



WAA EUROPE

Wisdom and Ability



WAA EUROPE

Wisdom and Ability

COMPANY PROFILE



ABOUT WAA GROUP

As Wisdom and Ability Person's Association (WAA), we are a U.S. based company, globally recognized solution provider for **Megaprojects** all around the world.



ABOUT WAA EUROPE

As **WAA Europe**, we represent **WAA Group** all throughout **Europe** and **Middle East**, and serve as the entity responsible for managing and overseeing all projects located in Europe and the Middle East.



With a remarkable international presence,
WAA operates through its regional entities;

- **WAA USA**
- **WAA KOREA**
- **WAA EUROPE**
- **WAA KUWAIT**
- **WAA QATAR**
- **WAA DUBAI**
- **WAA SAUDI**



OUR VISION



- ★ With over 25 years of experience, WAA stands out as a visionary company with a strong focus on people and innovation.
- ★ We prioritize values such as wisdom, knowledge and ability over material gains.

W.A.A. COMPANIES



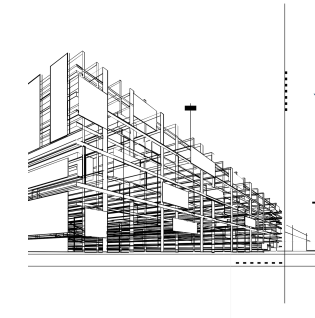
WAA CONSTRUCTION

Wisdom and Ability

KN-CELL
KOREAN COSMETICS



APRICOT ACCESS



WAA ENG & ARCH

WAA Engineering & Architecture

SV SEJIN VALVE



**SV SEJIN EUROPE
VALVE**

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- Oil and Gas
- Energy
- Petrochemical
- Refinery
- Textile
- Iron and Steel
- Food and Beverage
- Chemical Process
- Water and Wastewater
- Renewable Energy (Biogas, biomass, solar energy)



CLIENTS



SÖKTAŞ



nuh
enerji elektrik
üretim a.ş.



KAYALI
ENERJİ ÜRETİM A.Ş.



الهيئة الملكية لمدينة الرياض
ROYAL COMMISSION FOR RIYADH CITY



البتترول الوطنية
KNPC

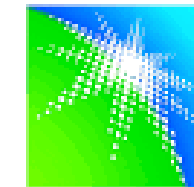
إحدى شركات مؤسسة البترول الكويتية
A Subsidiary of Kuwait Petroleum Corporation

سابك
عنداله



شركة المياه الوطنية
National Water Company

aramco



GLOBAL CONTACT POINTS & PARTNERS



Partnership

Contact Points



SOME OF OUR REFERENCE PROJECTS



Country	End User	Project Name	Budget
KOREA	MEW	Supply of Ductile Iron Pipes. & Fittings	€15.000.000
KUWAIT	KNPC	Al-Zour New Refinery Project	\$1.3 Billion
KUWAIT	KNPC	Supply of Reactors & Separators for Cclearn Fuels Piroject 2020	\$331 Million
KUWAIT	EQUATE	Supply of New Tubular Heat Exchanger	\$7.900.000
USA	Medical Properties Trust	Instrumentation Control & Automation Package Project SE/97 Pumping Station (UGCC - Main Contractor)	\$6.000.000
SAUDI ARABIA	SWCC	NWC-SWCC Connection Points Bulk Meter Project	\$119 Million
UAE	SEWA	Al Layah Combined Cycle Power Plant	\$550 Million
UAE	ADNOC	QusahwiRa Field Development Phase 2	\$130 Million

Country	End User	Project Name	Budget
SAUDI ARABIA	ARAMCO	Tanajib ISPP project	\$60.400.000
INDONESIA	Lotte Chemical Co.	LINE project	\$12.000.000
GUAM	KEPCO&EWP	Guam Ukudu combined Cycle Power Plant(WT&WWT)	\$8.300.000
TAIWAN	Hyundai Engineering	Datan Combined Cycle Expansion Project Unit 7 Add On	\$9.900.000
OMAN	VCF	BARKA V IWO-RO DESALINATION PLANT	\$4.500.000
INDONESIA	EPC Energy Singapore - HK	JAWA 9 & 10 COAL FIRED STEAM POWER PLANT PROJECT	\$8.800.000
MALAYSIA	POSCO E&C	PULAU INDAH COMBINED CYCLE POWER PLANT	\$5.550.000
KOREA	Cheonga Energy Korea Western Power GS Energy	Combined Heat & Power Plant	\$12.500.000

Country	End User	Project Name	Budget
USA	U.S. ARNOLD AIR FORCE BASE	Jet Engine Combustion	\$10.400.000
UAE	FUJAIRAH POWER	FUJAIRAH 3 IPP Project	\$7.000.000
VIETNAM	CTCI Corporation	Van Phong 1 BOT Thermal Power Plant Project	\$9.300.000
BANGLADESH	SAMSUNG C&T	Meghnaghat 718MW CCPP	\$11.000.000
SINGAPORE	EXXON MOBIL	LIZA UNITY PHASE 3	\$15.500.000
SAUDI ARABIA	SWCC	Construction of MED- TVC unit and Water Production	\$18.500.000
ITALY	SAIPEM	COOLING WATER SIDE STREAM	\$3.550.000
QATAR	QATAR CHEMICAL	MAA DC MPD	\$2.500.000

Country	End User	Project Name	Budget
MOROCCO	Safi Energy Company	Safi Independant Power Project	\$5.200.000
KAZAKHSTAN	Karabatan Utiliy Solution LLP	Karabatan Power Plant	\$7.000.000
PANAMA	Gas Natural Atlantico	Panama Colon Power	\$7.300.000
MALAYSIA	JIMAH EAST POWER	JIMAH EAST POWER CFPP	\$1.500.000
ALGERIA	Mostaganem CCPP	Mostaganem CCPP	\$1.900.000
TURKEY	ACWA	KIRIKKALE ICPP	\$2.500.000
ITALY	SAIPEM	COOLING WATER SIDE STREAM	\$3.550.000
KENYA	THE KENYA ELETRCITY GENE	OLKARI IV GEOTHERMAL POWER PLANT	\$2.500.000

APPROVALS & CERTIFICATES



MANAGEMENT SYSTEM CERTIFICATE

Certificate No.
E004-1017-KQ-000-000

Initial certification date
28 October, 2017

Valid
28 December, 2018 - 28 October, 2019

This is to certify that the management system of

Enertork Ltd.

344 Neungseo-ro, Neungseo-myeon, Yeosu-si, Gyeonggi-do, Korea

has been found to conform to the Quality Management System standard:
ISO 9001:2015, KS Q ISO 9001:2015

This certificate is valid for the following scope:
DESIGN AND MANUFACTURE OF ELECTRIC ACTUATOR

Place and date:
Seoul 28 December, 2018



For the issuing office:
DNV GL - Business Assurance
189, Yeosu Bldg., 1, Yeosu-si, Jeollanam-do, Korea

Signature
Sir Kyoung Ahn
Management Representative

Loss of fullness of conditions as stated in the Certification agreement may render this Certificate invalid.
본 인증서의 효력은 인증 계약에 명시된 조건이 충족되지 않을 경우 무효가 됩니다.
인증계약에 명시된 조건을 충족하지 못할 경우 본 인증서는 효력을 상실합니다.
DNV GL Business Assurance Korea Ltd., 189 Yeosu Bldg., 1, Yeosu-si, Jeollanam-do, Republic of Korea TEL: +82-120-0000
DNV GL Korea

EVPÜ

CERTIFICATE No. 00018/1001/1/2015
on January 29th, 2017

EVPÜ s.p.a., Nova Dobruša, authorized for Certification issue this Certificate.

- | | |
|-------------------|---|
| 1. Product | : Electric Actuator TM-Series enertork |
| 2. Type | : TM-01HDAC |
| 2.1 Derived types | : See annex 1 |
| 3. Specification | : J NFE 400V _N - 20 Hz |
| 4. Applicant | : ENERTORK LTD.
344, Neungseo-ro, Neungseo-myeon, Yeosu-si, 469 811 Gyeonggi-do, Korea |
| 5. Manufacturer | : ENERTORK LTD.
344, Neungseo-ro, Neungseo-myeon, Yeosu-si, 469 811 Gyeonggi-do, Korea |

This Certificate confirms the compliance of features of mentioned product type with technical requirements in following technical and legal decrees:

EN 60204-1: 2006 + A1: 2009	EN 61000-6-2: 2005
EN 61000-3-2: 2006 + A1: 2009 + A2: 2009	EN 61000-6-4: 2007 + A1: 2011
EN 61000-3-3: 2013	

Results of tests and findings on the conformity of features of mentioned product type are stated in Final report No. 00028/2015/C of January 29th, 2015.

Validity of this certificate is limited for the period from: **January 29th, 2015**
until: **January 28th, 2018**



Signature
Mark Hudák

Any significant changes in the design or construction of the products, the quality system and amendments of the technical and legal decrees reference above may render this Certificate invalid. The product liability rests with the manufacturer or his representative.

EVPÜ s.p.a., Trnava 2620, SK 261 01 Nova Dobruša, Slovak republic, www.evpu.sk

03/2018

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KOSEP World Class-30

**CERTIFICATE
of Best Partner**

Enertork
enertork

#344 Neungseo-Ro, Neungseo-Myeon, Yeosu-Si, Gyeonggi-Do, Korea

KOREA SOUTH-EAST POWER CO. certifies that
ENERTORK Co., Ltd has excellent technology
and global competitiveness.

CERTIFICATION No.2

CEO OF KOSEP

Date of Issue : 24. March, 2015

KOSEP KOREA SOUTH-EAST
POWER CO.

30, Seodeung-ro 123 beon-gil, Jinju-si Gyeongangnam-do, 660-001 KOREA.



ТАМОВЕННЫЙ СОНД
СЕРТИФИКАТ СООТВЕТСТВИЯ

№ TC: KZ.7500525.02.11.00407 Серия KZ: 0053386

ОРГАН ПО СЕРТИФИКАЦИИ Тонгжинский центр сертификации "Т-Стандарт" Агент Республики Казахстан по техническому регулированию и метрологии (АКМЕТ), город Алматы, проспект Саулы 104Б. Телефон: +7 (727) 254-01-40, факс: +7 (727) 254-00-61, e-mail: info@t-standard.kz, № аккредитации KZ.002.00257 выдан 09.06.2014 года. Центр является аккредитованной организацией Национального союза аккредитации.

ЗАЯВИТЕЛЬ Закрытое акционерное общество "Тонгжинский центр сертификации" и/или "T-standard Ltd." Республика КР. Свидетельство о государственной регистрации № 131210001278 от 04.02.2013 года. Российская Федерация Место нахождения: 120000, город Москва, улица Калужская, дом 11/11/1, факсовый адрес: 425000, город Москва, улица Калужская, дом 11/11/1, телефон: +7 (495) 240-41-15, 24-66-24, 24-64-61, e-mail: info_tsc@rambler.ru

ИЗГОТОВИТЕЛЬ "T-standard Ltd." Корея, Место нахождения: 144, Neungseo-ro, Neungseo-myeon, Yeosu-si, Gyeonggi-do. Факсовый адрес: 144, Neungseo-ro, Neungseo-myeon, Yeosu-si, Gyeonggi-do

ПРОДУКЦИЯ Электроустройства, входящие в состав системной № 0071718, из стандартных комплектующих, и/или системы управления № 0071718-0071782, предназначенные по стандарту EN 609740, EN 60975-1, IEC 60324, и/или для других

КОД ТН ВЭД ТС: 8501

СООТВЕТСТВИЕ ТРЕБОВАНИЕМ Техническим регламентам Таможенного союза ТР ТС 002/2011 "Об утверждении обязательных требований к электроустройствам для работы на переменном токе"

СЕРТИФИКАТ ВЫДАН НА ОСНОВАНИИ протокола испытаний № 01/25-1-01/25-01 от 22.01.2015 года, утвержденного Свидетельством о государственной аккредитации Тонгжинского центра сертификации "Т-Стандарт", протокол испытаний № KZ.04.02.0018, действующий до 09.06.2019 года, и/или протокола проведения проверки от 01.01.2015 года. Орган по сертификации аккредитован Тонгжинским центром сертификации "Т-Стандарт", регистрационный документ/акт аккредитации выдан от 09.06.2014 года - сертификат ISO 9001:2008/ISO 9001:2009 № 0184-1897-00-KOR-RUS от 28.12.2012 года, выданного ISO 9001.

ДОПОЛНИТЕЛЬНАЯ ИНФОРМАЦИЯ Настоящим заверяю, что Центр по сертификации и метрологии "Т-Стандарт" является аккредитованной организацией Национального союза аккредитации. Условия и сроки действия сертификата, срок действия факсов и/или в других документах, касающихся сертификации, указаны в документах.



15.06.2015 г. от 15.06.2015 г.

Руководитель
управляющего делами
органа по сертификации

Исполнитель (подпись)

Генеральный Директор ИАМ

Генеральный Директор ИАМ



Certificate of Qualification

Korea Electric Power Corporation (KEPCO) hereby qualifies **ENERTORK Ltd.** as a KEPCO Trusted Partner in recognition of its commitment to quality, reliability and customer satisfaction in **Actuator**.

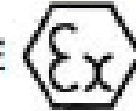
January 20, 2015




Cho, Hwan Elk
President & CEO

www.kepco.co.kr/trustedpartner

1 EC-TYPE EXAMINATION CERTIFICATE



- 2 Equipment or Protective systems intended for use in Potentially Explosive Atmospheres - Directive 94/9/EC
- 3 EC-Type Examination Certificate No: FM15ATEX00552
- 4 Equipment or protective systems (Type Reference and Name) TM-01 and TM-04 Electric Actuator

- 5 Name of Applicant: Enertork Ltd
- 6 Address of Applicant: 64-8 Ogye-Ri Hwangso-Myeon Yeosu-City, Gyeonggi-Do 469-811 Republic of Korea

- 7 This equipment or protective system and any acceptable variation therein is specified in the schedule to this certificate and documents therein referred to.

- 8 FM Approvals Ltd, notified body number 1725 in accordance with Article 9 of Directive 94/9/EC of 23 March 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 intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report number:

3040550 dated 18 February 2015

- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those identified in item 15 of the schedule to this certificate, has been assessed by compliance with the following documents:

EN 60079-0: 2009, EN 60079-1: 2007, and EN 60529:1991 + A1:2006

- 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, examination and tests of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the items including packing and supplied (the equipment or protective system). These are not covered by this certificate.

- 12 The marking of the equipment or protective system shall include:



II 2G Ex d IIB T4 Ta = -20°C to +40°C IP66


Mick Gower
Certification Manager, FM Approvals Ltd

Issue date: 21st February 2015

Issue date: 21st February 2015

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals Ltd, 1 Windsor Court, Walsall, Solihull, UK, B44 1RQ
T: +44 (0) 1927 643000 F: +44 (0) 1927 643000 E: sales@fmapprovals.com www.fmapprovals.com

FATEX 020/Mar12

Page 1 of 2



Morgan Korea Ltd.
Head Office, #460-2,
Yangtae-Ri, Wollong-Myung
Paju-City, Kyunggi-Do, KOREA



National Technical Systems
533 Main Street
Acton, MA 01720
(978) 263-2933

CERTIFICATE OF CONFORMANCE

CC62281-02F, Revision 0

ITEM	QTY.	DESCRIPTION
01	1	LTMD-01Q, Morgan Korea Actuator, 0.75 kW Motor
02	1	LTMD-1Q, Morgan Korea Actuator, 3.7 kW Motor
03	1	LTMD-5Q, Morgan Korea Actuator, 11 kW Motor

NTS hereby verifies that:

The items in the quantity listed above have successfully undergone Class 1E, Harsh environment and seismic qualification testing to the requirements of IEEE 344-1987, IEEE 323-1983, and IEEE 382-1985 in accordance with Specification No. MKSB-QS-001.

A detailed description of the qualification testing, including seismic and harsh environmental qualification data, was submitted under NTS Report No. 62281-02F, Revision 0. Furthermore, all work performed under NTS Project No. 62281-02F, was conducted in accordance with NTS Corporate Quality Policy Manual, Revision 0, dated May 18, 2001. During the program, the NTS Corporate Quality Policy Manual was updated to Revision 1, dated January 15, 2002. This program fulfills the requirements of 10CFR50, Appendix B, and 10CFR Part 21.

Prepared by:

Steve Parisk

Steve Parisk, Program Manager

NTS Power Products

9/17/03

Date

Approved By:

Sharon R. Bickhardt

Quality Representative

NTS Power Products

9/29/03

Date



CERTIFICATE NO FS/71/220/16/0125

PAGE 1/1
16/09/04

LICENCE HOLDER
ENERTORK LTD.

ENERTORK LTD, HEADQUARTER
#344, NEUNG-YEO-RO, NEUNGSEO-
MYEON, YEOJU-SI, KYUNGGI-DO,
KOREA

MANUFACTURING PLANT
ENERTORK LTD.

ENERTORK LTD, FACTORY
#344, NEUNG-YEO-RO, NEUNGSEO-
MYEON, YEOJU-SI, KYUNGGI-DO,
KOREA

PROJECT NO. 01
KORF

LICENSED TEST MARK
SGS TÜV SAAR

CERT. REPORT NO.
KORF0001



Tested according to
EN 60335-1

IEC 60335-1:2000

Certified product(s)
Functional Safety

TM Electric Actuator

Model(s)
Model

TM-01, TM-04, TM-07, TM-1, TM-3, TM-6, TM-12
Equipment submitted as Type A (non-hazardous parts) respectively
Type B (EEMs parts).

Technical Data and
Parameter
Technical Data and Parameter

The quantitative (IEC 60335-1 Tables 2 i 3) and qualitative
probabilistic demands (IEC 60335-2 Tables 2 i 3) for the safety
functions.

- 1) „Stay-put – the actuator keeps its present position in case no
safe external stop/stop commands are received“ in high
demand mode of operation.
 - 2) „Emergency Shut Down (ESD) – the actuator performs the
commissioned ESD action (open/close/stop)“ in low demand
mode of operation.
- are fulfilled EN 12181 configuration on the assumption a
periodic diagnosis is performed.

Specific Requirements
Technical Data and Parameter

Proof of the required safety-related parameters
Failure rate, PFD, PFH, DC and SFF by means of FMEA.
The verification report is an integral part of this certificate. All
requirements and specifications of the current valid revision of
this report shall be met.

Certification Body
for Functional Safety
SGS-TÜV Saar GmbH
Certification Body for Functional Safety

16/09/2018-03-18

Robert Bickhardt

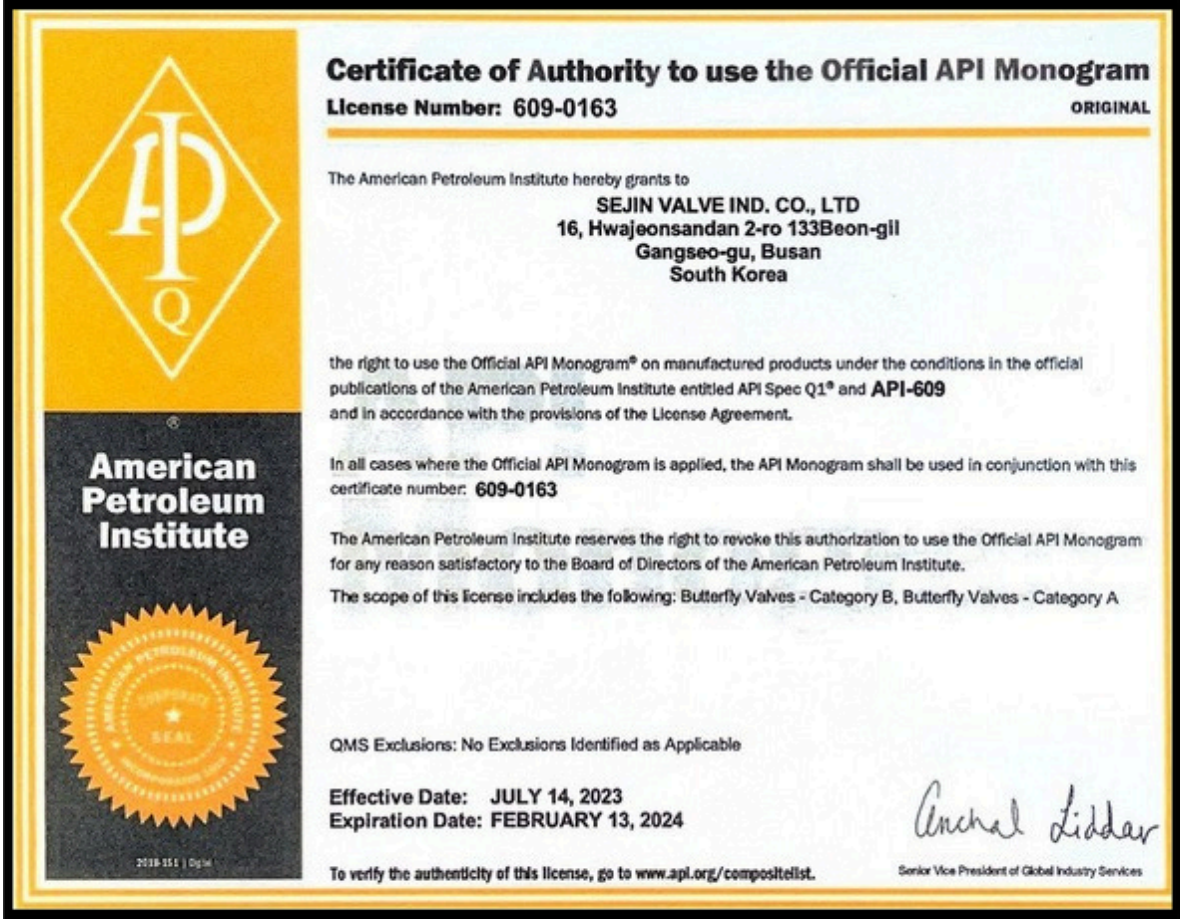
This technical regulation is an integral part of this certificate.
On 16/09/2018, the certificate was issued by the certification body SGS-TÜV Saar GmbH, Saarbrücken, Germany.

SGS-TÜV Saar GmbH, Saarbrücken, Germany

Phone: +49 (0) 641 300-1000 Fax: +49 (0) 641 300-1001

Website: www.sgstuv.com Email: info@sgstuv.com





TEST CERTIFICATE

ORIGINAL

Certificate No. : B-50/2016-0023/015-02

Date: June 28, 2017

Page 1 of 1

Applicant / Manufacturer : Sejin Valve Ind. Co., Ltd.

24, Nakdongnam-ro 549 beon-gil, Gangseo-gu, Busan, Korea

Date and place of test : May 29 ~ June 12, 2017 at the manufacturer's premises in Busan, Korea

Kind of test : Type Acceptance Testing according to MESC SPE 77/300

Test valve : Butterfly Valve

- Triple-Offset, Double Flange, DN 600, Class 300, ASTM A351 CF8M

Applicable drawing : A1800

Test standard : MESC SPE 77/300 December 2012

Test condition :

- Test Sequence No. : 16

- Emission Tightness Class : B

- Test Medium : Helium

- Test Temperature : High/Elevated Temperature : 200°C

Low Temperature : - 196°C

Extension of qualification : As per Appendix C of MESC SPE 77/300

This is to certify that the test was performed by the manufacturer under witness and reviewed the EVADOCs as per MESC SPE 77/300D, and the result was satisfied within acceptance criteria specified in MESC SPE 77/300.

Note
The details of the test condition and data are as per manufacturer's Test Report No. SV-TAT-BF-600300-01, which was verified and endorsed.

This certificate is valid from June 27, 2017 until June 27, 2022.

In accordance with Client's instructions, the Company's involvement has been limited to witnessing/observing a third party's intervention(s) at the third party's laboratory/test house or other facilities and installations used for the intervention(s). The Company's sole responsibility was to be present at the time of the third party's intervention(s) to forward the results, or confirm the occurrence, of the intervention(s). The Company is not responsible for the condition or calibration of apparatus, instruments and measuring devices used, the analysis methods applied, the qualifications, actions or omissions of the third party's personnel or the analysis results.

This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Korea Co., Ltd.

I. J. Jun

Manager, Industrial Division

SHJ/jhs

FUGITIVE EMISSION TEST CERTIFICATE

ORIGINAL

Certificate No. B-50/2016-0023/004-1

Page 1 of 1

Date : 15 June, 2016

Applicant / Manufacturer : Sejin Valve Industrial Co., Ltd.

30 May, 2016-2 June, 2016 at the manufacturer's premises in Busan, Korea

Date and place of test : Witness of Fugitive Emission Test

Kind of test : Butterfly Valve (ASTM A216 WCB)

Test valve : - 10", CL300

Applicable drawing : TOM3B-10BA Rev.0

Test standard : ISO 15848 Part1, 2015 Edition

Test condition :

- Test Medium : Helium

- Test Pressure : 56.0 Bar at Ambient Temperature,

46.0 Bar at 200°C

- Tightness Class : BH

- Mechanical-Cycle Class : 1500 Cycles / CO2

- Number of Thermal Cycles : 3

- Number of Stem Seal Adjustment : 0

- Temperature Class : t200°C

Performance Class : ISO FE BH-CO2- t(RT, 200°C)-CL300-ISO 15848-1

Extension of Qualification : As per Para.8 of ISO 15848-1

This is to certify that the Fugitive Emission Test was performed by the manufacturer under our witness as above, and the results were satisfied within acceptance criteria specified for the target performance class.

Note
The details of the test condition and data are as per manufacturer's Test Report No. SV-FET-10300-1, which were verified and endorsed by us.

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Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Korea Co., Ltd.

B. I. Lim

Team Lead, Industrial Division

SHJ/jyp

FUGITIVE EMISSION TEST CERTIFICATE

ORIGINAL

Certificate No. B-50/2016-0023/004-2

Page 1 of 1

Date : 15 June, 2016

Applicant / Manufacturer : Sejin Valve Industrial Co., Ltd.

30 May, 2016-3 June, 2016 at the manufacturer's premises in Busan, Korea

Date and place of test : Witness of Fugitive Emission Test

Kind of test : Butterfly Valve (ASTM A216 WCB)

Test valve : - 24", CL300

Applicable drawing : TOM3B-24BA Rev.0

Test standard : ISO 15848 Part1, 2015 Edition

Test condition :

- Test Medium : Helium

- Test Pressure : 56.0 Bar at Ambient Temperature,

46.0 Bar at 200°C

- Tightness Class : BH

- Mechanical-Cycle Class : 1500 Cycles / CO2

- Number of Thermal Cycles : 3

- Number of Stem Seal Adjustment : 1

- Temperature Class : t200°C

Performance Class : ISO FE BH-CO2-SSA1- t(RT, 200°C)-CL300-ISO 15848-1

Extension of Qualification : As per Para.8 of ISO 15848-1

This is to certify that the Fugitive Emission Test was performed by the manufacturer under our witness as above, and the results were satisfied within acceptance criteria specified for the target performance class.

Note
The details of the test condition and data are as per manufacturer's Test Report No. SV-FET-24300-1, which were verified and endorsed by us.

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SGS Korea Co., Ltd.

B. I. Lim

Team Lead, Industrial Division

SHJ/jyp

FIRE TEST CERTIFICATE

ORIGINAL

Certificate No. KR-5000-50007040-5

Page 1 of 1

Date: April 05, 2021

Applicant / Manufacturer : Sejin Valve Industrial Co., Ltd.

24, Nakdongnam-ro 549 beon-gil, Gangseo-gu, Busan, Korea

Date and place of test : April 10, 2018 at the Manufacturer's Premises in Busan, Korea

Kind of test : Witness of Fire Test

Test valve : Butterfly Valve

- 2", Class 150, ASTM A216 WCB

Design standard : API 609 Category B - 8th Edition, February 2016

Applicable drawing : A0392-15002-CS Rev.0

Test standard : API STANDARD 607 - 7th Edition, June, 2016

This is to conform that the fire test was performed by the manufacturer under witness, and the results were satisfied with the requirements in API 607, so we hereby confirm that the coverage of the qualification ranges Class150 through Class300 rating with 2" and below through 4" size for the Ferritic Material.

Note
The details of the test condition and data are as per Manufacturer's Test Report No. SV-FST-15002-CS-01 dated 10 April, 2018, which were verified and endorsed by us.

In accordance with Client's instructions, the Company's involvement has been limited to witnessing/observing a third party's intervention(s) at the third party's laboratory/test house or other facilities and installations used for the intervention(s). The Company's sole responsibility was to be present at the time of the third party's intervention(s) to forward the results, or confirm the occurrence, of the intervention(s). The Company is not responsible for the condition or calibration of apparatus, instruments and measuring devices used, the analysis methods applied, the qualifications, actions or omissions of the third party's personnel or the analysis results.

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SGS Korea Co., Ltd.

Michael Kang

Business Manager, Industrial Division

SHJ/dsk

SGS **FIRE TEST CERTIFICATE**

Date: April 05, 2021
Certificate No. KR-5000-50007040-4
Page 1 of 1

Applicant / Manufacturer : Sejin Valve Industrial Co., Ltd.
24, Nakdongnam-ro 549 beon-gil, Gangseo-gu, Busan, Korea

Date and place of test : February 24, 2017 at the Manufacturer's Premises in Busan Korea

Kind of test : Witness of Fire Test

Test valve : **Butterfly Valve**
- 3", Class 150, ASTM A216 WCB

Design standard : API 609 Category B - 8th Edition, February 2016

Applicable drawing : A0392-15003-CS Rev.0

Test standard : API STANDARD 607 - 7th Edition, June, 2016

" " " "

This is to conform that the fire test was performed by the manufacturer under witness, and the results were satisfied with the requirements in API 607, so we hereby confirm that the coverage of the qualification ranges **Class150 through Class300** rating with 3" through 6" size for the Ferritic Material.

Note
The details of the test condition and data are as per Manufacturer's Test Report No. SV-FST-15003-CS-01 dated 24 Feb., 2017, which were verified and endorsed by us.

In accordance with Client's instructions, the Company's involvement has been limited to witnessing(observance of a third party's intervention(s)) at the third party's laboratory/test house or other facilities and installations used for the intervention(s). The Company's sole responsibility was to be present at the time of the third party's intervention(s) to forward the results, or confirm the occurrence, of the intervention(s). The Company is not responsible for the condition or calibration of apparatus, instruments and measuring devices used, the analysis methods applied the qualifications, actions or omissions of the third party's personnel or the analysis results.

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" " " "

SGS Korea Co., Ltd.

Michael Kang
Business Manager, Industrial Division

SHJ/dsk

SGS **FIRE TEST CERTIFICATE**

Date: April 05, 2021
Certificate No. KR-5000-50007040-3
Page 1 of 1

Applicant / Manufacturer : Sejin Valve Industrial Co., Ltd.
24, Nakdongnam-ro 549 beon-gil, Gangseo-gu, Busan, Korea

Date and place of test : February 24, 2017 at the Manufacturer's Premises in Busan Korea

Kind of test : Witness of Fire Test

Test valve : **Butterfly Valve**
- 3", Class 150, ASTM A351 CF8M

Design standard : API 609 Category B - 8th Edition, February 2016

Applicable drawing : A0392-15003-SS Rev.0

Test standard : API STANDARD 607 - 7th Edition, June, 2016

" " " "

This is to conform that the fire test was performed by the manufacturer under witness, and the results were satisfied with the requirements in API 607, so we hereby confirm that the coverage of the qualification ranges **Class150 through Class300** rating with 3" through 6" size for the Austenitic Material.

Note
The details of the test condition and data are as per Manufacturer's Test Report No. SV-FST-15003-SS-01 dated 24 Feb., 2017, which were verified and endorsed by us.

In accordance with Client's instructions, the Company's involvement has been limited to witnessing(observance of a third party's intervention(s)) at the third party's laboratory/test house or other facilities and installations used for the intervention(s). The Company's sole responsibility was to be present at the time of the third party's intervention(s) to forward the results, or confirm the occurrence, of the intervention(s). The Company is not responsible for the condition or calibration of apparatus, instruments and measuring devices used, the analysis methods applied the qualifications, actions or omissions of the third party's personnel or the analysis results.

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" " " "

SGS Korea Co., Ltd.

Michael Kang
Business Manager, Industrial Division

SHJ/dsk

SGS **FIRE TEST CERTIFICATE**

Date: April 05, 2021
Certificate No. KR-5000-50007040-2
Page 1 of 1

Applicant / Manufacturer : Sejin Valve Industrial Co., Ltd.
24, Nakdongnam-ro 549 beon-gil, Gangseo-gu, Busan, Korea

Date and place of test : February 23, 2017 at the Manufacturer's Premises in Busan, Korea

Kind of test : Witness of Fire Test

Test valve : **Butterfly Valve**
- 8", Class 150, ASTM A351 CF8M

Design standard : API 609 Category B - 8th Edition, February 2016

Applicable drawing : A0392-15008-SS Rev.0

Test standard : API STANDARD 607 - 7th Edition, June 2016

" " " "

This is to conform that the fire test was performed by the manufacturer under witness, and the results were satisfied with the requirements in API 607, so we hereby confirm that the coverage of the qualification ranges **Class150 through Class300** rating with 8" and above size for the Austenitic Material.

Note
The details of the test condition and data are as per Manufacturer's Test Report No. SV-FST-15008-SS-01 dated 23 Feb., 2017, which were verified and endorsed by us.

In accordance with Client's instructions, the Company's involvement has been limited to witnessing(observance of a third party's intervention(s)) at the third party's laboratory/test house or other facilities and installations used for the intervention(s). The Company's sole responsibility was to be present at the time of the third party's intervention(s) to forward the results, or confirm the occurrence, of the intervention(s). The Company is not responsible for the condition or calibration of apparatus, instruments and measuring devices used, the analysis methods applied the qualifications, actions or omissions of the third party's personnel or the analysis results.

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" " " "

SGS Korea Co., Ltd.

Michael Kang
Business Manager, Industrial Division

SHJ/dsk

SGS **FIRE TEST CERTIFICATE**

Date: April 05, 2021
Certificate No. KR-5000-50007040-1
Page 1 of 1

Applicant / Manufacturer : Sejin Valve Industrial Co., Ltd.
24, Nakdongnam-ro 549 beon-gil, Gangseo-gu, Busan, Korea

Date and place of test : February 23, 2017 at the Manufacturer's Premises in Busan, Korea

Kind of test : Witness of Fire Test

Test valve : **Butterfly Valve**
- 8", Class 150, ASTM A216 WCB

Design standard : API 609 Category B - 8th Edition, February 2016

Applicable drawing : A0392-15008-CS Rev.0

Test standard : API STANDARD 607 - 7th Edition, June 2016

" " " "

This is to conform that the fire test was performed by the manufacturer under witness, and the results were satisfied with the requirements in API 607, so we hereby confirm that the coverage of the qualification ranges **Class150 through Class300** rating with 8" and above size for the Ferritic Material.

Note
The details of the test condition and data are as per Manufacturer's Test Report No. SV-FST-15008-CS-01 dated 23 Feb., 2017, which were verified and endorsed by us.

In accordance with Client's instructions, the Company's involvement has been limited to witnessing(observance of a third party's intervention(s)) at the third party's laboratory/test house or other facilities and installations used for the intervention(s). The Company's sole responsibility was to be present at the time of the third party's intervention(s) to forward the results, or confirm the occurrence, of the intervention(s). The Company is not responsible for the condition or calibration of apparatus, instruments and measuring devices used, the analysis methods applied the qualifications, actions or omissions of the third party's personnel or the analysis results.

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" " " "

SGS Korea Co., Ltd.

Michael Kang
Business Manager, Industrial Division

SHJ/dsk

HPI VS

Certificate of Quality System Approval

This is to certify that the product listed below conforms to the requirements of the
Pressure Equipment Directive 2014/68/EU
Annex III Module H

Certificate Number	HPIVS-IP1013-140-Q-00-00	Date of Expiry	06-Feb-2026
Date of Issue	02-Aug-2023	Surveillance due:	06-Feb-2024
Manufacturer	Sejin Valve Co., Ltd. #24, Seilbeom-gil, Haeundongnam-gu, Gangseo-gu 48726, Busan, Korea		

Description of Pressure Equipment: Casting Butterfly and Check Valves
Type: Water, Lug, Flange, Semi-Lug and Mono flanged type.
2" to 60" (Class 150 & 300)

Equipment Identification: CE mark only
Type of material: steel
Other Certification: ISO 9001:2015 Certificate No. 002-90060-Q issued by NSC
Standards Applied: ASME B16.34-2021
Report Reference: HPIVS-140-3

This Certificate is valid in any European Economic Area Member State.
This Report has been issued by HPI Verification Services (Ireland) Ltd, which is a body notified to the European Commission according to the provisions of the Pressure Equipment Directive (Notified Body number 2810).
This Report is issued following the assessment of the documentation and implementation of the Quality System in accordance with the provisions of the quoted Conformity Assessment Module of the above directive. The CE Mark must be affixed to the Pressure Equipment within the scope of approval as described above once the EU 'declaration of conformity' has been signed by the responsible person. The number '2810', being HPI Verification Services (Ireland) Ltd. Notified Body number must also be placed on the equipment dataplate.

Quality Director: _____ Technical Director: _____

An NAS accredited Certification Body 0022

CE

EU Notified Body No. 2810
Company registered in Ireland #577786
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UK Notified Body No. 18077028
HPI Verification Services (Ireland) Ltd
Dunmurry, Co. Wick
www.hpi.ie

NSF International

789 N. Dixboro Road, Ann Arbor, MI 48105 USA

RECOGNIZES

Sejin Valve Ind. Co., Ltd.

Facility: Busan, Republic of Korea

AS COMPLYING WITH NSF/ANSI 61, 372 AND ALL APPLICABLE REQUIREMENTS.
PRODUCTS APPEARING IN THE NSF OFFICIAL LISTING ARE
AUTHORIZED TO BEAR THE NSF MARK.

This certificate is the property of NSF International and must be returned upon request. This certificate remains valid as long as this client has products in Listing for the referenced standards. For the most current and complete Listing information, please access NSF's website (www.nsf.org).

April 29, 2016
Certificate# C0263944 - 01

Theresa Bellish
Theresa Bellish
General Manager, Water Systems

Royal Commission for Jubail and Yanbu
Directorate General of the Royal Commission in Jubail
Construction Department

RC TRANSMITTAL

RE: DOOKHONY, Ashwin

PLEASE ACKNOWLEDGE RECEIPT AND RETURN IMMEDIATELY DATE: 07-Nov-23

Document Type:	Code:	Contract No:
<input checked="" type="checkbox"/> Design Calculation	DC Technical	<u>20B-C03</u>
<input checked="" type="checkbox"/> Material Approval	CMA Technical	RC Transmittal No: <u>T-124</u>

ATTENTION SUPPLIERS: ALL FINAL DRAWINGS SUBMITTED TO THE ROYAL COMMISSION MUST BE IN GOOD QUALITY MYLAR

Document No.	Rev. No	Description/Title	*Action/Code	Action/Code	Reference
					Trans No Date Received

Subject: Butterfly Valve less than DN750mm (DN300mm & DN500mm) (Alternative)

Discipline :			
<input type="checkbox"/> Civil / Structural	<input type="checkbox"/> Architectural	<input checked="" type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical/Instrument/Telecom
<input type="checkbox"/> General			

TECHNICAL SUBMITTALS		NON-TECHNICAL SUBMITTALS	
<input checked="" type="checkbox"/> Material Approval	<input type="checkbox"/> ITP (Inspection and Test Plan)	<input type="checkbox"/> IFC/Final Quantity	
<input type="checkbox"/> Method Statement	<input type="checkbox"/> As Built Drawing	<input type="checkbox"/> CV/Resume	
<input type="checkbox"/> Temporary Work Design	<input type="checkbox"/> Plan	<input type="checkbox"/> Schedule	
<input type="checkbox"/> Shop Drawing		<input type="checkbox"/> Monthly Quality Report	
<input type="checkbox"/> Test Report		<input type="checkbox"/> Organizational Chart	
<input type="checkbox"/> Design Calculation			
<input type="checkbox"/> O and M	<input type="checkbox"/> Others: Please Specify _____	<input type="checkbox"/> Others: Please Specify _____	

Document No:	Rev No:	Description	Manufacturer Name	Supplier Name	RC CSI Code :
15-021-00	00	Butterfly Valve less than DN750mm (DN300mm & DN500mm) (Alternative)	SEJIN VALVE IND. CO. LTD.	SEJIN VALVE IND. CO. LTD.	15-07

Check Note: Please complete all the above details and be completed prior to submission to RCC

ROYAL COMMISSION FOR JUBAIL AND YANBU
ROYAL COMMISSION IN JUBAIL
CONSTRUCTION DEPARTMENT

TECHNICAL SUBMITTAL REVIEW - Contractor Copy

Contract No.: 20B-C03

CONTRACTOR SUBMITTAL NO 934 Doc. No: 15-021-00

RC TRANSMITTAL No: _____

TITLE: Butterfly Valve Less than DN750 (DN300mm-DN500mm) (Alternative)

<input type="checkbox"/> 1 Work May Proceed	<input type="checkbox"/> 3 Revise and Resubmit, Work May Not Proceed
<input checked="" type="checkbox"/> 2 Revise and Resubmit, Work May Proceed subject to incorporation of changes and comments	<input type="checkbox"/> 4 Review Not Required

Work:
☐ May Proceed
☐ May Not Proceed

Note: Permission to proceed does not constitute acceptance or approval of design details, calculation analyses, test methods or materials developed or selected by the supplier does not relieve the contractor from his contractual obligations.

DOOKHONY, Ashwin
Resident Engineer

Ashwin Dookhony
SIGNATURE

DATE

Note:

Comments must be written on the Comments sheet and attached. Comments which can only be possible on the contractor's submittal must be indexed on this form

Document status applies to technical content only. Use of foreign materials, equipment and services is subject to royal commission's approval. Once this technical submittal is given code 1 or 2 status, contractor shall submit vendor approval(with technical submittal package) for royal commission's review. Procurement prior to this approval is done at the contractor's own risk.



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