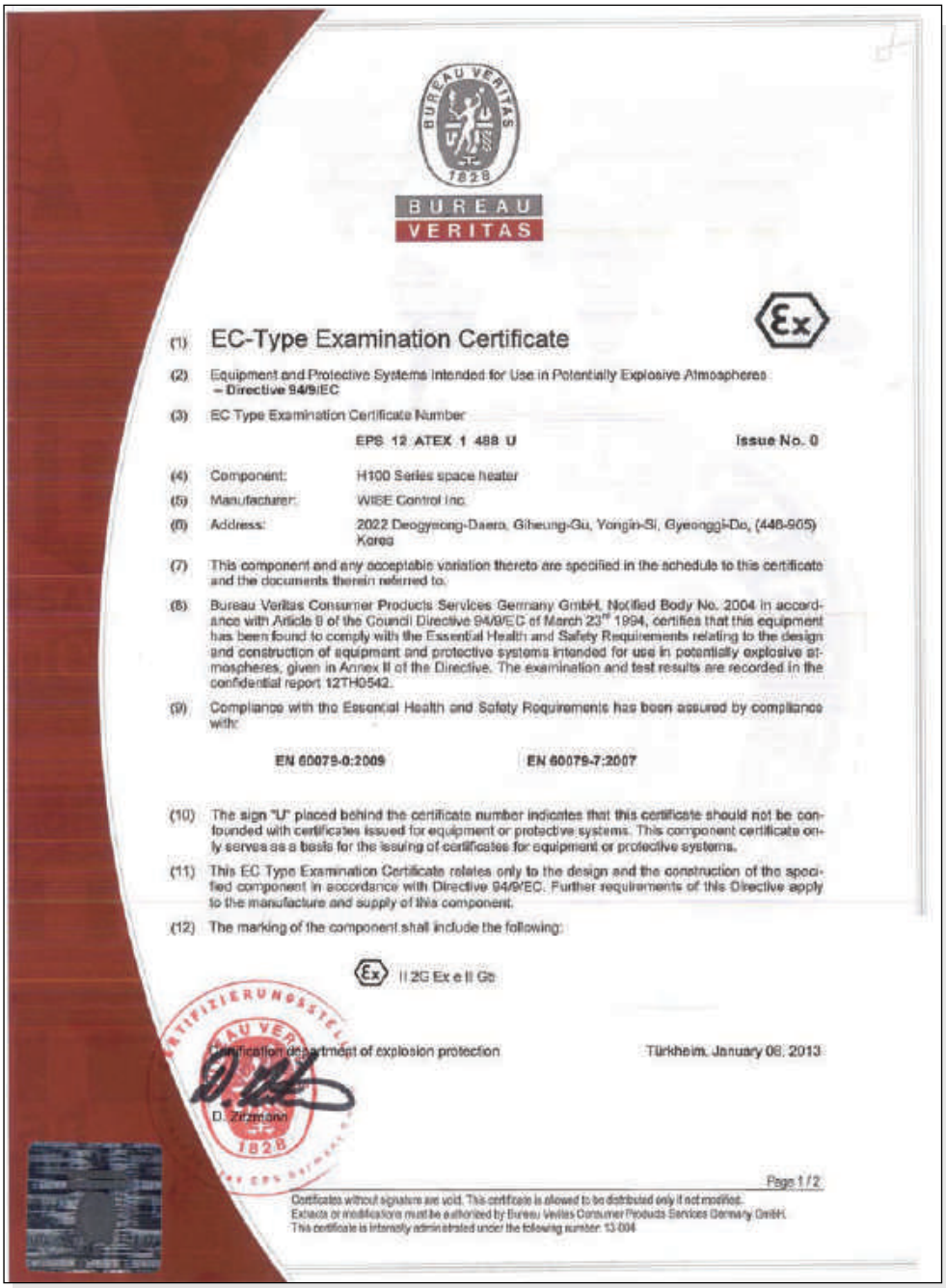
D. Zimmermann

Page 1 / 2

Certificates without signature are void. This certificate is allowed to be distributed only if not modified.
Extracts or modifications must be authorized by Bureau Veritas Consumer Products Services Germany GmbH.

# Temperature Instrument

## Explosion Proof Certificate - Increased Safety (ATEX II 2G Ex e II Gb)



BUREAU VERITAS

(1) EC-Type Examination Certificate

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres – Directive 94/9/EC

(3) EC Type Examination Certificate Number

EPS 12 ATEX 1 488 U — Issue No. 0

(4) Component: H100 Series space heater

(5) Manufacturer: WISE Control Inc.

(6) Address: 2022 Deogyeong-Daero, Giheung-Gu, Yongin-Si, Gyeonggi-Do, (446-965) Korea

(7) This component and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) Bureau Veritas Consumer Products Services Germany GmbH, Notified Body No. 2004 in accordance with Article 8 of the Council Directive 94/9/EC of March 23rd 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II of the Directive. The examination and test results are recorded in the confidential report 12TH0542.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2009 — EN 60079-7:2007

(10) The sign "U" placed behind the certificate number indicates that this certificate should not be confounded with certificates issued for equipment or protective systems. This component certificate only serves as a basis for the issuing of certificates for equipment or protective systems.

(11) This EC Type Examination Certificate relates only to the design and the construction of the specified component in accordance with Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this component.

(12) The marking of the component shall include the following:

Ex II 2G Ex e II Gb

Certification department of explosion protection — Türkheim, January 08, 2013

D. Zimmermann

Page 1 / 2

Certificates without signature are void. This certificate is allowed to be distributed only if not modified. Extracts or modifications must be authorized by Bureau Veritas Consumer Products Services Germany GmbH. This certificate is internally administrated under the following number: 13-004

## Explosion Proof Certificate - Intrinsic Safety (IECEx Ex ia IIC T6...T3 Ga/Gb)

# IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx DEK 16.0047X

Issue No: 1

Certificate history:
Issue No. 1 (2017-12-08)
Issue No. 0 (2016-05-19)

Status: Current

Page 1 of 4

Date of Issue: 2017-12-08

Applicant: Wise Control Inc.
2022 Deogyeong-daero, Giheung-gu, Yongin-si, Gyeonggi-do (17087)
Korea, Republic of

Equipment: Temperature Sensor R950 Series (ETR10)
*Optional accessory:*

Type of Protection: Ex i

Marking: Ex ia IIC T6...T3 Ga/Gb

*Approved for issue on behalf of the IECEx Certification Body:* R. Schuller

*Position:* Certification Manager

*Signature: (for printed version)*

*Date:* 2017-12-08

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

DEKRA Certification B.V.
Meander 1051,
6825 MJ Arnhem
The Netherlands

DEKRA

# Temperature Instrument

## Explosion Proof Certificate - Increased Safety (IECEx Ex e IIC Gb)

IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

For rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx LCIE 17.0038U

Issue No: 0

Certificate history: Issue No. 0 (2017-11-21)

Status: Current

Page 1 of 3

Date of Issue: 2017-11-21

Applicant: WISE Control Inc.
2022 Dongyeong-daero,
Giheung-gu,
Yongin-si,
Gyeonggi-do,
(17097)
Korea, Republic of

Equipment: Coil end temperature detector and Bearing temperature sensor - R640 series
Optional accessory:

Type of Protection: Ex e

Marking: Ex e IIC Gb
(Refer to attachment for full marking)

Approved for issue on behalf of the IECEx Certification Body: Julien GAUTHIER

Position: Certification Officer

Signature: (for printed version)

Date: 2017-11-20

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:
Laboratoire Central des Industries Electriques (LCIE)
33 Avenue du General Leclerc
FR-92260 Fontenay-aux-Roses
France

## Explosion Proof Certificate - Intrinsic Safety (IECEx Ex ia IIC T6...T3 Ga)

# IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

| | | | |
|---|---|---|---|
| Certificate No.: | IECEx EPS 17.0034X | Issue No: 0 | Certificate history: Issue No. 0 (2017-09-01) |
| Status: | Current | Page 1 of 4 | |
| Date of Issue: | 2017-09-01 | | |
| Applicant: | WISE CONTROL INC.<br>2022, Deogyeong-daero, Giheung-gu, Yongin-si, Gyeonggi-do, 17097, Korea<br>Korea, Republic of | | |
| Equipment:<br>Optional accessory: | Bearing Temperature Sensor RM** | | |
| Type of Protection: | Ia | | |
| Marking: | Ex ia IIC T6...T3 Ga | | |

Approved for issue on behalf of the IECEx Certification Body: H. Schaller

Position: Certification manager

Signature: (for printed version)

Date: 2017-09-01

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:
Bureau Veritas Consumer Products Services Germany GmbH
Businesspark A86
86842 Türkheim
Germany

# Temperature Instrument

## Explosion Proof Certificate - Flame Proof (IECEx Ex d IIC T6 Gb)

IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

For rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx LCIE 17.0028X
Issue No: 0
Certificate history: Issue No. 0 (2017-07-24)
Status: Current
Page 1 of 3
Date of Issue: 2017-07-24
Applicant: WISE Control Inc.
2022 Dongyeong-Daero, Giheung-Gu
Yongin-Si, Gyeonggi-Do (17097)
Korea, Republic of
Equipment: Thermocouple and resistance temperature detector, Type : R940 series (ETR series)
Optional accessory:
Type of Protection: Ex d
Marking: Ex d IIC T6 Gb

Approved for issue on behalf of the IECEx Certification Body: Julien Gauthier
Position: Certification Officer
Signature: (for printed version)
Date: 2017-07-24

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:
Laboratoire Central des Industries Electriques (LCIE)
33 Avenue du General Leclerc
FR-92260 Fontenay-aux-Roses
France

## Explosion Proof Certificate - Increased Safety (IECEx Ex e IIC T6...T1 Gb)

IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres
for rules and details of the IECEx Scheme visit www.iecex.com

| | | | |
|---|---|---|---|
| Certificate No.: | IECEx EPS 14.0043X | Issue No: 1 | Certificate history: Issue No. 1 (2016-06-06) Issue No. 0 (2014-06-24) |
| Status: | Current | Page 1 of 4 | |
| Date of Issue: | 2016-06-06 | | |
| Applicant: | WISE CONTROL INC. 2022, Deogyeong-Daero, Giheung-Gu, Yongin-Si, Gyeonggi-Do, Korea Korea, Republic of | | |
| Equipment: Optional accessory: | temperature sensor R950 Series (ETR 10 Series) | | |
| Type of Protection: | e | | |
| Marking: | Ex e IIC T6... T1 Gb | | |

Approved for issue on behalf of the IECEx Certification Body: Dieter Ztomann

Position: Head of Certification

Signature: (for printed version)

Date: 2016-06-06

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:
Bureau Veritas Consumer Products Services Germany GmbH
Businesspark A96
86842 Türkheim
Germany

# Temperature Instrument

## Explosion Proof Certificate - Flame Proof (IECEx Ex d IIC T6 Gb)

IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres
for rules and details of the IECEx Scheme visit www.iecex.com

| | | | |
|---|---|---|---|
| Certificate No.: | IECEx EPS 15.0081X | Issue No: 0 | Certificate history: Issue No. 0 (2015-12-07) |
| Status: | Current | Page 1 of 3 | |
| Date of Issue: | 2015-12-07 | | |
| Applicant: | WISE Control Inc.<br>2022 Deogyeong-daero, Giheung-gu, Yongin-si, Gyeonggi-do<br>Korea, Republic of | | |
| Electrical Apparatus:<br>*Optional accessory:* | Illuminator A250 | | |
| Type of Protection: | flameproof enclosure "d" | | |
| Marking: | Ex d IIC T6 Gb | | |

*Approved for issue on behalf of the IECEx Certification Body:* Dieter Zitzmann

*Position:* Certification Manager

*Signature: (for printed version)*

*Date:* 2015-12-07

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:
Bureau Veritas Consumer Products Services Germany GmbH
Businesspark A96
86842 Türkheim
Germany

## Explosion Proof Certificate - Flame Proof / Intrinsic Safety / Increased Safety / Dust Ignition Proof

BUREAU VERITAS

(1) **EC-Type Examination Certificate**

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres – **Directive 94/9/EC**

(3) EC Type Examination Certificate Number

**EPS 15 ATEX 1 817 X** **Revision 0**

(4) Equipment: Field Junction Box B500

(5) Manufacturer: WISE Control Inc.

(6) Address: 2022 Deogyeong-daero, Giheung-gu, Yongin-si, Gyeonggi-do, Korea

(7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) Bureau Veritas Consumer Products Services Germany GmbH, Notified Body No. 2004 in accordance with Article 9 of the Council Directive 94/9/EC of March 23rd 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II of the Directive. The examination and test results are recorded in the confidential report 14TH0154.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

| | |
|---|---|
| **EN 60079-0:2012** | **EN 60079-1:2014** |
| **EN 60079-11:2012** | **EN 60079-31:2014** |
| **EN 60079-7:2007** | |

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-Type Examination Certificate relates only to the design and the construction of the specified equipment in accordance with Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this equipment.

(12) The marking of the equipment shall include the following:

II (1)2G Ex d [ia/ib] IIC T6 Gb

II 2G Ex d e IIC T6 Gb

II 2D Ex tb IIIC T85°C Db IP66/IP67

Certification department of explosion protection

Nuremberg, November 27, 2015

D. Zitzmann

Page 1 / 2

Certificates without signature are void. This certificate is allowed to be distributed only if not modified.
Extracts or modifications must be authorized by Bureau Veritas Consumer Products Services Germany GmbH.
EPS 15 ATEX 1 817 X Rev. 0

BUREAU VERITAS
Consumer Products Services Germany GmbH
Thurn und Taxis-Straße 18, 90411 Nürnberg, Germany
Phone: +49 911 74061-0
info.nuernberg@de.bureauveritas.com
www.bureau-veritas.de/cps

# Temperature Instrument

## Explosion Proof Certificate - Increased Safety (IECEx Ex e IIC Gb)

IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres
for rules and details of the IECEx Scheme visit www.iecex.com

| | | | |
|---|---|---|---|
| Certificate No.: | IECEx EPS 14.0011U | Issue No: 0 | Certificate history: Issue No. 0 (2014-02-18) |
| Status: | Current | Page 1 of 3 | |
| Date of Issue: | 2014-02-18 | | |
| Applicant: | WISE Control Inc.<br>2022, Deogyeong-Daero, Giheung-Gu,<br>Yongin-Si, Gyeonggi-Do, (446-905)<br>Korea, Republic of | | |
| Electrical Apparatus: | Space heater Type H100 | | |
| *Optional accessory:* | | | |
| Type of Protection: | e | | |
| Marking: | Ex e IIC Gb | | |

*Approved for issue on behalf of the IECEx Certification Body:* Dieter Zitzmann

*Position:* Manager Certification

*Signature: (for printed version)*

*Date:* 2014-02-18

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:
Bureau Veritas Consumer Products Services Germany GmbH
Businesspark A96
86842 Türkheim
Germany

## Explosion Proof Certificate - Increased Safety (IECEx Ex e IIC Gb)

# IECEx Certificate of Conformity

**INTERNATIONAL ELECTROTECHNICAL COMMISSION**
**IEC Certification Scheme for Explosive Atmospheres**
for rules and details of the IECEx Scheme visit www.iecex.com

| | | | |
|---|---|---|---|
| Certificate No.: | IECEx EPS 13.0029U | Issue No. 0 | Certificate history: |
| Status: | Current | | |
| Date of Issue: | 2013-11-04 | Page 1 of 3 | |
| Applicant: | WISE CONTROL, INC.<br>2022, Daogyeong-Daero, Giheung-Gu, Yongin-Si, Gyeonggi-Do, Korea<br>Korea, Republic of | | |
| Electrical Apparatus:<br>*Optional accessory:* | Stator Winding R.T.D R810 Series | | |
| Type of Protection: | e | | |
| Marking: | Ex e IIC Gb | | |

*Approved for issue on behalf of the IECEx Certification Body:* Dieter Ritzmann

*Position:* Head of Certification

*Signature: (for printed version)*

*Date:* 2013.11.04

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

Bureau Veritas Consumer Products Services Germany GmbH
Businesspark A96
86842 Turkheim
Germany

# Temperature Instrument

## Explosion Proof Certificate - Intrinsic Safety (IECEx Ex ia IIC T6...T3 Ga)

IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres
for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx EPS 13.0032X Issue No.: 0 Certificate history:

Status: Current

Date of Issue: 2013-11-04 Page 1 of 3

Applicant: WISE CONTROL INC.
2022, Deogyeong-Daero, Giheung-Gu, Yongin-Si, Gyeonggi-Do
Korea, Republic of

Electrical Apparatus: Stator Winding R.T.D R820 Series
Optional accessory:

Type of Protection: Ia

Marking: Ex ia IIC T6...T3 Ga

Approved for issue on behalf of the IECEx Certification Body: Dieter Zitzmann

Position: Head of Certification

Signature: (for printed version)

Date: 2013-11-4

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

Bureau Veritas Consumer Products Services Germany GmbH
Businesspark A96
86842 Türkheim
Germany

## Canadian Registration Number - Pressure Equipment Safety

ABSA
the pressure equipment safety authority

9410 - 20 Ave N.W.
Edmonton, Alberta, Canada T6N 0A4
Tel: (780) 437-9100 / Fax: (780) 437-7787

July 30, 2013

**Attention:** Mr. CH LEE
WISE CONTROL INC
199 SANGGAL-DONG GIHEUNG-GU
YONGIN-SIM
GYEONGGI-DO,

The design submission, tracking number 2013-02496, originally received on April 12, 2013 was surveyed and accepted for registration as follows:

**CRN :** 0F13241.2 **Accepted on:** July 30, 2013
**Reg Type:** Addition to Acc. Fitting **Expiry Date:** April 12, 2023
**Drawing No. :** SOR-TW-REV.0 DATED 14.02.2013 Rev 0
**Fitting type:** 1/2" TO 2" THERMOWELLS

**The registration is conditional on your compliance with the following notes:**

*This registration covers the thermowells listed in document SOR-TW-Rev.0.*
*The registration is given based on the understanding that the flanged type thermowells are completed with flanges of the same dimensions and materials as per the ASME B16.5 Standard.*

*This registration is valid only for fittings fabricated at the location(s) covered by the QC certificate attached to the accepted AB-41 Statutory Declaration form. This registration is valid only until the indicated expiry date only if the Manufacturer maintains a valid quality management system approved by an acceptable third-party agency until that date. Should the approval of the quality management system lapse before the expiry date indicated above, this registration shall become void.*

An invoice covering survey and registration fees will be forwarded from our Revenue Accounts.

Enclosed are stamped prints for your reference.

Sincerely,

ONSHCHENKO, TETYANA, P. Eng.

Page 1 of 1

# Temperature Instrument

## Explosion Proof Certificate - Intrinsic Safety / Increased Safety

ТАМОЖЕННЫЙ СОЮЗ

3

ПРИЛОЖЕНИЕ

К СЕРТИФИКАТУ СООТВЕТСТВИЯ № ТС RU C-KR.AB72.B.01861

Серия RU № 0258946

**Сведения по сертификату соответствия**

потенциал, не менее минимальных значений, установленных в ГОСТ Р МЭК 60079-7-2012.

Терморезисторы R810 являются Ex-компонентами и применяются в комплексе с барьером искробезопасности.

Терморезисторы модели R820 являются простым электрооборудованием в соответствии с ГОСТ Р МЭК 60079-11-2012, искробезопасное исполнение обеспечивается конструкцией терморезистора и соответствующим подключением к электрической цепи через барьер искрозащиты.

Значения путей утечек и электрических зазоров соответствуют ГОСТ Р МЭК 60079-11-2012.

Электрические параметры искробезопасных цепей соответствуют требованиям для электрооборудования подгруппы IIC.

**4 Маркировка**

Маркировка нанесена на изделии и включает следующие данные:

- знак предприятия – изготовителя;
- наименование и тип изделия;
- порядковый номер в системе нумерации предприятия – изготовителя и год выпуска;
- электрические параметры (напряжение, мощность, частота);
- температура окружающей среды нагревательного элемента H100 минус 40°C ≤Tamb≤+70 °C (температура окружающей среды Tamb терморезисторов указывается в эксплуатационной документации)
- знак обращения на рынке;
- знак взрывобезопасности;
- маркировку взрывозащиты;
- номер сертификата соответствия;

**5 Специальные условия безопасного применения оборудования:**

Элементы нагревательные, модели H100 являются компонентом комплекса, недопустимо использование без регулирующего устройства и дополнительного защитного устройства отключения.

Подключение терморезисторов моделей R810, R820 к внешним цепям должно осуществляться через искробезопасные барьеры с соответствующими искробезопасными параметрами, имеющими действующие сертификаты соответствия требованиям ТР ТС 012/2011.

Установка, подключение, эксплуатация, техническое обслуживание, и отключение изделий должно производиться в соответствии с технической документацией изготовителя.

Ремонт и регулировка на месте эксплуатации не допускаются

Замена, отключение и подключение изделий должны осуществляться при выключенном питании.

Во время установки необходимо убедиться, что изоляция не повреждена.

Необходимо беречь изделия от механических нагрузок и изгибающих нагрузок;

Температурный класс в маркировке взрывозащиты терморезистора модели R820 должен выбираться исходя из максимальной температуры окружающей среды, указанной в эксплуатационной документации.

М.П.

Руководитель (уполномоченное лицо) органа по сертификации (подпись) Г.М. Буракшаева (инициалы, фамилия)

Эксперт (эксперт-аудитор) (эксперты (эксперты-аудиторы)) (подпись) В.А. Казакова (инициалы, фамилия)

## Explosion Proof Certificate - Flame Proof (Ex d IIC T6)

ktl 한국산업기술시험원

No. 2016-029299-01

# 안 전 인 증 서

## *Certificate of Safety*

**WISE Control Inc.**

2022, Deogyeong-daero, Giheung-gu, Yongin-si, Gyeonggi-do, 17097, Rep. of Korea

*The following product manufactured by the above company has been authorized for the use of safety certification mark as the product has satisfied the safety and health requirements under Article 34 of OCCUPATIONAL SAFETY AND HEALTH ACT and paragraph 4 of Article 58-4 of ENFORCEMENT ORDINANCE OF the same ACT.*

**Electrical Equipment**

Explosion proof type Indicating Pressure Switch

**Model(Marking) / Certificate No.**

P981, P982(Ex d IIC T6) / 16-KA2BO-0323X

**Applied standards**

Announcement No. 2013-54 of Ministry of Employment and Labor

**Conditions of Certification**

1. **Manufacturing location(s):** This certificate is valid only for the specified products produced at '2022, Deogyeong-daero, Giheung-gu, Yongin-si, Gyeonggi-do, 17097, Rep. of Korea'
2. **Description of equipment**
   - The pressure transmitter is used to measure fluid pressure and provides external contact.
   - Ambient temperature and process temperature : -20 ℃ ≤ $T_a$ ≤ +65 ℃
   - Maximum fluid temperature: +100 ℃
3. **Scope of certification:** This certificate is only valid for below the contact capacities.
   - Micro contact type
     - Resistance load: 125 Vac / 5 A, 250 V / 3 A, 30 Vdc / 4 A, 125 Vdc / 0.4 A
     - Inductive load: 125 Vac / 3 A, 250 V / 2 A, 30 Vdc / 3 A, 125 Vdc / 0.05 A
   - Electrical contact type
     - 250 Vac / 1.0 A
4. **Special conditions for safe use**
   - IEC 60079-26 shall be applied to install in the zone boundary of hazardous area.
5. **Details of certificate changes:** None
6. **Details of the others**
   - This certificate shall be used with the related user manual.
   - Manufacturer shall take the responsibility including maintaining quality requirements for the certified products, receiving factory surveillance and informing any changes to the certified products.

Date of Issue: 2016-05-08

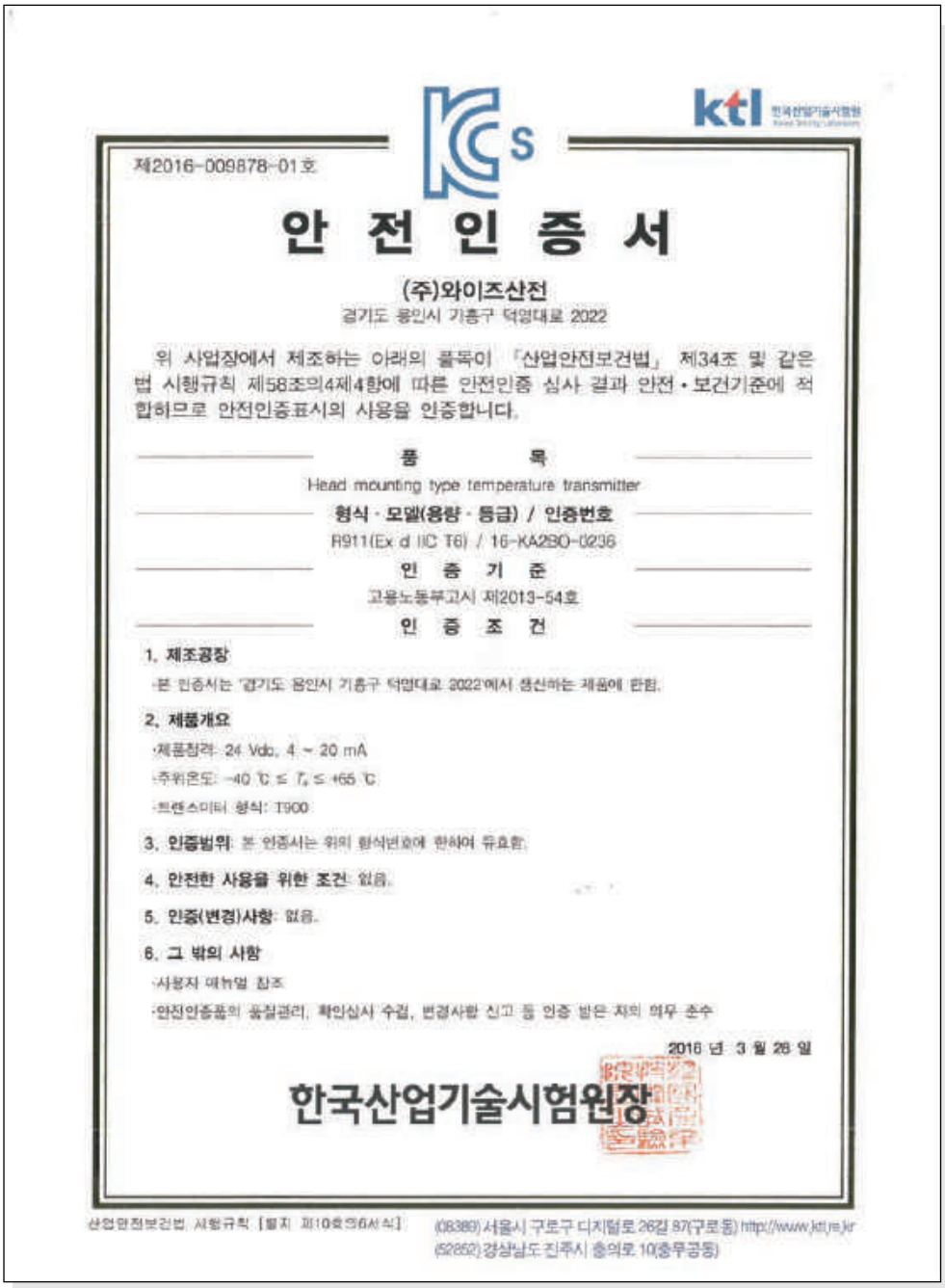
**한국산업기술시험원장**

**KOREA TESTING LABORATORY**

산업안전보건법 시행규칙 [별지 제10호의6서식] (08389) 서울시 구로구 디지털로 26길 87(구로동) http://www.ktl.re.kr (52852) 경상남도 진주시 충의로 10(충무공동)

# Temperature Instrument

## Explosion Proof Certificate - Flame Proof (Ex d IIC T6)



제2016-009878-01호

# 안 전 인 증 서

**(주)와이즈산전**

경기도 용인시 기흥구 덕영대로 2022

위 사업장에서 제조하는 아래의 품목이 「산업안전보건법」 제34조 및 같은 법 시행규칙 제58조의4제4항에 따른 안전인증 심사 결과 안전·보건기준에 적합하므로 안전인증표시의 사용을 인증합니다.

**품 목**

Head mounting type temperature transmitter

**형식 · 모델(용량 · 등급) / 인증번호**

R911(Ex d IIC T6) / 16-KA2BO-0236

**인 증 기 준**

고용노동부고시 제2013-54호

**인 증 조 건**

1. **제조공장**

-본 인증서는 '경기도 용인시 기흥구 덕영대로 2022'에서 생산하는 제품에 한함.

2. **제품개요**

-제품정격: 24 Vdc, 4 ~ 20 mA

-주위온도: -40 ℃ ≤ $T_a$ ≤ +65 ℃

-트랜스미터 형식: T900

3. **인증범위**: 본 인증서는 위의 형식번호에 한하여 유효함.

4. **안전한 사용을 위한 조건**: 없음.

5. **인증(변경)사항**: 없음.

6. **그 밖의 사항**

-사용자 매뉴얼 참조

-안전인증품의 품질관리, 확인심사 수검, 변경사항 신고 등 인증 받은 자의 의무 준수

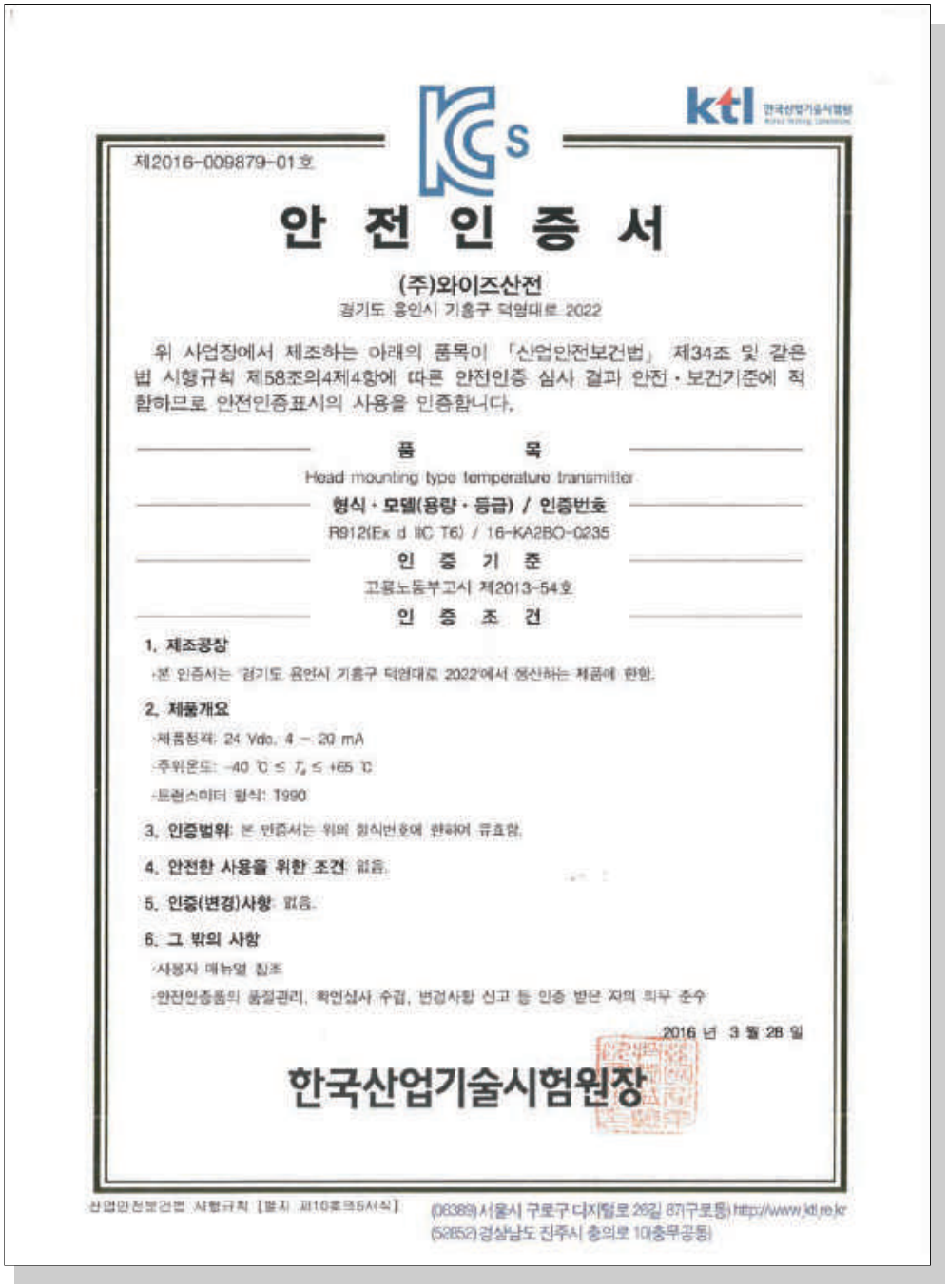
2016 년 3 월 28 일

**한국산업기술시험원장**

산업안전보건법 시행규칙 [별지 제10호의6서식]

(08380) 서울시 구로구 디지털로 26길 87(구로동) http://www.ktl.re.kr
(52852) 경상남도 진주시 충의로 10(충무공동)

## Explosion Proof Certificate - Flame Proof (Ex d IIC T6)



제2016-009879-01호

# 안 전 인 증 서

**(주)와이즈산전**

경기도 용인시 기흥구 덕영대로 2022

위 사업장에서 제조하는 아래의 품목이 「산업안전보건법」 제34조 및 같은 법 시행규칙 제58조의4제4항에 따른 안전인증 심사 결과 안전 · 보건기준에 적합하므로 안전인증표시의 사용을 인증합니다.

**품 목**

Head mounting type temperature transmitter

**형식 · 모델(용량 · 등급) / 인증번호**

R912(Ex d IIC T6) / 16-KA2BO-0235

**인 증 기 준**

고용노동부고시 제2013-54호

**인 증 조 건**

**1. 제조공장**

-본 인증서는 '경기도 용인시 기흥구 덕영대로 2022'에서 생산하는 제품에 한함.

**2. 제품개요**

-제품정격: 24 Vdc, 4 ~ 20 mA

-주위온도: -40 ℃ ≤ $T_a$ ≤ +65 ℃

-트랜스미터 형식: T990

**3. 인증범위**: 본 인증서는 위의 형식번호에 한하여 유효함.

**4. 안전한 사용을 위한 조건**: 없음.

**5. 인증(변경)사항**: 없음.

**6. 그 밖의 사항**

-사용자 매뉴얼 첨조

-안전인증품의 품질관리, 확인심사 수검, 변경사항 신고 등 인증 받은 자의 의무 준수

2016 년 3 월 28 일

**한국산업기술시험원장**

산업안전보건법 시행규칙 [별지 제10호의6서식]

(06389) 서울시 구로구 디지털로 26길 87(구로동) http://www.ktl.re.kr
(52852) 경상남도 진주시 충의로 10(충무공동)

# Temperature Instrument

## Explosion Proof Certificate - Flame Proof (Ex d IIC T6 IP65)

제16-0178호

### 안 전 인 증 서

**㈜와이즈 산전**

경기도 용인시 기흥구 덕영대로 2022

위 사업장에서 제조하는 아래의 품목이 「산업안전보건법」 제34조 및 같은 법 시행규칙 제58조의4제4항에 따른 안전인증 심사 결과 안전·보건기준에 적합하므로 안전인증표시의 사용을 인증합니다.

품 목

Ultrasonic Gas Flow Meters

형식 · 모델 / 용량 · 등급 / 인증번호

| 형식·모델 | 용량 · 등급 | 인증번호 |
|---|---|---|
| U111K | 16~30 VDC, 15W<br>Ex d IIC T6 | 16-GA2BO-0178 |

인 증 기 준

방호장치 의무안전인증 고시(고용노동부고시 제2013-54호)

인 증 조 건

-40 ℃≤Tamb≤ +60 ℃, 뒷면 사용조건 참조

2016 년 03 월 23 일

한국가스안전공사 사장

## Explosion Proof Certificate - Flame Proof (Ex de IIC T6 IP67)

제16-0297호

# 안 전 인 증 서

**(주)와이즈산전**

경기도 용인시 기흥구 덕영대로 2022

위 사업장에서 제조하는 아래의 품목이 「산업안전보건법」 제34조 및 같은 법 시행규칙 제58조의4제4항에 따른 안전인증 심사 결과 안전·보건기준에 적합하므로 안전인증표시의 사용을 인증합니다.

품 목

Metallic protection tube Thermocouple and RTD

형식 · 모델 / 용량 · 등급 / 인증번호

| 형식·모델 | 용량 · 등급 | 인증번호 |
|---|---|---|
| R960 Series | 뒷면 참조 | 16-GA2BO-0297 |
| | Ex de IIC T6 | |

인 증 기 준

방호장치 의무안전인증 고시(고용노동부고시 제2013-54호)

인 증 조 건

뒷면 참조

2016 년 04 월 07 일

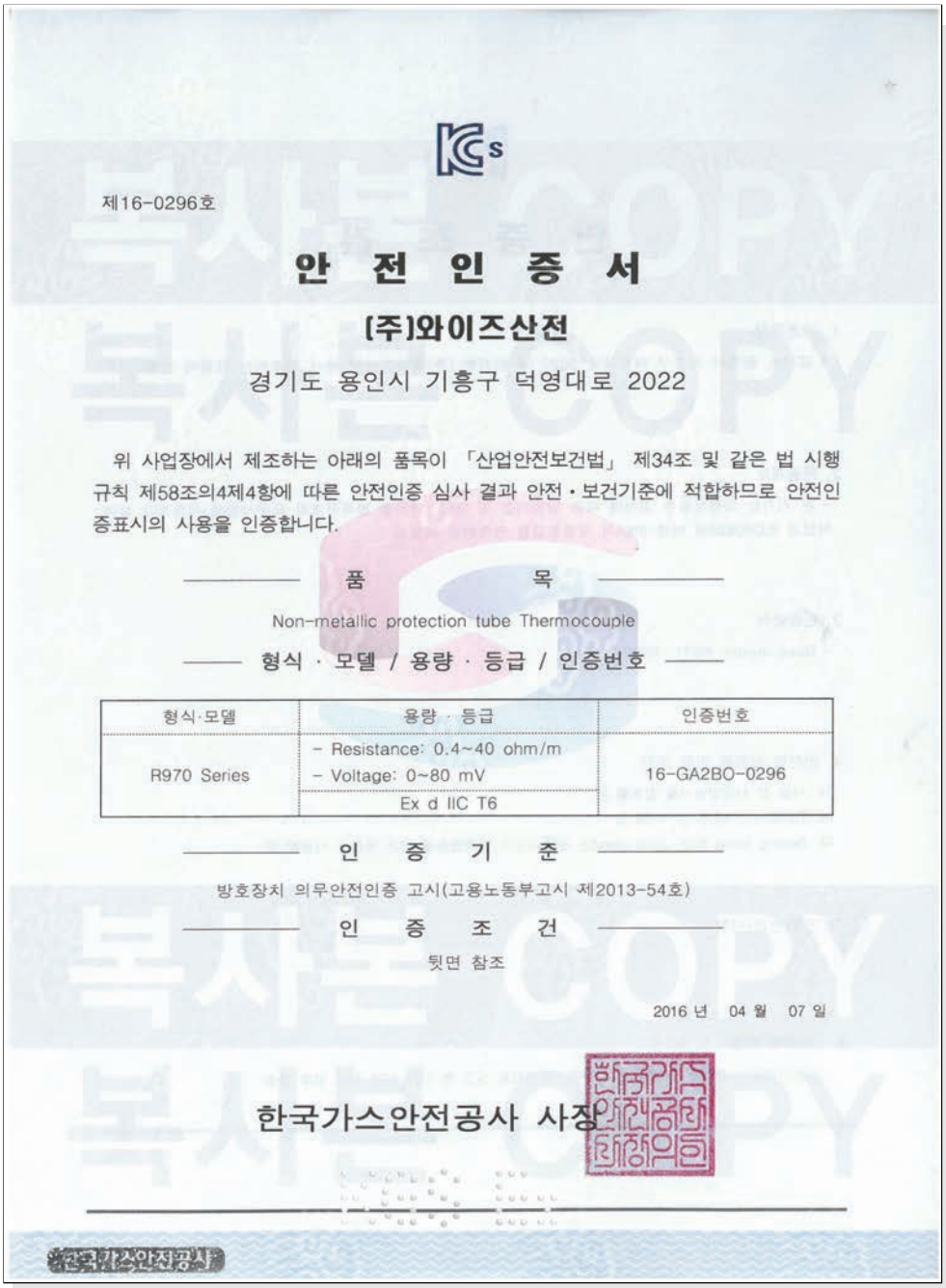
한국가스안전공사 사장

한국가스안전공사

복사본 COPY

# Temperature Instrument

## Explosion Proof Certificate - Flame Proof (Ex d IIC T6 IP65)



제16-0296호

**안 전 인 증 서**

**(주)와이즈산전**

경기도 용인시 기흥구 덕영대로 2022

위 사업장에서 제조하는 아래의 품목이 「산업안전보건법」 제34조 및 같은 법 시행규칙 제58조의4제4항에 따른 안전인증 심사 결과 안전·보건기준에 적합하므로 안전인증표시의 사용을 인증합니다.

품 목

Non-metallic protection tube Thermocouple

형식 · 모델 / 용량 · 등급 / 인증번호

| 형식·모델 | 용량 · 등급 | 인증번호 |
|---|---|---|
| R970 Series | - Resistance: 0.4~40 ohm/m<br>- Voltage: 0~80 mV<br>Ex d IIC T6 | 16-GA2BO-0296 |

인 증 기 준

방호장치 의무안전인증 고시(고용노동부고시 제2013-54호)

인 증 조 건

뒷면 참조

2016 년 04 월 07 일

한국가스안전공사 사장

한국가스안전공사

복사본 COPY

## Explosion Proof Certificate - Intrinsic Safety (Ex ia IIC T6...T3)

제15-0544호

# 안 전 인 증 서

**[주]와이즈산전**

**경기 용인시 기흥구 덕영대로 2022**

위 사업장에서 제조하는 아래의 품목이 「산업안전보건법」 제34조 및 같은 법 시행규칙 제58조의4제4항에 따른 안전인증 심사 결과 안전·보건기준에 적합하므로 안전인증표시의 사용을 인증합니다.

**품 목**

Stator Winding R.T.D

**형식 · 모델 / 용량 · 등급 / 인증번호**

| 형식·모델 | 용량 · 등급 | 인증번호 |
|---|---|---|
| R820 Series | Ui=30V, Ii=5.0mA, Pi=0.15W<br>Ex ia IIC T6...T3 | 15-GA2BO-0544X |

**인 증 기 준**

방호장치 의무안전인증 고시(고용노동부고시 제2013-54호)

**인 증 조 건**

-40℃<Ta<+80℃(T6); -40℃<Ta<+95℃(T5); -40℃<Ta<+130℃(T4); -40℃<Ta<+180℃(T3)
(뒷면 참조)

2015 년 08 월 06 일

한국가스안전공사 사장

# Temperature Instrument

## Explosion Proof Certificate - Increased Safety (Ex e IIC T6...T1)

No. 2015 - 0307

### Safety Certificate

- Manufacturer: WISE Control Inc.
- Address: 2022, Deogyeong-daero, Giheung-gu, Yongin-si, Gyeonggi-do, Korea

The following product fabricated by the above manufacturer has been certified for the use of the Safety Certification Mark as the product was assessed and tested in accordance with the article 34 of the Occupational Safety & Health Act and the article 58 (4) 4 of the Enforcement Rule thereof.

| | |
|---|---|
| Product | Temperature Sensor |
| Type(Model) | ETR10 Series |
| Rating | Max. DC 30 V, Max. 100 mA |
| Type of Protection | Ex e IIC T6...T1 |
| Certification No. | 15-GA2BO-0307X |
| Safety Certification Standards | Notification of Protective device Mandatory Safety Certification (Notice of Ministry of Employment and of Labor No. 2015-54) |
| Certification condition | 1. Tamb = -40℃ ~ +65℃<br>2. End user must use certification cable gland. |
| Date of issue | April 24th, 2015 |

*Approved for issue on behalf of the president :* *Gi-Hoi, Kim*
*position :* *General Manager*

*Signature* 김 기 회

Korea Gas Safety Corporation

## Explosion Proof Certificate - Increased Safety (Ex e IIC Gb)

제15-0036호

# 안 전 인 증 서

**(주)와이즈산전**

경기도 용인시 기흥구 덕영대로 2022

위 사업장에서 신청하는 아래의 품목이 「산업안전보건법」 제34조 및 같은 법 시행규칙 제58조의4제4항에 따른 안전인증 심사 결과 안전·보건기준에 적합하므로 안전인증표시의 사용을 인증합니다.

**품 목**

Stator Winding R.T.D

**형식 · 모델 / 용량 · 등급 / 인증번호**

| 형식·모델 | 용량 · 등급 | 인증번호 |
|---|---|---|
| R810 Series | 0.2 ~ 5 mA, 30 V 미만 | 15-GA2BO-0036U |
| | Ex e IIC Gb | |

**인 증 기 준**

방호장치 의무안전인증 고시(고용노동부고시 제2013-54호)

**인 증 조 건**

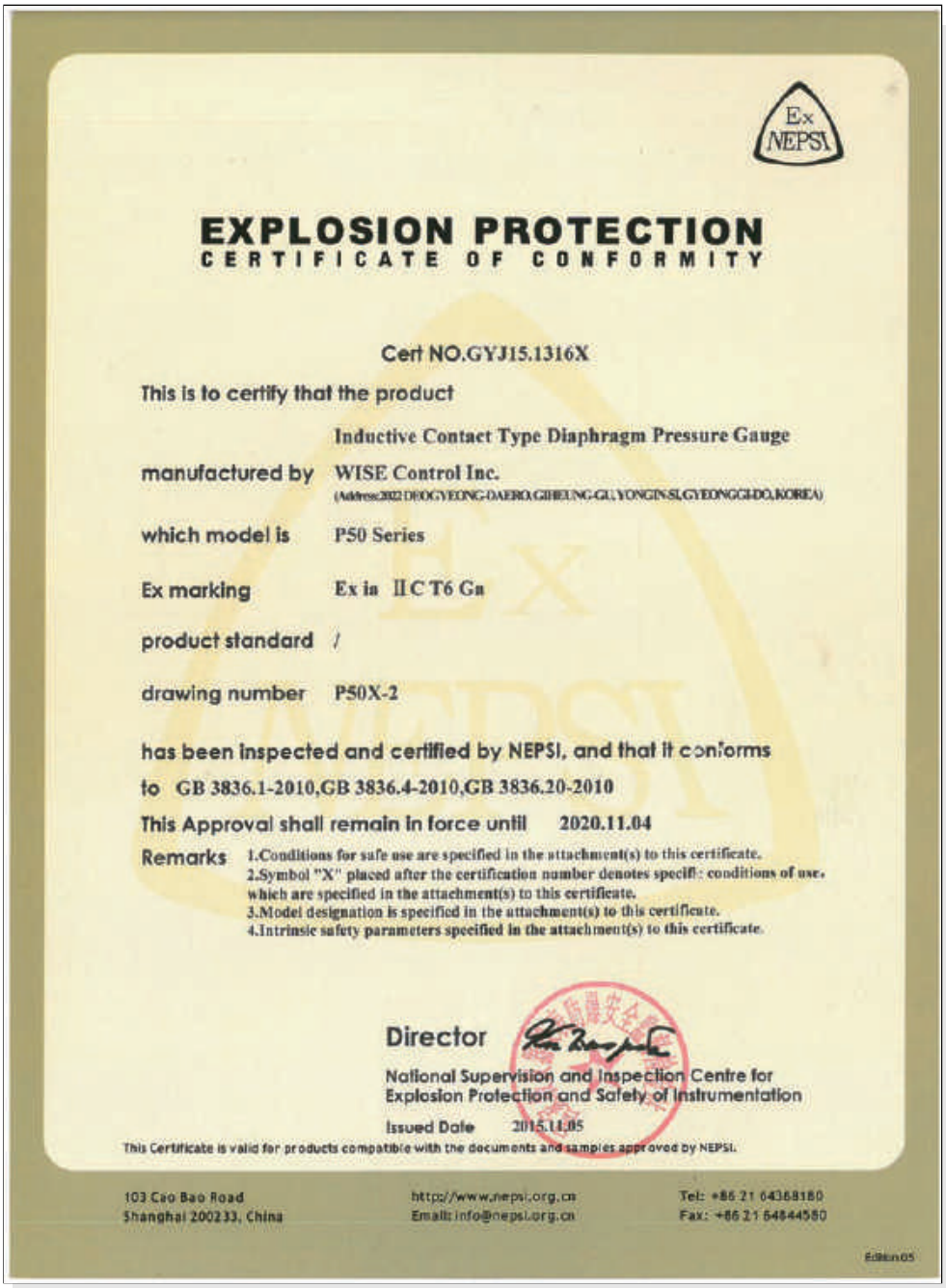
뒷면 인증 조건 참조

2015 년 01 월 16 일

한국가스안전공사 사장

# Temperature Instrument

## Explosion Proof Certificate - Intrinsic Safety (Ex ia IIC T6...T1 Ga/Gb)



Ex NEPSI

**EXPLOSION PROTECTION**
**CERTIFICATE OF CONFORMITY**

Cert NO.GYJ15.1316X

This is to certify that the product

Inductive Contact Type Diaphragm Pressure Gauge

manufactured by WISE Control Inc.
(Address:2022 DEOGYEONG-DAERO,GIHEUNG-GU,YONGIN-SI,GYEONGGI-DO,KOREA)

which model is P50 Series

Ex marking Ex ia ⅡC T6 Ga

product standard /

drawing number P50X-2

has been inspected and certified by NEPSI, and that it conforms to GB 3836.1-2010,GB 3836.4-2010,GB 3836.20-2010

This Approval shall remain in force until 2020.11.04

Remarks
1.Conditions for safe use are specified in the attachment(s) to this certificate.
2.Symbol "X" placed after the certification number denotes specifi: conditions of use, which are specified in the attachment(s) to this certificate.
3.Model designation is specified in the attachment(s) to this certificate.
4.Intrinsic safety parameters specified in the attachment(s) to this certificate.

Director

National Supervision and Inspection Centre for Explosion Protection and Safety of Instrumentation

Issued Date 2015.11.05

This Certificate is valid for products compatible with the documents and samples approved by NEPSI.

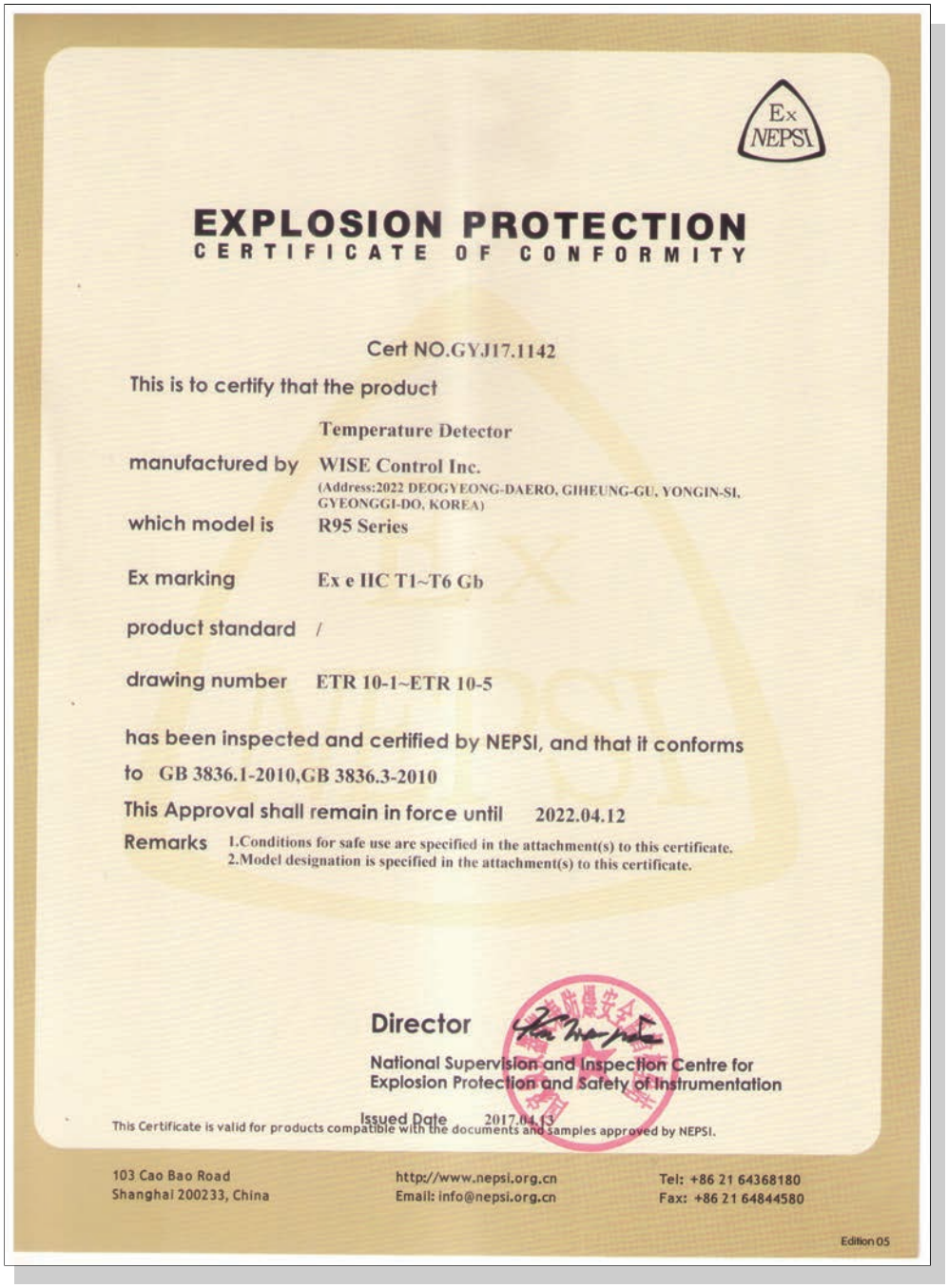
103 Cao Bao Road
Shanghai 200233, China

http://www.nepsi.org.cn
Email: info@nepsi.org.cn

Tel: +86 21 64368180
Fax: +86 21 64844580

Edition:05

## Explosion Proof Certificate - Increased Safety (Ex e IIC T6...T1 Gb)



Ex NEPSI

# EXPLOSION PROTECTION
CERTIFICATE OF CONFORMITY

Cert NO.GYJ17.1142

This is to certify that the product

Temperature Detector

manufactured by WISE Control Inc.
(Address:2022 DEOGYEONG-DAERO, GIHEUNG-GU, YONGIN-SI, GYEONGGI-DO, KOREA)

which model is R95 Series

Ex marking Ex e IIC T1~T6 Gb

product standard /

drawing number ETR 10-1~ETR 10-5

has been inspected and certified by NEPSI, and that it conforms to GB 3836.1-2010,GB 3836.3-2010

This Approval shall remain in force until 2022.04.12

Remarks 1.Conditions for safe use are specified in the attachment(s) to this certificate.
2.Model designation is specified in the attachment(s) to this certificate.

Director

National Supervision and Inspection Centre for Explosion Protection and Safety of Instrumentation

Issued Date 2017.04.13

This Certificate is valid for products compatible with the documents and samples approved by NEPSI.

103 Cao Bao Road
Shanghai 200233, China

http://www.nepsi.org.cn
Email: info@nepsi.org.cn

Tel: +86 21 64368180
Fax: +86 21 64844580

Edition 05

# Pressure & Temperature Instrument

## Explosion Proof Certificate - Intrinsic Safety (Ex ia IIC T6)

제 2014-BO-0272-1 호

# 안 전 인 증 서

(주)와이즈산전

경기도 용인시 기흥구 덕영대로 2022(상갈동)

위 사업장에서 제조하는 아래의 품목이 산업안전보건법 제34조 및 같은 법 시행규칙 제58조의4제4항에 따른 안전인증 심사 결과 안전 · 보건기준에 적합하므로 안전인증표시의 사용을 인증합니다.

**품 목**

INDUCTIVE CONTACTS TYPE PRESSURE GAGUE

**형식 · 모델/용량 · 등급/인증번호**

| 형식·모델 | 인증번호 |
|---|---|
| P5**/P69*/T5** | 14-AV2BO-0272X |

Ex ia IIC T6

용량·등급: Dial φ100: Ui=10 V, Ii=25 mA, Pi=34 mW, Ci=30 nF, Li=100 μH
Dial φ160: Ui=10 V, Ii=25 mA, Pi=34 mW, Ci=50 nF, Li=250 μH
(*:방폭성능에 무관함)

**인 증 기 준**

방호장치 안전인증 고시(고용노동부고시 제2016-54호)

**인 증 조 건**

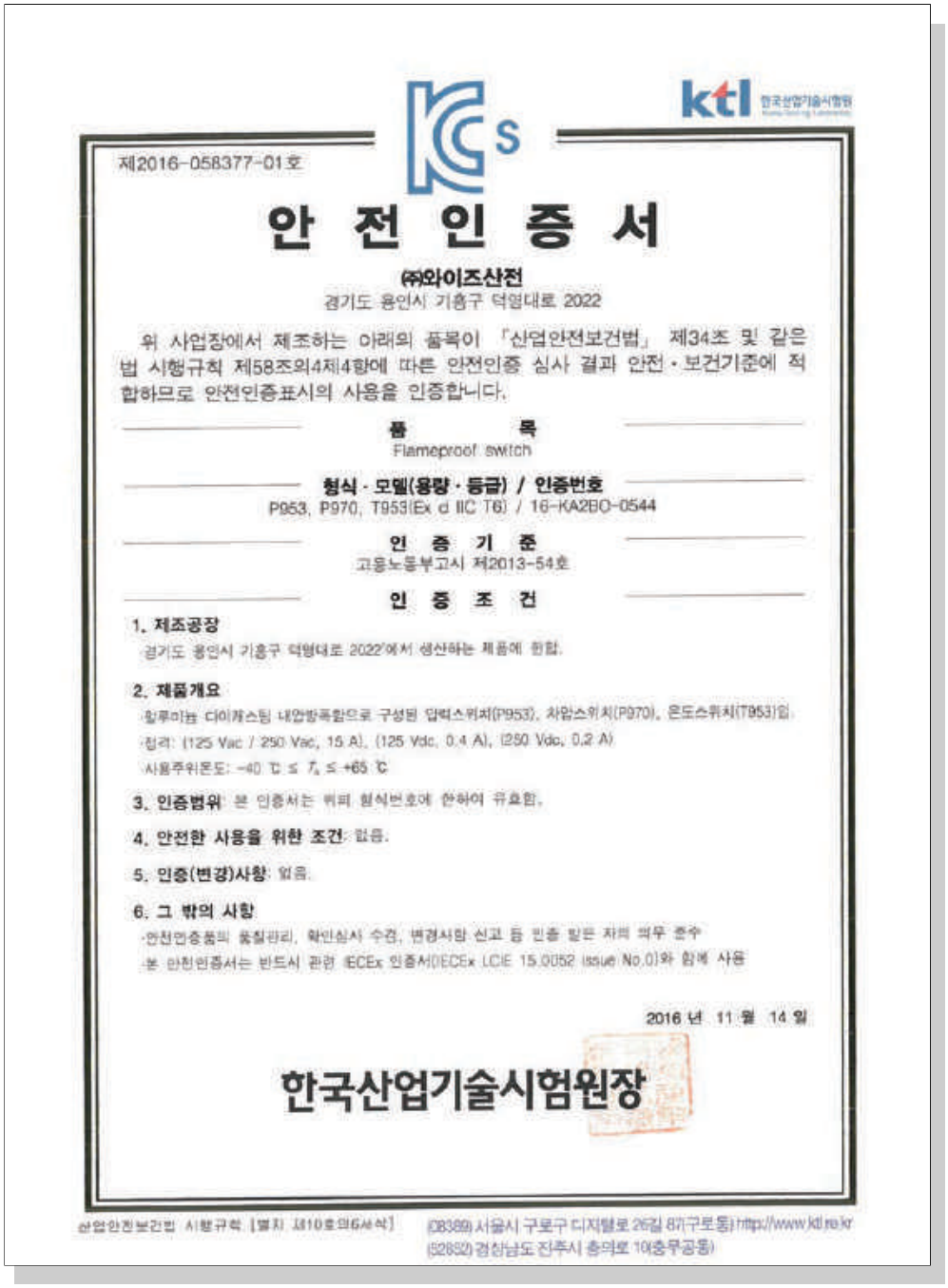
정전기발생 주의하고 젖은 헝겊을 사용하여 닦을 것

2017년 07월 03일

2014.05.27 최초 교부
2017.07.03 동일형식

한국산업안전보건공단 이사장

## Explosion Proof Certificate - Flame Proof (Ex d IIC T6 IP65)



제2016-058377-01호

# 안 전 인 증 서

**㈜와이즈산전**

경기도 용인시 기흥구 덕영대로 2022

위 사업장에서 제조하는 아래의 품목이 「산업안전보건법」 제34조 및 같은 법 시행규칙 제58조의4제4항에 따른 안전인증 심사 결과 안전·보건기준에 적합하므로 안전인증표시의 사용을 인증합니다.

**품 목**

Flameproof switch

**형식 · 모델(용량 · 등급) / 인증번호**

P953, P970, T953(Ex d IIC T6) / 16-KA2BO-0544

**인 증 기 준**

고용노동부고시 제2013-54호

**인 증 조 건**

**1. 제조공장**

경기도 용인시 기흥구 덕영대로 2022'에서 생산하는 제품에 한함.

**2. 제품개요**

·알루미늄 다이캐스팅 내압방폭함으로 구성된 압력스위치(P953), 차압스위치(P970), 온도스위치(T953)임.

·정격: (125 Vac / 250 Vac, 15 A), (125 Vdc, 0.4 A), (250 Vdc, 0.2 A)

·사용주위온도: -40 ℃ ≤ $T_a$ ≤ +65 ℃

**3. 인증범위**: 본 인증서는 위의 형식번호에 한하여 유효함.

**4. 안전한 사용을 위한 조건**: 없음.

**5. 인증(변경)사항**: 없음.

**6. 그 밖의 사항**

·안전인증품의 품질관리, 확인심사 수검, 변경사항 신고 등 인증 받은 자의 의무 준수

·본 안전인증서는 반드시 관련 IECEx 인증서(IECEx LCIE 15.0052 issue No.0)와 함께 사용

2016 년 11 월 14 일

**한국산업기술시험원장**

산업안전보건법 시행규칙 [별지 제10호의6서식]

(08389) 서울시 구로구 디지털로 26길 87(구로동) http://www.ktl.re.kr
(52852) 경상남도 진주시 충의로 10(충무공동)

# Pressure & Temperature Instrument

## Explosion Proof Certificate - Flame Proof (IECEx Ex d IIC T6 Gb)

IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres
for rules and details of the IECEx Scheme visit www.iecex.com

| | | | |
|---|---|---|---|
| Certificate No.: | IECEx LCIE 15.0052 | Issue No.:0 | Certificate history: |
| Status: | Current | | |
| Date of Issue: | 2016-08-01 | Page 1 of 3 | |
| Applicant: | WISE Control Inc.<br>2022 Deogyeong-daero, Giheung-gu, Yongin-si, Gyeonggi-do (17097)<br>Korea, Republic of | | |
| Equipment:<br>Optional accessory: | Flameproof switch (953 series)<br>Pressure switch(P953), Differential pressure switch (P970), Temperature switch (T953) | | |
| Type of Protection: | Ex d | | |
| Marking: | Ex d IIC T6 Gb | | |

Approved for issue on behalf of the IECEx Certification Body: Marie-Elisabeth d'Ornano

Position: Certification Director

Signature: (for printed version)

Date: 2016-08-01

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:
Laboratoire Central des Industries Electriques (LCIE)
33 Avenue du General Leclerc
FR-92260 Fontenay-aux-Roses
France

Documents relative to LCIE certification activities (Certificates, QARs, ExTRs) can be registered under the references "LCI" or "LCIE".

## Explosion Proof Certificate - Flame Proof (ATEX Ex d IIC T6 Gb)

# ATTESTATION D'EXAMEN UE DE TYPE
## *EU TYPE EXAMINATION CERTIFICATE*

1 **Version : 03** **LCIE 06 ATEX 6073 X** **Issue : 03**

**Directive 2014/34/UE**

2 Appareil ou Système de Protection destiné à être utilisé en Atmosphères Explosibles

**Directive 2014/34/EU**

Equipment or Protective System Intended for use in Potentially Explosive Atmospheres

3 PRODUIT :
**Interrupteur antidéflagrant (séries 953)**

PRODUCT :
**Flameproof switch (953 series)**

**Type: Pressostat / *Pressure switch* : P953**
**Pressostat différentiel / *Differential pressure switch* : P970**
**Thermostat / *Temperature switch* : T953**

4 Fabricant :

Manufacturer :

**WISE Control Inc.**

5 Adresse :

Address :

2022 Deogyeong-Daero,Giheung-Gu
Yongin-Si,Gyeonggi-Do, (17097) Korea

6 Ce produit et ses variantes éventuelles acceptées sont décrits dans l'annexe de la présente attestation et dans les documents descriptifs cités en référence.

This product any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

7 Le LCIE, Organisme Notifié sous la référence 0081 conformément à l'article 17 de la directive 2014/34/UE du Parlement européen et du Conseil du 26 février 2014, certifie que ce produit est conforme aux Exigences Essentielles de Sécurité et de Santé pour la conception et la construction de produits destinés à être utilisés en atmosphères explosibles, données dans l'annexe II de la Directive.
Les résultats des vérifications et essais figurent dans le(s) rapport(s) confidentiel(s) N° :

LCIE, Notified Body number 0081 in accordance with article 17 of the Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014 certifies that product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres, given in Annex II to the Directive.
The examination and test results are recorded in confidential report(s) N°:

N° 60044351-544327/02 ; 107065-612538 ; 123618-648102-02 ; 141626-665285

8 Le respect des Exigences Essentielles de Sécurité et de Santé est assuré par la conformité à :

Compliance with the Essential Health and Safety Requirements has been assured by compliance with :

EN 60079-0:2012 +A11:2013
EN 60079-1:2007

9 Le signe « X » lorsqu'il est placé à la suite du numéro de l'attestation, indique que cet appareil est soumis aux conditions particulières d'utilisation, mentionnées dans l'annexe de cette attestation.

If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

10 Cette Attestation d'Examen UE de Type concerne uniquement la conception et la construction du produit spécifié.
Des exigences supplémentaires de la directive sont applicables pour la fabrication et la fourniture du produit. Ces dernières ne sont pas couvertes par la présente attestation.

This EU Type Examination Certificate relates only to the design and construction of the specified product.
Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

11 Le marquage du produit est mentionné dans l'annexe de cette attestation.

The marking of the product is specified in the schedule to this certificate.

Fontenay-aux-Roses, le 15 juin 2016

Responsable de Certification
Certification Officer
Julien Gauthier

Seul le texte en français peut engager la responsabilité du LCIE. Ce document ne peut être reproduit que dans son intégralité, sans aucune modification. Il est établi en accord avec le référentiel de certification ATEX du LCIE. *The LCIE's liability applies only on the French text. This document may only be reproduced in its entirety and without any change. It is issued in accordance with LCIE's ATEX Certification Rules.*
CERT-ATEX-FORM-06 Rev. 02

Page 1 of 3

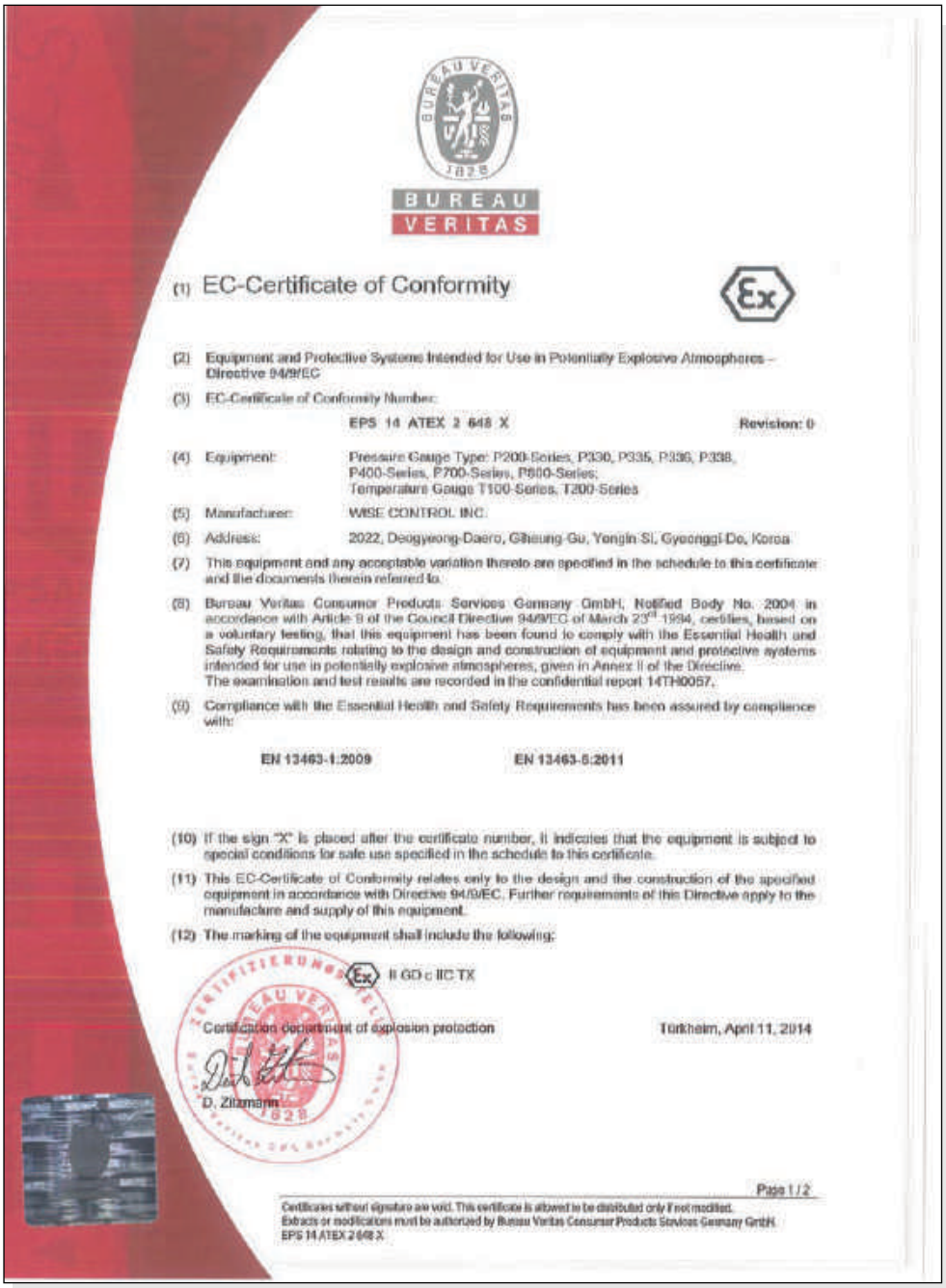
LCIE
Laboratoire Central des Industries Electriques
Une société de Bureau Veritas

33 Avenue du Général Leclerc
92260 Fontenay-aux-Roses
FRANCE

WWW.LCIE.FR

# Pressure & Temperature Instrument

## Explosion Proof Certificate - Constructional Safety (ATEX Ex II GD c IIC TX)



BUREAU VERITAS

(1) EC-Certificate of Conformity

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres – Directive 94/9/EC

(3) EC-Certificate of Conformity Number:

EPS 14 ATEX 2 648 X — Revision: 0

(4) Equipment: Pressure Gauge Type: P200-Series, P330, P335, P336, P338, P400-Series, P700-Series, P800-Series; Temperature Gauge T100-Series, T200-Series

(5) Manufacturer: WISE CONTROL INC.

(6) Address: 2022, Deogyeong-Daero, Giheung-Gu, Yongin-Si, Gyeonggi-Do, Korea

(7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) Bureau Veritas Consumer Products Services Germany GmbH, Notified Body No. 2004 in accordance with Article 9 of the Council Directive 94/9/EC of March 23rd 1994, certifies, based on a voluntary testing, that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II of the Directive. The examination and test results are recorded in the confidential report 14TH0057.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 13463-1:2009 EN 13463-5:2011

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-Certificate of Conformity relates only to the design and the construction of the specified equipment in accordance with Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this equipment.

(12) The marking of the equipment shall include the following:

Ex II GD c IIC TX

Certification department of explosion protection — Türkheim, April 11, 2014

D. Zitzmann

Page 1 / 2

Certificates without signature are void. This certificate is allowed to be distributed only if not modified. Extracts or modifications must be authorized by Bureau Veritas Consumer Products Services Germany GmbH.
EPS 14 ATEX 2 648 X

## Explosion Proof Certificate - Constructional Safety (ATEX Ex II GD c IIB TX)

BUREAU VERITAS

(1) EC-Certificate of Conformity

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres – Directive 94/9/EC

(3) EC-Certificate of Conformity Number:

EPS 14 ATEX 2 651 X Revision: 1

(4) Equipment: Pressure Gauge Type: P359
Temperature Gauge Type: T359

(5) Manufacturer: WISE CONTROL INC.

(6) Address: 2022, Deogyeong-Daero, Giheung-Gu, Yongin-Si, Gyeonggi-Do, Korea

(7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) Bureau Veritas Consumer Products Services Germany GmbH, Notified Body No. 2004 in accordance with Article 9 of the Council Directive 94/9/EC of March 23rd 1994, certifies, based on a voluntary testing, that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II of the Directive.
The examination and test results are recorded in the confidential report 14TH0057.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 13463-1:2009 EN 13463-5:2011

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-Certificate of Conformity relates only to the design and the construction of the specified equipment in accordance with Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this equipment.

(12) The marking of the equipment shall include the following:

Ex II GD c IIB TX

Certification department of explosion protection Türkheim, May 02, 2014

D. Zilzmann

Page 1/2

Certificates without signature are void. This certificate is allowed to be distributed only if not modified.
Extracts or modifications must be authorized by Bureau Veritas Consumer Products Services Germany GmbH.
EPS 14 ATEX 2 651 X Rev.1

# Pressure & Temperature Instrument

## 3-A Symbol Certificate

ISSUE DATE: January 30, 2006

CERTIFICATE AUTHORIZATION NUMBER: 1400

THIS IS TO CERTIFY THAT

WISE Control Inc.

2022 Deogyeong-Daero, Giheung-Gu, Yongin-Si 446-905 , Republic of Korea

is hereby authorized to continue to apply the
3-A Symbol to the models of equipment, conforming to 3-A Sanitary Standards for:

Number 74-06
74-06 (Sensors and Sensor Fittings and Connections)

set forth below

CIP Models: Pressure Transmitter Model P426, Sizes: 3/4 in. to 2 in.; Pressure Transmitter Model P427, Size: ¾ in.; Pressure Gauge Model P752S, Sizes: 3/4 in. to 2 in.; Pressure Gauge Model P753S, Size: 3/4 in.; RTD Models R231 and R232, Sizes: 1 in. to 2 in.; Thermometer Model T123, Sizes: 1 in. to 2 in.; Thermowell Model A603, Sizes: 1 in. to 2 in.

VALID THROUGH: **December 31, 2019**

Timothy R. Rugh
Executive Director
3-A Sanitary Standards, Inc.

The issuance of this authorization for the use of the 3-A Symbol is based upon the voluntary certification, by the applicant for it, that the equipment listed above complies fully with the 3-A Sanitary Standard(s) designated. Legal responsibility for compliance is solely that of the holder of this Certificate of Authorization, and 3-A Sanitary Standards, Inc. does not warrant that the holder of an authorization at all times complies with the provisions of the said 3-A Sanitary Standards. This in no way affects the responsibility of 3-A Sanitary Standards, Inc. to take appropriate action in such cases in which evidence of nonconformance has been established.

NEXT TPV INSPECTION/REPORT DUE: **February 2021**

## GOST-Pattern Approval - Pressure Gauge

ФЕДЕРАЛЬНОЕ АГЕНТСТВО
ПО ТЕХНИЧЕСКОМУ РЕГУЛИРОВАНИЮ И МЕТРОЛОГИИ

# СВИДЕТЕЛЬСТВО

об утверждении типа средств измерений

**KR.C.30.004.A № 58073**

**Срок действия до 27 февраля 2020 г.**

НАИМЕНОВАНИЕ ТИПА СРЕДСТВ ИЗМЕРЕНИЙ
**Манометры деформационные с трубчатой пружиной серии Р**

ИЗГОТОВИТЕЛЬ
**Фирма "WISE Control Inc.", Корея**

РЕГИСТРАЦИОННЫЙ № **60046-15**

ДОКУМЕНТ НА ПОВЕРКУ
**МИ 2124-90**

ИНТЕРВАЛ МЕЖДУ ПОВЕРКАМИ **2 года**

Тип средств измерений утвержден приказом Федерального агентства по техническому регулированию и метрологии от **27 февраля 2015 г. № 236**

Описание типа средств измерений является обязательным приложением к настоящему свидетельству.

Заместитель Руководителя
Федерального агентства С.С.Голубев

«11» 03 2015 г.

Серия СИ № 019508

# Pressure & Temperature Instrument

## GOST-Pattern Approval - Pressure Gauge (Diaphragm Type)

ФЕДЕРАЛЬНОЕ АГЕНТСТВО
ПО ТЕХНИЧЕСКОМУ РЕГУЛИРОВАНИЮ И МЕТРОЛОГИИ

СВИДЕТЕЛЬСТВО

об утверждении типа средств измерений

KR.C.30.004.A № 58072

Срок действия до 27 февраля 2020 г.

НАИМЕНОВАНИЕ ТИПА СРЕДСТВ ИЗМЕРЕНИЙ
Манометры деформационные мембранные серии Р

ИЗГОТОВИТЕЛЬ
Фирма "WISE Control Inc.", Корея

РЕГИСТРАЦИОННЫЙ № 60045-15

ДОКУМЕНТ НА ПОВЕРКУ
МИ 2124-90

ИНТЕРВАЛ МЕЖДУ ПОВЕРКАМИ 2 года

Тип средств измерений утвержден приказом Федерального агентства по техническому регулированию и метрологии от 27 февраля 2015 г. № 236

Описание типа средств измерений является обязательным приложением к настоящему свидетельству.

Заместитель Руководителя Федерального агентства С.С.Голубев

«11» 03 2015 г.

Серия СИ № 019348

## GOST-Pattern Approval - Differential Pressure Gauge

ФЕДЕРАЛЬНОЕ АГЕНТСТВО
ПО ТЕХНИЧЕСКОМУ РЕГУЛИРОВАНИЮ И МЕТРОЛОГИИ

# СВИДЕТЕЛЬСТВО

об утверждении типа средств измерений

**KR.C.30.004.A № 58071**

**Срок действия до 27 февраля 2020 г.**

НАИМЕНОВАНИЕ ТИПА СРЕДСТВ ИЗМЕРЕНИЙ
**Манометры дифференциальные P620, P640, P660, P670, P680, P690**

ИЗГОТОВИТЕЛЬ
**Фирма "WISE Control Inc.", Корея**

РЕГИСТРАЦИОННЫЙ № **60044-15**

ДОКУМЕНТ НА ПОВЕРКУ
**ГОСТ 8.146-75**

ИНТЕРВАЛ МЕЖДУ ПОВЕРКАМИ **2 года**

Тип средств измерений утвержден приказом Федерального агентства по техническому регулированию и метрологии от **27 февраля 2015 г. № 236**

Описание типа средств измерений является обязательным приложением к настоящему свидетельству.

Заместитель Руководителя
Федерального агентства

С.С.Голубев

«11» 03 2015 г.

Серия СИ

№ 019347

# Pressure & Temperature Instrument

## GOST-Pattern Approval - Temperature Gauge (T100)

ФЕДЕРАЛЬНОЕ АГЕНТСТВО
ПО ТЕХНИЧЕСКОМУ РЕГУЛИРОВАНИЮ И МЕТРОЛОГИИ

СВИДЕТЕЛЬСТВО

об утверждении типа средств измерений

KR.C.32.004.A № 57680

Срок действия до 23 января 2020 г.

НАИМЕНОВАНИЕ ТИПА СРЕДСТВ ИЗМЕРЕНИЙ
Термометры биметаллические T110, T120, T140, T190, T191

ИЗГОТОВИТЕЛЬ
Фирма "WISE Control Inc.", Корея

РЕГИСТРАЦИОННЫЙ № 59702-15

ДОКУМЕНТ НА ПОВЕРКУ
МП 59702-15

ИНТЕРВАЛ МЕЖДУ ПОВЕРКАМИ 2 года

Тип средств измерений утвержден приказом Федерального агентства по техническому регулированию и метрологии от 23 января 2015 г. № 69

Описание типа средств измерений является обязательным приложением к настоящему свидетельству.

Заместитель Руководителя
Федерального агентства

Ф.В.Булыгин

02 03 2015 г.

Серия СИ

№ 018679

## GOST-Pattern Approval - Resistance Temperature Detector

ФЕДЕРАЛЬНОЕ АГЕНТСТВО
ПО ТЕХНИЧЕСКОМУ РЕГУЛИРОВАНИЮ И МЕТРОЛОГИИ

# СВИДЕТЕЛЬСТВО

об утверждении типа средств измерений

**KR.C.32.004.A № 57401**

**Срок действия до 19 декабря 2019 г.**

НАИМЕНОВАНИЕ ТИПА СРЕДСТВ ИЗМЕРЕНИЙ
**Термопреобразователи сопротивления платиновые серии R**

ИЗГОТОВИТЕЛЬ
**Фирма "WISE Control Inc.", Корея**

РЕГИСТРАЦИОННЫЙ № **59444-14**

ДОКУМЕНТ НА ПОВЕРКУ
**ГОСТ 8.461-2009**

ИНТЕРВАЛ МЕЖДУ ПОВЕРКАМИ **2 года;**
**ТС модификации R810, R820, R830 подлежат первичной поверке до ввода в эксплуатацию**

Тип средств измерений утвержден приказом Федерального агентства по техническому регулированию и метрологии от **19 декабря 2014 г. № 2071**

Описание типа средств измерений является обязательным приложением к настоящему свидетельству.

Заместитель Руководителя
Федерального агентства — Ф.В.Булыгин

«30» 12 2014 г.

Серия СИ — № 018263

# Pressure & Temperature Instrument

## GOST-Pattern Approval - Temperature Gauge (T200)

ФЕДЕРАЛЬНОЕ АГЕНТСТВО
ПО ТЕХНИЧЕСКОМУ РЕГУЛИРОВАНИЮ И МЕТРОЛОГИИ

**СВИДЕТЕЛЬСТВО**

об утверждении типа средств измерений

**KR.C.32.004.A № 57402**

**Срок действия до 19 декабря 2019 г.**

НАИМЕНОВАНИЕ ТИПА СРЕДСТВ ИЗМЕРЕНИЙ
**Термометры манометрические серии Т**

ИЗГОТОВИТЕЛЬ
**Фирма "WISE Control Inc.", Корея**

РЕГИСТРАЦИОННЫЙ № **59445-14**

ДОКУМЕНТ НА ПОВЕРКУ
**ГОСТ 8.305-78**

ИНТЕРВАЛ МЕЖДУ ПОВЕРКАМИ **2 года**

Тип средств измерений утвержден приказом Федерального агентства по техническому регулированию и метрологии от **19 декабря 2014 г. № 2071**

Описание типа средств измерений является обязательным приложением к настоящему свидетельству.

Заместитель Руководителя
Федерального агентства — Ф.В.Булыгин

«30» 12 2014 г.

Серия СИ — № 018264

## GOST-Pattern Approval - Thermocouple

ФЕДЕРАЛЬНОЕ АГЕНТСТВО
ПО ТЕХНИЧЕСКОМУ РЕГУЛИРОВАНИЮ И МЕТРОЛОГИИ

# СВИДЕТЕЛЬСТВО

об утверждении типа средств измерений

**KR.C.32.004.A № 57403**

**Срок действия до 19 декабря 2019 г.**

НАИМЕНОВАНИЕ ТИПА СРЕДСТВ ИЗМЕРЕНИЙ
**Преобразователи термоэлектрические серии R**

ИЗГОТОВИТЕЛЬ
**Фирма "WISE Control Inc.", Корея**

РЕГИСТРАЦИОННЫЙ № **59446-14**

ДОКУМЕНТЫ НА ПОВЕРКУ
**ГОСТ 8.338-2002 и МИ 3090-2007**

ИНТЕРВАЛ МЕЖДУ ПОВЕРКАМИ **2 года; 1 год - для ТП с НСХ "R"; "S"; "B"**

Тип средств измерений утвержден приказом Федерального агентства по техническому регулированию и метрологии от **19 декабря 2014 г. № 2071**

Описание типа средств измерений является обязательным приложением к настоящему свидетельству.

Заместитель Руководителя
Федерального агентства

Ф.В.Булыгин

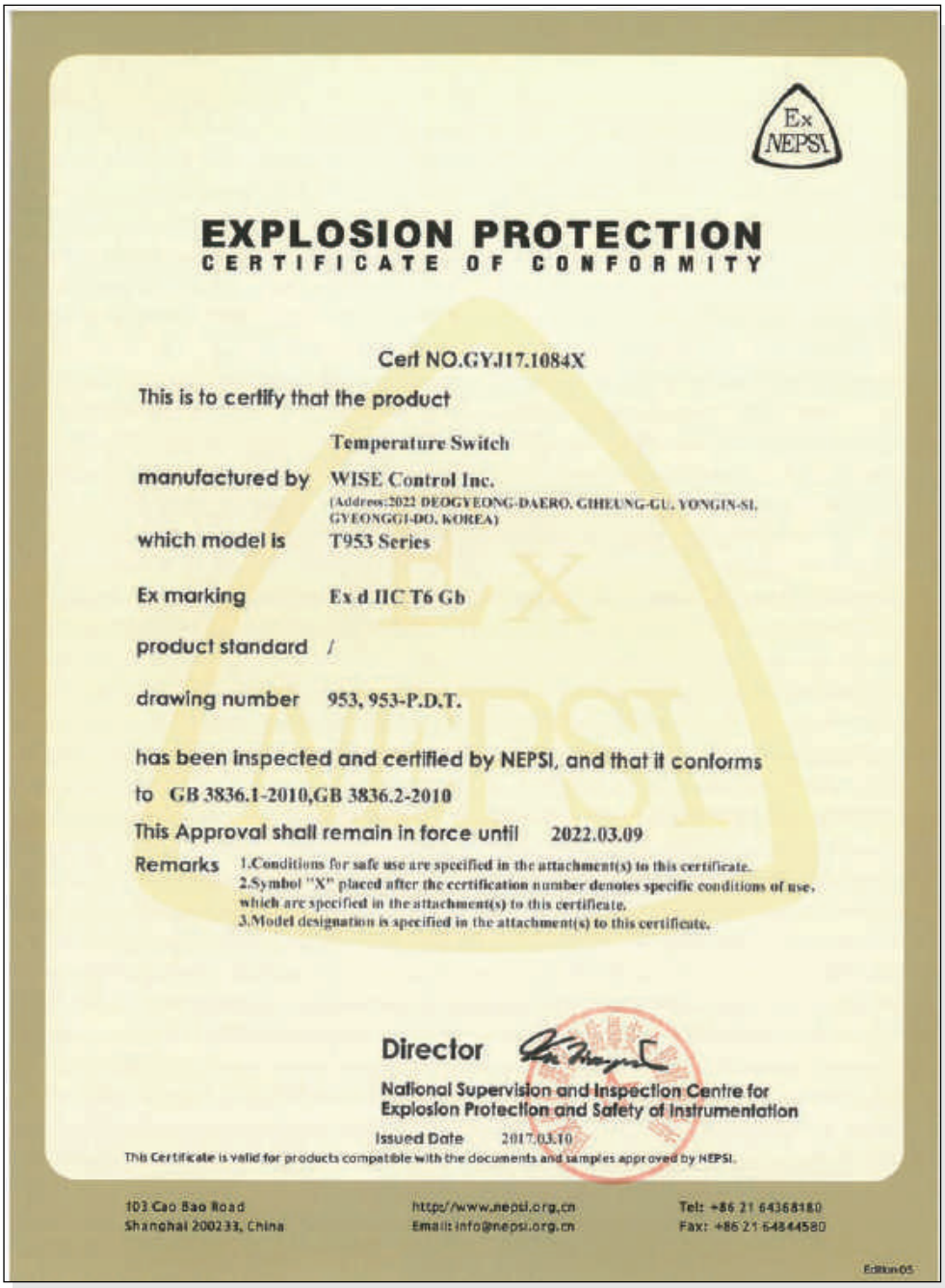
«30» 12 2014 г.

Серия СИ

№ 018265

# Pressure & Temperature Instrument

## Explosion Proof Certificate - Flame Proof (Ex d IIC T6 Gb)



Ex NEPSI

**EXPLOSION PROTECTION**
**CERTIFICATE OF CONFORMITY**

Cert NO.GYJ17.1084X

This is to certify that the product

Temperature Switch

manufactured by WISE Control Inc.
(Address:2022 DEOGYEONG-DAERO, GIHEUNG-GU, YONGIN-SI, GYEONGGI-DO, KOREA)

which model is T953 Series

Ex marking Ex d IIC T6 Gb

product standard /

drawing number 953, 953-P.D.T.

has been inspected and certified by NEPSI, and that it conforms to GB 3836.1-2010,GB 3836.2-2010

This Approval shall remain in force until 2022.03.09

Remarks
1.Conditions for safe use are specified in the attachment(s) to this certificate.
2.Symbol "X" placed after the certification number denotes specific conditions of use, which are specified in the attachment(s) to this certificate.
3.Model designation is specified in the attachment(s) to this certificate.

Director

National Supervision and Inspection Centre for Explosion Protection and Safety of Instrumentation

Issued Date 2017.03.10

This Certificate is valid for products compatible with the documents and samples approved by NEPSI.

103 Cao Bao Road
Shanghai 200233, China

http://www.nepsi.org.cn
Email: info@nepsi.org.cn

Tel: +86 21 64368180
Fax: +86 21 64844580

Edition:05

## Explosion Proof Certificate - Intrinsic Safety (Ex ia IIC T6 Ga)

Ex NEPSI

# EXPLOSION PROTECTION
## CERTIFICATE OF CONFORMITY

Cert NO.GYJ15.1315X

This is to certify that the product

Inductive Contact Type Differential Pressure Gauge

manufactured by WISE Control Inc.
(Address:202DEOGYEONG-DAERO,GIHEUNG-GU,YONGINSI,GYEONGGI-DO,KOREA)

which model is P69 Series

Ex marking Ex ia II C T6 Ga

product standard /

drawing number P690

has been inspected and certified by NEPSI, and that it conforms to GB 3836.1-2010,GB 3836.4-2010,GB 3836.20-2010

This Approval shall remain in force until 2020.11.04

Remarks
1.Conditions for safe use are specified in the attachment(s) to this certificate.
2.Symbol "X" placed after the certification number denotes specific conditions of use, which are specified in the attachment(s) to this certificate.
3.Model designation is specified in the attachment(s) to this certificate.
4.Intrinsic safety parameters specified in the attachment(s) to this certificate.

Director

National Supervision and Inspection Centre for Explosion Protection and Safety of Instrumentation

Issued Date 2015.11.05

This Certificate is valid for products compatible with the documents and samples approved by NEPSI.

103 Cao Bao Road
Shanghai 200233, China

http://www.nepsi.org.cn
Email: info@nepsi.org.cn

Tel: +86 21 64368180
Fax: +86 21 64844580

Edition 05

# Pressure, Temperature, Flow & Level Instrument

## Pressure Equipment Directive(2014/68/EU) Annex III Module H

TÜV NORD

# CERTIFICATE

**Conformity based on full quality assurance according to directive 2014/68/EU**

**Certificate No.:** **07/202/9160/Z/0608/17/D/009**

**Name and address of manufacturer:** **WISE CONTROL Inc.**
2022, Deogyeong-daero, Giheung-gu, Yongin-si, Gyeonggi-do, Korea

We hereby certify that the manufacturer has established a **quality system** for the manufacturing of pressure equipment according to directive 2014/68/EU. The manufacturer is entitled to mark the pressure equipment produced within the range of the quality system with the following mark:

CE 0045

| | |
|---|---|
| Tested according to 2014/68/EU: | **Module H** |
| Audit report No.: | **9160/P/0608/17/D/009** |
| Range of products: | **Design and Manufacturing of Pressure instrument, Pressure gauge accessary, Flow element and Level instrument.** (Detail of the scope is mentioned in the annex of the certificate) |
| Place of manufacture: | 2022, Deogyeong-daero, Giheung-gu, Yongin-si, Gyeonggi-do, Korea |
| This certificate is valid until: | **04/2020** |

Hamburg, 26.04. 2017

notified body TÜV NORD 0045 TÜV NORD Systems

Notified Body (0045)
for pressure equipment

**Dipl.-Ing. Arne Witt**
TÜV NORD Systems GmbH & Co. KG,
Große Bahnstraße 31, D-22525 Hamburg

Annex 1: detail certification scope

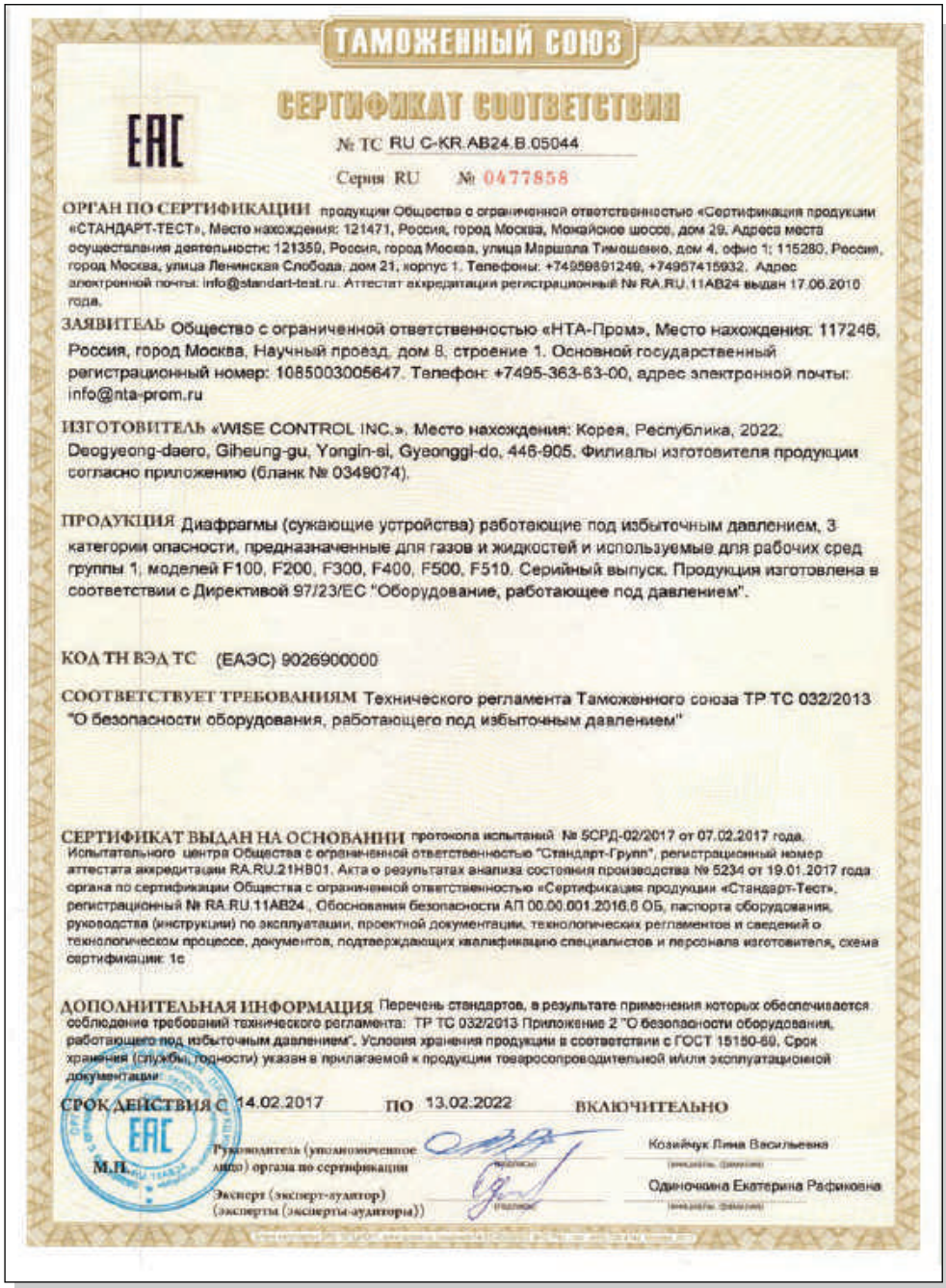
Region: Technikzentrum

Tel. +49-(0) 40 8557 2009
Fax +49-(0) 40 8557 2187
e-mail awitt@tuev-nord.de

Mitglied der CEOC

D:_QA-System eng Rev. 007.18

## TRCU (Technical Reulation of Customs Union)



ТАМОЖЕННЫЙ СОЮЗ

ЕАС

СЕРТИФИКАТ СООТВЕТСТВИЯ

№ ТС RU C-KR.AB24.B.05044

Серия RU № 0477858

ОРГАН ПО СЕРТИФИКАЦИИ продукции Общества с ограниченной ответственностью «Сертификация продукции «СТАНДАРТ-ТЕСТ», Место нахождения: 121471, Россия, город Москва, Можайское шоссе, дом 29. Адреса места осуществления деятельности: 121359, Россия, город Москва, улица Маршала Тимошенко, дом 4, офис 1; 115280, Россия, город Москва, улица Ленинская Слобода, дом 21, корпус 1. Телефоны: +74959891249, +74957415932. Адрес электронной почты: info@standart-test.ru. Аттестат аккредитации регистрационный № RA.RU.11AB24 выдан 17.06.2010 года.

ЗАЯВИТЕЛЬ Общество с ограниченной ответственностью «НТА-Пром», Место нахождения: 117246, Россия, город Москва, Научный проезд, дом 8, строение 1. Основной государственный регистрационный номер: 1085003005647. Телефон: +7495-363-63-00, адрес электронной почты: info@nta-prom.ru

ИЗГОТОВИТЕЛЬ «WISE CONTROL INC.», Место нахождения: Корея, Республика, 2022, Deogyeong-daero, Giheung-gu, Yongin-si, Gyeonggi-do, 446-905. Филиалы изготовителя продукции согласно приложению (бланк № 0349074).

ПРОДУКЦИЯ Диафрагмы (сужающие устройства) работающие под избыточным давлением, 3 категории опасности, предназначенные для газов и жидкостей и используемые для рабочих сред группы 1, моделей F100, F200, F300, F400, F500, F510. Серийный выпуск. Продукция изготовлена в соответствии с Директивой 97/23/ЕС "Оборудование, работающее под давлением".

КОД ТН ВЭД ТС (ЕАЭС) 9026900000

СООТВЕТСТВУЕТ ТРЕБОВАНИЯМ Технического регламента Таможенного союза ТР ТС 032/2013 "О безопасности оборудования, работающего под избыточным давлением"

СЕРТИФИКАТ ВЫДАН НА ОСНОВАНИИ протокола испытаний № 5СРД-02/2017 от 07.02.2017 года. Испытательного центра Общества с ограниченной ответственностью "Стандарт-Групп", регистрационный номер аттестата аккредитации RA.RU.21HB01. Акта о результатах анализа состояния производства № 5234 от 19.01.2017 года органа по сертификации Общества с ограниченной ответственностью «Сертификация продукции «Стандарт-Тест», регистрационный № RA.RU.11AB24., Обоснования безопасности АП 00.00.001.2016.6 ОБ, паспорта оборудования, руководства (инструкции) по эксплуатации, проектной документации, технологических регламентов и сведений о технологическом процессе, документов, подтверждающих квалификацию специалистов и персонала изготовителя, схема сертификации: 1с

ДОПОЛНИТЕЛЬНАЯ ИНФОРМАЦИЯ Перечень стандартов, в результате применения которых обеспечивается соблюдение требований технического регламента: ТР ТС 032/2013 Приложение 2 "О безопасности оборудования, работающего под избыточным давлением". Условия хранения продукции в соответствии с ГОСТ 15150-69. Срок хранения (службы, годности) указан в прилагаемой к продукции товаросопроводительной и/или эксплуатационной документации

СРОК ДЕЙСТВИЯ С 14.02.2017 ПО 13.02.2022 ВКЛЮЧИТЕЛЬНО

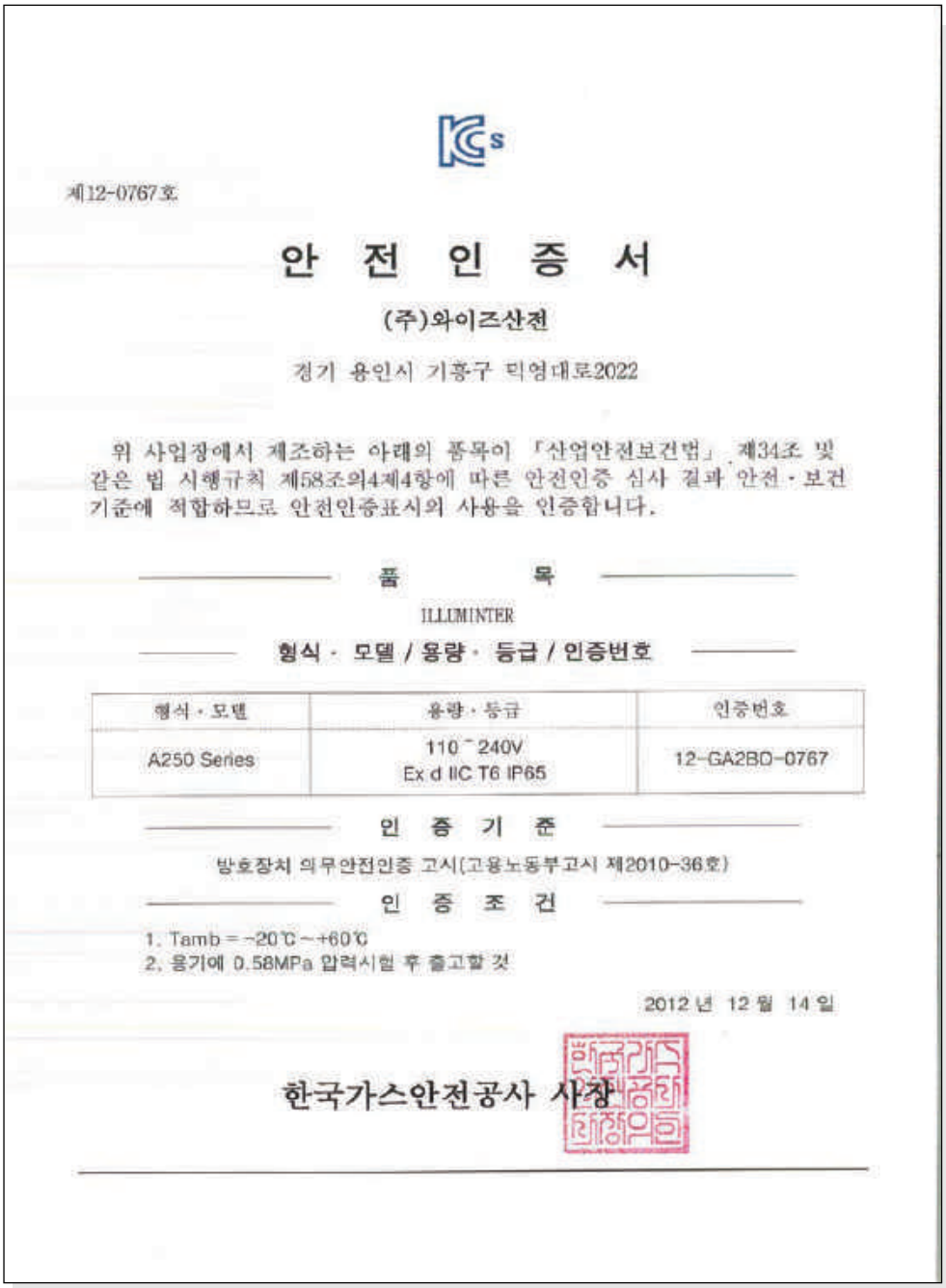
М.П.

Руководитель (уполномоченное лицо) органа по сертификации — Козийчук Лина Васильевна

Эксперт (эксперт-аудитор) (эксперты (эксперты-аудиторы)) — Одиночкина Екатерина Рафиковна

# Flow & Level Instrument

## Explosion Proof Certificate - Flame Proof (Ex d IIC T6 IP65)



제12-0767호

안 전 인 증 서

(주)와이즈산전

경기 용인시 기흥구 덕영대로2022

위 사업장에서 제조하는 아래의 품목이 「산업안전보건법」 제34조 및 같은 법 시행규칙 제58조의4제4항에 따른 안전인증 심사 결과 안전·보건 기준에 적합하므로 안전인증표시의 사용을 인증합니다.

품 목

ILLUMINTER

형식 · 모델 / 용량 · 등급 / 인증번호

| 형식 · 모델 | 용량 · 등급 | 인증번호 |
|---|---|---|
| A250 Series | 110 ~ 240V<br>Ex d IIC T6 IP65 | 12-GA2BD-0767 |

인 증 기 준

방호장치 의무안전인증 고시(고용노동부고시 제2010-36호)

인 증 조 건

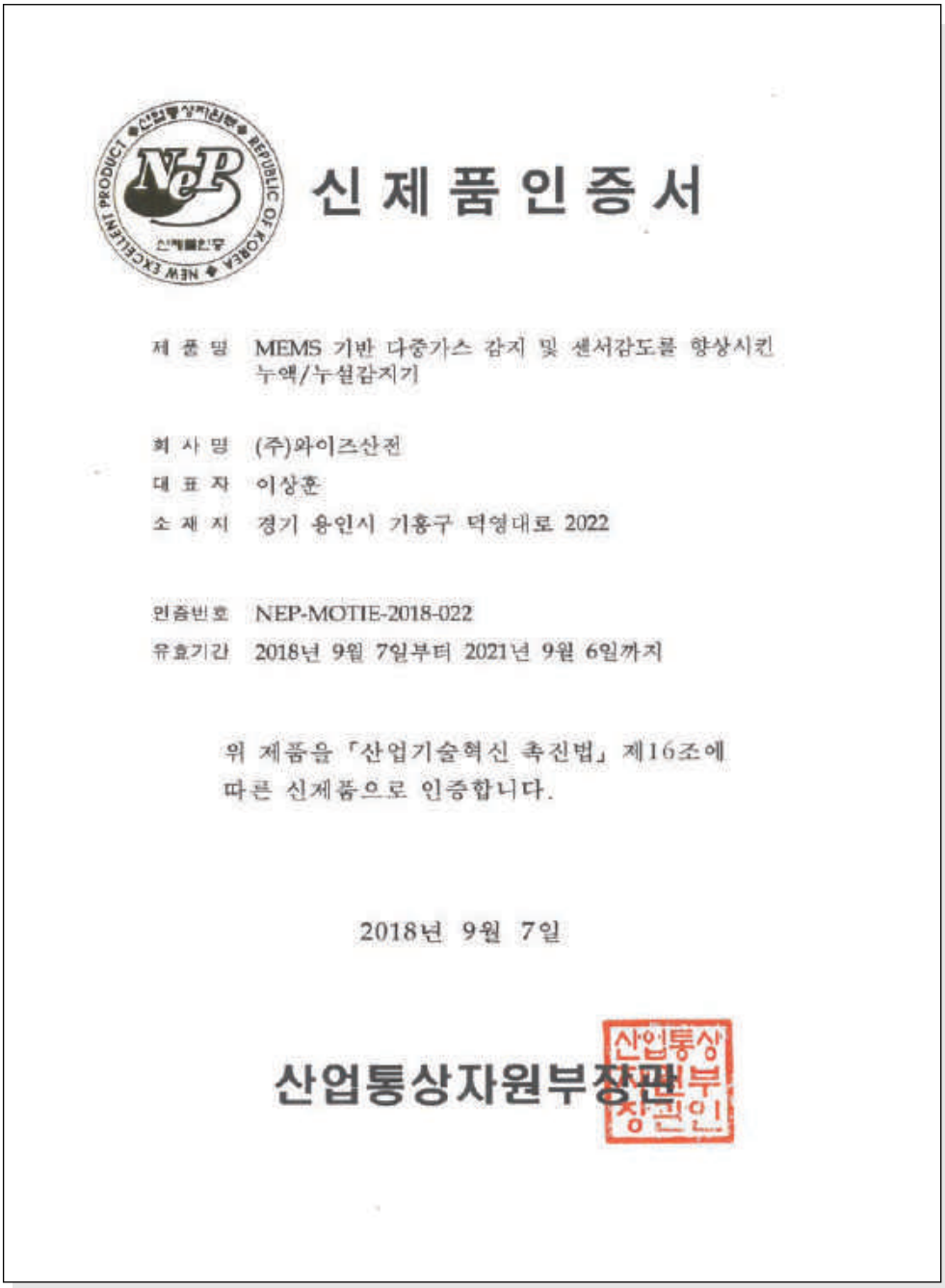
1. Tamb = -20℃ ~ +60℃
2. 용기에 0.58MPa 압력시험 후 출고할 것

2012 년 12 월 14 일

한국가스안전공사 사장

# Gas Instrument

## NEP (New Excellent Product)



# 신 제 품 인 증 서

제 품 명 MEMS 기반 다중가스 감지 및 센서감도를 향상시킨 누액/누설감지기

회 사 명 (주)와이즈산전

대 표 자 이상훈

소 재 지 경기 용인시 기흥구 덕영대로 2022

인증번호 NEP-MOTIE-2018-022

유효기간 2018년 9월 7일부터 2021년 9월 6일까지

위 제품을 「산업기술혁신 촉진법」 제16조에 따른 신제품으로 인증합니다.

2018년 9월 7일

산업통상자원부장관

산업통상자원부 장관인

# Gas Instrument

## Explosion Proof Certificate - Flame Proof (Ex d IIC T6 IP65)

제18-0411호

**안 전 인 증 서**

㈜와이즈산전

경기도 용인시 기흥구 덕영대로 2022

위 사업장에서 제조하는 아래의 품목이 「산업안전보건법」 제34조 및 같은 법 시행규칙 제58조의4제4항에 따른 안전인증 심사 결과 안전·보건기준에 적합하므로 안전인증표시의 사용을 인증합니다.

품 목

무선 누액 누설감지기
(Wireless Leak Detector)

형식 · 모델 / 용량 · 등급 / 인증번호

| 형식·모델 | 용량 · 등급 | 인증번호 |
|---|---|---|
| GLD1000 (Direct Type) | DC 24V, 10mA, DC 3.6V(Battery), 30mA | 18-GA2BO-0411X |
| | Ex de IIC T6(IP65) | |

인 증 기 준

방호장치 안전인증 고시(고용노동부고시 제2016-54호)

인 증 조 건

가. -20 ℃≤Tamb≤ +70 ℃, 뒷면 사용조건 참조
나. 가스탐지부 Sinter 부분은 IP등급에서 제외

2018 년 07 월 26 일

한국가스안전공사 사장

복사본 COPY

## Explosion Proof Certificate - Flame Proof (Ex de IIC T6 IP65)

제18-0412호

# 안 전 인 증 서

㈜와이즈산전

경기도 용인시 기흥구 덕영대로 2022

위 사업장에서 제조하는 아래의 품목이 「산업안전보건법」 제34조 및 같은 법 시행규칙 제58조의4제4항에 따른 안전인증 심사 결과 안전·보건기준에 적합하므로 안전인증표시의 사용을 인증합니다.

품 목

무선 누액 누설감지기
(Wireless Leak Detector)

형식 · 모델 / 용량 · 등급 / 인증번호

| 형식·모델 | 용량 · 등급 | 인증번호 |
|---|---|---|
| GLD1000 (Remote Type) | DC 24V, 10mA, DC 3.6V(Battery), 30mA | 18-GA2BO-0412X |
| | Ex de IIC T6(IP65) | |

인 증 기 준

방호장치 안전인증 고시(고용노동부고시 제2016-54호)

인 증 조 건

가. -20 ℃≤Tamb≤ +70 ℃, 뒷면 사용조건 참조
나. 가스탐지부 Sinter 부분은 IP등급에서 제외

2018 년 07 월 26 일

한국가스안전공사 사장

복사본 COPY

Overseas Vendor Registration Status

section 05

# Overseas Vendor Registration Status

# Overseas vendor Registration Status

## PRESSURE

| | |
|---|---|
| **PG** | Pressure Gauge |
| **PS** | Pressure Switch |
| **DP** | Differential PG |
| **ACC** | Accessories |
| **PT** | Pressure Transmitters |

## TEMPERATURE

| | |
|---|---|
| **TG** | Temperature Gauge I Thermometer |
| **TC** | Thermocouple |
| **TW** | Thermowell |
| **RTD** | Resistance Temperature Detector |
| **TS** | Temperature Switch |
| **TT** | Temperature Transmitter |

## FLOW & LEVEL

### FLOW

| | |
|---|---|
| **OF** | Orifice Flange & Asemblies |
| **FS** | Flow Switch |
| **VC** | Venturi Cone |

### LEVEL

| | |
|---|---|
| **GG** | Level Gauge Glass |
| **OP** | Orifice Plate |
| **FM** | Flow Meter |
| **FN** | Flow Nozzle |
| **FT** | Flow Transmitter |
| **LG** | Level Gauge |
| **LT** | Level Transmitter |

## SIGHT GLASS

| | |
|---|---|
| **SG** | Sight Glass |

### GAS DETECTORS

| | |
|---|---|
| **GD** | Gas detector |
| **FD** | Fire detector |

| COMPANY NAME | LOCATION | REGISTERED ITEMS |
|---|---|---|
| KUWAIT | | |
| **KOC** (KUWAIT OIL COMPANY) | KUWAIT | PG, PS / TG, TW, TS |
| **KNPC** (KUWAIT NATIONAL PETROLEUM COMPANY) | KUWAIT | PG, PS / TG, TW, TS, RTD, TC, FS |
| KINGDOM OF SAUDI ARABIA | | |
| **SABIC** (SAUDI BASIC INDUSTRY CORPORATION) | SAUDI ARABIA | PG, PS / TG, TS |
| **SEC** (SAUDI ELECTRICITY COMPANY) | SAUDI ARABIA | PG, PS / TG, TC, TS, TW / OF, FM, GG / GD, VT |
| **SWCC** (SALINE WATER CONVERSION CORPORATION) | SAUDI ARABIA | TG, RTD, TW, PG |
| BAHRAIN | | |
| **EWAB** (ELECTRICITY & WATER AUTHORITY OF BAHRAIN) | BAHRAIN | PG, PS, TG, TC, TW, TS, RTD, LG, GG, FM, VT, OP, OF, GD, FD |
| U.A.E | | |
| **ADWEA** (ABU DHABI WATER & ELECTRICITY AUTHORITY) | ABU DHABI | PG, PS, PT, TG, TT, TC, RTD, TW / OP, OF, FM, FS, FN, LG, LT, LS |
| **ADGAS** (ABU DHABI GAS LIQUEFACTION COMPANY) | ABU DHABI | PG, PS, TG, TT, TC, RTD, TW / OP, OF, FM, FS, FN, VT / LG, GG, SG |
| **ADNOC** (ABU DHABI NATIONAL OIL COMPANY) | ABU DHABI | PG, PS, PT, TG, TT, TC, RTD, TW / OP, OF, FM, FS, FN, VT / LG, LT, LS, SG |
| **GASCO** (ABU DHABI GAS INDUSTRIES LIMITED) | ABU DHABI | PG, PS, PT, TG, TT, TC, RTD, TW / OP, OF, FM, FN, VT / LG, GG, LT, LS, SG |
| **TAKREER** (ABU DHABI REFINING COMPANY) | ABU DHABI | PG, PS, TG, TC, RTD, TW, FM, VT / LG, SG |
| QATAR | | |
| **QATAR PETROLEUM** (QUTAR PETROLEUM) | QUTAR | PG, TG, RTD, TC, TW, LG, FE |
| THAILAND | | |
| **PTT** (PETROLEUM AUTHORITY OF THAILAND) | THAILAND | PG / TG |
| **IRPC** (IRPC PUBLIC COMPANY LIMITED) | THAILAND | PG / TG, TC, TW, RTD |
| IRAN | | |
| **NIGC** (NATIONAL IRANIAN GAS COMPANY) | IRAN | PG, TG, RTD, TC, TW, PT, TT, PS, TS, LS |
| MALAYSIA | | |
| **PETRONAS** (PETRONAS) | MALAYSIA | PG, DPG, TG, TS, SG, PS, FE, OP, VT, FN, LG, TW, TC, RTD |
| TAIWAN | | |
| **CTCI** | TAIWAN | PG,TG,PS,TS,PT,TT,FM,OF,LG,NZ,VT,SG,RTD,TC,TW,VALVE, MULTI/SKIN TC,GAS DETECTOR,BELLOWS |

# Overseas vendor Registration Status

## KOC

10/03/2013 14:01 00965-23984967 PURCH. TEAM PAGE 01

TO: M/s. Wise Control Inc.,
Korea
Fax No.: 0082 31 281 6800

Date : 05th March 2013
Msg. No.: RQAN/1342/6640/2013
Total No. of Pages: 1

FROM: Ag. Team Leader Supplier Relationship Management
Commercial Support Group
P.O. Box – 9758, 61008 Ahmadi, Kuwait
Fax No.: (965) 23989418

SUBJECT: **RE-QUALIFICATION OF VENDOR APPROVAL NOTIFICATION**

OUR REF.: **VEC-3785/IN/PG/RQF/6640/2013**

Dear Sirs,

We are pleased to inform you that your application to retain you in KOC approved list of manufacturers has been approved for the product category and manufacturing facility mentioned here below:

PRODUCT CATEGORY : **PRESSURE / DIFFERENTIAL PRESSURE GAUGES**

FACILITY ADDRESS : **M/s. WISE CONTROL INC., A.B.DONG (SANGGAL-DONG (CORP.) WISE SANJEON), DEOGYEONG-DAERO 2022, GIHEUNG-GU, YONGIN-SI, GYEONGGI-DO, KOREA**

Validity : **From 05th March 2013 to 04th March 2018 (5 years)**

Earlier Approvals : **VEC/IN/PG/011/98 dated 18th October 1998 as M/s. Woojin Industrial System Engineering Inc., Korea**
: **VEC-3785/IN/PG/RQF/5596/2007 dated 23rd July 2007**

This notification of approval is issued subject to the following, failing which liable for cancellation at any time at the discretion of KOC:-

- To update regularly with the latest product catalogue / information.
- To furnish Budgetary Quotations as & when requested.
- To furnish Audited financial details for every two years.
- To update with latest contact details / Change in Local Agent.
- To update with Name Change / Merging / Factory Shifting.
- To submit request for Re-Qualification (if required) 3 months prior to the date of expiry.

Sincerely,
**For Kuwait Oil Company**

**Tariq-Al-Masoud**
cc: M/s. Rezayat Trading Company Ltd., Kuwait; Fax:- 2 481 0270
File

QF/CAG/PUR/14

## KOC

10/03/2013 14:01 00965-23984967 PURCH. TEAM PAGE 02

Date : 05th March 2013
Msg. No.: RQAN/1341/6639/2013
Total No. of Pages: 1

TO: M/s. Wise Control Inc.,
Korea
Fax No.: 0082 31 281 6800

FROM: Ag. Team Leader Supplier Relationship Management
Commercial Support Group
P.O. Box – 9758, 61008 Ahmadi, Kuwait
Fax No.: (965) 23989418

SUBJECT: **RE-QUALIFICATION OF VENDOR APPROVAL NOTIFICATION**

OUR REF.: **VEC-3786/IN/PTS/RQF/6639/2013**

Dear Sirs,

We are pleased to inform you that your application to retain you in KOC approved list of manufacturers has been approved for the product category and manufacturing facility mentioned here below:

| | |
|---|---|
| PRODUCT CATEGORY | : **PRESSURE & TEMPERATURE SWITCHES** |
| FACILITY ADDRESS | : **M/s. WISE CONTROL INC., A.B.DONG (SANGGAL-DONG (CORP.) WISE SANJEON), DEOGYEONG-DAERO 2022, GIHEUNG-GU, YONGIN-SI, GYEONGGI-DO, KOREA** |
| Validity | : **From 05th March 2013 to 04th March 2018 (5 years)** |
| Earlier Approvals | : **VEC/IN/PTS/014/98 dated 18th October 1998 as M/s. Woojin Industrial System Engineering Inc., Korea** |
| | : **VEC-3786/IN/PTS/RQF/5748/2007 dated 23rd July 2007** |

This notification of approval is issued subject to the following, failing which liable for cancellation at any time at the discretion of KOC:-

- To update regularly with the latest product catalogue / information.
- To furnish Budgetary Quotations as & when requested.
- To furnish Audited financial details for every two years.
- To update with latest contact details / Change in Local Agent.
- To update with Name Change / Merging / Factory Shifting.
- To submit request for Re-Qualification (if required) 3 months prior to the date of expiry.

Sincerely,
**For Kuwait Oil Company**

**Tariq-Al-Masoud**
cc: M/s. Rezayat Trading Company Ltd., Kuwait; Fax:- 2 481 0270
File

QF/CAG/PUR/14

## KOC

10/03/2013 14:01 00965-23984967 PURCH. TEAM PAGE 03

Kuwait Oil Company

TO: M/s. Wise Control Inc.,
Korea
Fax No.: 0082 31 281 6800

Date : 05th March 2013
Msg. No.: RQAN/1340/6638/2013
Total No. of Pages: 1

FROM: Ag. Team Leader Supplier Relationship Management
Commercial Support Group
P.O. Box – 9758, 61008 Ahmadi, Kuwait
Fax No.: (965) 23989418

SUBJECT: **RE-QUALIFICATION OF VENDOR APPROVAL NOTIFICATION**

OUR REF.: **VEC-2935/IN/TG/RQF/6638/2013**

Dear Sirs,

We are pleased to inform you that your application to retain you in KOC approved list of manufacturers has been approved for the product category and manufacturing facility mentioned here below:

PRODUCT CATEGORY : **TEMPERATURE GAUGES (WITH THERMOWELLS)**

FACILITY ADDRESS : **M/s. WISE CONTROL INC.,
A.B.DONG (SANGGAL-DONG (CORP.) WISE SANJEON),
DEOGYEONG-DAERO 2022, GIHEUNG-GU, YONGIN-SI,
GYEONGGI-DO, KOREA**

Validity : **From 05th March 2013 to 04th March 2018 (5 years)**

Earlier Approvals : **VEC/IN/TG/008/98 dated 14th November 1998 as M/s. Woojin Industrial System Engineering Inc., Korea**
: **VEC-2935/IN/TG/RQF/5797/2007 dated 23rd July 2007**

This notification of approval is issued subject to the following, failing which liable for cancellation at any time at the discretion of KOC:-

- To update regularly with the latest product catalogue / information.
- To furnish Budgetary Quotations as & when requested.
- To furnish Audited financial details for every two years.
- To update with latest contact details / Change in Local Agent.
- To update with Name Change / Merging / Factory Shifting.
- To submit request for Re-Qualification (if required) 3 months prior to the date of expiry.

Sincerely,
**For Kuwait Oil Company**

**Tariq-Al-Masoud**
cc: M/s. Rezayat Trading Company Ltd., Kuwait; Fax:- 2 481 0270
File

## KNPC

شركة البترول الوطنية الكويتية

إحدى شركات مؤسسة البترول الكويتية
A Subsidiary of Kuwait Petroleum Corporation

KNPC

**VENDORS & CONTRACTORS EVALUATION COMMITTEE**

# Vendor Registration Certificate

This document certifies that the manufacturing facility of

M/s. WISE CONTROL INC., SOUTH KOREA.,
199, SANGGAL DONG, GIHEUNG GU,
YONGIN CITY, KYUNGGI DO,
KOREA.

have been assessed and approved to supply of the following product(s) for KNPC refineries

| Product | | Description |
|---|---|---|
| 46 | 72 | FLOW SWITCHES |
| 46 | 77 | TEMPERATURE INSTRUMENT NON CONTACT |
| 46 | 78 | THERMOWELLS/THERMOCOUPLES/RTDs/TEMPERATURE GAUGES |
| 46 | 80 | PRESSURE SWITCHES |
| 46 | 81 | TEMPERATURE SWITCHES |
| 46 | 90 | PRESSURE GAUGES |

Ahmad Al- Tabtabai
Chairman V & CEC

Revalidation Approval: 02/01/2013
Approval Expiry: 30/06/2018
Code Number: 277124

PLEASE REFER OVERLEAF FOR INSTRUCTIONS TO THE VENDOR

Head Office : Kuwait National Petroleum Company - P.O. Box : 70 Safat 13001, Safat - Kuwait - Tel.:23989900 www.knpc.com C.R : 8149 Capital : 260,000,000

## SABIC

AUG.03'2008 14:43 00966 3 3401850 SQ SMO #0551 P.001/001

SHARED SERVICES **SABIC** سابك

Date: 03-Aug-08

Total Pages: 1

| | |
|---|---|
| Vendor No.: | 204295 |
| Vendor Name: | WISE CONTROL INC |
| Telephone: | 0082-312805114 |
| Fax: | 0082-312816800 |
| E-mail: | chlee@wisecontrol.com |
| Attention: | MR. C H. LEE |
| Subject: | QUALIFICATION |

Dear Supplier,

Based on business needs, we are pleased to report that you have been qualified as vendor of Saudi Basic Industries Corporation (SABIC).

Qualification means that you are eligible to receive requests for quotations and orders for the designated materials and / or services. However, there is no guarantee that you will receive any such requests or orders.

Please indicate your Vendor Number as mentioned above when communicating with SABIC for easy reference.

Thank you for your interest in being a supplier to SABIC.

Best regards,

**Abdullah A. Al-Thukair**

Vendor Evaluation Sr. Analyst
Supplier Qualification Section - Projects and Turnaround Dept.
SABIC Shared Services Supply Management Organization
Phone: + 966-3-340-1847
Fax: + 966-3-340-1850
E-mail: thukairaa2@sabic.com

NOTE:
For Supplier information update, please contact the following
Saudi Basic Industries Corporation (SABIC)
Shared Services - Supply Management Organization (SMO)
Projects & T/A Dept. - Supplier Qualification Section
P. O. Box 11115, Jubail Industrial City 31961
Kingdom of Saudi Arabia
TEL : +966-(3)-340-1808 / 1803 / 1872 / 1819
FAX : +966-(3)-340-1850
EMAIL : sq@sabic.com

ملاحظة:
لأي استفسار أو حد معرفة أي تغير في المعلومات الرجاء الاتصال على العنوان التالي
الشركة السعودية للصناعات الأساسية (سابك)
الخدمات المشتركة - قطاع التشغيل
إدارة المشاريع و تقنية الورشة - قسم تأهيل الموردين
صندوق برد: 11115 مدينة الجبيل الصناعية: 31961
المملكة العربية السعودية
هاتف رقم: +966-(3)-340-1808 / 1803 / 1872 / 1819
فاكس رقم: +966-(3)-340-1850
بريد إلكتروني: sq@sabic.com

## SEC

ENGINEERING & GENERATION PROJECTS SECTOR
GENERATION PROJECTS ENGINEERING DEPARTMENT

الشركة السعودية للكهرباء
Saudi Electricity Company

**Date** : **November 23, 2010**

**To** : **WISE CONTROL INC.**
**Attn.** : Mr. CH Lee
Overseas Sales Dept. GM

e-mail : chlee@wisecontrol.com

**Subject:** Vendor Pre-Qualification

We are pleased to inform you that, ***WISE CONTROL INC.*** in Korea is qualified with Saudi Electricity Company to provide the following products:

| No. | Description | limitations |
|---|---|---|
| 1 | Pressure & Temperature instrument (Gauge,Switchs, Thermocouples,Thermo Well) | No Limit |
| 2 | Masuring devices sensoers (Orifice, Ventura Tubes, Flow Nozzle, Gas Detectors) | No Limit |
| 3 | Control Panel | No Limit |

Please note that by virtue of this letter you are quelified for the above mentioned product by ***WISE CONTROL INC.*** Korea.

We are looking forward to work with you in the future.

**Best Regards,**

**Department Manager,**
**Generation Projects Engineering**

## SWCC

12-DEC-2006 TUE 14:12 SWCC-INFORMATION CENTER FAX NO. 4821016 P. 01

SWCC

Saline Water Conversion Corporation
Riyadh Olaya King Fahd Road
P.O. Box 5968 Riyadh 11432
Kingdom of Saudi Arabia
Tel.: 4631111 Fax: 4631111/1001
www.swcc.gov.sa

المؤسسة المالية لتحلية المياه المالحة
الرياض العليا طريق الملك فهد
ص.ب ٥٩٦٨ الرياض ١١٤٣٢
المملكة العربية السعودية
هاتف: ٤٦٣١١١١ - فاكس: ٤٦٣١١١١/١٠٠١

**DATE** : 12 December 2006.

**TO** : ACWA POWER SASAKURA

**ATTN.** : Dr. Mohammed A. Al Fouzan
General Manager

**FAX** : 460 8282

CC : SWCC PROJECT EXECUTION DEPARTMENT
CC : SWCC WESTERN REGION OFFICE
CC : SUPERVISION COMMITTEE OFFICE (02 692 3424)

**SUB** : NEW SATELLITE PLANTS PROJECT,
Final Approval for "WISE Control Inc.-Korea".

**Y. REF.** : APS/06/182 DATED: 10.12.2006.

With reference to the subject mentioned above, please be informed that SWCC hereby grants Prequalification Final Approval to your proposed subcontractor "WISE Control Inc.-Korea" for the manufacture and supply of "Temperature Instrument (*Bimetal Thermometer & RTD with Thermowell*) and Pressure Gauges (*Safety Pattern & Diaphragm Type*)" for this Project.

Regards,

**Mohammad Abdul Rahman Al Jaser**
Director General Computer & Information
SWCC, Riyadh, Saudi Arabia

12th December 2006 18/F06/.366

## EWAB

KINGDOM OF BAHRAIN
ELECTRICITY & WATER AUTHORITY
PURCHASING & SUPPLY DIRECTORATE

مملكة البحرين
هيئة الكهرباء والماء
إدارة المشتريات والتجهيزات

***Ref:*** 6030/2.512/223 /2008
***Date:*** 3rd February 2008

**M/S. Manarah World Trading**
**P.O. Box. 38699,**
**Riffa,**
**Kingdom of Bahrain**
**Tel. 17769524**
**Fax. 17769523**

Dear Sir,

***Subject: Pre-qualification of M/s Wise Control Inc – S. Korea***

Reference is made to your previous submissions and fax dated 26/11/07 regarding the above mentioned subject.

We highly appreciate your interest for introducing M/s Wise Control Inc products to the authority.

Your submittals and capabilities of M/s Wise Control had been evaluated for the purpose of prequalification. You may get the opportunity to offer instrumentation products that conforms to Water Transmission specification and requirements, subject to the following;

A. Technical merits of the products and after-sale services of the manufacturer will be monitored for a period of three years, and final approval shall be based on satisfactory re-assessment.
B. Electricity & Water Authority reserves the right to cancel this approval at any time, if any unsatisfactory results arise.
C. In the event of altering the source, manufacturing process or quality assurance procedures, Authority's consent shall be obtained, prior to supplying any such altered products.

Yours faithfully,

**Mohamed A. Rahim Al-Sadeqi**
**Director,**
**Purchasing & Supply Directorate**

P.O. Box 2, MANAMA, KINGDOM OF BAHRAIN, TEL. (+973) 17546966 - FAX (+973) 17537096 (+٩٧٣) ١٧٥٣٧٠٩٦ : فاكس - (+٩٧٣) ١٧٥٤٦٩٦٦ : هاتف - صندوق البريد : ٢ - المنامة - مملكة البحرين
Ministry Website : http://www.mew.gov.bh الموقع الإلكتروني للوزارة:

## ADWEA

Page 2

**Abu Dhabi Water & Electricity Authority**
**ADWEA Enterprise Asset Management System**
**Supplier Details Report**

| Product No | Product Name | Principal | Principal Name | AgencyLin | Certificate No | Certif.ExpiryDa |
|---|---|---|---|---|---|---|
| 0106005 | FILTERS - SEPARATORS | 9916160 | SC CORPORATION | R | | 31-Aug-2009 |
| 0106010 | FILTERS, AIR AND SPARES | 9916160 | SC CORPORATION | R | | 31-Aug-2009 |
| 0106020 | WATER FILTERS/STRAINERS | 9916160 | SC CORPORATION | R | | 31-Aug-2009 |
| 0107420 | PIPES: STRAINERS & TRAPS | 9916160 | SC CORPORATION | R | | 31-Aug-2009 |
| 0108010 | VALVES - GATE | 9916160 | SC CORPORATION | R | | 31-Aug-2009 |
| 0108020 | VALVES - BUTTERFLY | 9916160 | SC CORPORATION | R | | 31-Aug-2009 |
| 0108050 | VALVES - CHECK | 9916160 | SC CORPORATION | R | | 31-Aug-2009 |
| 0108140 | VALVES: GLOBE | 9916160 | SC CORPORATION | R | | 31-Aug-2009 |
| 0108200 | VALVES: WAFER CHECK | 9916160 | SC CORPORATION | R | | 31-Aug-2009 |
| 0113005 | HEAT EXCHANGERS AND SPARE PARTS | 9914748 | UNIWEL CORPORATION | R | | 28-Dec-2005 |
| 0113065 | COLD BOX - HEAT EXCHANGER | 9914748 | UNIWEL CORPORATION | R | | 28-Dec-2005 |
| 0601045 | INCINERATORS | 9914748 | UNIWEL CORPORATION | R | | 28-Dec-2005 |
| 0601095 | PRESSURE VESSELS UP TO 30MM (CS/SS/AS/CLAD) | 9914748 | UNIWEL CORPORATION | R | | 28-Dec-2005 |
| 0601100 | PRESSURE VESSELS UP TO 50MM (CS/SS/AS/CLAD) | 9914748 | UNIWEL CORPORATION | R | | 28-Dec-2005 |
| 0601105 | PRESSURE VESSELS UP TO 125MM (ALL | 9914748 | UNIWEL CORPORATION | R | | 28-Dec-2005 |
| 0601110 | PRESSURE VESSELS ABOVE 125MM (ALL MATL.) | 9914748 | UNIWEL CORPORATION | R | | 28-Dec-2005 |
| 0601150 | DEAERATORS | 9914748 | UNIWEL CORPORATION | R | | 28-Dec-200 |
| 0801035 | HEAT RECOVERY PACKAGES | 9914748 | UNIWEL CORPORATION | R | | 28-Dec-200 |
| 0112050 | FIRE ALARM SYSTEMS/SIREN/ALARMS/CALL | 9914747 | WISE CONTROL INC. | R | | 01-Dec-200 |
| 0112120 | FIRE & GAS DETECTION SYSTEM & PANEL | 9914747 | WISE CONTROL INC. | R | | 01-Dec-200 |
| 0112320 | DETECTORS FIRE & SAFETY | 9914747 | WISE CONTROL INC. | R | | 01-Dec-200 |
| 0506010 | THERMOCOUPLE/RTD THERMO WELL & T D'S | 9914747 | WISE CONTROL INC. | R | | 01-Dec-200 |

Report Name / DB / User : SUPPDETLS_ACT.RDD / MAXP / GHASHABANI
Site ID / Organization ID : ADWEA / ADWEADRC

Report Last Modified : 10-Aug-2008
Report Generated On : 01-Nov-2009 @ 12:

## ADWEA

Page 3

Abu Dhabi Water & Electricity Authority
ADWEA Enterprise Asset Management System
Supplier Details Report

| Product No | Product Name | Principal | Principal Name | AgencyLin | Certificate No | Certif.ExpiryDa |
|---|---|---|---|---|---|---|
| 0506020 | TRANSMITTER FLOW | 9914747 | WISE CONTROL INC. | R | | 01-Dec-2009 |
| 0506030 | TRANSMITTER PRESSURE | 9914747 | WISE CONTROL INC. | R | | 01-Dec-2009 |
| 0506040 | TRANSMITTER LEVEL | 9914747 | WISE CONTROL INC. | R | | 01-Dec-2009 |
| 0506050 | TRANSMITTER TEMPERATURE | 9914747 | WISE CONTROL INC. | R | | 01-Dec-2009 |
| 0506060 | TRANSMITTER DENSITY | 9914747 | WISE CONTROL INC. | R | | 01-Dec-2009 |
| 0509005 | METERS/RECORDERS/SWITCHES/TRANSMITTERS | 9914747 | WISE CONTROL INC. | R | | 01-Dec-2009 |
| 0509220 | GAUGES/INDICATORS, LEVEL | 9914747 | WISE CONTROL INC. | R | | 01-Dec-2009 |
| 0509240 | TRANSMITTERS/ INDICATORS / DIGITAL: | 9914747 | WISE CONTROL INC. | R | | 01-Dec-2009 |
| 0509400 | GAUGES: PRESSURE | 9914747 | WISE CONTROL INC. | R | | 01-Dec-2009 |
| 0509405 | PRESSURE GAUGE MANIFOLDS | 9914747 | WISE CONTROL INC. | R | | 01-Dec-2009 |
| 0509410 | GAUGES/INDICATORS: TEMPERATURE / | 9914747 | WISE CONTROL INC. | R | | 01-Dec-2009 |
| 0513040 | PRESSURE: DIFFERENTIAL PRESSURE AND | 9914747 | WISE CONTROL INC. | R | | 01-Dec-2009 |
| 0106005 | FILTERS - SEPARATORS | 9914746 | PROSERNAT | X | 7365 | 27-Feb-2009 |
| 0509190 | PRESSURE REGULATING SKIDS | 9914746 | PROSERNAT | X | 7365 | 27-Feb-2009 |
| 0103005 | PUMPS - SPARE | 9907481 | NIKKISO CO. LTD. | X | 9647 | 28-Jul-2009 |
| 0103010 | PUMPS - POTABLE WATER | 9907481 | NIKKISO CO. LTD. | X | 9647 | 28-Jul-2009 |
| 0103020 | PUMPS, CENTRIFUGAL | 9907481 | NIKKISO CO. LTD. | X | 9647 | 28-Jul-2009 |
| 0103030 | PUMPS - DOSING AND METERING | 9907481 | NIKKISO CO. LTD. | X | 9647 | 28-Jul-2009 |
| 0103050 | PUMP - CHEMICAL TRANSFER | 9907481 | NIKKISO CO. LTD. | X | 9647 | 28-Jul-2009 |
| 0103070 | PUMPS - OTHER PROCESS | 9907481 | NIKKISO CO. LTD. | X | 9647 | 28-Jul-2009 |
| 0103300 | PUMPS - SEALLESS | 9907481 | NIKKISO CO. LTD. | X | 9647 | 28-Jul-2009 |
| 0103330 | PUMPS - SPECIAL (CRYO) | 9907481 | NIKKISO CO. LTD. | X | 9647 | 28-Jul-2009 |

Report Name / DB / User : SUPPDETLS_ACT.RDO / MAXP / GHASHABANI
Site ID / Organization ID : ADWEA / ADWEAORG

Report Last Modified : 10-Aug-2008
Report Generated On : 01-Nov-2009 @ 12:

## ADGAS

**FACSIMILE MESSAGE**

ADGAS

**ABU DHABI GAS LIQUEFACTION COMPANY LTD**
**P. O. BOX 3500, ABU DHABI, U. A. E. FAX NO. (9712) 6061201**
**In case of transmission error, please call (9712) 6065708**

| To | | | From | | |
|---|---|---|---|---|---|
| Fax No. | : | 02 6742422 | Fax No. | : | 02-6061201 |
| Name | : | Mr. James Mathew | Name | : | Mr. Hassan A. Thabet |
| Title | : | Mechanical Engineer | Title | : | Procurement Division Manager |
| Company | : | AL MAZROUI TRADING & GENERAL SERVICES LLC | Company | : | ADGAS |
| | | | Ref./ Date | : | AD.128/104 9 June 2010 |

Pages: 1

**SUBJECT: Registration No: 100194**

With reference to your submission dated 26-5-2010, of Principal M/s. Wise Control Inc. - KOREA, we would like to inform you that, the following Products have been approved for inclusion in our data base system as possible source for service as shown below:

| Manufacturer | Product | Description | Remarks |
|---|---|---|---|
| WISE CONTROL INC - KOREA | 316570 | SWITCHES: PRESSURE | Exclusive Agent |
| | 316520 | SIGHT GLASS/GAUGE GLASS | Exclusive Agent |
| | 316550 | THERMO-COUPLES THERMOWELL R.T.D'S, PROBE & ACCESSORIES | Exclusive Agent |
| | 316565 | SWITCHES : TEMP. | Exclusive Agent |
| | 316635 | GAUGES : PRESSURE | Exclusive Agent |
| | 316640 | GAUGES: TEMPERATURE | Exclusive Agent |
| | 316645 | GAUGES : LEVEL | Exclusive Agent |
| | 316655 | RECORDERS – GAS FLOW | Exclusive Agent |
| | 316615 | METERS : VENTURI-FLOW | Exclusive Agent |
| | 326510 | ORIFICE PLATE & FLANGE | Exclusive Agent |
| | 302566 | DETECTORS & DETECTION SYSTEMS – FOR FIRE, GAS & HEAT | Exclusive Agent |
| | 302580 | DETECTORS: FIRE | Exclusive Agent |
| | 326590 | INSTRUMENT VALVES AND MANIFOLDS | Exclusive Agent |

The inclusion of your name in ADGAS Commercial directory does not constitute an obligation on ADGAS to invite you to bid in any of the future tenders / enquiries of ADGAS, and may require separate pre-qualification, depending on the nature of the tenders / enquiries.

9/6/10

Hassan A. Thabet

## ADNOC

11.JAN.2011 8:09 ADNOC PROC SUPP DEPT NO.826 P.1

أدنوك
ADNOC
شركة بترول أبوظبي الوطنية

### FACSIMILE MESSAGE

**To** : **AL MAZROUI TRADING AND GENERAL SERVICES LLC** **Fax No.:** 009712 6742422
Attn.: General Manager Abu Dhabi

**From** : Procurement Support Department, Procurement Services Division, Shared Services Directorate **Fax No.:** 009712 6024264

Abu Dhabi National Oil Company (ADNOC)
P.O. Box 898 - Tel. (9712) 6020000 Abu Dhabi U.A.E.

**Ref. No. :** PS/003/10 **Date** : 11 JAN 2011
**Subject** : REGISTRATION & PRE-QUALIFICATION STATUS

With reference to your fax OFD/MC/F150/10 dated 8-Nov-2010, please be informed that based on the evaluation of your Principal's Pre-qualification Document, **M/s. WISE CONTROL INC.**, has been included in ADNOC records as a possible source for supply of the following:

- **Venturi Tubes & Nozzles**
- **Switches: Level**
- **Sight Glass/Gauge Glass**
- **Level Instruments – Displacer**
- **Tank Level Indicators/Gauges: Float Type**
- **Tank Level Indicators: Servo Type**
- **Transmitters/Indicators/Digital: Press/Level/Temp.**
- **Press. & Diff. Pr. Electronic Transmitters**
- **Thermo - Couples Thermowell, R.T.D's, Probes and Accessories**
- **Switches: Temp.**
- **Switches: Pressure**
- **Switches: Flow**
- **Meters: Venturi-Flow**
- **Gauges: Pressure**
- **Gauges: Temperature**
- **Gauges: Level**
- **Orifice Plate & Flanges**

If you *do not receive* all the pages, please call Telephone: 6023081 **No. of pages to follow:** 1

*Confidentiality Notice: This fax is Confidential. If you are not the intended recipient, please notify us immediately. You should not copy the Fax or use it for any purpose or disclose its contents to any other person. Thank you.*

BGFAX10-PSD-5

## GASCO

Abu Dhabi Gas Industries Limited

### Supplier's Existing Information Report

**Supplier Code:** 000211 **Supplier Name:** AL MAZROUI TRADING & GENERAL SERVICES LLC
**Supplier Type:** VENDOR
**Commercial Directory status:** QUALIFIED **Origin:** AE **Emirate:** ABU DHABI

**Licenses**

GENERAL LICENSE(S)

| License No | License description | License Expiration Date |
|---|---|---|
| 12310 | MUNICIPALITY | 05-Mar-2006 |
| 14053 | COMMERCIAL REGISTER | 05-Mar-2006 |
| 123 | CHAMBER OF COMMERCE | 11-Feb-2009 |
| 7075 | CHAMBER OF COMMERCE | 09-Mar-2011 |

**Addresses**

| Official Address | Contact | Address Type | City | PO.BOX | Country | Phone | Fax | Email |
|---|---|---|---|---|---|---|---|---|
| 1 | JAMES MATHEW | V | ABU DHABI | 97 | AE | 009712672073 | 00971267424 | mtgsofd@mtgsofd.ae |
| 0 | | V | ABU DHABI | 97 | AE | 009712672073 | 00971267424 | mtgs@mtgsofd.ae |

**Contacts**

| Contact | Contact Type | Position | Phone | Fax | Email |
|---|---|---|---|---|---|
| ABBAS OSSAILI | | TECHNICAL MANAGER | 0097126742422 | 0097126720730 | abbas@mtgsofd.ae |
| AKRAM HAMMOUD | | GENERAL MANAGER | 0097126720730 | 0097126742422 | mtgs@mtgsofd.ae |
| ALI MOUBADDER | | BUSINESS DEVT MANAGER | 0097126742422 | 0097126720730 | ali@mtgsofd.ae |
| HASSAN HAMMOUD | | SALES MANAGER | 0097126720730 | 0097126742422 | hassan@mtgsofd.ae |
| JAMES MATHEW | | MECHANICAL ENGINEER | 0097126720730 | 0097126742422 | james@mtgsofd.ae |

**Stocks and/or Sourcer Capabilities**

| Product Group | Product Group Description | Stock Value |
|---|---|---|
| 170020 | MECHANICAL SPARES SOURCERS FROM EUROPEAN COUNTRIES | N |
| 170010 | MECHANICAL SPARES SOURCERS FROM USA | N |

**Principals**

| Gasco Code | Name | Agency Type | Agency No. | Agency Exp.Date | Related Product Group | Product Group Description | Country | Phone | Fax | Email |
|---|---|---|---|---|---|---|---|---|---|---|
| 500011 | M & I ELECTRIC INDUSTRIES, INC. | E | 7704 | 27-Nov-06 | 212505 | HV/MV SWITCHGEARS | US | 001713644 8182 | 001713644 7805 | dreeder@mielectric.co m |
| 503579 | P.M.WRIGHT LTD. / CIRCUL-AIRE DIVISION | E | 5333 | 05-Dec-05 | 186525 | CORROSION MONITORING SYSTEM | CA | 001514337 3331 | 001514336 3023 | smerchant@circul-aire.com |
| 503579 | P.M.WRIGHT LTD. / CIRCUL-AIRE DIVISION | E | 5333 | 05-Dec-05 | 410025 | CATALYST - ACTIVATED (CARBON/ALUMINA) | CA | 001514337 3331 | 001514336 3023 | smerchant@circul-aire.com |

## TAKREER

TAKREER
شركة أبوظبي لتكرير النفط
We Refine Right

### FACSIMILE MESSAGE

To : M/s. Al Mazroui Trading & General Services - L.L.C.
Attn.: Mr. Asem I. Bibi - Managing Director
Fax No.: 6742422
Abu Dhabi

From : Procurement Support Department Manager
Fax No.: 6027442

Abu Dhabi Oil Refining Company (TAKREER)
P.O. Box 3593 – Tel. (9712) 6027000 – Abu Dhabi, U.A.E.

Ref. No. : TKR/S/S/ 153 /FES/2010
Date : 24 JAN 2010
Subject : REGISTRATION & PRE-QUALIFICATION STATUS

Reference to the Documents of your Principal **M/s. Wise Control Inc. - Korea,** submitted by you as a *Manufacturer*. Please be informed that based on the evaluation, the above principal has been included in TAKREER records as a possible source for supply of the following products:

- **Gauges: Level**
- **Switches: Temp.**
- **Gauges: Pressure**
- **Switches: Pressure**
- **Gauges: Temperature**
- **Meters: Venturi-Flow**
- **Sight Glass / Gauge Glass**
- **Thermo - Couples Thermowell, R.T.D's, Probes And Accessories**

Please note that at the time of release of enquiries, a further short listing takes place based on exhibited interest at that time and the specifics of material / equipment in question as the need may be.

Kindly note that this fax shows your company's current Registration & Prequalification status with TAKREER and it supersedes any and all previous faxes which may have been issued to you on this subject.

You are advised to quote your Principal's Registration No. 905909 in all future correspondence.

Regards,

Hashim Al Hashemi

*If you do not receive all the pages, please call Telephone : (9712) 6027479*
No. of pages to follow:

*Confidentiality Notice: This fax is Confidential. If you are not the intended recipient, please notify us immediately. You should not copy the Fax or use it for any purpose or disclose its contents to any other person. Thank you.*

FA. 905909

## QATAR PETROLEUM

قطر للبترول
Qatar Petroleum
MATERIALS DEPARTMENT
(Qatar Navigation Plaza)
Tel 4240200 / Fax 4240351
Website: www.qp.com.qa

**Fax**

| | | | |
|---|---|---|---|
| **To:** | WISE CONTROL INC.<br>Attn.: Ch Lee, Overseas Sales Manager | **From:** | SUPPLIER RELATIONS<br>supplierrelation@qp.com.qa |
| **Fax:** | +82 31 281 6800 | **Fax:** | 0974-4240351 |
| **Phone:** | +82 31 280 5136 | **Phone:** | 0974-4240248 |
| **Date:** | 21 May 2007 | **Ref. #:** | MTR3/47/07 |
| **cc:** | Al Ahed Trading (Attn.: Richard Gomes) Fax 44 14 021 | **Pages:** | 1 of 1 |

**Subject:** Vendor Registration

We are pleased to inform you that your submission to become a registered **Vendor** with Qatar Petroleum has been accepted. Your firm has been included in the following product groups, and is contingent upon your continuous adherence to Qatar Petroleum Standards and Specifications:

| Product Group | Commodity Description |
|---|---|
| 6010 | PROCESS INSTRUMENT: FLOW |
| 6020 | PROCESS INSTRUMENT: LEVEL |
| 6030 | PROCESS INSTRUMENT: PRESSURE |
| 6040 | PROCESS INSTRUMENT: TEMPERATURE |
| 6050 | PROCESS INSTRUMENT: ANALYZERS/MONITORS & PARTS |
| 6060 | PROCESS INSTRUMENT: FIELD MOUNTED |

**Your Vendor Registration number: 6808 Valid until : 21 May 2009**

SAP VENDOR CO 305298

**However, successful registration is no guarantee, implied or otherwise, of any future participation in tenders, issuance of enquiry or award of work: (i.e. the inclusion on a particular tender list or the purchase of your products). We are merely giving your company an equal opportunity to compete with other registered vendors having the same range of products and services.**

The above product groups are in accordance with QP Materials Dept. and Shell's Materials, Equipment, Standards and Codes (MESC) coding system. Unless informed otherwise, we will assume you are satisfied with your products' coding and categorization.

If at anytime in the future your circumstances change such that you are no longer able to comply with the qualification criteria for these product groups, you should advise QP immediately. QP reserves the right to remove your name from the registered supplier list at its discretion and without notification.

Should there be any changes in your company's profile (e.g. name, address, telephone, fax, renewal or termination of agency agreement) QP must be notified immediately.

**Renewal of registration with Qatar Petroleum must be applied two (2) weeks before the expiration date.**

We thank you for the interest you have shown in introducing your company and products to Qatar Petroleum.

Regards,

**Maria Mendonsa**
Senior Supervisor

If you do not receive the correct number of pages or any are not legible, please contact the sender as soon as possible.

*Confidentiality Caution:* This message is intended for the use of the individual or entity to which it is addressed and may contain information that is privileged and confidential. If you have received it in error, please notify the sender immediately by telephone.

## PTT

Service in Restricted Area

Material/Product Brand List

| Material Group | EQUIPMENT | Manufacturer & Brand | Origin | AR1 | AR2 | CH | Last updated |
|---|---|---|---|---|---|---|---|
| Instrument | Pressure Guage | Wise Control Inc. | Korea | Y | Y | Y | 19.11.2013 08:37 |
| Instrument | Temperature Guage | Wise Control Inc. | Korea | Y | Y | Y | 19.11.2013 08:38 |

General Service & Material

| Commodity of Service | Last updated |
|---|---|
| General Service | 21.04.2010 09:45 |

## IRPC

เอกสารแนบท้าย ประกาศสายงานปฏิบัติการ 3 ฉบับที่ 002/2555

IRPC บริษัท ไอราพีซี จำกัด (มหาชน)

**Approved Manufacturer List (AML)**
**ฉบับที่ 1/2555**

S10332300-3020 Rev.0
2nd Nov. 2012

**หมวด Control system, Instrument, Bulk Material and Analyzer**

| ITEM | SYSTEM / EQUIPMENT | MANUFACTURER LIST | | Remark |
|---|---|---|---|---|
| | | Name of AML | Accepted Country of Origin. | |
| | | E&H | Japan / Germany | |
| | Tankgaging | Enraf | Netherland | |
| | (Custody type) | Rosemount(SAAB) | Sweden | |
| | Conductivity | Vega | Germany | |
| | | E&H | Germany | |
| | | Magnetrol | USA | |
| | Vibration | E&H | Germany | |
| | | Vega | Germany | |
| | | Rosemount | Singapore / UK | |
| | | ABB(K-Tek) | USA | |
| | | Krohne | France | |
| | Magnetic float | K-Tex | USA | |
| | | Magnetrol | USA | |
| | | KSR-KUEBLER | Germany | |
| | | Brook | USA | |
| | | Tokyo Keiso | Japan | |
| | Magnetostrictive | K-Tex | USA | |
| | | Magnetrol | USA | |
| | | KSR-KUEBLER | Germany | |
| | | Magtech | USA | |
| 5 | PRESSURE MEASUREMENT | | | |
| | Pressure Gauge | Wika | Germany | |
| | | Iec | Italy | |
| | | Baumer Bourdon-Heanni | France | |
| | | Ashcroft | Europe | |
| | | Wise (Woojin) | Korea | |
| | | Tempress | USA | |
| | | Kobold | Germany | |
| | Electronics Pressure Transmitter | Rosemount | USA | |
| | | Yokogawa | JAPAN | |
| | | azbil / Yamatake | Japan | |
| | | E&H | Germany | |
| | Pressure Switch | Nagano | Japan | |
| | | Danfoss | Denmark | |
| | | SOR | USA | |
| | | UE | USA | |
| | | Cella | Italy | |
| 6 | TEMPERATURE MEASUREMENT | | | |
| | Temperature gauge | Ashcroft | Europe | |
| | | Rueger | Switzerland | |
| | | ITEC | Italy | |
| | | Baumer Bourdon-Heanni | Switzerland | |
| | | Wika | Germany | |
| | | WISE (Woojin) | Korea | |
| | | ReoTemp | USA | |
| | | TEL-TRU | USA | |
| | | TEMPRESS | USA | |
| | Temperature Element | TCP | USA, Europe | |
| | | Wika | Germany,Canada,USA | |
| | | Okazaki | Japan | |
| | | Thermo - Electric | Netherland | |
| | | YAMARI | Canada, Japan,Singapore | |
| | | E&H | Italy | |
| | | WISE | Korea | |
| | | Rueger | Switzerland | |
| | Temperature Transmitter | Rosemount | Singapore | |
| | | Honeywell | USA | |
| | | Yokogawa | Japan | |

Page 3 of 6

## NIGC

Date: 11.06.2012
No.: 60.112.37720

**To: WISE CONTROL INC**

**Attn: Asst Manager**

**Subject: *NIGC VENDORS LIST***

**Dear Sir,**

**With reference to our questionnaire form (completed by your company), please be informed that your company has been registered in our vendors list as a manufacturer of following product.**

- *Gauge ( DP – Pressure )*
- *Transmitter ( Pressure , Temperature )*
- *Switch ( Level – Pressure – Temperature )*
- *RTD*
- *Thermocouple*
- *Thermowell*
- *Thermometer*

**Hope for future business relations.**

***N.B*: The validity of this letter is for one year, from the date of issue.**

**Best Regards,**

Farzin Mohajeri

**Farzin Mohajeri**

*Sourcing , Commercial Research & Contractor Manager*

*Cc: Fara Sanat Arman ( FSACO )*

NIGC Main Building,south Aban St.,Karimkhan Zand Ave.,Tehran,Iran
P.O.Box 11365-4694 & 15875-4533 , Tel: (+9821)86820 , Fax:(+9821)882-47 50
internet site:www.nigc.ir, E-mail:info@nigc.ir

## PETRONAS

PETRONAS

| | |
|---|---|
| COMPANY'S NAME | : FGE CONTROL (M) SDN BHD (965200-P) |
| LICENSE NO | : 965200-P |
| LICENSE PERIOD | : 21.05.2014 - 19.05.2017 |

| SPECIAL CONDITIONS | |
|---|---|
| PRINCIPAL APPOINTMENT & AGREEMENT | Company is required to submit a copy of the renewed exclusive agency appointment letter and renewed exclusive agency agreement from principal WISE CONTROL INC. and follow the format as specified in the PETRONAS' Licensing & Registration General Guidelines before 31 October 2016. Failing which, the company will no longer be listed in the PETRONAS List of Licensed / Registered Companies (LLRC) for the relevant SWEC |

CATEGORIES OF LICENSE / REGISTRATION

APPROVED LICENSE CATEGORIES

| L/R | Service / Supplier Code | Mode of Operation | Name of Product / Rig / Vessel (Which applicable) | Approval Date / Time | Expiry Date |
|---|---|---|---|---|---|
| L | PI1070100<br>INSTR-FLOW INSTR-ORIFICE BODIES | AGENT | WISE CONTROL INC. | 09.06.2014<br>09:29:41 | 19.05.2017 |
| L | PI1070300<br>INSTR-FLOW INSTR-SIGHT FLOW INDICATORS | AGENT | WISE CONTROL INC. | 20.05.2014<br>11:33:03 | 19.05.2017 |
| L | PI1070900<br>INSTR-FLOW INSTR-VENTURI TUBE | AGENT | WISE CONTROL INC. | 09.06.2014<br>09:29:41 | 19.05.2017 |
| L | PI1072200<br>INSTR-FLOW INSTR-FLOW NOZZLE | AGENT | WISE CONTROL INC. | 09.06.2014<br>09:29:41 | 19.05.2017 |
| L | PI1080100<br>INSTR-LEVEL INSTR-LEVEL GAUGES-GLASSES&COCKS | AGENT | WISE CONTROL INC. | 09.06.2014<br>09:29:42 | 19.05.2017 |
| L | PI1110400<br>"INSTR-PRESS INSTR-PRESSURE / DP SWITCHES (Reclassified PI1110300, PI1110400, PI1110500 & PI1110600)" | AGENT | WISE CONTROL INC. | 02.06.2014<br>15:40:49 | 19.05.2017 |
| L | PI1110600<br>INSTR-PRESS INSTR-PRESSURE / DP GAUGE (Reclassified from PI1110600 & PI1110900) | AGENT | WISE CONTROL INC. | 20.05.2014<br>11:33:03 | 19.05.2017 |
| L | PI1120200<br>INSTR-TEMPERATURE INSTR-TEMPERATURE SWITCHES | AGENT | WISE CONTROL INC. | 20.05.2014<br>11:33:02 | 19.05.2017 |
| L | PI1120300<br>INSTR-TEMPERATURE INSTR-THERMOWELLS | AGENT | WISE CONTROL INC. | 09.06.2014<br>09:29:42 | 19.05.2017 |
| L | PI1120400<br>INSTR-TEMPERATURE INSTR-TEMPERATURE GAUGE | AGENT | WISE CONTROL INC. | 20.05.2014<br>11:33:03 | 19.05.2017 |
| L | PI1120500<br>INSTR-TEMPERATURE INSTR-TEMPERATURE SENSOR / ELEMENT | AGENT | WISE CONTROL INC. | 09.06.2014<br>09:29:42 | 19.05.2017 |

*** END ***

This is a computer generated printout and no signature from PETRONAS is required.

Page 3 / 3

## CTCI

中義工程股份有限公司
CTCI CORPORATION

電話: +886-2-2833-9999
傳真: +886-2-2835-7621

# 廠商登記卡
# Vendor Profile

建(修)卡日期: / /

| | | | | | |
|---|---|---|---|---|---|
| 公司全名 Company Full Name | English | WISE Control Inc. | | | |
| | Chinese | WISE Control Inc. | | | |
| 公司簡稱 Company Abbreviation | English | WISE | 公司負責人 Company Director | English | Mr.S.H.LEE |
| | Chinese | WISE | | Chinese | Mr.S.H.LEE |
| 前公司全名 Previous Company Name | English | Woojin Instrument | | | |
| | Chinese | Woojin Instrument | | | |
| 公司登記地址 Register Address | English | 2022 Deogyeong-Daero, Giheung-Gu,Yongin-Si, Gyeonggi-Do 446-905 Korea | | | |
| | Chinese | 2022 Deogyeong-Daero, Giheung-Gu,Yongin-Si, Gyeonggi-Do 446-905 Korea | | | |
| 課稅地址 Tax Address | 2022 Deogyeong-Daero, Giheung-Gu,Yongin-Si, Gyeonggi-Do 446-905 Korea | | | | |
| 統一編號 / 廠商編號 Register Number / ID | SCM0006190 | | 郵遞區號 ZIP Code | 446905 | |
| 公司電話 Company Tel. | +82-31-280-5147 | | 公司所在國家 Company Country | Korea | |
| 公司傳真 Company Fax | +82-31-281-6800 | | 職工人數 Employee No. | 275 | |
| 主力產品 / 服務 Main Product or Service | PRESSURE GAUGES,TEMPERATURE GAUGES,PRESSURE SWITCHES,TEMPERATURE SWITCHES,PRESSURE TRANSMITTERS,TEMPERATURE TRANSMITTERS,FLOW METERS,ORIFICE,LEVEL GAUGES,NOZZLE,VENTURI TUBE,SIGHT GLASS,RESISTANCE TEMPERATURE DETECTOR,THERMOCOUPLE,THERMOWELL,MANIFOLD VALVE,MULTI/SKIN THERMOCOUPLE,GAS DETECTORS,BELLOWS | | | | |
| 公司類型 Company Type | ■ 1. 製造商 Manufacturer ☐ 2. 庫存商 Stockist ☐ 3. 分公司 / 代理商 Branch / Agent ☐ 4. 下包商 Subcontractor | | | | |
| 公司成立日期 Company Register | 1965/12/10 | | 公司網站 Company Website | http://www.wisecontrol.com | |
| 資本額 Capital Amount | KRW 1,600,000,000 | | 年度銷售額 Annual Sales | KRW 47,553,000,000 | |

1 / 2

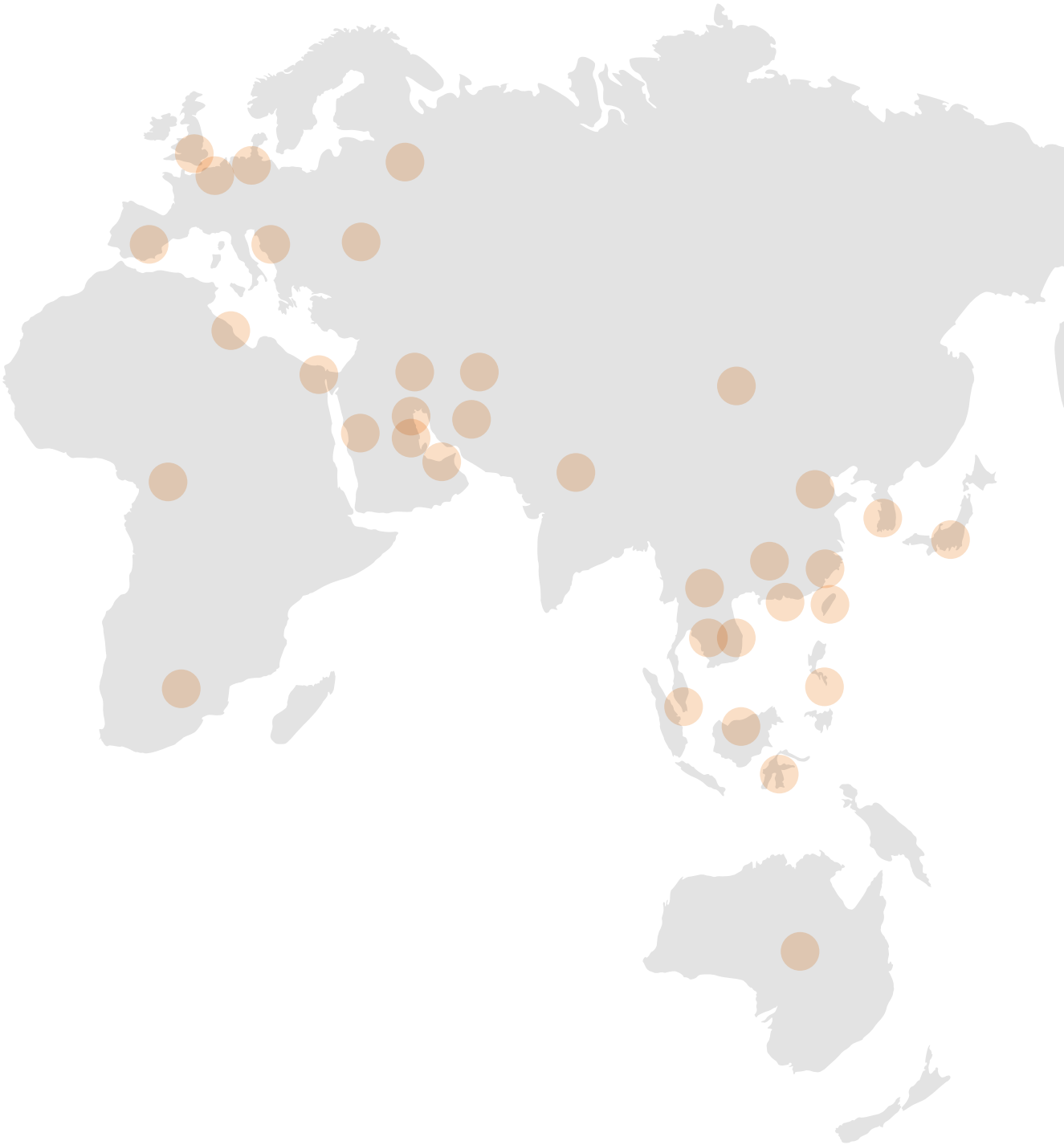
Worldwide Local Distributors and Business Partners l Company Location l Distributors

section

# Distributors & Location

# 06

# Worldwide Local Distributors and Business partners



### The Middle East

SAUDI ARABIA
UNITED ARAB EMIRATES
OMAN
KUWAIT
PAKISTAN
LIBYA
IRAN

### Europe

GERMANY
RUSSIA
FRANCE

### Africa

SOUTH AFRICA
NIGERIA
EGYPT

### East Asia

KOREA
JAPAN
CHINA
HONG KONG
TAIWAN

### South East Asia

AUSTRALIA
THAILAND
INDONESIA
SINGAPORE
VIETNAM
PHILIPPINES
MALAYSIA

| | |
|---|---|
| **Name of Company - Full legal name** | WISE Control Inc. |
| **Chief Executive Officer** | Sanghoon Lee |

**The Americas**

UNITES STATE
CANADA

**South America**

COLOMBIA
PERU

# Worldwide Local Distributors and Business partners

## EAST ASIA

| COUNTRY | CONTACT INFO |
|---|---|
| KOREA | **HEAD Office** |
| | MR. CH LEE |
| | TEL : +82-2-300-2312 |
| | FAX : +82-2-300-2310 |
| | chlee@wisecontrol.com |
| | 19F, 181, GASAN DIGITAL 1-RO, GEUMCHEON-GU, SEOUL, REPUBLIC OF KOREA |
| JAPAN | **JAPAN Office** |
| | JMC |
| | TEL: +81-3-5703-5150 |
| | FAX : +82-33730-3782 |
| | jmctok@japanmachinery.com |
| | 2-9-16 Higashi Rokugo, Ota-ku, 144-0046 Tokyo, JAPAN |
| CHINA | **WISE CONTROL (SHANGHAI) INC.** |
| | MS. MEIHUA ZHOU |
| | TEL : +86-21-64016088(EXT 807) |
| | FAX : +86-21-6401-8058 |
| | mhzhou@wisecontrol.com |
| | UNIT 313, 1081 WUZHONG RD. MINHANG DISTRICT, SHANGHAI, CHINA |
| HONG KONG | **GATE WAY VALVE & FITTING LTD** |
| | MR. THOMAS KWONG |
| | TEL : +86-26882666 |
| | FAX : +86-26882655 |
| | gatewayv@netvigator.com |
| | FLAT A1, 4/F, GALAXY FACTORY BUILDING, 25-27 LUK HOP STREET, SAN PO KONG, KOWLOON, HONG KONG |
| TAIWAN | **CREATION SERVICE TECHNOLOGY CO., LTD.** |
| | MR. TONY FANG |
| | TEL : +886 7 7532980 |
| | FAX : +886 7 7532981 |
| | tony@cstc.tw |
| | No.38, Ln. 5, Chengyi Rd., Fengshan Dist., Kaohsiung City 830, Taiwan |

## SOUTH EAST ASIA

| COUNTRY | CONTACT INFO |
|---|---|
| AUSTRALIA | **ROSS BROWN SALES PTY LTD.** |
| | MR. ALBERT HAKVOORT |
| | TEL : +61-2-9899-2744 |
| | FAX : +61-2-9899-4233 |
| | alberthakvoort@rossbrownsales.com.au |
| | P.O. BOX 6345, 21 BROOKHOLLOW AVE, BAULKHAM HILLS,NSW 2153, AUSTRALIA |
| THAILAND | **UTCC TECH** |
| | MR. SATHIT VIJITPHAN |
| | TEL : +66-38-608803-5 |
| | FAX : +66-38-608806 |
| | sathit@utcctech.com |
| | 267/133 SUKHUMVIT RD.T. MAPTAPHUT, A. MUANG RAYONG, 21150 THAILAND |

## SOUTH EAST ASIA

| COUNTRY | CONTACT INFO |
|---|---|
| INDONESIA | **PT. WANATA TAMA** |
| | MS. GERY YULIANNA MARPAUNG |
| | TEL : +62-21-8430-5320 |
| | FAX : +62-21-8430-5317 |
| | gerymarpaung@wt.co.id |
| | CIBUBUR TIMES SQUARE BLOCK C2/12B, JI. TRANSYOGI KM. 3 JAKARTA INDONESIA |
| | **PT. PANCATAMA ABADI SAKTI** |
| | MS. LIANA APRILI |
| | TEL: +62-21-662-4885 |
| | FAX: +62-21-669-7642 |
| | import@pancatama.com |
| | JI BANDENGAN UTARA NO 81., BLOCK A/7. JAKARTA 14440, INDONESIA |
| SINGAPORE | **FGE CONTROL PTE LTD** |
| | MR. RICHARD ONG |
| | TEL : +65-6483-3160 |
| | FAX: +65-6483-3190 |
| | richard@fgecontrol.com |
| | BLK 5014, ANG MO KIO AVE 5, #04-05, TECHPLACE II, 569881 SINGAPORE |
| VIETNAM | **VIET PHAT TECH CO.,LTD (STOCKIST DISTRIBUTOR)** |
| | MS. TRAM |
| | TEL: +84-613913459 |
| | FAX: +84-613913460 |
| | sale@vptech21.com |
| | 17/1KP-1 Binh Da Ward, Bien Hoa City,DIST, HCMC, VIETNAM, Dong Nai Province,Vietnam |
| | **ANS VIETNAM** |
| | MS. THAM TA |
| | TEL : +84-835170401 |
| | FAX : +84-835170403 |
| | tham.ans@ansvietnam.com |
| | TA NGOC SON D3,DINH TIEN HOANG STREET, MIEU NOI RESIDENT AREA,W.3,BINH THANH DIST, HCMC, VIETNAM |
| | **INTERNATIONAL TECHNICAL TRADING CO., LTD** |
| | MS. TO KHANH AN |
| | TEL: +84 -8-39 621 621 |
| | FAX: +84 -8-39 650 292 |
| | an@ittco.vn |
| | 113 BINH THOI STREET, WARD 11, DIST 11, HO CHI MINH CITY, VIET NAM |
| | nghia@ittco.vn |
| | 14 TRUNG YEN 3 STREET ,CAU GIAY DIST. |
| | **TANG MINH PHAT TRADING AND SERVICE CO., LTD** |
| | Mr. Sato |
| | Tel: +84.8.3512 1007 |
| | Fax: +84.8.3512 1008 |
| | sales@tmpvietnam.com |
| | 119 Quoc Huong, Thao Dien Ward, District 2, Ho Chi Minh City, Vietnam |
| | **LIEN TIEN CO.,LTD** |
| | Mr. Truong Van Qui |
| | Tel: +84.8.3855 2571 |
| | Fax: +84.8.3950 5331 |
| | lientien@lientien.com |
| | 23 Nguyen Thi St, Ward 13, Dist 5, HoChiMinh City, Vietnam. |

## SOUTH EAST ASIA

| COUNTRY | CONTACT INFO |
|---|---|
| PHILIPPINES | **NILE CENTRAL PROCUREMENT, INC.** |
| | MR. NILO C. PUNZALAN |
| | TEL : +63-49-5311691 |
| | FAX : +63-49-5311691 |
| | niilo.punzalan@gmail.com |
| | UNIT 3 DON ONOFRE BLDG. 2, OLD HIGHWAY, SALA, CABUYAO, LAGUNA 4025 PHILS. |
| MALAYSIA | **FGE CONTROL (M) SDN BHD** |
| | MR. RICHARD ONG |
| | TEL : +603 5891-1290 |
| | FAX : +603 5891-1350 |
| | richard@fgecontrol.com |
| | Block G-2-4, Setia Walk, PSN Wawasan, Pusat Bandar Puchong, 47100 Puchong, Malaysia |

## THE MIDDLE EAST

| COUNTRY | CONTACT INFO |
|---|---|
| SAUDI | **REZAYAT TRADING COMPANY LIMITED** |
| ARABIA | T.R. Ganesan |
| | TEL: +966-13-858-1106 Ext 131 |
| | FAX: +966-3-882-6716 |
| | instrument-sales@rezayat.com.sa |
| | Prince Sultan Bin Abed Alaziz Road, Near Saudi Investment Bank, Al Sehamyiah Tower, 1st Floor, Room 103. |
| | Al-Khobar 31952, P.O. Box 90, Kingdom of Saudi Arabia |
| UNITED | **AL MAZROUI TRADING & GENERAL SERVICES L.L.C.** |
| ARAB | Flor Quiocho |
| EMIRATES | TEL: +971-2-672-0730 |
| | FAX: +971-2-674-2422 |
| | flor@mtgsofd.ae |
| | Suite 801, Al Yasat Tower, Najda Street, P.O. Box 95, Abu Dhabi, United Arab Emirates |
| OMAN | **SERVICES TRADING ESTABLISHMENT L.L.C.** |
| | Muhammad Bilal Bhatti |
| | TEL: +968-2449-0259 |
| | FAX: +968-2449-0259 |
| | ste@steoman.com |
| | PO BOX 174, AL AZAIBA, PC 130, SULTANATE OF OMAN |
| KUWAIT | **GOLDEN PALM PETROLEUM SERVICES** |
| | Mohamed Hussain |
| | TEL: +965-23983017 |
| | FAX: +965-23983051 |
| | mhussain@goldenpalm.com.kw |
| | Off: 24, 3rd Floor, Block B, Al Hashan Commercial Complex, Fahaheel. PO Box : 251, Abu Halifa 54753, Kuwait |
| PAKISTAN | **EASTEC INTERNATIONAL** |
| | Tauseef Akram |
| | Tel: +92-42-3592-6072~4 |
| | Fax: +92-42-3586-6340 |
| | tauseef.akram@eastec.com.pk |
| | 140-B, New Muslim Town, Lahore - 54600 Pakistan |

## THE MIDDLE EAST

| COUNTRY | CONTACT INFO |
|---|---|
| LIBYA | **BENESSA GROUP INC.** |
| | Hajras Issa |
| | Tel: +218-91-373-3232 |
| | hajras.issa@benessagroup.com |
| | Main Airport Road, Tripoli, Libya, P.O. Box 6001 |
| IRAN | **PETRO SANAT SAPRA** |
| | NAFISEH RAHMANI |
| | TEL : (+98) 21-2214-6239 |
| | rahmani@petrosapra.com |
| | Unit 206, No.3, Ahmad Moghaddas St. (11th Alley), Sa`adat Abad Blv.,Tehran, Iran |

## AFRICA

| COUNTRY | CONTACT INFO |
|---|---|
| SOUTH AFRICA | **BLANES INSTRUMENTS** |
| | Paul Dhooge |
| | TEL: +2711-425-1465 |
| | FAX: +2786-604-5381 |
| | paul@blanes.co.za |
| | 130 B President Pretoruis St. Rynfield A/H Section 2. Benoni, Gauteng, South Africa |
| NIGERIA | **ROCOTEX INTEGRATED SERVICES LTD** |
| | Justin Egwim |
| | TEL: +234-8036671566 |
| | FAX:+234-8036671566 |
| | info@rocotexltd.com |
| | 36 EKERE STREET, RUMUOBIAKANI PORTHARCOURT RIVERS STATE. NIGERIA |
| EGYPT | **THE EGYPTIAN CO. FOR TOOLS AND MECHANICAL MACHINERY** |
| | MR. PAUL SALIB |
| | TEL: +202-59193380 |
| | FAX: +202-5921588 |
| | egtools@live.com |
| | 80 EL GOMHORIA STR CAIRO EGYPT |

## EUROPE

| COUNTRY | CONTACT INFO |
|---|---|
| GERMANY | **HEWALTECH UG(haftungsbeschränkt)** |
| | HEINRICH GERULL |
| | TEL: +49 (0)40-609-44-89-91 |
| | FAX.: +49 (0)40-609-44-89-99 |
| | gerull@hewaltech.com |
| | LOTTBEKKOPPELN 4, 22395 HAMBURG, GERMANY |
| RUSSIA | **NTA PROM** |
| | Sales Department |
| | TEL: +7-495-363-63-00 |
| | info@nta-prom.ru |
| | HOUSE 8, STROENIE 1, NAUCHNYI PROEZD, MOSCOW 117246, RUSSIA |
| FRANCE | **TECH TEAM DISTRIBUTION ENVIRONNEMENT** |
| | Brigitte |
| | TEL: +3.22.75.33.40 |
| | FAX: +3-22-75-41-80 |
| | ttde@techteam.fr |
| | 9PLACE DU GENERAL DE GAULLE, 80300 ALBERT, FRANCE |

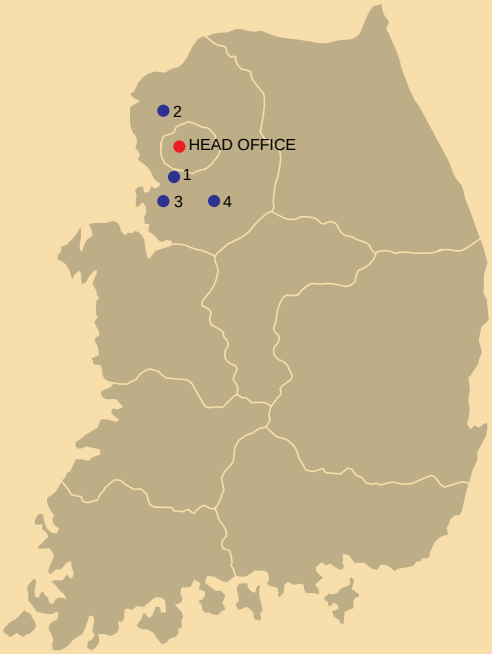
## THE AMERICAS

| COUNTRY | CONTACT INFO |
|---|---|
| UNITED | **AMETEK U.S GAUGE** |
| STATES | SALES DEPT. |
| | TEL: 1-215-293-4100 PRESS 2 |
| | FAX: 1-215-257-0205 |
| | usg.sales@ametek.com |
| | 205 KEITH VALLEY ROAD, HORSHAM, PA 19044 U.S.A. |
| | **HESSE-REYNOLDS SALES** |
| | SCOTT WAGNER |
| | TEL:(716)821-5921 |
| | swagner@hessereynolds.com |
| | 3370 NORTH BENZING ROAD ORCHARD PARK, NY 14127 U.S.A. |
| | **SENTROL INC.** |
| | TIM CROWLEY |
| | TEL : +1 508 830 0458 |
| | FAX : +1 508 830 0248 |
| | tcrowley@nesentrol.com |
| | 208 SO. MEADOW RD., UNIT 1, PLYMOUTH, MA 02360 |
| | **K-TEK International, Inc.** |
| | Tel. 503-624-0315 |
| | sales@ktekintl.com |
| | 9755 SW Commerce Circle Suite B2 Wilsonville, OR 97070 USA |
| CANADA | **Enerfest, Inc.** |
| | Cecilia Urate |
| | TEL: +1-403-261-8008 |
| | curate@enerfest.com |
| | Bay 6, 1511 Highfield Crescent SE, Calgary, AB, Canada T2G 5M4 |

## SOUTH AMERICA

| COUNTRY | CONTACT INFO |
|---|---|
| COLOMBIA | **SEALCO** |
| | Jaime Peraffan |
| | TEL: 574-3704700 |
| | FAX:574-2817327 |
| | jaimeperaffan@gmail.com |
| | AV 37 B # 38 A 12 ITAGUI, 055412, COLOMBIA |
| PERU | **3JR Ingenieros S.A.C.** |
| | Ing. Jaime Valle Dett |
| | Tel: +51-1-261-0314 |
| | ventas@3jri.com |
| | Jr. José Mariano Arce 133(Ex Jr. Barcelona) Pueblo Libre, Lima 21-Perú |

# Company Location



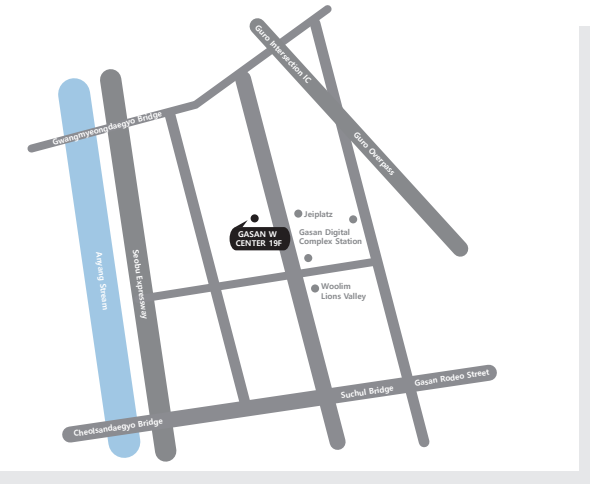

**HEAD OFFICE**
19F, 181, Gasan digital 1-ro, Geumcheon-gu, Seoul, 08503,
Republic of Korea
Tel. +82-2-300-2300 Fax. +82-2-300-2301

**FACTORY - 1**
2022, Deogyeong-daero, Giheung-gu,Yongin-si, Gyenggi-do, 17097,
Republic of Korea

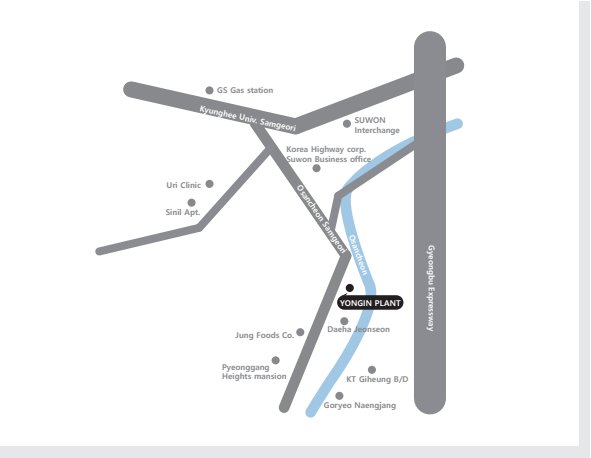
**FACTORY - 2**
149, Hanroksan-gil, Tanhyeon-myeon, Paju-si, Gyeonggi-do, 10858,
Republic of Korea
Tel. +82-31-949-1043 Fax. +82-31-949-1041

**FACTORY - 3**
Sosa Plaza 204, 46, Gyeongin-ro 392 Beon-gil, Sosa-gu, Bucheon-si,
14693, Republic of Korea
Tel. +82-31-351-5751 Fax. +82-31-351-5754

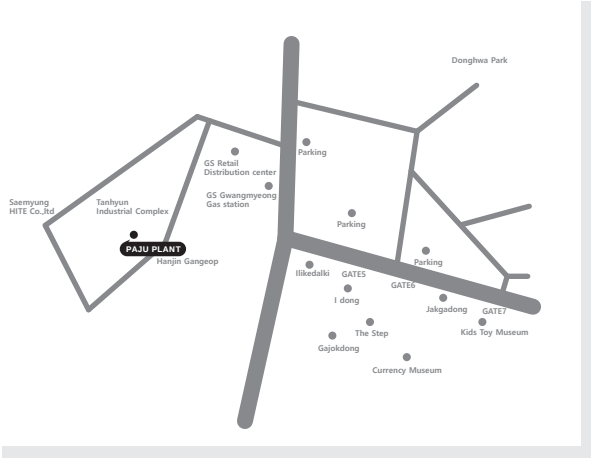
**FACTORY - 4**
5, Madogongdan-ro 4-gil, Mado-myon, Hwaseong-si, Gyeonggi-do,
18542, Republic of Korea
Tel. +82-31-812-6226 Fax. +82-31-812-6556



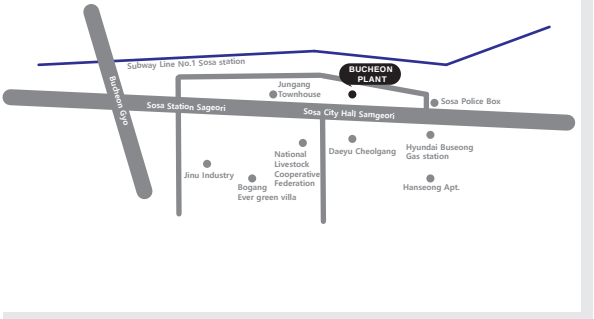

**HEAD OFFICE**
19F, 181, Gasan digital 1-ro, Geumcheon-gu, Seoul,
Republic of Korea
http://www.wisecontrol.com



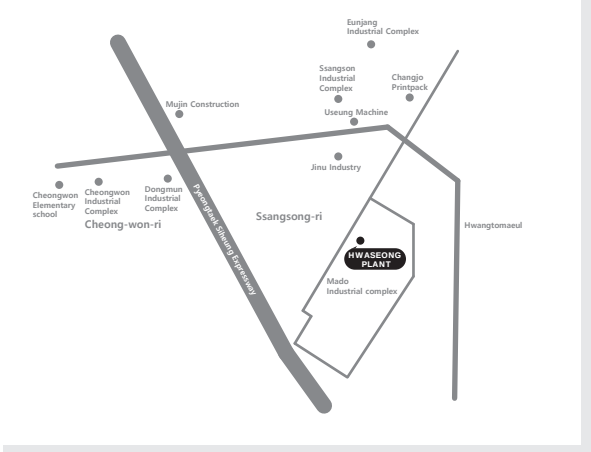

**YONGIN PLANT** **FACTORY - 1**
2022, Deogyeong-daero, Giheung-gu, Yongin-si,
Gyeonggi-do, 17097, Republic of Korea
http://www.wisecontrol.com
PRODUCT. Pressure & Temperature Instruments




**PAJU PLANT** **FACTORY - 2**
149, Hanroksan-gil, Tanhyeon-myeon, Paju-si,
Gyeonggi-do, 10858, Republic of Korea
Tel. +82-32-328-1571 Fax. +82-32-328-6530
PRODUCT. Power transmission line hardware




**BUCHEON PLANT** **FACTORY - 3**
Sosa plaza 204, 46, 392-gil, Gyeongin-ro, Sosa-gu,
Bucheon-si, Gyeonggi-do, 14693, Republic of Korea
Tel. +82-32-351-5751~53 Fax. +82-32-351-5754
PRODUCT. General Service Pressure gauge




**HWASEONG PLANT** **FACTORY - 4**
5, Madogongdan-ro 4-gil, Mado-myon, Hwaseong-si,
Gyeonggi-do, 18542, Republic of Korea
Tel. +82-31-366-9237 Fax. +82-31-366-9238
PRODUCT. Level Gauge & Flow Elements

# Distributors

## SEOUL

| COMPANY | CONTACT INFO |
|---|---|
| WISE WOOJIN | TEL : 82-2-2614-5110 / 82-2-6443-5313 |
| | FAX : 82-2-2614-3001 / 82-2-6443-5419 |
| | #1808, Hanrasigeuma Valley 53, Gasan digital 2-ro, Geumcheon-gu, Seoul, 08588, Republic of Korea |
| DAE IL INSTRUMENT | TEL : 82-2-2279-1210 |
| | FAX : 82-2-2274-0451 |
| | 3F, 145, Cheonggyecheonro, Jongro-gu, Seoul, 03193, Republic of Korea |
| WOOJIN CENTER | TEL : 82-2-2157-1131~3 |
| | FAX : 82-2-2272-3442 |
| | #T-9147, Garden 5 Life, Munjeong 2-dong, Songpa-gu, Seoul, 05838, Republic of Korea |
| WOOJIN TOTAL INSTRUMENT (GU-RO) | TEL : 82-2-2614-3442 |
| | FAX : 82-2-2619-3442 |
| | #1425 Ra-dong, 15, Gyeongin-ro 53-gil, Guro-gu, Seoul, 08217, Republic of Korea |
| ESAK CO.,LTD | TEL : 82-2-2028-0240 |
| | FAX : 82-2-2028-0250 |
| | #79, Magokjungang 8-ro, Gangseo-gu, Seoul, Republic of Korea |
| WOOJIN CONTROL ( GU-RO ) | TEL : 82-2-2613-1560 |
| | FAX : 82-2-2613-1561 |
| | #1229 Ma-Dong, 15, Gyeongin-ro 53-gil, Guro-gu, Seoul, 08217, Republic of Korea |
| WORLD INSTRUMENT | TEL : 82-2-2685-7395 |
| | FAX : 82-2-2685-7397 |
| | #1425 Ma-dong, 15, Gyeongin-ro 53-gil, Guro-gu, Seoul, 08217, Republic of Korea |
| WISE INSTEC | TEL : 82-2-894-5031 |
| | FAX : 82-2-894-5033 |
| | #111, 29-dong, 97, Siheung-daero, Geumcheon-gu, Seoul, 08638, Republic of Korea |

## INCHEON

| COMPANY | CONTACT INFO |
|---|---|
| WOOJIN INSTRUMENT CONTROL | TEL : 82-32-589-1766 |
| | FAX : 82-32-589-1769 |
| | #9-136, 23, Bangchuk-ro 83beon-gil, Dong-gu, Incheon, 22530, Republic of Korea |

## GYEONGGI

| COMPANY | CONTACT INFO |
|---|---|
| BOO SUNG INSTRUMENT & ELECTRIC | TEL : 82-31-479-2193 |
| | FAX : 82-31-479-2190 |
| | #215, 1-dong, 76, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do, 14117, Republic of Korea |
| AUTO SENSOR KOREA | TEL : 82-31-278-6292 |
| | FAX : 82-31-278-6293 |
| | #703, 97, Jungbu-daero 448beon-gil, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea |
| UTS CO.,LTD | TEL : 82-31-278-5721 |
| | FAX : 82-31-227-5714 |
| | 61, Giandong-ro, Hwaseong-si, Gyeonggi-do, 18339, Republic of Korea |
| DAE JOO INSTRUMENT | TEL : 82-31-248-1581 |
| | FAX : 82-31-248-1584 |
| | 25, Paldalmun-ro 93beon-gil, Paldal-gu, Suwon-si, Gyeonggi-do, 16244, Republic of Korea |

## GYEONGGI

| COMPANY | CONTACT INFO |
|---|---|
| **WISE TECH CO.,LTD** | TEL : 82-31-280-5053 |
| | FAX : 82-31-283-2523 |
| | #906, 767, Sinsu-ro, Suji-gu, Yongin-si, Gyeonggi-do, Republic of Korea |
| **WOOJIN INSTRUMENT CO., LTD** | TEL : 82-2-3452-5517 |
| | FAX : 82-2-8065-4833 |
| | #1601, Tower-dong, 13, Heungdeok 1-ro, Giheung-gu, Yongin-si, Gyeonggi-do, 16954, Republic of Korea |
| **WISE ENGINEERING CO.,LTD** | TEL : 82-31-280-5057 / 5079 |
| | FAX : 82-31-283-5080 |
| | #901, 103-dong, 486-1, Sin-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea |
| **WOOJIN CONTROL CO.,LTD** | TEL : 82-31-287-2141 / 82-41-358-2141 |
| | FAX : 82-31-287-2143 / 82-41-358-2143 |
| | #202-11, 9, Geumhwa-ro, Giheung-gu, Yongin-si, Gyeonggi-do, Republic of Korea |
| **WISE INSTRUMENT** | TEL : 82-31-283-3944 / 82-31-284-3944 |
| | FAX : 82-31-282-3944 |
| | 71-19, Jungbu-daero 747beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, Republic of Korea |
| **WOOJIN KOREA** | TEL : 82-31-463-3000 |
| | FAX : 82-31-463-3002 |
| | #1009, A-dong, 282, Hagui-ro, Dongan-gu, Anyang-si, Gyeonggi-do, 14056, Republic of Korea |
| **WISE INC** | TEL : 82-31-492-7815 |
| | FAX : 82-31-492-7816 |
| | #324, 12-dong, 326, Sandan-ro, Danwon-gu, Ansan-si, Gyeonggi-do, 15431, Republic of Korea |
| **DONG A MANAGEMENT & TECH CO.,LTD** | TEL : 82-31-251-4247 |
| | FAX : 82-31-251-4249 |
| | 2F, 22, Sinwon-ro 247beon-gil, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16676, Republic of Korea |
| **WOOJIN Measurement & Instrument CO., LTD.** | TEL : 82-31-430-6641 |
| | FAX : 82-31-430-6640 |
| | #123, 12-Dong, Siwha Yootong Sangga, Jeongwang-dong, 244, Gongdan 1-daero, Siheung-si, |
| | Gyeonggi-do, 15103, Republic of Korea. |
| **WOOJIN INSTRUMENT (GYEONG GI)** | TEL : 82-31-225-9158 |
| | FAX : 82-31-225-9157 |
| | #113, 103-dong, 109, Wauan-gil, Bongdam-eup, Hwaseong-si, Gyeonggi-do, 18298, Republic of Korea |
| **SENTROL** | TEL : 82-31-430-6567 |
| | FAX : 82-31-430-6569 |
| | #126, 4-Dong, 244, Gongdan 1-daero, Siheung-si, Gyeonggi-do, 15103, Republic of Korea |
| **WISE SENSOR** | TEL : 82-31-287-3337 |
| | FAX : 82-31-287-3339 |
| | 2022, Deogyeong-daero, Giheung-gu, Yongin-si, Gyeonggi-do, 17097, Republic of Korea |
| **SENTROL SYSTEM CO.,LTD** | TEL : 82-31-337-5446 |
| | FAX : 82-31-337-5448 |
| | #814, B-dong, 282, Hagui-ro, Dongan-gu, Anyang-si, Gyeonggi-do, 14056, Republic of Korea |

## CHUNGCHEONG

| COMPANY | CONTACT INFO |
|---|---|
| **SHIN JIN INSTRUMENT & ENGINEERING** | TEL : 82-41-576-3154 |
| | FAX : 82-41-576-3155 |
| | #314, 10, Baekseokgongdan 1-ro, Seobuk-gu, Cheonan-si, Chungcheongnam-do, Republic of Korea |
| **SEO HO CORPERATION** | TEL : 82-43-237-9325 |
| **(Chungcheongbuk-do)** | FAX : 82-63-214-9328 |
| | 586, Hyeoksin-ro, Deokjin-gu, Jeonju-si, Jeollabuk-do, Republic of Korea |

## DAEJEON

| COMPANY | CONTACT INFO |
|---|---|
| DAE SUNG INSTRUMENT & ENGINEERING | TEL : 82-42-634-4795 |
| | FAX : 82-42-634-4796 |
| | 19, Ojeong-ro 99beon-gil, Daedeok-gu, Daejeon, 34440, Republic of Korea |

## DAEGU

| COMPANY | CONTACT INFO |
|---|---|
| DAE MYUNG F.A CO.,LTD | TEL : 82-53-558-8101 |
| | FAX : 82-53-558-8106 |
| | 218, Seodaegu-ro, Seo-gu, Daegu, 41770, Republic of Korea |
| WOOJIN TOTAL INSTRUMENT (DAE GU) | TEL : 82-53-254-7401 |
| | FAX : 82-53-253-7401 |
| | 32, Bukseong-ro, Jung-gu, Daegu, 41921, Republic of Korea |

## ULSAN

| COMPANY | CONTACT INFO |
|---|---|
| SUN-IL INSTRUMENT | TEL : 82-52-267-8910 |
| | FAX : 82-52-267-8912 |
| | 5-4, Sangnam 2-gil, Sangnam-ri, Cheongnyang-myeon, Ulju-gun, Ulsan, Republic of Korea |
| WOOJIN INSTRUMENT & ELECTRIC | TEL : 82-52-276-8428 |
| | FAX : 82-52-276-8430 |
| | #145~6, 24, Galbat-ro, Nam-gu, Ulsan, 44717, Republic of Korea |
| WOOJIN INSTRUMENT (UL SAN) | TEL : 82-52-268-0992 |
| | FAX : 82-52-266-0991 |
| | #120, Galbat-ro, Nam-gu, Ulsan, 44717, Republic of Korea |
| SEIN TECH CO.,LTD | TEL : 82-52-287-0601 |
| | FAX : 82-52-287-0604 |
| | 55, Hwadong 15-gil, Buk-gu, Ulsan, 44240, Republic of Korea |

## BUSAN

| COMPANY | CONTACT INFO |
|---|---|
| WOOJIN INSTRUMENT CORPORATION | TEL : 82-51-319-1255~7 |
| | FAX : 82-51-319-1258 |
| | #101, 13-dong, 37, Gwaegam-ro, Sasang-gu, Busan, 46977, Republic of Korea |

## GYEONGSANG

| COMPANY | CONTACT INFO |
|---|---|
| **SAMWOO INSTRUMENT CO.,LTD** | TEL : 82-55-245-6661~4 |
| | FAX : 82-55-247-2681 |
| | 3, Sanhonam 12-gil, Masanhappo-gu, Changwon-si, Gyeongsangnam-do, 51331, Republic of Korea |
| **SAMWOO INSTRUMENT & TECHNOLOGY** | TEL : 82-55-276-6661 |
| | FAX : 82-55-276-6619 |
| | 2F, 3, Sanhonam 12-gil, Masanhappo-gu, Changwon-si, Gyeongsangnam-do, 51331, Republic of Korea |
| **IL-SUNG INSTRUMENT & ELECTRIC** | TEL : 82-54-278-4241 |
| | FAX : 82-54-278-4249 |
| | 6, Jungheung-ro 58beon-gil, Nam-gu, Pohang-si, Gyeongsangbuk-do, 37771, Republic of Korea |

## GWANGJU

| COMPANY | CONTACT INFO |
|---|---|
| **TPL** | TEL : 82-62-953-4390~1 |
| | FAX : 82-62-953-4392 |
| | #303, B-dong, 138, Hanamsandan 3beon-ro, Gwangsan-gu, Gwangju, 62231, Republic of Korea |

## JEOLLA

| COMPANY | CONTACT INFO |
|---|---|
| **IL-SUNG INSTRUMENT & ELECTRIC** | TEL : 82-61-792-6578 / 82-61-792-8792 |
| | FAX : 82-61-792-6579 |
| | 46-1, Geumnyeong-ro, Gwangyang-si, Jeollanam-do, 57722, Republic of Korea |
| **WISE CONTROL LIMITED COMPANY** | TEL : 82-61-685-9900 |
| **(JEOLLANAM-DO)** | FAX : 82-61-685-9903 |
| | 980, Jwasuyeong-ro, Yeosu-si, Jeollanam-do, 59631, Republic of Korea |
| **SEO HO CORPERATION** | TEL : 82-63-214-9325 |
| | FAX : 82-63-214-9328 |
| | 114, Yeosan-ro, Deokjin-gu, Jeonju-si, Jeollabuk-do, 54852, Republic of Korea |
| **SI & N Co.,Ltd.** | TEL : 82-63-291-6900 |
| | FAX : 82-63-291-9911 |
| | 273-2, Ongoeul-ro, Deokjin-gu, Jeonju-si, Jeollabuk-do, 54876, Republic of Korea |

**YONGIN PLANT**
2022, Deogyeong-daero, Giheung-gu, Yongin-si,
Gyeonggi-do, 17097, Republic of Korea
http://www.wisecontrol.com
PRODUCT. Pressure & Temperature instruments

**PAJU PLANT**
149, Hanroksan-gil, Tanhyeon-myeon, Paju-si,
Gyeonggi-do, 10858, Republic of Korea
PRODUCT. Power transmission line hardware

**BUCHEON PLANT**
122, Jomaru-ro 385beon-gil, Bucheon-si, Gyeonggi-do, 14556,
Republic of Korea
PRODUCT. General Service Pressure gauge

**HWASEONG PLANT**
5, Madogongdan-ro 4-gil, Mado-myon, Hwaseong-si,
Gyeonggi-do, 18542, Republic of Korea
PRODUCT. Level Gauge & Flow Elements

**HEAD OFFICE**
19F, 181, Gasan digital 1-ro, Geumcheon-gu, Seoul,
Republic of Korea
Tel. 82-2-300-2300 Fax. 82-2-300-2301
http://www.wisecontrol.com