



SAMSUNG VALVES

Company Profile & Pre-Qualification

- 
- A large industrial valve assembly, painted yellow, is shown in a factory setting. The valve is mounted on a metal frame and has several large handwheels for manual operation. The background shows other industrial equipment and a factory building.
- 1. Brief History**
 - 2. Company Information**
 - 3. Main Products**
 - 4. Organization**
 - 5. Certificate**
 - 6. Experience**

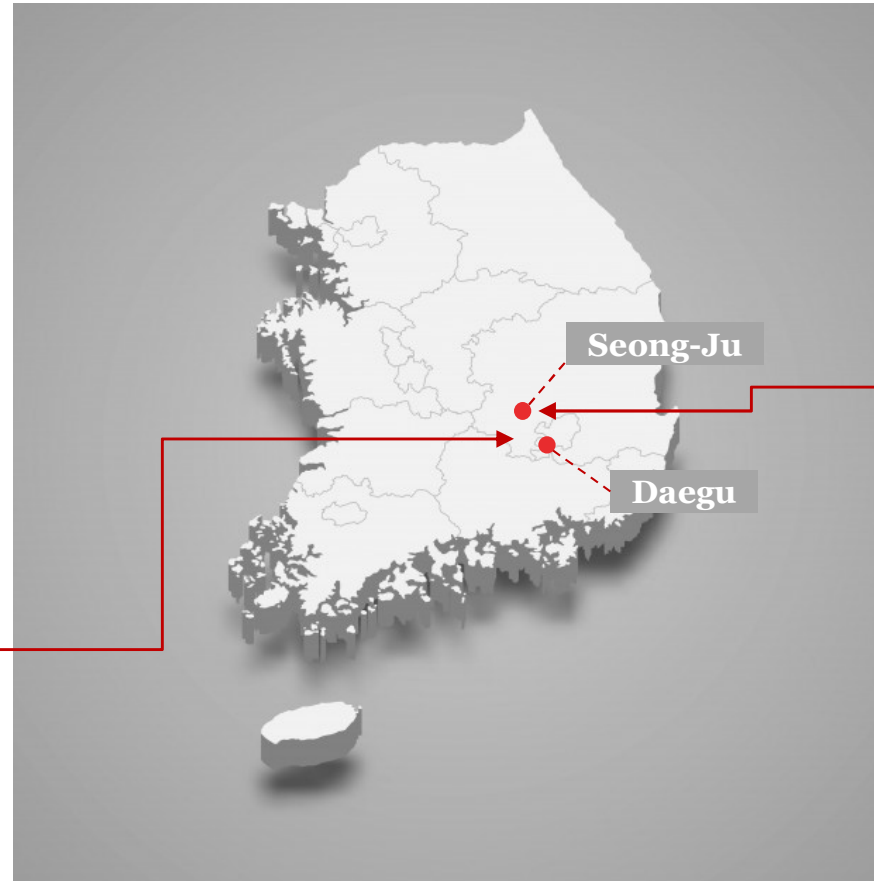
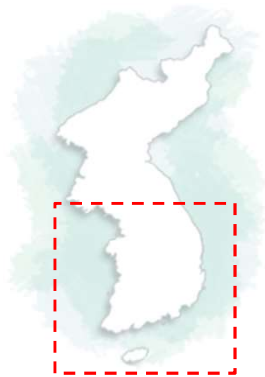
2. Brief History-1

- 1982. 08 Established Samsung stainless Co., Ltd.**
- 1985. 04 3-Way Ball Valve Production**
- 1987. 09 Knife Gate Valve Production**
- 1989. 03 V-Notch Ball Valve Production**
- 1989. 10 Headquarter moved to 298-5 Gaksan-dong, Dong-gu, Daegu**
- 1991. 01 Pneumatic Cylinder production(135')**
- 1992. 07 Legal Entity Conversion to Samsung Precision Ind.Co.,Ltd.**
- 1992. 08 Seongseo Factory Breaking ground(Complex 2, District 2)**
- 1993. 06 POSCO Vendor Registration**
- 1993. 07 Completion of Seongseo Factory (Land: 3,163m² Building: 1,599m²)**
- 1996. 11 Acquired Ball Valve KS B2308 Korea Industrial Standard Marking Certification**
- 1997. 02 Expanded Seongseo Factory in Wolam-dong, Dalseo-gu, Daegu from 298-5, Gaksan-dong, Dong-gu, Daegu**
- 1998. 02 Selected as an Export Promising SME / Registered as a Subcontractor for LG E&C**
- 1993. 03 Samsung Engineering Vendor Registration**
- 1995. 05 Acquired gas appliance manufacturing business license**
- 1999. 06 JIS 30K ANSI & 600LB Ball Valve Production**
- 2001. 06 Acquired API 6D Cert.**
- 2002. 04 Acquired Fire Safety Cert.**
- 2009. 09 Registered Specific Equipment Manufacturing(Valves for Toxic Gas Piping)/Dalseo-gu Office**
- 2009. 10 Established 2nd Factory (Foundry) in Dalseong 2nd Complex, Guji-myeon, Dalseong-gun, Daegu**
- 2010. 04 Recognized by the Korea Industrial Technology Association as a Corporate Research Institute**
- 2011. 02 Acquired ISO 9001 Quality Certification and selected as INNO-BIZ, a technology innovation SME**
- 2011. 03 Acquired ISO 14001 Quality Management System Certification**
- 2011. 12 Site Agreement at Sungju General Industrial Complex**
- 2012. 03 DooSan Heavy Industry Vendor Registration**
- 2012. 12 POSCO E&C Vendor Registration**
- 2013. 08 Sold Guji Plant 2 (located in Expanded and relocated Guji Factory 2)
(located in Seongju Industrial Complex) Land 7,393,60m² Building area 3,447.30m²**
- 2013. 12 Expanded and relocated Seongju Headquarter (located in Seongju Industrial Complex)
Land 9,699.20m² Building 5,516.57m²**

2. Brief History-2

- 2015. 06 Participated in the High Growth Enterprise Export Capacity Build-up Program and designated as a High Growth (Gazelle) Company**
- 2016. 03 Expanded Seongju Foundry 2nd factory - Land 7,393,60m² Building 560m²**
- 2016.12 Awarded the \$1 Million Export Tower at the 53rd Trade Day.**
- 2018. 03 Patented swing shutoff valve.**
- 2018. 04 Patented force-closable check valve.**
- 2020. 09 Acquired SIL Cert. / Recognized as a Root Technology Special Company**
- 2021. 12 Registered as a major equipment manufacturer of Korea Gas Corporation**
- 2022. 01 Acquired CE Cert.**
- 2022. 04 Acquired ISO 9001(for headquarter & foundry)**
- 2024. 04 Expanded the on-site building of the Seongju headquarter (Land 9,699.20m² Building 777,00m²)**
- 2024. 06 Certificate of Hygiene and Safety Standards (KC Certification)**

2. Company Information



3rd Factory

- ◆ Main Facility : Daegu Laboratory
- ◆ Total Area : 3,300 m²
- ◆ Roofed Area : 2,258 m²
- ◆ Total Employee : 5

Head Office & 1st Factory

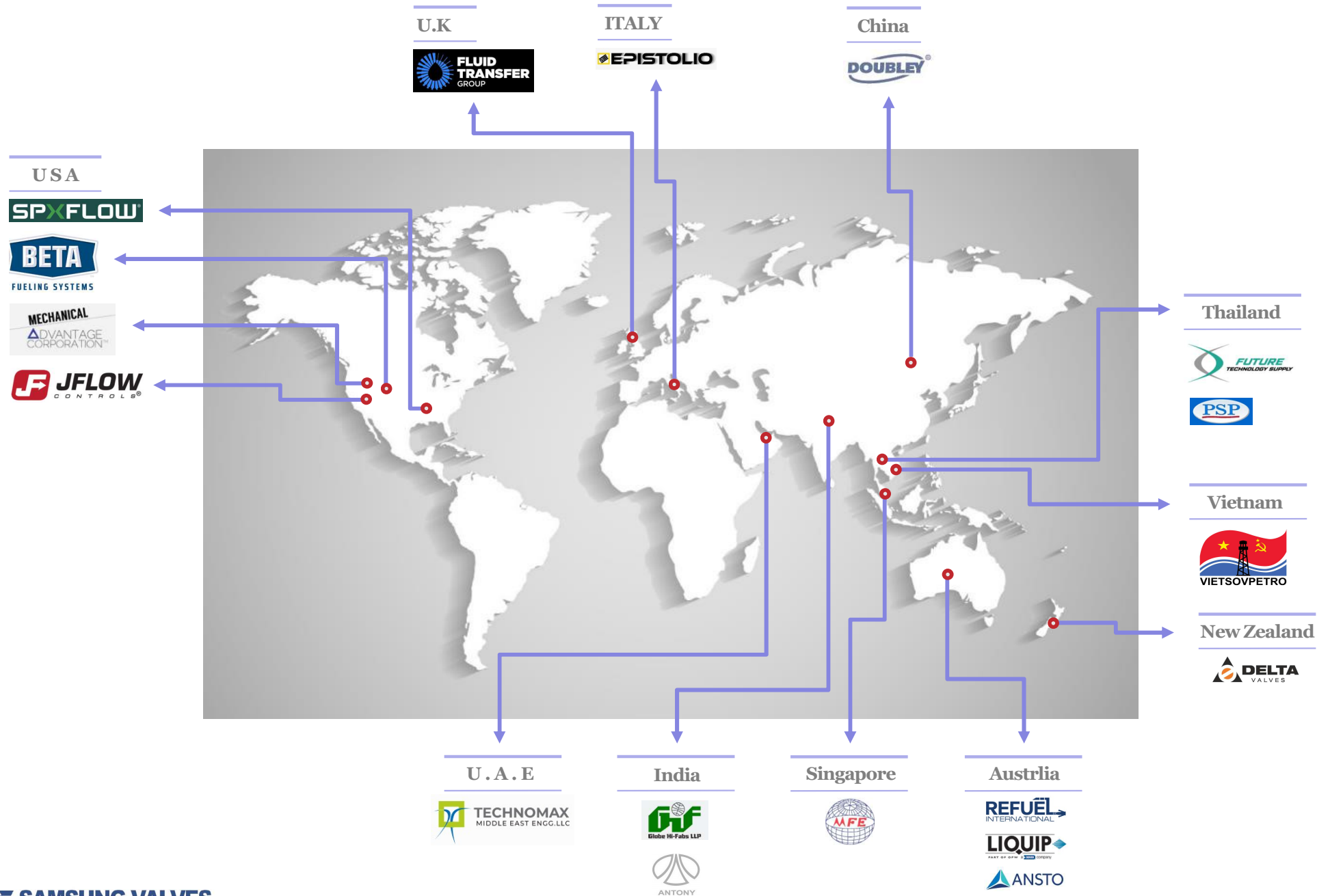
- ◆ Head Office, Valve Machining & Assembly, Warehouse
- ◆ Total Area : 9,900 m²
- ◆ Roofed Area : 5,516 m²
- ◆ Total Employee : 30
- ◆ Address : 90, Seongju saneop danji-ro 1-gil, Seongju-eup, Seongju-gun, Gyeongsangbuk-do, Korea
- ◆ Telephone : 82-54-4864-0511
82-54-931-4123
- ◆ FAX : 82-54-931-4155
- ◆ E-mail : qure1087@sam-sung.co.kr

2nd Factory

- ◆ Main Facility : Valve Casting shop
- ◆ Manufacturing Capacity : 2,100 Ton/Year
- ◆ Total Area : 7,394 m²
- ◆ Roofed Area : 4,007 m²
- ◆ Total Employee : 26
- ◆ Address : 94, Seongju saneop danji-ro 1-gil, Seongju-eup, Seongju-gun, Gyeongsangbuk-do, Korea
- ◆ Telephone : 82-70-4864-0560
- ◆ FAX : 82-70-4855-0566
- ◆ E-mail : samsung@sam-sung.co.kr



Customer Reference



주요 등록 및 납품업체-1

NO	업체명	Company
1	두산에너지빌리티	DOOSAN ENERBILITY
2	SK 머트리얼즈	SK METATERIALS
3	DL E & C	DL E & C
4	KCC 건설	KCC WORLD
5	O C I(주)	OCI Company Ltd
6	포스코 엔지니어링	POSCO Engineering
7	포스코 건설	POSCO ENC
8	롯데건설	LOTTE E&C
9	(주)동남합성	Dongnam Chem
10	한국실리콘	HKSilicom
11	코오롱	Kolon
12	한화에너지	Hanwha Energy
13	이테크건설	SGC Etec
14	LG디스플레이	LG Display
15	(주)대상	Daesang Holdings
16	한국바스프(주)	KOREA BASF
17	롯데케미칼	LOTTE Chem
18	삼성물산	Samsung C&T
19	필즈엔지니어링	PIELDS Engineering
20	포스코	POSCO

NO	업체명	Company
21	태광산업	TAEKWANG
22	(주)효성	Hyosung
23	한솔케미칼	Hansol Chem
24	동우화인켐	DW Chem
25	극동건설	KUKDONG Engineering
26	원익머트리얼즈	Wonik Materials
27	삼성엔지니어링	SAMSUNG ENGINEERING
28	GS건설	GS ENC
29	여천 YNCC	YEOCHUN NCC
30	성일하이텍	SungEel HiTech
31	에코프로	EcoPro
32	삼성전자	SAMSUNG SEC
33	벽산엔지니어링	BYUCK-SAN ENGINEERING
34	금호피앤비화학	KUMHO P&B CHEMICALS
35	금호건설	KUMHO E&C
36	한화건설	Hanwha Corporation/E&C
37	한화솔루션	Hanwha Solutions
38	DY PNF	DY PNF
39	금호석유화학	KUMHO PETRO CHEMICALS
40	도요엔지니어링	Toyo Engineering Corp

주요 등록 및 납품업체-2

NO	업체명	Company
41	LG화학	LG Chem
42	SK 온	SK ON
43	SK 스페셜티	SK Specialty
44	남해화학	NAMHAE CHEMICAL
45	도레이 첨단소재 주식회사	Toray Advanced Materials Korea
46	현대중공업	Hyundai Heavy Industries Co. Ltd
47	STX 마린서비스	STX Marine Service
48	윤성에프앤씨	Yunsung F&C Company
49	이엔에프	ENF TECHNOLOGY CO., LTD
50	솔브레인	SOULBRAIN
51	PETRONAS	PETRONAS(MALAYSIA)
52	ELLIOT EBARA	ELLIOT EBARA(JAPAN)
53	VIETSOVPETRO	VIETSOVPETRO(VIETNAM)
54	KALA NAFT	KALA NAFT(IRAN)
55	TTCL	TTCL(THAILAND)
56	DEWA	DEWA(UAS)
57	ANSTO	ANSTO(AUSTRALIA)
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NO	업체명	Company
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2-1 Factory-Valve Shop

Assembly Area



Manufacturing Area



Vertical Hydraulic Press 500 TON
Horizontal Hydraulic Press 500 TON



Vertical Hydraulic Press 100 TON



Vertical Hydraulic Press 100 TON



Vertical Hydraulic Press 65 TON



2-2 Factory-Valve Shop

Vertical-MCT LCV650 SMEC



Vertical-CNC V740T DOOSAN



Horizontal-MCT HM6300 DOOSAN



Vertical-CNC PUMA-V400 DOOSAN



2-3 Factory-Valve Shop

Vertical-MCT / VT-900



2-2-1 1st Factory-Equipment

NO	Machining	Model	Maker
1	V-MCT	F400	WIA
2	V-MCT	F400	WIA
3	V-MCT	VT-900	DOOSAN
4	V-MCT	MYNX 6500/50II	DOOSAN
5	H-MCT	HM 6300	DOOSAN
6	V-MCT	LCV 650	SMEC
7	V-MCT	LCV 650	SMEC
8	V-MCT	Mynx 6500/50	DOOSAN
9	V-MCT	Mynx 6500/50	DOOSAN
10	V-CNC	V740T	DOOSAN
11	V-CNC	PUMA-V400	DOOSAN
12	H-CNC	PUMA-10S	DAEWOO
13	H-CNC	PUMA-250	DOOSAN
14	H-CNC	PUMA-280	DOOSAN
15	Radial M/C	RJD1750	HOGWANG
16	H-CNC	PUMA-10HC	DAEWOO
17	H-CNC	HYUNDAI 15N	DAEWOO
18	H-CNC	HYUNDAI 18N	DAEWOO
19	H-CNC	HYUNDAI 18N	DAEWOO
20	H-CNC	HYUNDAI 18N	DAEWOO

NO	Machining	Model	Maker
21	Milling M/C	MSM-T	TONGIL
22	Lathe M/C	TIPL-4	TONGIL
23	Lathe M/C	TIPL-4	TONGIL
24	Lathe M/C	TIPL-4	TONGIL
25	Radial M/C	BR-1.5	BONGSIN
26	Tapping M/C	NBTG-YSTM-19	YONG SU
27	Hoist	2.8 Ton	ILSUNG
28	Hoist	2.8 Ton	ILSUNG
29	Hoist	2.8 Ton	ILSUNG
30	Hoist	5 Ton	ILSUNG
31	Hoist	20 Ton	ILSUNG

2-2-2 1st Factory-Equipment

NO	Machining	Model	Maker
1	Hydraulic Press	65 Ton	
2	Hydraulic Press	100 Ton	Dae myeong
3	Vertical Hydraulic Press	500 Ton	PIA Tech
4	Horizontal Hydraulic Press	500 Ton	PIA Tech
5	Hydraulic Press	100 Ton	Yong Jin
6	Coordinate Measuring Machines , Contact(3D)	HERO 8127S	DUKIN
7	Universal Testing Machine	JS-UTM-50T	Jinsung Mecha
8	Low Temp, Chamber	-	Sunjin Tech
9	Round Tester	RA-100	Mitutoyo
10	Spectro Mater	Solaris COD Plus	GNR
11	Optical Emission Spectro Meter	ESA POTR	GNR
12	Radiation Thermometer	AH35S004	IR-AH
13	Coating Thickness Testet	97486	HANDO
14	Rock well Hardness Tester	R940204	Dae kyeng
15	Rock well Hardness Tester	AR-10	Mitutoyo
16	Helium Detector	MS 40	
17	Helium Detector	Heliot 711 W1	ULVAC
18	Test Bed	750*1,000mm	Tae Kyeong
19	Torque Wrench(Dial type)	(0~274.59)N.m	TOHNICHI
20	Torque Wrench(Dial type)	(0~140)Kg-m	TOHNICHI

2-2-3 2st Factory-Equipment

NO	Machining	Model	Maker
1	High Frequency Induction Furnace	350-10R/500Kg	
2	High Frequency Induction Furnace	350-10R/350Kg	
3	Semiautomatic Impregnator	-	
4	Silica Mixer	1,300*580mm	
5	Forming M/C	750*650mm	
6	Forming M/C	730*730mm	
7	Forming M/C	730*730mm	
8	Forming M/C	730*730mm	
9	Forming M/C	730*730mm	
10	Forming M/C	600*1,060mm	
11	Forming M/C	100*50mm	
12	Shot Blast	150*1,500*650mm	
13	Dust Collector	-	
14	Shot Blast	700*750mm	
15	Cutting M/C	10"	
16	Cutting M/C	16"	
17	Cutting M/C	16"	
18	Grinder	4"	
19	Generator	TOP-1000	
20	Air Plasma	-	Taewoo

2-2-3 2st Factory-Equipment

NO	Machining	Model	Maker
21	Gouging Machine	-	Hyeopsin
22	Arc Welder	DY-18/220V/180A	
23	Arc Welder	HS-300/52V/120A	
24	Algon Welder M/C	JS-00A	
25	High Frequency Grinder	JGA-1300H/7"	
26	Hoist	2.8 ton	ILSUNG
27	Hoist	5 ton	ILSUNG
28	Compressor	MICOS37	YOUJIN
29	Compressor	-	DAEWOO
30	Firing Furnace	1.0 m ²	
31	Apron Shot Blast	500Kg	
32	Hanger Shot Blast	-	
33	Boiler	TX-200	
34	Wax Purifier	10 m ²	
35	Wax Purifier	15 m ²	
36	Compressor	7.5HP	
37	Compressor	15HP	
38	Semi-auto Injection	150Kg/m ²	
39	Semi-auto Injection	150Kg/m ²	
40	Semi-auto Injection	200Kg/m ²	

2-2-4 2st Factory-Equipment

NO	Machining	Model	Maker
41	Semi-auto Injection	200Kg/m ²	
42	Manual Injection	50Kg/m ²	
43	Wax Heat Insulation	5 m ²	
44	Wax Billet Constant temperature Oven	70CAVI	
45	Auto Sand Blast M/C	10Kg/m ²	
46	Knock-out M/C	-	
47	Cutting M/C	-	
48	Slurry Tank	Ø600	
49	Fluidzed Bed	Ø600	
50	Rain Stucco unit	800*800	
51	Belt Grinding M/C	75mm	
52	Cooled Reactor	5.0 R/T	
53	Electric Oven	1 m ²	
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2-3-1 2nd Factory-Valve Casting Shop

Shell Molding

Metallic mold



Mold Heating



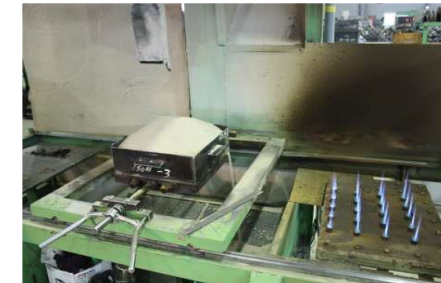
Core



Mold Heating



Molding (Coated Sand)



Mold Adhesive



Cope + drag(Mold Assembly)



Mold Assembly Completed



2-3-2 2nd Factory-Valve Casting Shop

CO₂ Molding

Wooden Pattern



Processing Sand Mixing



Completed CO₂ Molding



Processing CO₂ Molding



Completed Mixing



Cope + drag(Mold Assembly)



2-3-3 2nd Factory-Valve Casting Shop

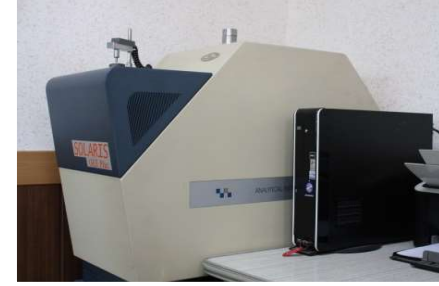
Scrap Analysis & Charging



Melting



Chemical analysis



Shell Mold Injection



CO2 Mold Injection



Pouring(Ladle Injection)



CO2 Shake Out (Before Blast)



Shell Shake Out (Before Blast)



Blast Cleaning (After Blast)



2-3-4 2nd Factory-Valve Casting Shop

After Blast



Gas Cutting arc air gouging



Cutting



Heat Treatment



Blast Cleaning



Grinding



Acid Cleaning(only S.S)



Visual inspection & Measurement



2-4 1st Factory-Clean Room



CLEAN ROOM



Air Conditioner



VALVE ASSEMBLING



Helium Detector



Black Light



Demi-Water



Washing Room



Helium Test



Vacuum Packaging Machinery

2-5 1st Factory-Laboratory



Laboratory



Universal Testing Machine



Optical Emission Spectro Meter



**Rock Well Hardness Tester
Round Tester/ Helium Detector**



Test Bed



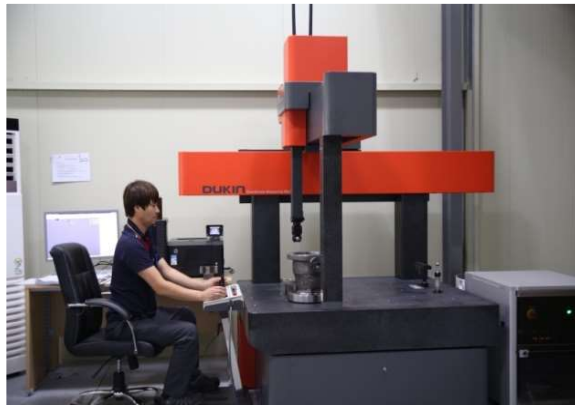
Low Temp, Chamber



Radiation Thermometer

2-6 1st Coordinate Measuring

Coordinate Measuring Machines .Contact(3D)



3-1 Main Product(Floating Ball Valve)

Floating type Ball Valve

- Manufacturing scope Size / Full bore : DN15 (1/2") ~ DN350 (14")
Reduce bore : DN50 (2")~ DN350 (14")
Pressure Rating : Class 150 ~ 600,
JIS 10K ~ 40K
Working Temperature : -46°C ~ +250°C
- Standard Features
Face to face : ASME B16.10 , JIS B2002
End flange : ASME B16.5 , JIS B2238
Shell wall thickness : ASME B16.34 & BS5351
Fire safe design (API 607 , API 6FA & BS6755)
Anti-static device / Locking device
Blow-out proof stem
Design : ASME B16.34 , API 6D or BS5351



3-2 Main Product(Trunnion Ball Valve)

Trunnion type Ball Valve

- Manufacturing scope Size

Full bore & Reduce bore Class 150 : DN50 (2") ~ DN1200 (48")
 Class 300 : DN50 (2") ~ DN1200 (48")
 Class 600 : DN50 (2") ~ DN1200 (48")
 Class 900 : DN50 (2") ~ DN900 (36")
 Class 1500 : DN50 (2") ~ DN600 (24")
 Class 2500 : DN50 (2") ~ DN300 (12")

Pressure Rating : Class 150 ~ 2500, JIS 10K ~ 40K

Working Temperature : -46°C ~ +250°C



- Standard Features

Face to face : ASME B16.10 , JIS B2002

End flange : ASME B16.5 , JIS B2238

Shell wall thickness : ASME B16.34 & BS5351

Fire safe design (API 607 , API 6FA & BS6755)

Anti-static device / Locking device

Blow-out proof stem

Design : ASME B16.34 , API 6D or BS5351

Double block and bleed & Double piston effect

Self-relieving seats

Stem emergency grease fitting

Seats lubricant and emergency sealant fitting

Mounting pad ISO5211

Metal to metal seat sealing



3-3 Main Product(Metal to Metal)

Metal to Metal Ball Valve

- Manufacturing scope Size / Class 150 : DN15 (1/2") ~ DN900 (36")
Class 300 : DN15 (1/2") ~ DN900 (36")
Class 600 : DN15 (1/2") ~ DN600 (24")

Pressure Rating : Class 150 ~ 600, JIS 10K ~ 40K

Working Temperature : -40°C ~ +520°C

- Standard Features

Face to face : ASME B16.10 , JIS B2002

End flange : ASME B16.5 , JIS B2238

Shell wall thickness : ASME B16.34 & BS5351

Fire safe design (API 607 , API 6FA & BS6755)

Anti-static device / Locking device

Blow-out proof stem

Design : ASME B16.34 , API 6D or BS5351



3-4 Main Product(Cryogenic Ball Valve)

Cryogenic Ball Valve

- Manufacturing scope Size / Full bore Class 150 : DN15 (1/2") ~ DN600 (24")
Class 300 : DN15 (1/2") ~ DN600 (24")
Class 600 : DN15 (1/2") ~ DN400 (16")

Pressure Rating : Class 150 ~ 600

Working Temperature : -47°C ~ -196°C

- Standard Features

Face to face : ASME B16.10 , JIS B2002

End flange : ASME B16.5 , JIS B2238

Shell wall thickness : ASME B16.34 & BS5351

Fire safe design (API 607 , API 6FA & BS6755)

Anti-static device / Locking device

Blow-out proof stem

Design : ASME B16.34 , BS6364



3-5 Main Product(3-Way Ball Valve)

3-Way Ball Valve

- Manufacturing scope Size / T.T-Port & T.L-Port : DN15 (1/2") ~ DN350 (14")
Y-Type (Divert) : DN65 (2-1/2") ~ DN400 (16")

Pressure Rating : Class 150,300 / JIS 10K 20K

Working Temperature : -46°C ~ +250°C

- Standard Features

Face to face : Maker standard

End flange : ASME B16.5 , JIS B2238

Shell wall thickness : ASME B16.34 & BS5351

Anti-static device / Locking device

Blow-out proof stem



3-6 Main Product(Jacket Ball Valve)

Jacket Ball Valve

- Manufacturing scope Size / Class 150 : DN15*40 (1/2"*1-1/2") ~ DN150*200 (6"*8")
Class 300 : DN15*40 (1/2"*1-1/2") ~ DN80*125 (3"*5")

Pressure Rating : Class 150 ~ 300, JIS 10K ~ 20K

Working Temperature : -46°C ~ +225°C

- Standard Features

Face to face : ASME B16.10 , JIS B2002

End flange : ASME B16.5 , JIS B2238

Shell wall thickness : ASME B16.34 & BS5351

Fire safe design (API 607 , API 6FA & BS6755)

Anti-static device / Locking device



3-7 Main Product(Tank Bottom Ball Valve)

Tank Bottom Ball Valve

- **Manufacturing scope** Size / Class 150 : DN25*40 (1"*1-1/2") ~ DN150*200 (8"*10")
Class 300 : DN100*150 (4"*6") ~ DN150*200 (6"*8")

Pressure Rating : Class 150 ~ 300, JIS 10K ~ 20K

Working Temperature : -46°C ~ +250°C

- **Standard Features**

Face to face : Maker standard

End flange : ASME B16.5 , JIS B2238

Shell wall thickness : ASME B16.34 & BS5351

Fire safe design (API 607 , API 6FA & BS6755)

Anti-static device / Locking device

Blow-out proof stem



3-7 Main Product(Double Block & Bleed Valve)

Double Block & Bleed Valve Ball

- Flange To Flange Size / Class 150 ~ 2500 : DN15 (1/2") ~ DN50 (36")
- Flange To Screw Size / Class 150 ~ 2500 : DN15 (1/2") ~ DN50 (36")
- SAMPLING Type Size / Class 150 ~ 2500 : DN15 (1/2") ~ DN50 (24")

Pressure Rating : Class 150 ~ 2500

Working Temperature : -46°C ~ +250°C

- Standard Features

Face to face : Maker standard

End flange : ASME B16.5

Shell wall thickness : ASME B16.34 & BS5351

Fire safe design (API 607 , API 6FA & BS6755)

Anti-static device / Locking device

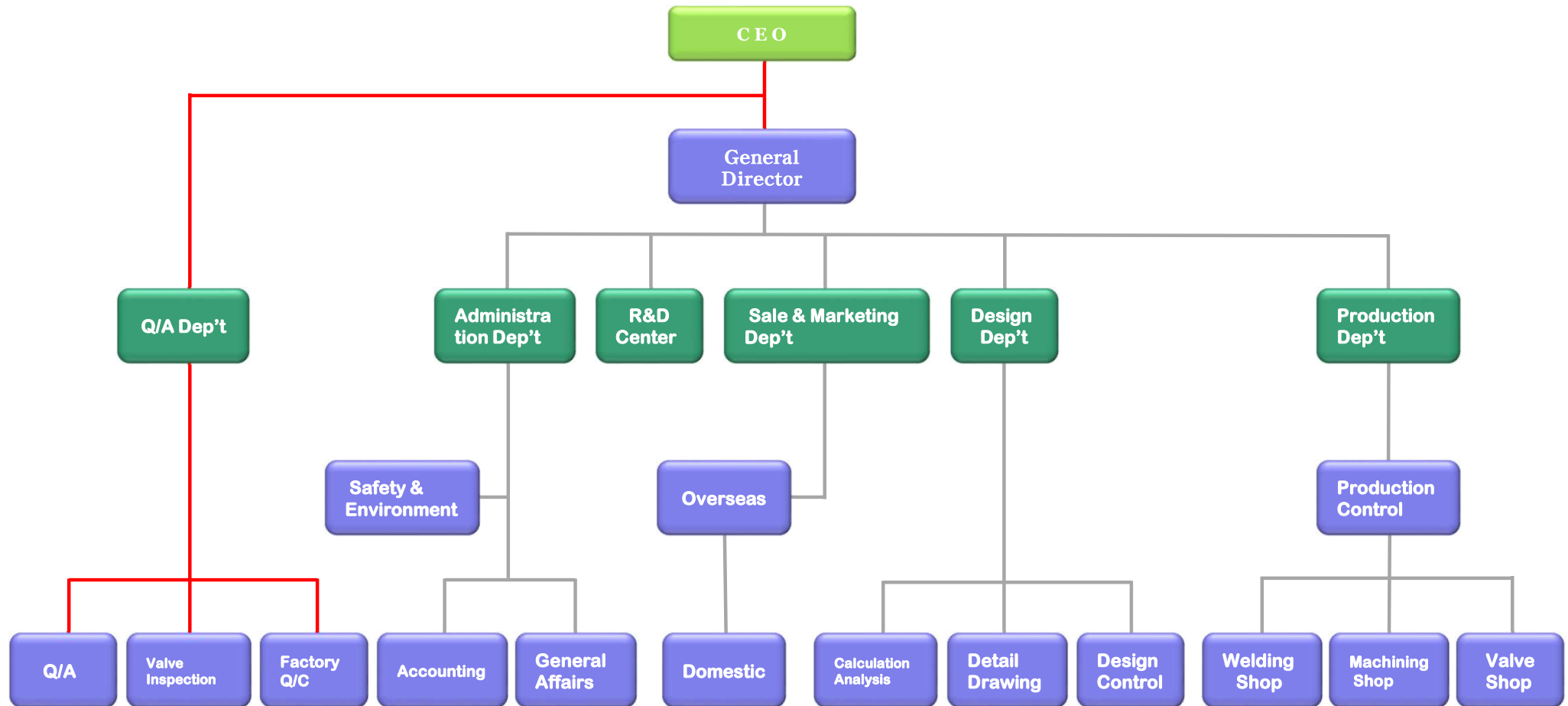
Blow-out proof stem

Live Loaded Gland Packing

Design : ASME B16.34



4. Organization



5-1 Certificate API-6D

 American Petroleum Institute  2018-151 Digital	Certificate of Authority to use the Official API Monogram License Number: 6D-0396 ORIGINAL
	The American Petroleum Institute hereby grants to SAMSUNG PRECISION IND. CO., LTD. 90, Seongjusaneopdanji-ro 1 gil, Seongju-eup Seongju-gun, Gyeongsangbuk-do South Korea the right to use the Official API Monogram® on manufactured products under the conditions in the official publications of the American Petroleum Institute entitled API Spec Q1® and API-6D and in accordance with the provisions of the License Agreement. In all cases where the Official API Monogram is applied, the API Monogram shall be used in conjunction with this certificate number: 6D-0396 The American Petroleum Institute reserves the right to revoke this authorization to use the Official API Monogram for any reason satisfactory to the Board of Directors of the American Petroleum Institute. The scope of this license includes the following: Ball Valves QMS Exclusions: Servicing; Customer Property Effective Date: FEBRUARY 1, 2024 Expiration Date: MARCH 31, 2027 To verify the authenticity of this license, go to www.api.org/compositelist.  Senior Vice President of Global Industry Services

5-2 Certificat of Hygiene and Safety Standards(KC Certification)

출력일: 2024년 07월 01일

(앞쪽)

위생안전기준 인증서

1. 인증번호 : KCW-2024-0071

2. 제조업체명 : (주)삼성정공

3. 대표자 : 위성주, 위현호

4. 본사 주소 : (40031) 경상북도 성주군 성주읍 성주산업단지로1길 90, (주)삼성정공

5. 공장 소재지 : (40031) 경상북도 성주군 성주읍 성주산업단지로1길 90, (주)삼성정공

6. 제품명 : 볼밸브

7. 용도 :

☐ 표충용재료

☐ 말단급수설비

☐ 급수설비

☒ 일반수도용자재

「수도법」 제14조제1항 및 「수도용 자재와 제품의 위생안전기준 인증 등에 관한 규칙」 제8조제1항에 따라 위생안전기준 인증서를 발급합니다.

2024년 06월 21일

한국물기술인증원

210mm×297mm[보존용지 120g/㎡]

출력일: 2024년 07월 01일 (뒤쪽)

<인증상세사항>

종류·등급	보조구분	호칭	재질	모델명	냉·온수 여부
플랜지형 0.98MPa		15A, 20A, 25A, 32A, 40A, 50A, 65A, 80A, 100A, 125A, 150, 200A, 250A	- 바디, 캡, 볼, 스템: 스테인리스 - 시트링, 가스켓, 패킹 : PTFE	BN-F23-1AA-PJR -(호칭)L, BN-F23-1BB-PJR- (호칭)L, BN-F23-1 CC-PJR-(호칭)L	냉·온수
플랜지형 1.96MPa		15A, 20A, 25A, 32A, 40A, 50A, 65A, 80A, 100A, 125A, 150A	- 바디, 캡, 볼, 스템: 스테인리스 - 시트링, 가스켓, 패킹 : PTFE	BN-F23-2AA-PJR -(호칭)L, BN-F23-2BB-PJR- (호칭)L, BN-F23-2CC-PJR- (호칭)L	냉·온수

* 인증제품과 유사한 제품의 모델명은 같이 기재할 수 있음.

<변경사항>

변경일	내용	확인
2024-06-21	1. 신규인증 - 인증서 유효기간 : '26. 6. 20. 까지	2024년 제6차 인증심의위원회(2024. 6. 21)

<행정처분사항>

행정처분일	내용	확인
행정처분사항이 없습니다.		



5-3 Certificate Pressure Equipment Directive

Certificate

Quality Assurance System
acc. to Directive 2014/68/EU

Certificate no.: 01 202 ROK/Q-22 0112.02

Name and address of the
certificate holder: **SAMSUNG PRECISION IND. CO., LTD.**
90, Seongjusaneopdanji-ro 1-gil,
Seongju-eup, Seongju-gun,
Gyeongsangbuk-do 40031
Republic of Korea

Herewith we certify that the above-mentioned manufacturer
operates a quality system according to the European Directive
2014/68/EU. The manufacturer has the permission to affix
the following CE marking to pressure equipment described
and manufactured in accordance with the scope covered by
this Quality-Assurance System:

CE 0035

Test basis: **Directive 2014/68/EU: QA-System (Module H)**
(the QS-Modules E1, E, D1, D are covered by Module H)

Audit report no.: 01 202 ROK/Q-22 0112

Scope: **Design, Development and manufacturing of Ball Valve,**
see annex to certificate: 01 202 ROK/Q-22 0112,
revision 2 from May 02, 2024

Manufacturing plant: see certificate holder

Validity: **The certificate is valid from 2025-05-12 until 2028-05-11.**

Cologne, 2025-04-24

Ines Krüger-Führ



TUV Rheinland Industrie Service GmbH
Notified Body for Pressure Equipment, ID-No. 0035
Am Grauen Stein, D-51105 Cologne

MS-0037317 E-008-Rev01

Details of the Validity of the Approval as Manufacturer of Pressure Equipment
with certified QA-System acc. PED 2014/68/EU



Annex to Certificate No.: 01 202 ROK/Q-22 0112

Manufacturer			Production Plant		Nationality	Date	Page No..	TÜV Rheinland Industrie Service GmbH
Name: SAMSUNG PRECISION IND. CO., LTD. Address: 90, Seongjusaneopdanji-ro 1-gil, Seongju-eup, Seongju-gun, Gyeongsangbuk-do 40031 Republic of Korea			90, Seongjusaneopdanji-ro 1-gil, Seongju-eup, Seongju-gun, Gyeongsangbuk-do 40031 Republic of Korea		Korea	May.02, 2024	1	
						Rev.: 2	of: 1	
Current No.	Valve Type	Structure	Pressure Class	Nominal Diameter	Until now applied codes	Listing of Module B/B1 certificates (for QS-module D/E)		Remarks
1	2	3	4	5	6	7		8
01	Ball Valve	A Floating B Trunnion	PN 10 ~ PN 20 (Class 150) PN 20 ~ PN 420 (Class 150 ~ Class 2500)	DN32(1.25") ~ DN1400(56")	ASME B16.5, ASME B16.10 ASME B16.34, API 6D, API 607, API 608			 

MS-0037317 E-010-E-Scope-PEM-Valve-Rev.01.docx

MS-0037317 E-010-Rev.01

Effective Date: 01.03.2020

5-4 Certificate Patent for Check Valve & Swing Check Valve

특허증
CERTIFICATE OF PATENT

특 허 제 10-1852412 호
Patent Number

출원번호 제 10-2017-0105549 호
Application Number

출원일 2017년 08월 21일
Filing Date

등록일 2018년 04월 20일
Registration Date

발명의 명칭 Title of the Invention
강제 폐쇄 가능한 체크밸브

특허권자 Patentee
위현호(880604-*****)

(주)삼성정공
www.spm-sung.co.kr

이 사
위 현 호
Mobile 010-4507-6243
E-MAIL: whh803@naver.com

본 사 : 경북 상주군 상주읍 상주산업단지 1길 90
1공정 TEL : (054)931-4123
FAX : (054)931-4155
2공정 1 경북 상주군 상주읍 상주산업단지 1길 94
3공정 1 대구시 달서구 성서광안로 205(월암동)

위의 발명은 「특허법」에 따라 특허등록원부에 등록되었음을 증명합니다.
This is to certify that, in accordance with the Patent Act, a patent for the invention has been registered at the Korean Intellectual Property Office.

2020년 12월 11일

특허청장
COMMISSIONER,
KOREAN INTELLECTUAL PROPERTY OFFICE
김 용 래

QR코드로 현재기준
등록사항을 확인하세요

특허증
CERTIFICATE OF PATENT

특 허 제 10-1837499 호
Patent Number

출원번호 제 10-2017-0105552 호
Application Number

출원일 2017년 08월 21일
Filing Date

등록일 2018년 03월 06일
Registration Date

발명의 명칭 Title of the Invention
스윙차단밸브

특허권자 Patentee
위현호(880604-*****)

(주)삼성정공
www.spm-sung.co.kr

이 사
위 현 호
Mobile 010-4507-6243
E-MAIL: whh803@naver.com

본 사 : 경북 상주군 상주읍 상주산업단지 1길 90
1공정 TEL : (054)931-4123
FAX : (054)931-4155
2공정 1 경북 상주군 상주읍 상주산업단지 1길 94
3공정 1 대구시 달서구 성서광안로 205(월암동)

위의 발명은 「특허법」에 따라 특허등록원부에 등록되었음을 증명합니다.
This is to certify that, in accordance with the Patent Act, a patent for the invention has been registered at the Korean Intellectual Property Office.

2020년 12월 11일

특허청장
COMMISSIONER,
KOREAN INTELLECTUAL PROPERTY OFFICE
김 용 래

QR코드로 현재기준
등록사항을 확인하세요

5-5 Certificate KS B 2308/SIL2



제 KGS-19-0005 호

제 품 인 증 서

제 조 업 체 명 (주)삼성정공
대 표 자 성 명 위 성 주, 위 현 호
공 장 소 재 지 경상북도 성주군 성주읍 성주산업단지로1길 90
인 증 제 품
가. 표 준 명 볼밸브
나. 표준번호 KS B 2308:2016
다. 종류 · 등급 · 호칭 또는 모델
플랜지식, 10K, 석유공업용(가스, 액체), 공업용 냉·온수용, 화학약품용 (15A~250A)
플랜지식, 20K, 석유공업용(가스, 액체), 공업용 냉·온수용, 화학약품용 (15A~150A)

「산업표준화법」 제17조제1항에 따른 인증심사를 실시한 결과 한국산업 표준(KS)과 인증심사기준에 적합하므로, 「산업표준화법」 제15조 및 같은 법 시행규칙 제10조제1항에 따라 위와 같이 한국산업표준(KS)에 적합함을 인증합니다.

2022 년 10 월 18 일

한 국 가 스 안 전 공 사 사 장



최 초 인 증 일 : 2019.08.09.
기 관 변 경 일 : -
정 기 심 사 기 한 : 2025.08.08.

(1/2)

KGS-KS(P) 양식 10-01 A Rev.02

2022.10.13

SGS
CERTIFICATE NO
ZERTIFIKAT NR.

SGS
TÜV
SAAR
FS/71/220/20/0594

PAGE 1/1
SEITE(N)

LICENCE HOLDER
GENEHMIGUNGSHABER

Samsung Precision Ind Co., Ltd.
90, Seongjusaneopdanji-ro 1-gil,
Seongju-eup, Seongju-
gun, Gyeongsangbuk-do, Korea

MANUFACTURING PLANT
FERTIGUNGSTÄTTE

Samsung Precision Ind Co., Ltd.
90, Seongjusaneopdanji-ro 1-gil,
Seongju-eup, Seongju-
gun, Gyeongsangbuk-do, Korea

PROJECT NO./ID
PROJEKT-NR./ID

M3RA

LICENSED TEST MARK
GENEHMIGTES PRÜFZEICHEN



CERT. REPORT NO.
ZERTIFIKATSBERICHT NR.

M3RA0001

Tested according to
Geprüft nach

IEC 61508:2010 Ed.2

Certified product(s)
Zertifizierte(n) Produkte

Floating Ball Valve,
Trunnion Mounted Ball Valve
FBV Series and TBV Series

Model(s)
Modell(e)

Technical Data and
Parameter
Technische Daten und Parameter

The products fulfill the requirements of functional safety acc. to IEC 61508. The products can be used with a hardware fault tolerance HFT = 0, e.g. in a 1001- architecture up to SIL 2 and SC 3, with HFT ≥ 1, e.g. in a 1002 architecture up to SIL 3 (SC 3).

Specific Requirements
Spezifische Anforderungen

This certificate confirms the achievement of the requirements of functional safety based on the following proofs:
- Proof of systematic safety integrity for defined phases of the life cycle
- Proof of the required safety-related parameters (failure rate, PFD and SFF by means of FMEDA)
- Proofs that processes and methods are established at the manufacturer guaranteeing that unexceptionable processes in terms of risk analysis, design, production, validation, change management and quality management comply with the safety-related standard (see M3RA0001).

Certification Body
for Functional Safety
SGS-TÜV Saar GmbH
Zertifizierungsstelle für Funktionale Sicherheit

Munich, 2020-09-30

Robert Sammer

Robert Sammer

The test mark registration is an integral part of this certificate.
Das Prüf-Zertifikatszeichen ist integraler Bestandteil des Zertifikates

SGS-TÜV Saar GmbH, Hofmannstraße 50, 81379 München

Website: www.sgs-tuv-saar.com E-mail: fs@sgs.com



Certificate

Standard **ISO 9001:2015**

Certificate Registr. No. **01 100 2234503**

Certificate Holder: **SAMSUNG PRECISION IND. CO., LTD.**
90, Seongjusaneopdanji-ro 1-gil,
Seongju-eup,
Seongju-gun, Gyeongsangbuk-do 40031
Republic of Korea

Scope: Design, Development and manufacturing of Ball Valve.
Casting of Ni Alloy, Non Ni Alloy, and Alloyed steel.

Proof has been furnished by means of an audit that the requirements of ISO 9001:2015 are met.

Validity: The certificate is valid from 2025-04-01 until 2028-03-31.
First certification 2022

2025-03-27

TÜV Rheinland Cert GmbH
Am Grauen Stein · 51105 Köln

Annex to certificate

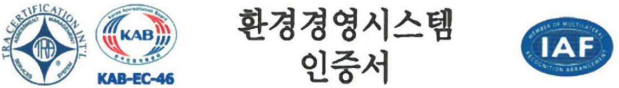
Standard **ISO 9001:2015**

Certificate Registr. No. **01 100 2234503**

No.	Location	Scope
/01	c/o SAMSUNG PRECISION IND. CO., LTD. 90, Seongjusaneopdanji-ro 1-gil, Seongju-eup, Seongju-gun, Gyeongsangbuk-do 40031 Republic of Korea	Design, Development and manufacturing of Ball Valve
/02	c/o SAMSUNG PRECISION IND. CO., LTD. 2nd Factory 94, Seongjusaneopdanji-ro 1-gil, Seongju-eup, Seongju-gun, Gyeongsangbuk-do 40031 Republic of Korea	Casting of Ni Alloy, Non Ni Alloy, and Alloyed steel.

2025-03-27

TÜV Rheinland Cert GmbH
Am Grauen Stein · 51105 Köln



**환경경영시스템
인증서**

(주)삼성정공
경상북도 성주군 성주읍 성주산업단지1길 90

ISO 14001:2015 / KS I ISO 14001:2015

인증범위 :
Cast Steel Valve, Stainless Steel Valve, 볼밸브의 설계 및 개발, 생산

상기 기업의 환경경영시스템을 ISO 14001:2015 표준의 요구사항에
따라 심사한 결과 트라국제인증원의 인증기준에 적합한 바,
이를 정히 인증합니다.

인증등록번호 : KE-1242 인증등록일 : 2018년 02월 06일
개 정 : 2023년 10월 24일
유효 기 간 : 2024년 02월 06일 ~ 2027년 02월 05일

Authroized By : J. H. cho
Jaehyun CHO
President
TRA Certification International Co., Ltd.

* 트라국제인증원(주)은 한국인정지원센터(KAB)로부터 환경경영시스템 인증기관으로 인정 (인정번호: KAB-EC-46) 받았습니니다.
* 트라국제인증원(주) : 서울특별시 구로구 디지털로 285 에이스트원타워 1차 1106호 02) 6675-6901
* 본 인증서는 트라국제인증원의 자산이므로 요청시 반납 하여야 합니다.



Certificate of Registration
**ENVIRONMENTAL
MANAGEMENT SYSTEM**

Samsung Precision Ind Co., Ltd.
90, Seongjusanopdanji-ro 1-gil, Seongju-eup, Seongju-gun, Gyeongsangbuk-do, Korea

ISO 14001:2015 / KS I ISO 14001:2015

Scope :
Design & Development, Manufacture of
Cast Steel Valve, Stainless Steel Valve, Ball Valve

TRA Certification International Co.,Ltd.(TRACI) hereby declares that
this facility has been audited in accordance with the requirements
of ISO 14001:2015 and meets the accreditation criteria defined
in the certification scheme of
TRA Certification International Co.,Ltd.(TRACI)

Certification No : KE-1242 Issued : 06 Feb 2018
Revised : 24 Oct 2023
Validity : 06 Feb 2024 ~ 05 Feb 2027

Authroized By : J. H. cho
Jaehyun CHO
President
TRA Certification International Co., Ltd.

* TRA Certificaion International Co.,Ltd.(TRACI) has been accredited by Korea Accreditation Board (KAB) as an Environmental
Management System certification body. (Accreditation number: KAB-EC-46)
* TRACI Add. : #1106, Ace Twin Tower 1, 285, Digital-ro, Guro-gu, Seoul, Republic of Korea.
* This certificate is the property of TRACI and shall be returned upon request by TRACI.

5-8 Certificate ISO 45001





**안전보건경영시스템
인증서**

(주)삼성정공

경상북도 성주군 성주읍 성주산업단지로1길 90

ISO 45001:2018 / KS Q ISO 45001:2018

인증범위 :
Cast Steel Valve, Stainless Steel Valve, 볼밸브의 설계 및 개발, 생산

상기 기업의 안전보건경영시스템을 ISO 45001:2018 표준의
요구사항에 따라 심사한 결과 트라국제인증원의 인증기준에 적합한 바,
이를 정히 인증합니다.

인증등록번호 : KO-0032 인증등록일 : 2014년 11월 24일
개 정 : 2023년 10월 24일
유효기간 : 2023년 11월 24일 ~ 2026년 11월 23일

Authroized By : *J. H. cho*
Jaehyun CHO
President
TRA Certification International Co., Ltd.

* 트라국제인증원(주)은 한국인정지원센터(KAB)로부터 안전보건경영체계 인증기관으로 인정 (인정번호: KAB-OC-28) 받았습니니다.
* 트라국제인증원(주) : 서울특별시 구로구 디지털로 285 에이스트원타워 1차 1106호 02) 6675-6901
* 본 인증서는 트라국제인증원의 자산이므로 요청시 반납 하여야 합니다.





Certificate of Registration
**OCCUPATIONAL
HEALTH AND SAFETY
MANAGEMENT SYSTEM**

Samsung Precision Ind Co., Ltd.

90, Seongjusaneopdanji-ro 1-gil, Seongju-eup, Seongju-gun, Gyeongsangbuk-do, Korea

ISO 45001:2018 / KS Q ISO 45001:2018

Scope :
Design & Development, Manufacture of
Cast Steel Valve, Stainless Steel Valve, Ball Valve

TRA Certification International Co.,Ltd.(TRACI) hereby declares that
this facility has been audited in accordance with the requirements
of ISO 45001:2018 and meets the accreditation criteria defined
in the certification scheme of
TRA Certification International Co.,Ltd.(TRACI)

Certification No : KO-0032 Issued : 24 Nov 2014
Revised : 24 Oct 2023
Validity : 24 Nov 2023 ~ 23 Nov 2026

Authroized By : *J. H. cho*
Jaehyun CHO
President
TRA Certification International Co., Ltd.

* TRA Certification International Co.,Ltd.(TRACI) has been accredited by Korea Accreditation Board (KAB) as an Occupational Health and Safety Management System certification body. (Accreditation number: KAB-OC-28)
* TRACI Add. : #1106, Ace Twin Tower 1, 285, Digital-ro, Guro-gu, Seoul, Republic of Korea.
* This certificate is the property of TRACI and shall be returned upon request by TRACI.

5-9 Certificate FIRE TEST

CERTIFICATE OF FUGITIVE EMISSION TEST

(Attestation)

TÜV SÜD Korea Ltd. 29F, Two IFC, 10 Gukjegeumyung-ro, Yeongdeungpo-gu, Seoul, 07326, Korea



Choose certainty.
Add value.

■ Certificate No. : TSK-IS-74955944-003

■ Manufacturer Name / Address: SAMSUNG PRECISION&IND. CO., LTD..

90, Seongjusaneopdanji-ro 1-gil, Seongju-eup, Seongju-gun,
Gyeongsangbuk-do, Korea

■ Date of Test : 26~29-Dec-2019 (4days)

■ Kind of Test : Witness of Fugitive Emission Test

■ Test Standard : ISO 15848-1 2015 Second edition

1. Product : 1500LB-8" Trunnion Type Ball Valve

Body	Stem/Motion	Body Seals	Shaft Seals
ASTN A105	Diameter 80mm Quarter Turns	Round spiral gasket (Stainless+Graphite)	Graphite(VOC)

2. Applicable Drawing : BN-F38-150AB-DAJ-8G

3. Test Condition

Test Fluid	Tightness Class	Endurance Class	Cycle	Temperature Class	Performance Class
Helium	A	CO2	1500	tRT, TT(200℃)	ISO FE AH -CO2-SSA0- t(RT, 200℃)-CL1500-ISO 15848-1

4. Extension of Qualification : As per Para.8 of ISO 15848-1, 2015 Edition

5. Conclusion

The undersigned, Inspector to TÜV SÜD, certifies that the above type meets the applicable requirements.

The details of the test condition and data are as per manufacturer's Test Report No. SSP-FE-191230-1 which were verified and endorsed by TÜV SÜD Korea.

Business registration number in Korea:
116-81-68264 (Head Office)

Cert. No.: TSK-IS-2017-EX-029C

Seoul Office
Tel.: +82-(0)2-3215-1100
Fax: +82-(0)2-3215-1110
www.tuv-sud.kr

TÜV®

TÜV SÜD Korea Ltd.
HQ of Region Korea
29F, Two IFC, 10 Gukjegeumyung-ro,
Yeongdeungpo-gu, Seoul, 07326,
Korea

CERTIFICATE OF FUGITIVE EMISSION TEST

(Attestation)

TÜV SÜD Korea Ltd. 29F, Two IFC, 10 Gukjegeumyung-ro, Yeongdeungpo-gu, Seoul, 07326, Korea



Choose certainty.
Add value.

Note: "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.

Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. 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."

This certificate is issued further to a test whose duration and scope were limited by the terms and conditions of the contract with TÜV SÜD Korea Ltd.. This certificate is NOT an indication that the item(s) is (are) fit for any specific purpose and does not release the manufacturer, supplier and any party from their respective duty. Guarantee, obligation and/or indemnity relating to, without limitation, patents, workmanship, materials, safety, performance in operation and/or reliability.

TÜV SÜD Korea Ltd.



Byung Suk Roh

Issued by Byung Suk Roh

Seoul Office
Tel.: +82-(0)2-3215-1100
Fax: +82-(0)2-3215-1110
www.tuv-sud.kr

TÜV®

Business registration number in Korea:
116-81-68264 (Head Office)

Cert. No.: TSK-IS-2017-EX-029C

TÜV SÜD Korea Ltd.
HQ of Region Korea
29F, Two IFC, 10 Gukjegeumyung-ro,
Yeongdeungpo-gu, Seoul, 07326,
Korea

5-10 Certificate FIRE TEST LIST

FUGITIVE EMISSION TEST CERT. LIST

1. FLOATING TYPE TEST CERT.

순서	모델명	재질	TYPE	SEAT	GASKET	STEM PACKING	Test condition							Date	Remark
							Test Medium	Test Pressure	Tightness Class	Mechanical-Cycle Cycles	Number of Thermal Cycles	Number of Stem Seal Adjustment	Temperature Class		
1	300#-2"	A216-WCB	Floating	Soft Seat	RTFE	VOC	Helium	51.1Bar at Room Temperature 51.1Bar at -50°C 43.8Bar at 200°C	AH	1500 Cycles/CO2	4	0	t-50°C, t200°C	23. OCT. 2015	
2	300#-6"	A216-WCB	Floating	Soft Seat	RTFE	VOC	Helium	51.1Bar at Room Temperature 51.1Bar at -50°C 43.8Bar at 200°C	AH	1500 Cycles/CO2	4	0	t-50°C, t200°C	23. OCT. 2015	
3	150#-2"	A351-CF3M	Floating	PTFE	316L+ Graphite	Graphite	Helium	7 barg	CH				tRT to t200°C	06. OCT. 2016	
4	2500#-1"	A105N	Floating	PEEK	304+ Graphite (SPW)	Graphite	Helium	425.5 bar	AH				tRT to t200°C	30. AUG. 2023.	
5	2500#-1"	A182-F304	Floating	PEEK	304+ PTFE (SPW)	PTFE	Helium	413.7 bar	AH				tRT to t200°C	30. AUG. 2023.	
6	600#-2"	A216-WCB	Floating	METAL (316+TCC)	304+ Graphite	Graphite	Helium	102.1 bar	AH				tRT to t400°C	20. DEC. 2024.	

FUGITIVE EMISSION TEST CERT. LIST

2. TRUNNION TYPE TEST CERT.

순서	모델명	재질	TYPE	SEAT	GASKET	STEM PACKING	Test condition							Date	Remark
							Test Medium	Test Pressure	Tightness Class	Mechanical-Cycle Cycles	Number of Thermal Cycles	Number of Stem Seal Adjustment	Temperature Class		
1	300#-12"	A216-WCB	Trunnion	Soft Seat	RTFE	VOC	Helium	51.1Bar at Room Temperature 51.1Bar at -50°C 43.8Bar at 200°C	AH	1500 Cycles/CO2	4	0	t-50°C, t200°C	23. OCT. 2015	
2	1500#-1 1/2"	A105	Trunnion	PEEK	Spiral Round Gasket	Graphite (VOC)	Helium	255.3 bar	AH	1500 Cycles/CO2			tRT to t200°C	20~23.DEC.2019	
3	1500#-8"	A105	Trunnion	PEEK	Spiral Round Gasket	Graphite (VOC)	Helium	255.3 bar	AH	1500 Cycles/CO2			tRT to t200°C	26~29.DEC.2019	
4	2500#-4"	A182-F304	Trunnion	PEEK	304+PTFE (SPW)	PTFE	Helium	413.7 bar	AH				tRT to t200°C	26~29.DEC.2019	
5	600#-4"	A105N	Trunnion	METAL (CF8M+TCC)	304+ Graphite	Graphite	Helium	102.1 bar	AH				tRT to t400°C	20. DEC. 2024.	

5-11 FE Test Certificate

CERTIFICATE OF FUGITIVE EMISSION TEST

(Attestation)

TÜV SÜD Korea Ltd. 29F, Two IFC, 10 Gukjegeumyung-ro, Yeongdeungpo-gu, Seoul, 07326, Korea



Choose certainty.
Add value.

■ **Certificate No. :** TSK-IS-74955944-003

■ **Manufacturer Name / Address:** SAMSUNG PRECISION & IND. CO., LTD..

90, Seongjusaneopdanji-ro 1-gil, Seongju-eup, Seongju-gun,
Gyeongsangbuk-do, Korea

■ **Date of Test :** 26~29-Dec-2019 (4days)

■ **Kind of Test :** Witness of Fugitive Emission Test

■ **Test Standard :** ISO 15848-1 2015 Second edition

1. Product : 1500LB-8" Trunnion Type Ball Valve

Body	Stem/Motion	Body Seals	Shaft Seals
ASTN A105	Diameter 80mm Quarter Turns	Round spiral gasket (Stainless+Graphite)	Graphite(VOC)

2. Applicable Drawing : BN-F38-150AB-DAJ-8G

3. Test Condition

Test Fluid	Tightness Class	Endurance Class	Cycle	Temperature Class	Performance Class
Helium	A	CO2	1500	tRT, TT(200℃)	ISO FE AH -CO2-SSA0- t(RT, 200℃)-CL1500-ISO 15848-1

4. Extension of Qualification : As per Para.8 of ISO 15848-1, 2015 Edition

5. Conclusion

The undersigned, Inspector to TÜV SÜD, certifies that the above type meets the applicable requirements.

The details of the test condition and data are as per manufacturer's Test Report No. SSP-FE-191230-1 which were verified and endorsed by TÜV SÜD Korea.

Business registration number in Korea:
116-81-68264 (Head Office)

Cert. No.: TSK-IS-2017-EX-029C

Seoul Office
Tel.: +82-(0)2-3215-1100
Fax: +82-(0)2-3215-1110
www.tuv-sud.kr

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TÜV SÜD Korea Ltd.
HQ of Region Korea
29F, Two IFC, 10 Gukjegeumyung-ro,
Yeongdeungpo-gu, Seoul, 07326,
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CERTIFICATE OF FUGITIVE EMISSION TEST

(Attestation)

TÜV SÜD Korea Ltd. 29F, Two IFC, 10 Gukjegeumyung-ro, Yeongdeungpo-gu, Seoul, 07326, Korea



Choose certainty.
Add value.

Note: "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.

Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. 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."

This certificate is issued further to a test whose duration and scope were limited by the terms and conditions of the contract with TÜV SÜD Korea Ltd.. This certificate is NOT an indication that the item(s) is (are) fit for any specific purpose and does not release the manufacturer, supplier and any party from their respective duty. Guarantee, obligation and/or indemnity relating to, without limitation, patents, workmanship, materials, safety, performance in operation and/or reliability.

TÜV SÜD Korea Ltd.



byungsukroh

Issued by Byung Suk Roh

Seoul Office
Tel.: +82-(0)2-3215-1100
Fax: +82-(0)2-3215-1110
www.tuv-sud.kr

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Korea

Business registration number in Korea:
116-81-68264 (Head Office)

Cert. No.: TSK-IS-2017-EX-029C

5-12 FE Test Certificate List

FUGITIVE EMISSION TEST CERT. LIST

1. FLOATING TYPE TEST CERT.

순서	모델명	재질	TYPE	SEAT	GASKET	STEM PACKING	Test condition							Date	Remark
							Test Medium	Test Pressure	Tightness Class	Mechanical-Cycle Cycles	Number of Thermal Cycles	Number of Stem Seal Adjustment	Temperature Class		
1	300#-2"	A216-WCB	Floating	Soft Seat	RTFE	VOC	Helium	51.1Bar at Room Temperature 51.1Bar at -50°C 43.8Bar at 200°C	AH	1500 Cycles/CO2	4	0	t-50°C, t200°C	23. OCT. 2015	
2	300#-6"	A216-WCB	Floating	Soft Seat	RTFE	VOC	Helium	51.1Bar at Room Temperature 51.1Bar at -50°C 43.8Bar at 200°C	AH	1500 Cycles/CO2	4	0	t-50°C, t200°C	23. OCT. 2015	
3	150#-2"	A351-CF3M	Floating	PTFE	316L+ Graphite	Graphite	Helium	7 barg	CH				tRT to t200°C	06. OCT. 2016	
4	2500#-1"	A105N	Floating	PEEK	304+ Graphite (SPW)	Graphite	Helium	425.5 bar	AH				tRT to t200°C	30. AUG. 2023.	
5	2500#-1"	A182-F304	Floating	PEEK	304+ PTFE (SPW)	PTFE	Helium	413.7 bar	AH				tRT to t200°C	30. AUG. 2023.	
6	600#-2"	A216-WCB	Floating	METAL (316+TCC)	304+ Graphite	Graphite	Helium	102.1 bar	AH				tRT to t400°C	20. DEC. 2024.	

FUGITIVE EMISSION TEST CERT. LIST

2. TRUNNION TYPE TEST CERT.

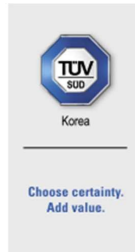
순서	모델명	재질	TYPE	SEAT	GASKET	STEM PACKING	Test condition							Date	Remark
							Test Medium	Test Pressure	Tightness Class	Mechanical-Cycle Cycles	Number of Thermal Cycles	Number of Stem Seal Adjustment	Temperature Class		
1	300#-12"	A216-WCB	Trunnion	Soft Seat	RTFE	VOC	Helium	51.1Bar at Room Temperature 51.1Bar at -50°C 43.8Bar at 200°C	AH	1500 Cycles/CO2	4	0	t-50°C, t200°C	23. OCT. 2015	
2	1500#-1 1/2"	A105	Trunnion	PEEK	Spiral Round Gasket	Graphite (VOC)	Helium	255.3 bar	AH	1500 Cycles/CO2			tRT to t200°C	20~23.DEC.2019	
3	1500#-8"	A105	Trunnion	PEEK	Spiral Round Gasket	Graphite (VOC)	Helium	255.3 bar	AH	1500 Cycles/CO2			tRT to t200°C	26~29.DEC.2019	
4	2500#-4"	A182-F304	Trunnion	PEEK	304+PTFE (SPW)	PTFE	Helium	413.7 bar	AH				tRT to t200°C	26~29.DEC.2019	
5	600#-4"	A105N	Trunnion	METAL (CF8M+TCC)	304+ Graphite	Graphite	Helium	102.1 bar	AH				tRT to t400°C	20. DEC. 2024.	

5-13 Certificate TYPE ACCEPTANCE TEST (TAT)

CERTIFICATE OF TYPE ACCEPTANCE TEST (TAT)

(Attestation)

TÜV SÜD Korea Ltd. 29F, Two IFC, 10 Gukjegeumyung-ro, Yeongdeungpo-gu, Seoul, 07326, Korea



- **Certificate No. :** TSK-IS-74957157-002
- **Manufacturer Name / Address:** SAMSUNG PRECISION IND. CO., LTD.
/ 90, Seongjusaneopdanji-ro 1-gil, Seongju-gun, Gyeongsangbuk-do, Korea
- **Date of Test :** 01~07-Apr-2020 (5days)
- **Kind of Test :** Witness of TYPE Acceptance Test (TAT)
- **Test Standard :** MESC 77/300_Dec.2012

1. Product

ASTM A105N, DN50(2inch), Pressure Class 1500, Ball Valve, Bolted Bonnet

2. Test Condition Applicable

TEC Code : BA-TR-ST-BD-SB-BB-XX-I14313-ST
MESC No. : N/A
Shell Fugitive Class : A(HS)
Test Temperature: -29°C to +183°C
Manufacture's Test Report No. : SSP-TAT-200407-02
GA Drawing No. : BN-F38-150IB-PJR-2L Rev. 2
Item No. : 2092-0002

3. Conclusion

The undersigned, Inspector to TÜV SÜD, certifies that the above type meets the applicable requirements.

The details of the test condition and data are as per manufacturer's Test Report No. SSP-TAT-200407-02 which were verified and endorsed by TÜV SÜD Korea.

Note: "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

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Seoul Office
Tel.: +82-(0)2-3215-1100
Fax: +82-(0)2-3215-1110
www.tuv-sud.kr

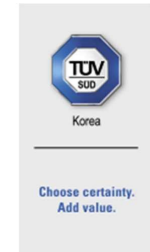


TÜV SÜD Korea Ltd.
HQ of Region Korea
29F, Two IFC, 10 Gukjegeumyung-ro,
Yeongdeungpo-gu, Seoul, 07326,
Korea

CERTIFICATE OF TYPE ACCEPTANCE TEST (TAT)

(Attestation)

TÜV SÜD Korea Ltd. 29F, Two IFC, 10 Gukjegeumyung-ro, Yeongdeungpo-gu, Seoul, 07326, Korea



- **Certificate No. :** TSK-IS-74957157-001
- **Manufacturer Name / Address:** SAMSUNG PRECISION IND. CO., LTD.
/ 90, Seongjusaneopdanji-ro 1-gil, Seongju-gun, Gyeongsangbuk-do, Korea
- **Date of Test :** 01~07-Apr-2020 (5days)
- **Kind of Test :** Witness of TYPE Acceptance Test (TAT)
- **Test Standard :** MESC 77/300_Dec.2012

1. Product

ASTM A216 WCB, DN50(2inch), Pressure Class 600, Ball Valve, Bolted Bonnet

2. Test Condition Applicable

TEC Code : BA-FL-ST-BD-SB-BB-XX-I14313-ST
MESC No. : N/A
Shell Fugitive Class : A(HS)
Test Temperature: -29°C to +183°C
Manufacture's Test Report No. : SSP-TAT-200407-01
GA Drawing No. : BN-F27-60FB-RJR-2L Rev. 0
Item No. : 2092-0001

3. Conclusion

The undersigned, Inspector to TÜV SÜD, certifies that the above type meets the applicable requirements.

The details of the test condition and data are as per manufacturer's Test Report No. SSP-TAT-200407-01 which were verified and endorsed by TÜV SÜD Korea.

Note: "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

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Seoul Office
Tel.: +82-(0)2-3215-1100
Fax: +82-(0)2-3215-1110
www.tuv-sud.kr



TÜV SÜD Korea Ltd.
HQ of Region Korea
29F, Two IFC, 10 Gukjegeumyung-ro,
Yeongdeungpo-gu, Seoul, 07326,
Korea

5-14 Certificate TYPE ACCEPTANCE TEST (TAT)

CERTIFICATE OF TYPE ACCEPTANCE TEST (TAT)



(Attestation)

TÜV SÜD Korea Ltd. 29F, Two IFC, 10 Gukjegeumyung-ro, Yeongdeungpo-gu, Seoul, 07326, Korea

- **Certificate No.** : TSK-IS-74957157-007
- **Manufacturer Name / Address:** SAMSUNG PRECISION IND. CO., LTD.
/ 90, Seongjusaneopdanji-ro 1-gil, Seongju-gun, Gyeongsangbuk-do, Korea
- **Date of Test** : 07~11-Sep-2020 (5 days)
- **Kind of Test** : Witness of TYPE Acceptance Test (TAT)
- **Test Standard** : MESC 77/300_Dec.2012

1. Product

ASTM A105N, DN80(3inch), Pressure Class 600, Ball Valve, Bolted Bonnet

2. Test Condition Applicable

TEC Code : BA-TR-ST-BD-SB-BB-XX-MFRSTD-ST
MESC No. : N/A
Shell Fugitive Class : A(HS)
Test Temperature: -29°C to +183°C
Manufacture's Test Report No. : SSP-TAT-200911-02
GA Drawing No. : BN-R38-60IB-DAR-3L Rev. 1
Item No. : 20380104

3. Conclusion

The undersigned, Inspector to TÜV SÜD, certifies that the above type meets the applicable requirements.

The details of the test condition and data are as per manufacturer's Test Report No. SSP-TAT-200911-02 which were verified and endorsed by TÜV SÜD Korea.

Note: "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

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Cert. No.: TSK-IS-2017-EX-029C

Seoul Office
Tel.: +82-(0)2-3215-1100
Fax: +82-(0)2-3215-1110
www.tuv-sud.kr



TÜV SÜD Korea Ltd.
HQ of Region Korea
29F, Two IFC, 10 Gukjegeumyung-ro,
Yeongdeungpo-gu, Seoul, 07326,
Korea

CERTIFICATE OF TYPE ACCEPTANCE TEST (TAT)



(Attestation)

TÜV SÜD Korea Ltd. 29F, Two IFC, 10 Gukjegeumyung-ro, Yeongdeungpo-gu, Seoul, 07326, Korea

- **Certificate No.** : TSK-IS-74957157-005
- **Manufacturer Name / Address:** SAMSUNG PRECISION IND. CO., LTD.
/ 90, Seongjusaneopdanji-ro 1-gil, Seongju-gun, Gyeongsangbuk-do, Korea
- **Date of Test** : 14~18-Sep-2020 (5 days)
- **Kind of Test** : Witness of TYPE Acceptance Test (TAT)
- **Test Standard** : MESC 77/300_Dec.2012

1. Product

ASTM A182 F316, DN25(1inch), Pressure Class 600, Ball Valve, Double Block & Bleed

2. Test Condition Applicable

TEC Code : BA-FL-ST-BD-SB-XX-XX-MFRSTD-ST
MESC No. : N/A
Shell Fugitive Class : B(HS)
Test Temperature: -29°C to +183°C
Manufacture's Test Report No. : SSP-TAT-200918-01
GA Drawing No. : DBB-60IN-R-P-25 Rev. 1
Item No. : 20380102

3. Conclusion

The undersigned, Inspector to TÜV SÜD, certifies that the above type meets the applicable requirements.

The details of the test condition and data are as per manufacturer's Test Report No. SSP-TAT-200918-01 which were verified and endorsed by TÜV SÜD Korea.

Note: "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

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Seoul Office
Tel.: +82-(0)2-3215-1100
Fax: +82-(0)2-3215-1110
www.tuv-sud.kr



TÜV SÜD Korea Ltd.
HQ of Region Korea
29F, Two IFC, 10 Gukjegeumyung-ro,
Yeongdeungpo-gu, Seoul, 07326,
Korea

5-15 Certificate TYPE ACCEPTANCE TEST (TAT)

CERTIFICATE OF TYPE ACCEPTANCE TEST (TAT)

(Attestation)

TÜV SÜD Korea Ltd. 29F, Two IFC, 10 Gukjegeumyung-ro, Yeongdeungpo-gu, Seoul, 07326, Korea



Choose certainty.
Add value.

- **Certificate No.** : TSK-IS-74957157-004
- **Manufacturer Name / Address**: SAMSUNG PRECISION IND. CO., LTD.
/ 90, Seongjusaneopdanji-ro 1-gil, Seongju-gun, Gyeongsangbuk-do, Korea
- **Date of Test** : 07~11-Sep-2020 (5 days)
- **Kind of Test** : Witness of TYPE Acceptance Test (TAT)
- **Test Standard** : MESC 77/300_Dec.2012

1. Product

ASTM A216 WCB, DN80(3inch), Pressure Class 600, Ball Valve, Bolted Bonnet

2. Test Condition Applicable

TEC Code : BA-FL-ST-BD-SB-BB-XX-MFRSTD-ST
MESC No. : N/A
Shell Fugitive Class : A(HS)
Test Temperature: -29°C to +183°C
Manufacture's Test Report No. : SSP-TAT-200911-01
GA Drawing No. : BN-F23-60FB-RAR-3L Rev. 1
Item No. : 20380101

3. Conclusion

The undersigned, Inspector to TÜV SÜD, certifies that the above type meets the applicable requirements.

The details of the test condition and data are as per manufacturer's Test Report No. SSP-TAT-200911-01 which were verified and endorsed by TÜV SÜD Korea.

Note: "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

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Seoul Office
Tel.: +82-(0)2-3215-1100
Fax: +82-(0)2-3215-1110
www.tuv-sud.kr



TÜV SÜD Korea Ltd.
HQ of Region Korea
29F, Two IFC, 10 Gukjegeumyung-ro,
Yeongdeungpo-gu, Seoul, 07326,
Korea

CERTIFICATE OF TYPE ACCEPTANCE TEST (TAT)

(Attestation)

TÜV SÜD Korea Ltd. 29F, Two IFC, 10 Gukjegeumyung-ro, Yeongdeungpo-gu, Seoul, 07326, Korea



Choose certainty.
Add value.

- **Certificate No.** : TSK-IS-74957157-006
- **Manufacturer Name / Address**: SAMSUNG PRECISION IND. CO., LTD.
/ 90, Seongjusaneopdanji-ro 1-gil, Seongju-gun, Gyeongsangbuk-do, Korea
- **Date of Test** : 14~18-Sep-2020 (5 days)
- **Kind of Test** : Witness of TYPE Acceptance Test (TAT)
- **Test Standard** : MESC 77/300_Dec.2012

1. Product

ASTM A182 F316, DN25(1inch), Pressure Class 1500, Ball Valve, Double Block & Bleed

2. Test Condition Applicable

TEC Code : BA-FL-ST-UD-OP-XX-XX-MFRSTD-ST
MESC No. : N/A
Shell Fugitive Class : B(HS)
Test Temperature: -29°C to +183°C
Manufacture's Test Report No. : SSP-TAT-200918-02
GA Drawing No. : DBB-150IN-R-P-25-25 Rev. 1
Item No. : 20380103

3. Conclusion

The undersigned, Inspector to TÜV SÜD, certifies that the above type meets the applicable requirements.

The details of the test condition and data are as per manufacturer's Test Report No. SSP-TAT-200918-02 which were verified and endorsed by TÜV SÜD Korea.

Note: "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

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TÜV SÜD Korea Ltd.
HQ of Region Korea
29F, Two IFC, 10 Gukjegeumyung-ro,
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Korea

5-16 Certificate TYPE ACCEPTANCE TEST (TAT)

CERTIFICATE OF TYPE ACCEPTANCE TEST (TAT)

(Attestation)

TÜV SÜD Korea Ltd. 29F, Two IFC, 10 Gukjegeumyung-ro, Yeongdeungpo-gu, Seoul, 07326, Korea

- **Certificate No.** : TSK-IS-74957157-009
- **Manufacturer Name / Address:** SAMSUNG PRECISION IND. CO., LTD.
/ 90, Seongjusaneopdanji-ro 1-gil, Seongju-gun, Gyeongsangbuk-do, Korea
- **Date of Test** : 04~08-Feb-2021 (4 days)
- **Kind of Test** : Witness of TYPE Acceptance Test (TAT)
- **Test Standard** : MESC 77/300_Dec.2012

1. Product

ASTM A182 F316, DN25(1inch), Pressure Class 600, Floating Ball Valve, Bolted Bonnet

2. Test Condition Applicable

TEC Code : BA-FL-ST-BD-SB-BB-XX-I17292-ST
MESC No. : N/A
Shell Fugitive Class : A(HS)
Design Temperature: -29°C to +200°C
Manufacture's Test Report No. : SSP-TAT-210208-01
GA Drawing No. : FB7-00400-0L Rev. A
Item No. : SSP210112-1

3. Conclusion

The undersigned, Inspector to TÜV SÜD, certifies that the above type meets the applicable requirements.

The details of the test condition and data are as per manufacturer's Test Report No. SSP-TAT-210208-01 which were verified and endorsed by TÜV SÜD Korea.

Note: "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

Business registration number in Korea:
116-81-68264 (Head Office)

Cert. No.: TSK-IS-2017-EX-029C

Seoul Office
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Fax: +82-(0)2-3215-1110
www.tuv-sud.kr

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TÜV SÜD Korea Ltd.
HQ of Region Korea
29F, Two IFC, 10 Gukjegeumyung-ro,
Yeongdeungpo-gu, Seoul, 07326,
Korea

CERTIFICATE OF TYPE ACCEPTANCE TEST (TAT)

(Attestation)

TÜV SÜD Korea Ltd. 29F, Two IFC, 10 Gukjegeumyung-ro, Yeongdeungpo-gu, Seoul, 07326, Korea

- **Certificate No.** : TSK-IS-74957157-008
- **Manufacturer Name / Address:** SAMSUNG PRECISION IND. CO., LTD.
/ 90, Seongjusaneopdanji-ro 1-gil, Seongju-gun, Gyeongsangbuk-do, Korea
- **Date of Test** : 01~04-Feb-2021 (4 days)
- **Kind of Test** : Witness of TYPE Acceptance Test (TAT)
- **Test Standard** : MESC 77/300_Dec.2012

1. Product

ASTM B564 N08825, DN25(1inch), Pressure Class 1500, Floating Ball Valve, Bolted Bonnet

2. Test Condition Applicable

TEC Code : BA-FL-ST-BD-SB-BB-XX-I17292-VH
MESC No. : N/A
Shell Fugitive Class : A(HS)
Design Temperature: -50°C to +150°C
Manufacture's Test Report No. : SSP-TAT-210204-01
GA Drawing No. : RB9-00400-0L Rev. A
Item No. : SSP210112-2

3. Conclusion

The undersigned, Inspector to TÜV SÜD, certifies that the above type meets the applicable requirements.

The details of the test condition and data are as per manufacturer's Test Report No. SSP-TAT-210204-01 which were verified and endorsed by TÜV SÜD Korea.

Note: "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

Business registration number in Korea:
116-81-68264 (Head Office)

Cert. No.: TSK-IS-2017-EX-029C

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Yeongdeungpo-gu, Seoul, 07326,
Korea

5-17 Certificate TYPE ACCEPTANCE TEST (TAT)

CERTIFICATE OF TYPE ACCEPTANCE TEST (TAT)

(Attestation)

TÜV SÜD Korea Ltd. 29F, Two IFC, 10 Gukjegeumyung-ro, Yeongdeungpo-gu, Seoul, 07326, Korea

- **Certificate No.** : TSK-IS-74959526-002
- **Manufacturer Name / Address**: SAMSUNG PRECISION IND. CO., LTD.
/ 90, Seongjusaneopdanji-ro 1-gil, Seongju-gun, Gyeongsangbuk-do, Korea
- **Date of Test** : 12~16-Apr-2021 (5 days)
- **Kind of Test** : Witness of Type Acceptance Test (TAT)
- **Test Standard** : MESC 77/300_Dec.2012

1. Product

ASTM A182 Gr. F316, DN25(1inch), Pressure Class 1500, Ball Valve, Bolted Bonnet

2. Test Condition Applicable

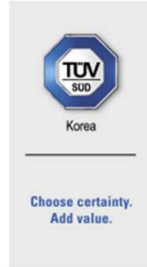
TEC Code : BA-FL-MG-BD-SB-BB-XX-MFRSTD-ST
MESC No. : N/A
Shell Fugitive Class : A(HS)
Test Temperature: -29°C to +200°C
Manufacture's Test Report No. : SSP-TAT-210416-01
GA Drawing No. : FB9-00400-0L Rev. 0
Item No. : 21160001

3. Conclusion

The undersigned, Inspector to TÜV SÜD, certifies that the above type meets the applicable requirements.

The details of the test condition and data are as per manufacturer's Test Report No. SSP-TAT-210416-01 which were verified and endorsed by TÜV SÜD Korea.

Note: "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



CERTIFICATE OF TYPE ACCEPTANCE TEST (TAT)

(Attestation)

TÜV SÜD Korea Ltd. 29F, Two IFC, 10 Gukjegeumyung-ro, Yeongdeungpo-gu, Seoul, 07326, Korea

- **Certificate No.** : TSK-IS-74959526-001
- **Manufacturer Name / Address**: SAMSUNG PRECISION IND. CO., LTD.
/ 90, Seongjusaneopdanji-ro 1-gil, Seongju-gun, Gyeongsangbuk-do, Korea
- **Date of Test** : 05~09-Apr-2021 (5 days)
- **Kind of Test** : Witness of TYPE Acceptance Test (TAT)
- **Test Standard** : MESC 77/300_Dec.2012

1. Product

ASTM A105N, DN50(2inch), Pressure Class 600, Ball Valve, Bolted Bonnet

2. Test Condition Applicable

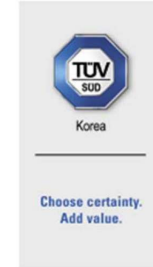
TEC Code : BA-TR-MG-BD-SB-BB-XX-MFRSTD-ST
MESC No. : N/A
Shell Fugitive Class : A(HS)
Test Temperature: -29°C to +200°C
Manufacture's Test Report No. : SSP-TAT-210409-01
GA Drawing No. : FB7-00700-0L Rev. 0
Item No. : 210405001

3. Conclusion

The undersigned, Inspector to TÜV SÜD, certifies that the above type meets the applicable requirements.

The details of the test condition and data are as per manufacturer's Test Report No. SSP-TAT-210409-01 which were verified and endorsed by TÜV SÜD Korea.

Note: "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



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HQ of Region Korea
29F, Two IFC, 10 Gukjegeumyung-ro,
Yeongdeungpo-gu, Seoul, 07326,
Korea

Business registration number in Korea:
116-81-68264 (Head Office)

Cert. No.: TSK-IS-2017-EX-029C

Seoul Office
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TÜV SÜD Korea Ltd.
HQ of Region Korea
29F, Two IFC, 10 Gukjegeumyung-ro,
Yeongdeungpo-gu, Seoul, 07326,
Korea

Business registration number in Korea:
116-81-68264 (Head Office)

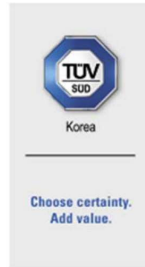
Cert. No.: TSK-IS-2017-EX-029C

5-18 Certificate TYPE ACCEPTANCE TEST (TAT)

CERTIFICATE OF TYPE ACCEPTANCE TEST (TAT)

(Attestation)

TÜV SÜD Korea Ltd. 29F, Two IFC, 10 Gukjegeumyung-ro, Yeongdeungpo-gu, Seoul, 07326, Korea



- **Certificate No.** : TSK-IS-74959526-003
- **Manufacturer Name / Address:** SAMSUNG PRECISION IND. CO., LTD.
/ 90, Seongjusaneopdanji-ro 1-gil, Seongju-gun, Gyeongsangbuk-do, Korea
- **Date of Test** : 03-07-May-2021 (5 days)
- **Kind of Test** : Witness of Type Acceptance Test (TAT)
- **Test Standard** : MESC 77/300_Dec.2012

1. Product

ASTM A105N, DN250(10inch), Pressure Class 600, Trunnion Ball Valve, Bolted Bonnet

2. Test Condition Applicable

TEC Code : BA-TR-ST-BD-SB-BB-XX-MFRSTD-ST
MESC No. : N/A
Shell Fugitive Class : A(HS)
Test Temperature: -29°C to +200°C
Manufacture's Test Report No. : SSP-TAT-210507-01
GA Drawing No. : BN-F38-60IB-PJR-10G Rev. 0
Item No. : 21200001

3. Conclusion

The undersigned, Inspector to TÜV SÜD, certifies that the above type meets the applicable requirements.

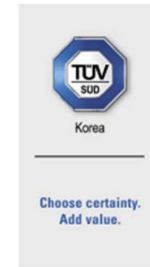
The details of the test condition and data are as per manufacturer's Test Report No. SSP-TAT-210507-01 which were verified and endorsed by TÜV SÜD Korea.

Note: "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

CERTIFICATE OF TYPE ACCEPTANCE TEST (TAT)

(Attestation)

TÜV SÜD Korea Ltd. 29F, Two IFC, 10 Gukjegeumyung-ro, Yeongdeungpo-gu, Seoul, 07326, Korea



- **Certificate No.** : TSK-IS-74959526-004
- **Manufacturer Name / Address:** SAMSUNG PRECISION IND. CO., LTD.
/ 90, Seongjusaneopdanji-ro 1-gil, Seongju-gun, Gyeongsangbuk-do, Korea
- **Date of Test** : 10-14-May-2021 (5 days)
- **Kind of Test** : Witness of Type Acceptance Test (TAT)
- **Test Standard** : MESC 77/300_Dec.2012

1. Product

ASTM A105N, DN250(10inch), Pressure Class 1500, Trunnion Ball Valve, Bolted Bonnet

2. Test Condition Applicable

TEC Code : BA-TR-ST-BD-SB-BB-XX-MFRSTD-ST
MESC No. : N/A
Shell Fugitive Class : A(HS)
Test Temperature: -29°C to +200°C
Manufacture's Test Report No. : SSP-TAT-210514-01
GA Drawing No. : BN-F38-150IB-PJR-10G Rev. 0
Item No. : 21200002

3. Conclusion

The undersigned, Inspector to TÜV SÜD, certifies that the above type meets the applicable requirements.

The details of the test condition and data are as per manufacturer's Test Report No. SSP-TAT-210514-01 which were verified and endorsed by TÜV SÜD Korea.

Note: "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

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Cert. No.: TSK-IS-2017-EX-029C

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Yeongdeungpo-gu, Seoul, 07326,
Korea

5-19 Certificate TYPE ACCEPTANCE TEST (TAT)

CERTIFICATE OF TYPE ACCEPTANCE TEST (TAT) (Attestation)



Date: 07th Apr, 2022

- **Certificate No.:** TSK-IS-74960363-001
- **Manufacturer Name / Address:** Samsung Precision Ind.Co.,Ltd.,
90,Seongjusaneopdanji-ro 1-gil, Seongju-eup, Seongju-gun, Gyeongsangbuk-do, Korea.
- **Date of Test :** 05~07-Apr-2022 (3days)
- **Kind of Test :** Witness of Type Acceptance Test (TAT)
- **Test Standard :** MESG SPE 77/300 Appendix C -2010.

1. Product

ASTM A182-F51, DN25(1"), CLASS 1500 + NEEDLE + DOUBLE BLOCK & BLEED VALVE

2. Test Condition Applicable

Shell Fugitive Class: A (HS)
Test Temperature: -50°C to +185°C
Test Report No: SPC-TAT-20220407-01
GA Drawing No.: DBB-25N-150-01 Rev.0
Technical Classification Code : BA-FL-SE-UD-EE-IB-XX-I17292 -VH

3. Conclusion

The undersigned, Inspector to TÜV SÜD, certifies that the above type meets the applicable requirements.

The details of the test condition and data are as per manufacturer's Test Report No. SPC-TAT-20220407-01 which were verified and endorsed by TÜV SÜD Korea.

Note: "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.

Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. 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."

This certificate is issued further to a test whose duration and scope were limited by the terms and conditions of the contract with TÜV SÜD Korea Ltd. This certificate is NOT an indication that the item(s) is (are) fit for any specific purpose and does not release the manufacturer, supplier and any party from their respective duty. Guarantee, obligation and/or indemnity relating to, without limitation, patents, workmanship, materials, safety, performance in operation and/or reliability.



TÜV SÜD Korea Ltd.


Issued by Byung Suk Roh

5-20 Certificate Registration Card Manufacturer Specific Equipment & Gas Supplies Manufacturing Business Licence

제 2017-5210082-04-1-00002 호

처리부서명	경제교통과
담당자명	유성록
전화번호	054-930-6704

(액화석유가스 가스용품제조사업) 허 가 중

1. 사업의 종류 및 대상 범위 : 액화석유가스 가스용품제조사업
2. 상호 : (주)삼성정공
3. 사업소 소재지 : 경상북도 성주군 성주읍 성주산업단지로1길 90
4. 대표자 성명 : 위성주
5. 대표자 생년월일 : 1957년 05월 15일
6. 가스용품의 종류 및 규격 : 배관용밸브(볼밸브)
호칭치수 : 1/2"~40"
호칭압력 : CLASS(150~1500)

「액화석유가스의 안전관리 및 사업법」 제5조제1항·제2항, 제8조제1항 및 같은 법 시행규칙 제10조제1항에 따라 위와 같이 허가합니다.

2017년 06월 07일

성 주 군



(앞 쪽)

제 2014-5210082-16-5-00001 호

처리부서명	경제교통과
담당자명	박주하
전화번호	054-930-6704

특정설비 제조 등록증명서

①사업의 종류	특정설비		
②상 호	(주)삼성정공		
③사업소 소재지	경상북도 성주군 성주읍 성주산업단지로1길 90		
④성명(대표자)	위성주	⑤생년월일	1957년 05월 15일
⑥용기·냉동기·특정설비	종 류		규 격
	특정설비, 특정설비		독성가스배관용밸브, 긴급차단장치(밸브)

「고압가스 안전관리법」 제5조제1항, 제5조의2제1항 또는 제2항과 같은 법 시행규칙 제6조제1항제3호에 따라 용기(냉동기·특정설비)의 제조등록 또는 재등록을 마쳤으므로 용기(냉동기·특정설비)제조 등록증명서를 발급합니다.

2018년 09월 17일

성 주 군



5-21 Certificate Registration Card Manufacturer Specific Equipment & Gas Supplies Manufacturing Business Licence

제 2014-0058076 호				완 성 검 사 증 명 서			
① 상 호	(주)삼성정공	② 사업의 종류	특정설비제조				
③ 사무소 소재지		④ 대표자 성명	위성주				
⑤ 사업소 소재지	경북 성주군 성주읍 성주산업단지로1길 90						
⑥ 검사원 성명	정동하	⑦ 검사 연월일	2014.02.19				
⑧ 차기 검사일							

「고압가스 안전관리법」 제16조제3항, 제16조의2제1항 및 같은 법 시행규칙 제28조제5항, 제30조제6항에 따라 고압가스 특정설비의 제조시설의 완성검사증명서를 발급합니다.

2014년 02월 27일



발급지사명(주소) : 대구경북지역본부 (대구 달서구 성서공단로 22안길 9)
 담당부서 : 검사1부 ☎ (053) 588-0019

한국가스안전공사사장



제 2017-0314559 호				완 성 검 사 증 명 서			
① 상 호	(주)삼성정공	② 사업의 종류	가스용품제조				
③ 사무소 소재지		④ 대표자	위성주				
⑤ 사업소 소재지	경북 성주군 성주읍 성주산업단지로1길 90						
⑥ 검사원 성명	이평락	⑦ 검사 연월일	2017.07.17				
⑧ 차기 검사일	배관용 밸브						

「액화석유가스의 안전관리 및 사업법」 제36조제2항, 같은 법 제37조제1항 본문 및 같은 법 시행규칙 제51조제5항·제52조제5항에 따라 액화석유가스 가스용품 제조시설의 완성검사증명서를 발급합니다.

2017년 07월 19일



한국가스안전공사사장



검사기관주소 : 대구경북지역본부 (대구 달서구 성서공단로 22안길 9)
 담당부서 : 검사1부 ☎ (053) 588-0019

210mm X 297mm(보존용지(2종)70g/m²)



제 RI10301 -00134 호

기술혁신형 중소기업(Inno-Biz) 확인서

업 체 명 : (주)삼성정공

대 표 자 : 위성주, 위현호

주 소 : 경북 성주군 성주읍 성주산업단지로1길 90

등 급 : A

유효기간 : 2023. 2. 16 ~ 2026. 2. 15

위 업체는 기술혁신형 중소기업 육성사업에 의해
선정된 기술혁신형 중소기업(Inno-Biz)임을 확인
합니다.

2023년 1월 9일

중소벤처기업부장





제98-356 호

수출유망중소기업선정서

업 체 명 : (주) 삼성 정 공
대 표 자 : 위 성 주
생 산 품 목 : 스테레스 폴 펄브

귀사를 중소기업진흥공단이 지정한
수출 유망 중소기업으로 발굴선정
합니다.

1998년 2월 23일

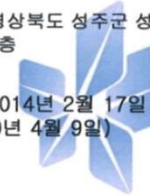
중소기업진흥공단 이사장



제 2010310269 호

기업부설연구소 인정서

- 연 구 소 명: (주)삼성정공 기술연구소
[소속기업명: (주)삼성정공]
- 소 재 지: 경상북도 성주군 성주읍 성주산업단지로1길 90
1층
- 신 고 연월일: 2014년 2월 17일
(최초인정일: 2010년 4월 9일)
※ 변경내역: 소재지 변경



미래창조과학부

「기초연구진흥 및 기술개발지원에 관한 법률」 제14조,
같은 법 시행령 제16조제1항 및 제27조제1항에 따라 위와
같이 기업부설연구소로 인정합니다.



2014년 2월 18일

한국산업기술진흥협회장





뿌리기술 전문기업 지정증

1. 지정번호 : 제200301-0152호
2. 기 업 명 : (주)삼성정공
3. 대 표 자 : 위성주
4. 소 제 지 : (우40031) 경북 성주군 성주읍 성주산업단지로1길 90
5. 핵심 뿌리기술 분야 또는 범위 : 고주파 유도식 급속 용해 주조기술

「뿌리산업 진흥과 첨단화에 관한 법률」 제15조 제1항 및 같은 법 시행령 제19조제2항에 따라 위 기업을 뿌리기술 전문기업으로 지정합니다.

2020년 9월 28일

중소벤처기업부



5-25 Ball valve for natural Gas Certificate Of Registration

등록번호: KOGAS-2025-003
Certificate No.

공 급 업 체 등 록 증
CERTIFICATE OF REGISTRATION

상 호: (주)삼성정공
Company Name

사업자등록번호: 503-81-23762
Certificate of Taxpayer's I.D.

대 표 자: 위성주
Chief Executive

공 장 주 소: 1공장:경북 성주군 성주읍 성주산업 단지로1길90, 2공장:경북 성주군 성주읍 성주산업단지로 1길94
Factory Location

등 록 품 목 : 밸브류 : 천연가스용 볼밸브(생산기지용)
Item Description Valve : Ball valve for natural gas(For LNG Terminals)

해 당 규 격 : 4 " 이하
Purchase Spec. up to 4 "

상기 업체는 위의 등록 품목(해당규격)에 대하여
한국가스공사의 공급업체로 등록되었음을 증명합니다.

This is to certify that this company is qualified and
eligible to supply the above item to Korea Gas Corporation

KOGAS

유효 기 간: 2027.12.30
Period of Validity

 **한국가스공사** 사 장
KOREA GAS CORPORATION



발 행 일: 2024.12.31
Issue date

6-1 Experience

No	Project Name	Contractor(EPC)	Client(End User)	Date	Item	Class	Size	Site
1	South Pars-SP12		National Iranian Oil Company	2011.01	Ball valve	150~300	3/4"~8"	Iran
2	Barka3 & Sohar2	GS ENG & Construction		2011.01	Ball valve & MOV	150	6"~18"	Oman
3	P2- Project	Lotte ENG & Construction	Lotte Chemical	2011.04	Ball valve	150~300	1/2"~10"	KOREA
4	SAPA-Project	POSCO ENG	SAMYANG INOCHEM	2011.05	Ball valve	150	1/2"~12"	KOREA
5	1.5-Project	Kukdoong Construction	Woongjin Polysilicon	2011.07	Ball valve	150~600	1/2"~16"	KOREA
6	U1-Project	KCC ENG & Construction	Hyundai Engineering	2011.08	Ball valve	10K	15A~300A	KOREA
7	P2- Project	Susungtech	Hankook Silicon	2011.09	Ball valve	150~600	2"~16"	KOREA
8	Iran LNG Project	Daelim		2011.09	Ball valve	150	1"~6"	Iran
9			Gastech International FCZO	2011.11	Ball valve	600	20"~24"	Dubai
10	Rabigh Power Plant	Doosan Heavy Industries		2012.01	Ball valve	150~300	2.1/2"~36"	Saudi Arabia
11	TPC Jubail Polysilicon	Hyundai Engineering		2012.11	Ball valve	150~600	1/2"~18"	Saudi Arabia
12	HCC Orange Project	Hanwha E & C	Hanwha Chemical	2013.01	Ball valve	150~600	1/2"~16"	KOREA
13	Rabigh Power plant	Doosan Heavy Industries		2013.02	Ball valve	150~300	3"~14"	Saudi Arabia
14	SMP W-1 Project	SAMSUNG ENG	SAMSUNG FINE CHEMICAL	2013.03	Ball valve	150~600	1/2"~20"	KOREA
15	B-Project	Lotte ENG & Construction	Lotte Chilsung	2013.04	Ball valve	150	1/2"~6"	KOREA
16	Korea east-west power Co	Daelim	Ulsan Thermoelectric Power Plant	2013.05	3-way Ball valve POV	150	8"	KOREA
17	R1-Project	Lotte ENG & Construction		2013.07	3-way Ball valve	150	1"~10"	Malaysia
18	CPS steel Plant	POSCO ENG		2013.11	Ball valve	150	1/2"~4"	Brazil
19	SMP W-1 Project	SAMSUNG ENG	SAMSUNG FINE CHEMICAL	2013.12	Ball valve	150~300	1/2"~12"	KOREA
20	Needle coke Project	POSCO ENG	POSCO	2013.12	Ball valve	150~300	1/2"~12"	KOREA

6-2 Experience

No	Project Name	Contractor(EPC)	Client(End User)	Date	Item	Class	Size	Site
21	SMP W-1 Project	SAMSUNG ENG	SAMSUNG FINE CHEMICAL	2014.01	Ball valve	150~300	1/2"~12"	KOREA
22	DH-2 Project	Daelim	Hyosung	2014.02	Ball valve	150	3/4"~4"	KOREA
23	Rabigh power Plant	Doosan Heavy instrial		2014.02	Ball valve	150~300	3"~36"	KOREA
24	Cps Steel Project	POSCO E&C		2014.06	Ball valve	150~300	3"~36"	Brazil
25	I-Project (1st)	E-tech Construction	SC-Engineering	2015.01	Ball valve	150	1/2"~10"	KOREA
26	P2-Project	OCI	OCI	2015.02	Ball valve	150~600	1/2"~4"	KOREA
27	Cochrance-Project	Doosan Heavy instrial	Doosan Heavy Industri es.	2015.02	Ball valve	600	1/2"~2"	KOREA
28	I-Project (2nd)	E-tech Construction	SAMYANGSA	2015.03	Ball valve	150	1/2"~10"	KOREA
29	YNCC5 Separation Project	Daelim		2015.03	Ball valve	150	1"~3"	KOREA
30	KAK-Project	E-tech Construction	SC-Engineering	2015.04	Ball valve	10K	8A~200A	KOREA
31	KAK-Project	E-tech Construction	SC-Engineering	2015.04	Ball valve	800~1500	3/8"~2"	KOREA
32	TNB Track 3A Project	Severn trent	Severn trent	2015.05	Ball valve	600	1/2"~2"	Malaysia
33	Yeosu power 1 & 2		Halla Energy & Enviro nment	2015.06	Ball valve	150	1"~4"	KOREA
34	VINH TAN4 Project	Doosan Heavy Industries		2015.07	Ball valve	150~600	1/2"~10"	Vietnam
35	Needle Coke-Project		POSCO	2015.08	Ball valve	10K	8A~200A	KOREA
36	TPC Jubail Polysilicon	Hyundai Engineering		2015.08	Ball valve	150~800	1/2"~6"	Saudi Arabia
37	KPR-1D-Project	E-tech Construction	SC-Engineering	2015.08	Ball valve	150~300	1/2"~10"	KOREA
38	KPR-D-Project	E-tech Construction	SC-Engineering	2015.11	Ball valve	10K	20A~100A	KOREA
39	KPR-D-Project	E-tech Construction	SC-Engineering	2015.12	Ball valve	150	1/"~4"	KOREA
40	VINH TAN4 Project	Doosan Heavy Industries		2015.12	Ball valve	150~300	1"~10"	Vietnam

6-3 Experience

No	Project Name	Contractor(EPC)	Client(End User)	Date	Item	Class	Size	Site
41	SMP W-1 Project	SAMSUNG ENG	SAMSUNG FINE CHEMICAL	2016.01	Ball valve	150~300	1/2"~12"	KOREA
42		Doosan Enterprise	Lotte Chemical	2016.02	Ball valve	150~300	3/4"~8"	KOREA
43	LVSF-Project	Hyundai Engineering	Lotte ENG & Construction	2016.02	Ball valve	150~300	2"~12"	KOREA
44	DEOA-Project(1st)	E-tech Construction	Lotte ENG & Construction	2016.03	Ball valve	150~300	1"~6"	KOREA
45	COCHRANE-Project	Doosan Heavy Industries		2016.03	Ball valve	600LB	1/2"~2"	Vietnam
46	YMDI-Project	POSCO ENG	Kumho Mitsui Chemical	2016.513	Ball valve	150~600	1/2"~14"	KOREA
47	BMH Feeding Line		Hanwha Energy	2016.06	Ball valve	150	6"	KOREA
48	E-Project		Daelim	2016.06	Ball valve	150	1/2"~10"	KOREA
49	DEOA-Project (2rd)	E-tech Construction	Lotte ENG & Construction	2016.06	Ball valve	150	3/4"~3"	KOREA
50			SPX FLOW	2016.06	Ball valve	150~600	3"~24"	USA
51	GWANGYONG 7CG NEW PLATE	POSCO E&C	POSCO	2016.06	Ball valve	10K	15A~200A	KOREA
52	E-Project(1st)	POSCO E&C	Daelim	2016.06	Ball valve	150~300	1/2"~2"	KOREA
53	E-Project(2rd)	POSCO E&C	Daelim	2016.06	Ball valve	150~300	1/2"~2"	KOREA
54	BASF Expansion Ultrason-PJT		GS & Construction	2016.09	Ball valve	150	1/2"~1"	KOREA
55	E-Project(3rd)	POSCO E&C	Daelim	2016.10	Ball valve	150~300	1/2"~2"	KOREA
56	LA-MEG Project	Samsung-Engineering	Lotte Chemical	2016.10	Ball valve	150~300	1/2"~6"	USA
57	Karabatan-Project	Doosan Heavy Industries		2016.10	Ball valve	150~600	1/2"~10"	Karabatan
57	LA-MEG Project	Samsung-Engineering	Lotte Chemical	2016.12	Ball valve	150~300	1/2"~4"	USA
58	VINH TAN4 Project	Doosan Heavy Industries		2016.12	Ball valve	150~300	1"	Vietnam
59			ANSTO	2017.01	Ball valve(3-way Y)	150#	1-1/2"	Australia
60	VINH TAN4 Project	Doosan Heavy Industries		2017.02	Ball valve	150#~600#	1" ~ 8"	Vietnam

6-4 Experience

No	Project Name	Contractor(EPC)	Client(End User)	Date	Item	Class	Size	Site
61	LA-MEG Project(3rd)	Samsung Engineering		2017.03	Ball valve	150~300	1/2" ~ 4"	KOREA
62			SPX FLOW	2017.03	Ball valve	150~300	4"~6"	USA
63	ECEC Methanol PJT		Hwa Sung Industry	2017.03	Ball valve	150	4"~8"	KOREA
64	TPP3 PJT		Flowone	2017.05	Ball valve	150	3"~4"	KOREA
65	Grease Plant Revamping PJT		Future Technology Supply	2017.06	Ball valve(3-way Y)	150	3"~4"	Thailand
66	TPP3 PJT		Doo San Enterprise	2017.07	Ball valve	150~300	1-1/2"~8"	KOREA
67			SPX FLOW	2017.08	Ball valve	600	2"	USA
68	Grease Plant Revamping PJT		Future Technology Supply	2017.08	Ball valve	150	2"~4"	Thailand
69			Delta Valves	2017.09	Ball valve	600	2"	New Zealand
70	MP3 PJT	Flowone	OCIM	2017.11	Ball valve	150~600	1/2"~12"	KOREA
71	MP3 PJT	Flowone	OCIM	2018.01	Ball valve	150~600	1" ~ 10"	Malaysia
72		Future Technology	Thai Petroleum & Trading	2018.01	Ball Valve(3-way "Y")	10K	50A	Thailand
73	LA-MEG Project(3rd)		Samsung Engineering	2018.02	Ball Valve	150~300	1/2" ~ 4"	KOREA
74	ECEC Methanol Pjt		Hwa Sung Industry	2018.02	Ball Valve	150	3"~4"	KOREA
75	TPP3 PJT		Doo San Enterprise	2018.02	Ball Valve	150~300	2"	KOREA
76	MP3 PJT	Flowone	OCIM	2018.02	Ball Valve	150~600	1" ~ 10"	Malaysia
77	CA TAM PJT	Thanh Long Technical Services	Vietsovpetro	2018.02	Ball Valve	1500~2500	4" ~ 8"	Vietnam
78			MECHANICAL ADVANTAGE	2018.04	Ball Valve	600	4" ~ 6"	USA
79			Taekwang Industrial Co.,LTD	2018.04	Ball Valve	150~300	1/2" ~ 6"	KOREA
80	BMH Feeding Line		Hanwha Energy	2018.04	Ball Valve	150	6"	KOREA

6-5 Experience

No	Project Name	Contractor(EPC)	Client(End User)	Date	Item	Class	Size	Site
81	H-NC3 Project		E-tech Construction	2018.04	Ball Valve	150 ~ 300	1" ~ 6"	KOREA
82	HC2-Project		Hyundai Engineering	2018.04	Ball Valve	150 ~ 300	1" ~ 4"	KOREA
83	POE- Project		LOTTE Construction	2018.05	Ball Valve	150 ~ 300	1/2" ~ 6"	KOREA
84	Goseong Hai-Project		Doosan Heavy Industries	2018.08	Ball Valve	150 ~ 300	1/2" ~ 1"	KOREA
85	MP5 PJT	Flowone	OCIM	2018.08	Ball Valve	150 ~ 600	1/2" ~ 10"	Malaysia
86	BMH Feeding Line		Hanwha Energy	2018.08	Ball Valve	150	4" ~ 10"	KOREA
87	CA TAM PJT	Thanh Long Technical Services	Vietsovpetro	2018.09	Ball Valve	150 ~ 800	1/2" ~ 12"	Vietnam
88	MP4 PJT	Flowone	OCIM	2018.11	Ball Valve	150 ~ 600	1" ~ 10"	Malaysia
89	Large size gas turbine PJT		Doosan Heavy Industries	2018.11	Ball Valve	150 ~ 600	3" ~ 10"	KOREA
90	Bien Dong 1 PJT	VTs Trading	Petro Vietnam	2018.11	Ball Valve	150 ~ 800	1/2" ~ 8"	Vietnam
91	HOC-U3 Project		E-tech Construction	2018.11	Ball Valve	10K ~ 800	1" ~ 6"	KOREA
92	EPO Factory Construction PJT		Daelim	2018.12	Ball Valve	150 ~ 300	1/2" ~ 2"	KOREA
93	MP5 PJT	Flowone	OCIM	2018.12	Ball Valve	150 ~ 600	1/2" ~ 10"	Malaysia
94	New-Seocheon FGD-Project		Doosan Heavy Industries	2018.12	Ball Valve	150 ~ 600	1/2" ~ 1"	KOREA
95	JC Chemical-Ulsan New Airport Project	E-tech Construction	E-tech Construction	2019.01	Ball Valve	10K	1" ~ 6"	KOREA
96	MP5 PJT	Flowone	OCIM	2019.01	Ball Valve	150~600	1/2" ~ 4"	Malaysia
97	EPO-REVANPING-project	Daelim	Daelim	2019.02	Ball Valve	150 ~ 300	1/2" ~ 2"	KOREA
98	MP4 PJT	Flowone	OCIM	2019.02	Ball Valve	150~300	1/2" ~ 6"	Malaysia
99	GANGNEUNG ANIN #1.2	Doosan Heavy Industries	Doosan Heavy Industries	2019.05	Ball Valve	150 ~ 600	1/2" ~ 2"	KOREA
100	EPO-REVANPING-project	Daelim	Daelim	2019.05	Ball Valve	150 ~ 300	1/2" ~ 2"	KOREA

6-6 Experience

No	Project Name	Contractor(EPC)	Client(End User)	Date	Item	Class	Size	Site
101	GWANGYONG 3rd Furnace #5	POSCO	POSCO	2019.05	Ball Valve	10K,20K	15A ~ 250A	KOREA
102	BK21 PJT	TLEST	VIETSOVPETRO	2019.07	Ball Valve	150 ~ 800	1/2" ~ 10"	Vietnam
103	YNCC-NCC-project	Daelim	Daelim	2019.09	Ball Valve	150	3/4" ~ 2"	KOREA
104	HDPE PILOT PLAMT-PJT	LOTTE Chemical	LOTTE Chemical	2019.11	Ball Valve	150 ~ 300	1/2" ~ 6"	KOREA
105	YNCC-NCC-project	Daelim	Daelim	2020.01	Ball Valve	150 ~ 800	3/4" ~ 2"	KOREA
106	ENBRIDGE PJT	Advance Control Product	Advance Control Product	2020.01	Ball Valve	150 ~ 900	1"~3"	USA
107	BK19 PJT	Thanh Long Technical JSC	Thanh Long Technical JSC	2020.01	Ball Valve	600 ~ 2500	8"~12"	Vietnam
108	HDPE PILOT PLAMT-PJT	LOTTE Chemical	LOTTE Chemical	2020.02	Ball Valve	150 ~ 300	1/2"~6"	KOREA
109	YNCC-NCC-project	Daelim	Daelim	2020.02	Ball Valve	150#	3/4"~4"	KOREA
110	M16 Ph1 Gas Plant Project	SK AIR GAS	SK AIR GAS	2020.03	Ball Valve	10K~63K	3/4"~4"	KOREA
111	Sam Chun Po Thermal Powerplant			2020.03	Ball Valve	150	3/4"~5"	KOREA
112	SHIN KORI NUCLEAR POWER PLANT UNITS 5&6	KOREA HYDRO&NUCLEAR CO.LTD	KOREA HYDRO&NUCLEAR CO.LTD	2020.03	Ball Valve	150	3/4"~5"	KOREA
113		Taekwang Industrial Co.,LTD	Taekwang Industrial Co.,LTD	2020.04	Ball Valve	10K~20K	15A~250A	KOREA
114		Taekwang Industrial Co.,LTD	Taekwang Industrial Co.,LTD	2020.04	Ball Valve	10K~20K	15A~250A	KOREA
115	YNCC-NCC2 Revamo-project	Daelim	Daelim	2020.04	Ball Valve	150 ~ 600	3"~6"	KOREA
116	M16 Ph1GAS PLANT-project	SK AIR GAS	SK AIR GAS	2020.04	Ball Valve	10K~20K	15A"~250A	KOREA
117	Thai Petroleum & Trading	Future Technology	Future Technology	2020.04	Ball Valve	10K	80A	Thailand
118	YNCC-NCC2 Revamo-project	Daelim	Daelim	2020.05	Ball Valve	150~300	3"~6"	KOREA
119	GANGNEUNG ANIN (#1.2)	Coway Entech	Coway Entech	2020.06	Ball Valve	150 ~ 300	1/2" ~ 5"	KOREA
120	HPC-PJT	Hyundai Chemical	Hyundai Chemical	2020.06	Ball Valve	150	11/2" ~ 3"	KOREA

6-7 Experience

No	Project Name	Contractor(EPC)	Client(End User)	Date	Item	Class	Size	Site
121		CV.Pratama Mitra Andalan	CV.Pratama Mitra Andalan	2020.06	Ball Valve	10K	80A	Indonesia
122	Shuweiht S3 IPP PJT	Technomax Middle East Engg	Technomax Middle East Engg	2020.06	Ball Valve	300#	10"	U.A.E
123		Liquip International	Liquip International	2020.06	Ball Valve	150#	3"	Australia
124	KDFPK Gas Expansion PJT	TOYO ENGINEERING	TOYO ENGINEERING	2020.09	Ball Valve	10K	15A ~ 80A	KOREA
125	EMK 01 Project	TOYO ENGINEERING	TOYO ENGINEERING	2020.09	Ball Valve	10K	15A ~ 80A	KOREA
126	North Caspian Operating	Advance Control Product	Advance Control Product	2020.10	Ball Valve	2500	12"	USA
127	GANGNEUNG ANIN (#1.2)	Doosan Heavy Industries	Doosan Heavy Industries	2020.12	Ball Valve	150 ~ 800	1/2" ~ 3"	KOREA
128	HYC 2nd LOC2 PLANT PJT		HANYOU Chemical	2021.01	Ball Valve	150 ~ 300	1/2" ~ 6"	KOREA
129	Hyundai Engineering Da ng Jin Factory		Hyundi steel company	2021.01	Ball Valve	150 ~ 600	3/4" ~ 16"	KOREA
130	SAMCHEOK POWER FGD		Doosan Heavy Industries	2021.02	Ball Valve	150 ~ 800	1/2" ~ 3"	KOREA
131	B Grimm 7 FGH	MS & TECH	Technical Korea	2021.02	Ball Valve	150 ~ 1500	1/2" ~ 6"	Singapore
132	Mmodec pa14 Bacalhau FPSO		CORE Plant Co.,Ltd.	2021.05	Ball Valve	150	6" ~ 12"	KOREA
133	M16 Ph1 Gas Plant Project		SK Air Gas	2021.05	Ball Valve	10K ~ 20K	40A ~ 80A	KOREA
134	Taiwan Chimei Project	MS & TECH	Technical Korea	2021.08	Ball Valve	150 ~ 800	1/2" ~ 4"	Taiwan
135	BK19 Wellhead Platform		SOLICOM	2022.01	Ball Valve	150 ~ 900	1/2" ~ 3"	Vietnam
136	B Grimm 7 FGH	MS & TECH	Technical Korea	2022.02	Ball Valve	150 ~ 1500	1/2" ~ 6"	Taiwan
137	Yeosu 40KTA APAO Project		DL E&C	2022.02	Ball Valve	150 ~ 600	1/2" ~ 10"	KOREA
138	Samsung Electronics P-3	Haudy	SAMSUNG Electronics	2022.02	Ball Valve	150 ~ 600	1/2" ~ 6"	KOREA
139	Malaysia USR_R Project		LOTTE Construction	2022.03	Ball Valve	150	1/2" ~ 12"	KOREA
140	Kd Gas Project		Toyo Engineering	2022.03	Ball Valve	10K ~ 20K	15A ~ 100A	KOREA

6-8 Experience

No	Project Name	Contractor(EPC)	Client(End User)	Date	Item	Class	Size	Site
141	NaePo New City Gas Complex		LOTTE Construction	2022.03	Ball Valve	600	4" ~ 20"	KOREA
142	Incheon International Airport Refueling Facility	Woosung Valve & Hyundai Valve Control	Incheon International Airport Corp.	2022.04	Ball Valve	150	3" ~ 8"	KOREA
143	HPC Project		E-tech Construction	2022.07	Ball Valve	150 ~ 2500	1/2" ~ 12"	KOREA
144	LINE Project	LOTTE ENGINEERING	LOTTE ENGINEERING	2023.06	Ball Valve	300	2" ~ 8"	Indonesia
145		LG CHEMICAL	LG CHEMICAL	2023.10	Ball Valve	150	3" ~ 6"	KOREA
146		JGC ARAMCO ZULUF	EBARA ELLIOT	2023.12	Ball Valve	600 ~ 1500	3"	JAPAN
147	SHUAIBAH 3		Doosan ENERBILITY	2024.01	Ball Valve	150 ~ 600	2" ~ 4"	Saudi Arabia
148		ECOPRO HUNGARY	SUNGDO	2024.02	Ball Valve	150 ~ 800	1/2" ~ 8"	HUNGARY
149	BEKOK-A	Inter Flow		2024.05	Ball Valve	150 ~ 1500	1/2" ~ 10"	Malaysia
150	ECO & DREAM #1(ED#1)	YUDAM TECH		2024.06	Ball Valve	150	1/2" ~ 6"	KOREA
151		TUWAIQ	Doosan ENERBILITY	2024.12	Ball Valve	150	3/4" ~ 3"	KOREA
152			Doosan ENERBILITY	2024.12	Ball Valve	150	3" ~ 14"	Saudi Arabia
153	INNOX LITHIUM HYDROXIDE		DL E&C	2024.12	Ball Valve	150 10K	1/2" ~ 2" 15A ~ 200A	KOREA
154	LOTTED ENGINEERING SUN CHEON STEP-1		DY PNF	2025.01	Ball Valve	150 ~ 300	1/2" ~ 5"	KOREA
155	INNOX LITHIUM HYDROXIDE		DL E&C	2025.05	Ball Valve	150 10K	1" ~ 2" 15A ~ 250A	KOREA
156	Turkistan LLP PROJECT	CCGT TURKISTAN	Doosan ENERBILITY	2025.05	Ball Valve	150	3" ~ 20"	KAZAKHSTAN
157	AMIRAL COGEN IPP PROJECT	POS TONTEC	SAMSUNG CNT	2025.06	Ball Valve	150	1" ~ 3"	KOREA

6-9 High Pressure Rating

No	Project Name	Contractor(EPC)	Client(End User)	Date	Item	Class	Size	Site
1			SPX Flow	2014.11	Ball Valve	600	4" / 8"	USA
2			SPX INTERNATIONAL LTD	2015.05	Ball Valve	600	1"	UK
3			SEVERN TRENT DE NORA LLC	2015.07	Ball Valve	600	1/2" ~ 2"	SINGAPORE
4			SPX Flow	2015.09	Ball Valve	600	6" ~ 20"	USA
5			SPX Flow	2015.10	Ball Valve	600	2" ~ 24"	USA
6			SPX Flow	2015.12	Ball Valve	600/900/1500	2" ~ 12"	USA
7			SPX Flow	2016.01	Ball Valve	600	4" ~ 24"	USA
8			SPX Flow	2016.02	Ball Valve	600	2" ~ 18"	USA
9			SPX Flow	2016.02	Ball Valve	600	2" ~ 10"	USA
10			SPX Flow	2016.05	Ball Valve	600/900/1500	2" ~ 8"	USA
11			SPX Flow	2016.06	Ball Valve	600	20" / 24"	USA
12			SPX Flow	2016.08	Ball Valve	600	24"	USA
13			SPX Flow	2016.10	Ball Valve	600/1500	2" ~ 24"	USA
14			DELTA VALVES AND CONTROLS LIMITED	2017.11	Ball Valve	600	2"	NEW ZEALAND
15			MECHANICAL ADVANTAG E CORPORATION	2018.05	Ball Valve	600	6" / 8"	USA
16			HAUDY	2018.11	Ball Valve	1500	3/4"	MALAYSIA
17			Thanh Long Technical	2018.12	Ball Valve	600/1500/2500	1/2" ~ 12"	VIETNAM
18			SHANGHAI LIGHT INDUSTRY	2019.02	Ball Valve	600	2"	CHINA
19			Thanh Long Technical	2019.09	Ball Valve	600/800/1500	1/2" / 2"	VIETNAM
20			INTER-FLOW	2019.10	Ball Valve	1500	8"	MALAYSIA

6-10 High Pressure Rating

No	Project Name	Contractor(EPC)	Client(End User)	Date	Item	Class	Size	Site
21			INTER-FLOW	2019.10	Ball Valve	1500	8"	MALAYSIA
22			Thanh Long Technical	2020.03	Ball Valve	1500	3/4" ~ 2"	VIETNAM
23			Thanh Long Technical	2020.04	Ball Valve	600/900/2500	8" / 12"	VIETNAM
24			ADVANCED CONTROL	2020.04	Ball Valve	600/900	1/2" ~ 2"	USA
25			Thanh Long Technical	2020.05	Ball Valve	600/900/2500	1/2" / 2"	VIETNAM
26			INTER-FLOW	2020.06	Ball Valve	1500	1/2" ~ 2"	MALAYSIA
27			ADVANCED CONTROL	2020.07	Ball Valve	1500	2" ~ 8"	USA
28			Thanh Long Technical	2020.09	Ball Valve	600/900	3/4" ~ 8"	VIETNAM
29			ADVANCED CONTROL	2020.10	Ball Valve	600/900	1" ~ 6"	USA
30			Thanh Long Technical	2021.12	Ball Valve	900	2" / 4"	VIETNAM
31			ADVANCED CONTROL	2021.01	Ball Valve	2500	12"	USA
32			ADVANCED CONTROL	2021.02	Ball Valve	600	14"X16"	USA
33			INTER-FLOW	2021.02	Ball Valve	1500	1" / 2"	MALAYSIA
34			SONG LINH TRADING	2021.03	Ball Valve	600/1500	4"	VIETNAM
35			Thanh Long Technical	2021.03	Ball Valve	800/1500	3/4" / 1-1/2"	VIETNAM
36			INTER-FLOW	2021.04	Ball Valve	2500	2"	MALAYSIA
37			INTER-FLOW	2021.05	Ball Valve	1500	3/4" / 1"	MALAYSIA
38			MS & TEAK	2021.05	Ball Valve	600/1500	3/4" / 6"	SINGAPORE
39			MS & TEAK	2021.08	Ball Valve	600/1500	3/4" / 6"	SINGAPORE
40			LOTTE Construction	2022.03	Ball Valve	600	4" ~ 20"	KOREA

6-11 High Pressure Rating

[illegible]

6-12 CRYOGENIC Experience

No	Project Name	Contractor(EPC)	Client(End User)	Date	Item	Class	Size	Site
1	PTC JUBAIL POLYSILICON		HYUNDAI ENGINEERING	2012.04	Ball Valve	150 / 300	1/2" ~ 6"	Saudi Arabia
2	SMP W1-PJT		SAMSUNG ENGINEERING	2013.12	Ball Valve	150 / 300	1/2" ~ 10"	KOREA
3			JEIL TECH INDUSTRYCO.,LTD	2014.09	Ball Valve	300	16"	KOREA
4		KCL		2015.08	Ball Valve	150	1/2"	U.A.E
5			Daewoo Shipbuilding & Marine Engineering	2017.05	Ball Valve	150	1/2" ~ 4"	KOREA
6			Daewoo Shipbuilding & Marine Engineering	2017.09	Ball Valve	150	1/2" ~ 4"	KOREA
7			Daewoo Shipbuilding & Marine Engineering	2017.11	Ball Valve	150	1/2" ~ 4"	KOREA
8			SK materials	2017.11	Ball Valve	10K	15A ~ 150A	KOREA
9			Daewoo Shipbuilding & Marine Engineering	2018.01	Ball Valve	150	1/2" ~ 5"	KOREA
10			Daewoo Shipbuilding & Marine Engineering	2018.03	Ball Valve	150	1/2" ~ 5"	KOREA
11			Daewoo Shipbuilding & Marine Engineering	2018.05	Ball Valve	150	1/2" ~ 5"	KOREA
12			Daewoo Shipbuilding & Marine Engineering	2018.08	Ball Valve	150	4" , 5"	KOREA
13		VNS CO.,LTD		2018.09	Ball Valve	300	4"	KOREA
14		WOO JIN STAINLESS		2019.05	Ball Valve	10K	65A X 80A	KOREA
15		HANA TECH CORP		2019.07	Ball Valve	150	1" ~ 1-1/2"	KOREA
16		YU DAM TECH		2019.08	Ball Valve	150	2"	KOREA
17		VNS CO.,LTD		2019.10	Ball Valve	30K	25A	KOREA
18		HANIL HUJI KOREA		2020.05	Ball Valve	150	4"	KOREA
19		H.A CORP		2020.09	Ball Valve	150	1/2" ~ 2"	KOREA
20		LK PNE		2020.11	Ball Valve	150	1"	KOREA

6-13 CRYOGENIC Experience

No	Project Name	Contractor(EPC)	Client(End User)	Date	Item	Class	Size	Site
21		WOONG VALVE		2021.03	Ball Valve	20K	1/2"	KOREA
22		MN I&C		2021.03	Ball Valve 3-WAY	150 ~ 300	3/4" / 1-1/2"	KOREA
23		DONG HUN ENTERPRISE		2021.05	Ball Valve 3-WAY	150 ~ 600	1/2" ~ 6"	KOREA
24		WOONG VALVE		2021.07	Ball Valve 3-WAY	20K	20A ~ 150A	KOREA
25		DONG HUN ENTERPRISE		2021.11	Ball Valve	150 ~ 600	1/2" ~ 1"	KOREA
26		STX MARINE		2023.06	Ball Valve	150 ~ 600	1" ~ 4"	KOREA
27	SKM S3 PJT	WOONG VALVE		2023.11	Ball Valve	150	1/2" ~ 3"	KOREA
28	TMC LCO2 PJT	STX MARINE		2024.02	Ball Valve	150	1" ~ 1-1/2"	KOREA
29		DONG HUN ENTERPRISE		2024.03	Ball Valve	150	1/2" ~ 5"	KOREA
30		STX MARINE		2024.08	Ball Valve	150	2" / 3"	KOREA
31		KOMOTO		2025.02	Ball Valve	300 / 600 / 800	1/2" / 1"	KOREA
32	FSG-L2 50MTPY PJT	KOMOTO		2025.04	Ball Valve	300 / 600	1/2" ~ 1-1/2"	KOREA
33								
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40								

Thank You.

For your further information, pls visit us - www.sam-sung.co.kr

**90, Seongju saneop danji-ro 1-gil,
Seongju-eup, Seongju-gun,
Gyeongsangbuk-do, Korea
T +82-54-931-4123
F +82-54-931-4155
[http:// www.sam-sung.co.kr](http://www.sam-sung.co.kr)**