

mcSYS[®]

Mechanical and Fluid Control Systems

K-val[®]

McSYS Corporation

COMPANY INSTRUCTION

Company Vision

“ 더 높은 표준을 향하는 기업, 사회의 빛과 소금이 되는 기업 ”

“Be the highest of standards, Company become the light and salt of society”

책임지는 품질

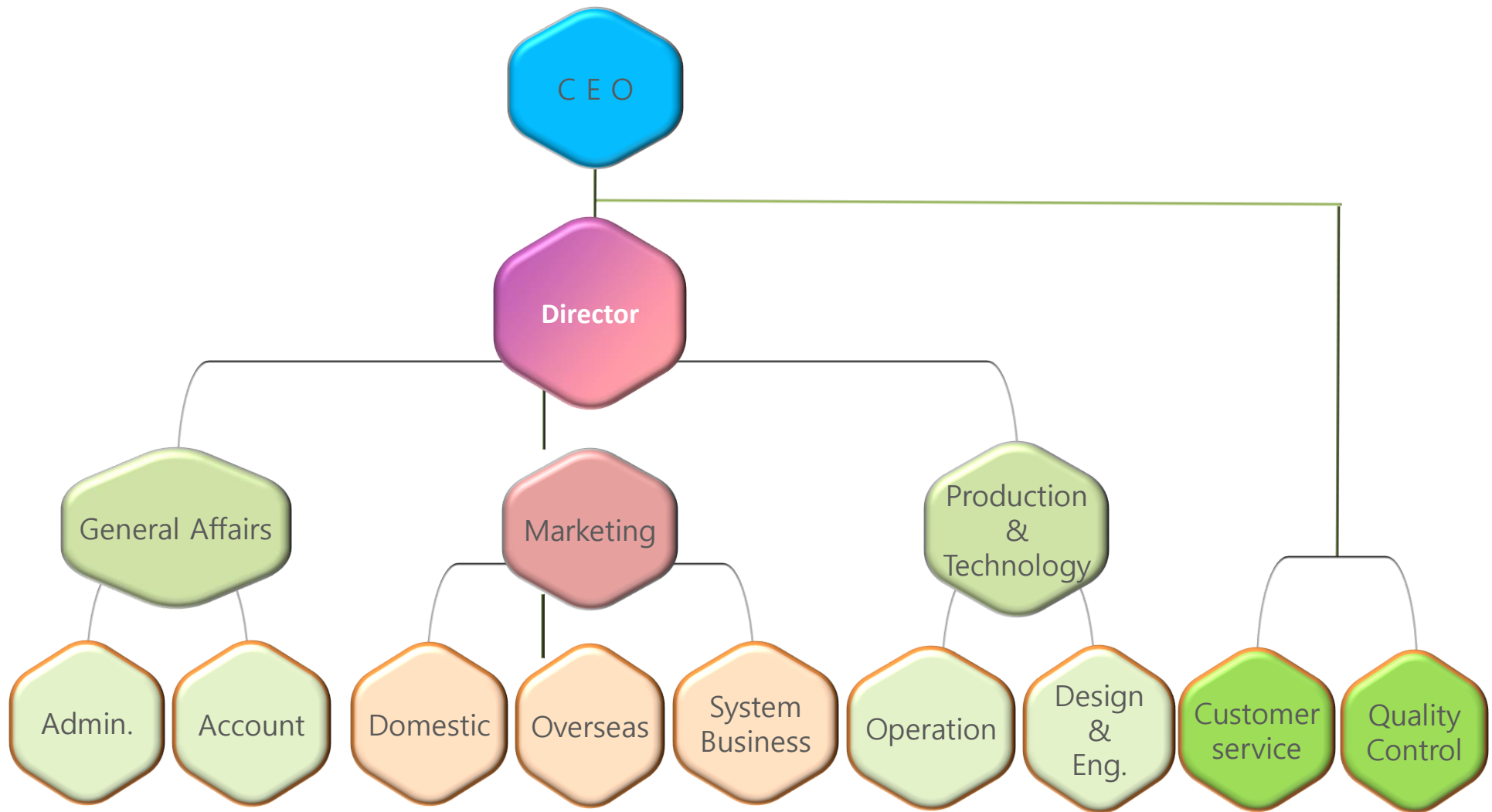
TAKE RESPONSIBILITY
FOR QUALITY

혁신적인 사고

INNOVATIVE
THINING

감동 있는 서비스

IMPRESSIVE SERVICE



Factory_Korea



WITH MCSYS BUSINESS CUSTOMERS



2010.06 MCSYS 설립

- 이태리, 미국으로 부터 석유화학용 밸브 수입 판매
Import and sales of petrochemical valves from Italy and USA

2012.04 MCSYS 자체 생산

- TEFLON LINED VALVE, FORGED BALL VALVE
- MEGA VALVE, V-NOTCH VALVE, CERAMIC VALVE

2013.02 호주 FLUOR 등록 호주 LNG 이송용 BALL VALVE 수주 (48" 600# : 4.5MIL USD) Australia Registered FLUORENG'G\$BALL VALVE order for LNG transport (48" 600# : 4.5MIL USD)

2014.04 중국 석유화학(China Petrochemical Engineering)

- IRAQ GARAFF PROJECT 수주 (3.5MIL USD)

2015.02 디토사 와 GLOBE CONTROL VALVE 아이템 공유 및 제조 (Globe control valve manufacture sharing with DITO)

▣ ITEM

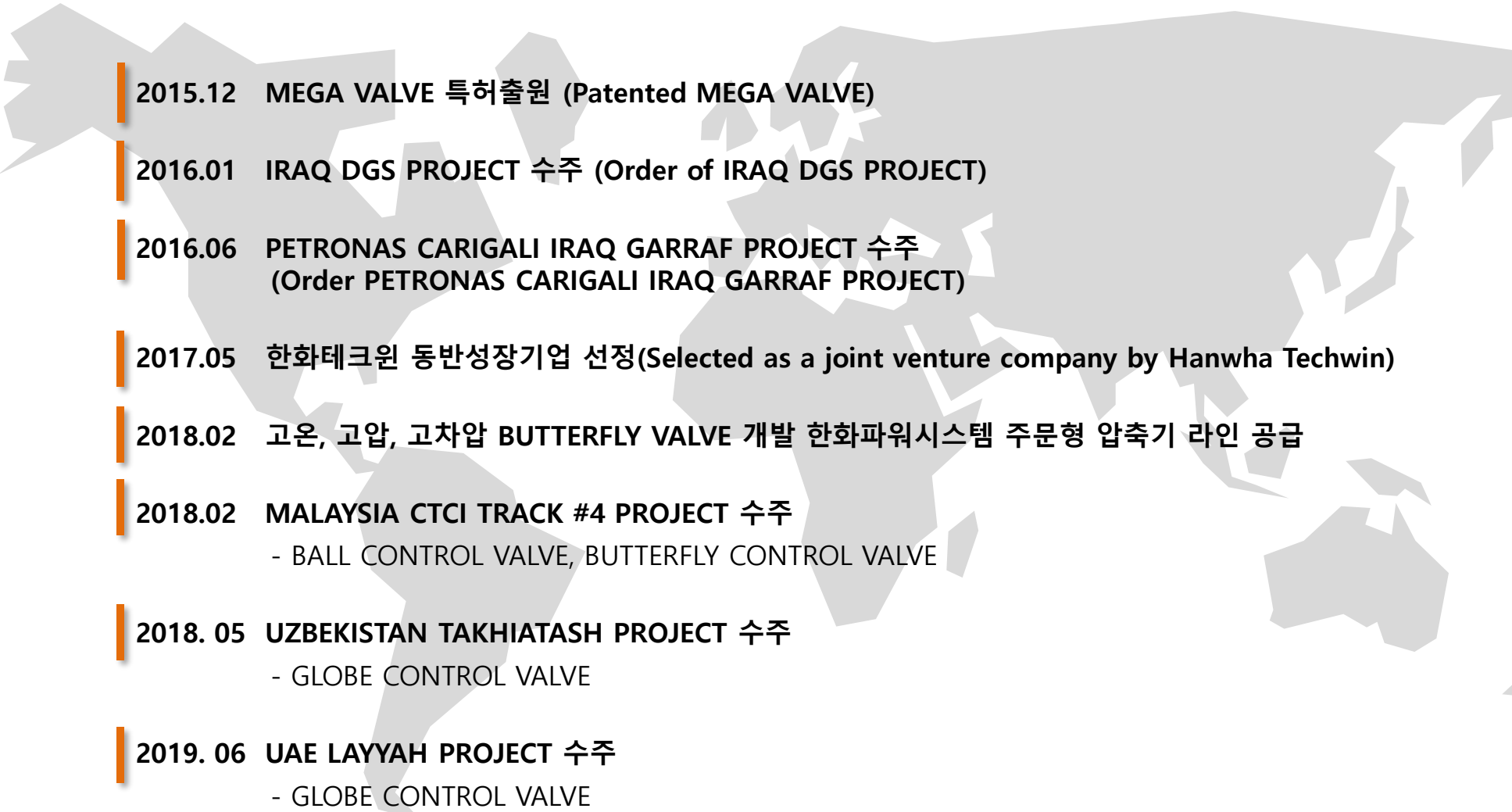
DITO : GLOBE CONTROL VALVE, BAS VALVE

MCSYS : TEFLON LINED VALVE, V-NOTCH VALVE, MEGA VALVE

2015.05 한화 파워시스템 (구 삼성 테크윈) 업체 등록 (Registered as a supplier of Hanhwa Power System)

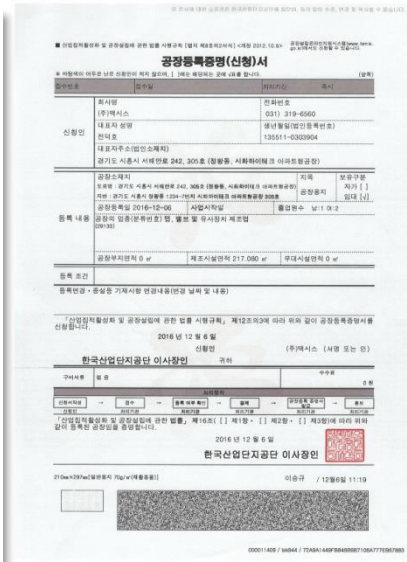
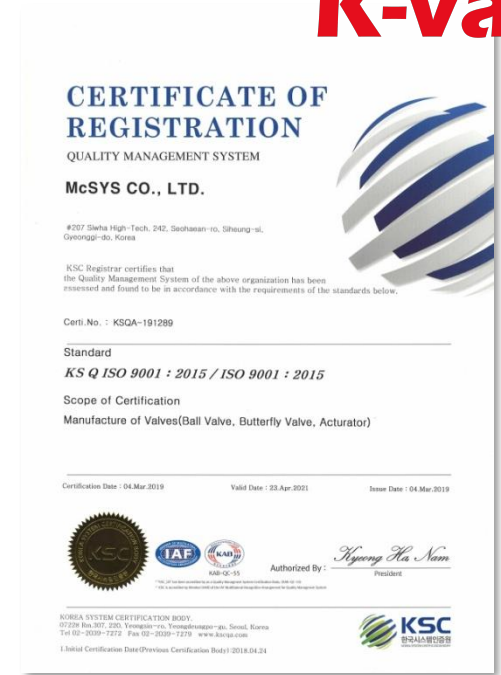
- 중국 생산 공장 및 한국 한화테크윈 창원 공장에 표준품 및 주문형 밸브 납품
Supplied standard products and customized valves to China production plant and Hanwha Power System Changwon factory in Korea

HISTORY

- 
- 2015.12 MEGA VALVE 특허출원 (Patented MEGA VALVE)
 - 2016.01 IRAQ DGS PROJECT 수주 (Order of IRAQ DGS PROJECT)
 - 2016.06 PETRONAS CARIGALI IRAQ GARRAF PROJECT 수주
(Order PETRONAS CARIGALI IRAQ GARRAF PROJECT)
 - 2017.05 한화테크윈 동반성장기업 선정 (Selected as a joint venture company by Hanwha Techwin)
 - 2018.02 고온, 고압, 고차압 BUTTERFLY VALVE 개발 한화파워시스템 주문형 압축기 라인 공급
 - 2018.02 MALAYSIA CTCI TRACK #4 PROJECT 수주
- BALL CONTROL VALVE, BUTTERFLY CONTROL VALVE
 - 2018. 05 UZBEKISTAN TAKHIATASH PROJECT 수주
- GLOBE CONTROL VALVE
 - 2019. 06 UAE LAYYAH PROJECT 수주
- GLOBE CONTROL VALVE

CERTIFICATE

- TR-CU 010/2011
- ISO 9001 : 2015
- Research and Development Complete charge Department
- Manufactory Certificate
- Business License



CUSTOMER	ITEM	APPLICATION
SAMSUNG ELECTRIC-CHINA	DWA-N30P6(ON-OFF)	24V,(30Nm)
HIH POWER PLANT	40A SCS13 16K	3-WAY MANUAL BALL V/V
BELLOWS VALVE	SW890T-15A	PNEUMATIC GLOBE V/V
SIEMENS KOREA	GLOBE CONTROL	
HIH POWER PLANT	40A,APL210,16K,SCS13	3-WAY MANUAL BALL V/V
HYUNDAI TEST BENCH	40A,2-WAY	BALL VALVE
SAMSUNG DISPLAY	PNEUMATIC CONTROL V/V	10K.CH WATER, SG-65A/290 DIA
	PNEUMATIC CONTROL V/V	10K.STEAM, SG-15A/250 DIA
HIH POWER PLANT	40A,16K,SCS13	3-WAY AUTO BALL V/V
ANSAN CITY	SG-25A(SUS304,10K) 2-Way,4-20mA	PNEUMATIC GLOBE V/V
	BELLOWS VALVE SW840G-15A	PNEUMATIC GLOBE V/V
	SW840G-65A	PNEUMATIC GLOBE V/V
	SW840G-100A	PNEUMATIC GLOBE V/V
	SW840G-65A	PNEUMATIC GLOBE V/V
	65A LIMIT&AUTO	3-WAY BALL V/V
	15A	PNEUMATIC GLOBE V/V
	SG-15A/250 DIA 10K.STEAM	PNEUMATIC GLOBE V/V
	SW840G-25A	PNEUMATIC GLOBE V/V
	SW800T-15A	PNEUMATIC GLOBE V/V
SAMSUNG DISPLAY	PNEUMATIC CONTROL V/V	10K,HOT WATER, CG-100A/370 DIA
	PNEUMATIC CONTROL V/V	10K.CH WATER, CG-200A/480 DIA
	PNEUMATIC CONTROL V/V	10K.HOT WATER, CG-80A/370 DIA
	PNEUMATIC CONTROL V/V	10K.STEAM, CG-100A/370 DIA
	PNEUMATIC CONTROL V/V	10K.STERM, CG-80A/370 DIA
	PNEUMATIC CONTROL V/V	10K.STEAM, SG-65A/290 DIA
	PNEUMATIC CONTROL V/V	10K.HOT WATER, SG-65A/290 DIA
	80A.Repair 3"	PNEUMATIC GLOBE V/V
	100A.Repair 4"	PNEUMATIC GLOBE V/V

MANUAL & CONTROL VALVE EXPERIENCE 2013 (2/2)

CUSTOMER	ITEM	APPLICATION
HYUNDAI STEEL	BALL VALVE 4"	(RF)150#-H/A216-WCB
	3-WAY BALL	40A
4.2-1.4MPA ANSI600 RF	CG-80A/370 DIA	PNEUMATIC CONTROL VALVE 600#
	CG-100A/370 DIA	PNEUMATIC CONTROL VALVE 600#
	CG-100A/370 DIA	PNEUMATIC CONTROL VALVE 600#
1.4-1.2MPA ANA1300 RF	CG-100A/370 DIA	PNEUMATIC CONTROL VALVE 300#
1.4-1.2MPA ANSI600 RF	CG-200A/480 DIA	PNEUMATIC CONTROL VALVE 600#
POSCO (KWANG YANG)	SG-50A	PNEUMATIC CONTROL VALVE
BELLOWS VALVE	SW840G-125A	PNEUMATIC GLOBE V/V
	SW840G-100A	PNEUMATIC GLOBE V/V
	SW890T-15A	PNEUMATIC GLOBE V/V
SAMSUNG ELECTRIC	SG-15A	20K,A216
	ACTUATOR	290ACTUATOR
	SG-50A(SUS304)	10K,RF
	ACTUATOR	290 ACTUATOR
	ACTUATOR	290 ACTUATOR
	ACTUATOR	250 ACTUATOR
SAMSUNG ELECTRIC (CHINA)	DWA-N30P6(ON-OFF	24V,(30Nm)
POSCO(KWANGYANG)	CG-25A(20K) 2-WAY,4-20mA	CG-25A(20K)
HIH POWER PLANT	40A,16K,SCS13	3-WAY AUTO BALL V/V
HYUNDAI HEAVY INDUSTRY POWER PLANT	3-WAY AUTO BALL VALVE	40A,16K,SCS13
	3-WAY MANUAL BALL VALVE	40A SCS13 16K
	3-WAY AUTO BALL VALVE	40A,16K,SCS13
	3-WAY MANUAL BALL VALVE	40A,APL210,16K,SCS13
	3-WAY 65A BALL VALVE	LIMIT&AUTO

MANUAL & CONTROL VALVE EXPERIENCE 2014 (1/3)

CUSTOMER	ITEM	APPLICATION
HYUNDAI STEEL	40A SCS13 16K, T-PORT, L-PORT	3-WAY MANUAL BALL V/V
SAMSUNG ELECTRIC	SW840G-100A	
	SW890G-15A	
	SW890G-20A	
	SW890T-15A	
POSCO (KWANG YANG)	ACTUATOR	290 ACTUATOR
	VSD 21.50	BC SCREW 16K 2WAY
	DYA-S20	AC24V 0-10V
HYUNDAI STEEL	40A SCS13 16K	3-WAY MANUAL BALL V/V
	25A	3-WAY APL210 BALL V/V
POSCO (KWANG YANG)	SG-25A(SUS304,10K)	2-Way,4-20mA, STEEM
	ACTUATOR	290 ACTUATOR
KOLON (GUMI)	VFD 32.80	FC 80A 20K 3WAY
SAMSUNG SDI	VBD 10K 400A 2-WAY	CHILLED WATER
HYUNDAI HEAVY INDUSTRIAL BANGLADESH	PRESSURE 16K	3-WAY MANUAL BALL V/V
	VALVE WITH PNEUMETIC ACTUATOR16K, SCS13	3-WAY AUTO BALL V/V
SAMSUNG ELECTRIC	SW840G-25A	
	SW840G-50A(10K)	
	SW840G-80A	
	SW840G-300A	RETROFIT
	SW840G-15A	2WAY 30K
	SW890G-15A	2WAY 30K
	SW890T-15A	2WAY 30K
	SW890G-15A	2WAY 30K 후렌지 25A제작
	SW890T-40A	
	SW840G-40A	RETROFIT
	SW840G-50A(10K)	

CUSTOMER	ITEM	APPLICATION
SAMSUNG SDI	SG-50A	20K,A216
HYUNDAI HEAVY INDUSTRY (BRAZIL GLOBAL SPARE VALVE)	BALL VALVE ON=OFF SCS13, 16K	3-WAY BALL 40A
		2-WAY AUTO BALL VALVE
SIN BO LYEONG POWER PLANT BLR SHUT-OFF VALVE MPS	CG22-DRS4/150A	A216 WCB, 300#, 2WAY CONTROL VALVE
	NO 1.2 PLANT	1,000MW
SAMSUNG ELECTRIC	SW890G-20A	
	ACTUATOR	YOKE CLAMP
	SW890T-15A~150A	250 ACTUATOR
	SW890G-300A	
	SW890T-400A	250 ACTUATOR
	SW890T-200A	251 ACTUATOR
POSCO (KWANG YANG)	SG-25A(20K) ETC	2-WAY,4-20mA
HAITI / ES88H(220V)	BALL VALVE	2-WAY AUTO BALL VALVE
	40A,16K,SCS13	3-WAY AUTO BALL V/V
	40A ~200ASCS13 16K	3-WAY MANUAL BALL V/V
SAMSUNG ELECTRIC	SW840G-100A	trim
	SW840G-65A	trim
	SW840G-80A	cf8 370da
	PNEUMATIC SYSTEM ACTUATOR	DIAP
POSCO (KWANG YANG)	CG-80A/370 DIA	10K.STERM
	SW890T-15A	CF8/PTFE
	SW840G-200A	316SS/480DA
	SW840G-100A	316SS/370RA
	SW840G-80A	316SS/370DA
	SW840G-65A	316SS/370RA
	SW840G-65A	316SS/290DA

CUSTOMER	ITEM	APPLICATION
HYUNDAI IRAQ KRG PROJECT	50A,10K	3-WAY MANUAL BALL V/V
	50A,16K,	3-WAY MANUAL BALL V/V
	50A,16K,	3-WAY MANUAI BALL V/V
	65A,10K,ON-OFF	2-WAY PNEUMATIC BALL V/V
	80A,10K,ON-OFF	2-WAY PNEUMATIC BALL V/V
HHI HAINA 1.7MW PPS	40A,16K	2-WAY MANUAL BALL V/V
SAMSUNG ELECTRIC	ACTUATOR	
	SW840G-80A	316SS/3780RB
	SW840G-40A	410SS/290DA
SAMSUNG ELECTRIC	SW890T-15A	
	SW840G-80A	WCB/316/370DA
	SW840G-80A	CF8/316/370RA
	SW840G-125A	CF8/316SS/480DA
	SW890G-20A	CF8
POSCO(KWANGYANG)	VFD22.15	15A, 2way FCD
	ACTUATOR	290 ACTUATOR
SAMSUNG ELECTRIC	SW840G-25A	
	SW840G-40A	
	SW840G-65A	
	SW840G-80A	
	SW840G-100A	
	SW840G-125A	
	SW840G-150A	

CUSTOMER	ITEM	APPLICATION
HYUNDAI HEAVY INDUSTRY	3way BALL VALVE	ON-OFF/10K
	3-WAYBALL VALVE	MANUAL/ SCS13 16K
POSCO (KWANG YANG)	ACTUATOR	290 RA
	GLOBE CONTROL VALVE SG-25A(SUS304,10K)	2-Way,4-20mA
SAMSUNG ELECTRIC	SW840G	
	SW890T	Bellows Valve
HYUNDAI HEAVY INDUSTRY	BALL VALVE	2-WAY 10K
	VM-1300-200A	PLUG RETROFIT
HYUNDAI HEAVY INDUSTRY	BALL VALVE	150LB ANSI
SAMSUNG ELECTRIC	GLOBE CONTROL VALVE SW890T	Bellows Valve / CF8 PTFE
	SW840G	WCB410SS370RA
	SW890G	Bellows Valve
SAMSUNG ELECTRIC	SW840G-40A(10K)	290DA,316SS
	SW840G-40A(10K)	290DR,410SS 20K
HYUNDAI STEEL	VM-1300-200A	TRIM교체/비례
	VM-1000-350A(40k)	TRIM 교체/ON-OFF
	VM-1000(MOR)20K	TRIM/PLUG교체
	550G-20K-250A	VKIX106-017
SAMSUNG ELECTRIC	SW840G-65A(20K)	316SS / 370 RA
	SW840G-80A(10K)	410SS / 290 RA
	SW840G-25A	410SS / 250 RA
	SW840G-40A(10K)	316SS / 290 DA
	SW840G-40A(10K)	410SS / 290 RA
	SW840G-300A	BELLOWS VALVE
HYUNDAI HEAVY INDUSTRY SURNECO PPS	3-WAY MANUAL BALL V/V	40A,16K
	3-WAY AUTO BALL V/V	40A,16K,SCS13
SAMSUNG ELECTRIC	840G-100A	TRIM CHANGE 410SS에서 316SS
	SW840G-40A(10K)	
POSCO (KWANG YANG)	ACTUATOR	290 ACTUATOR
	CG-50A	RF
SAMYANG BVP	BALL VALVE 40A	2-WAY 10K

CUSTOMER	ITEM	APPLICATION
POSCO (KWANG YANG)	SG SERIES	2-WAY,4-20mA
	SG-32A(10K)Water	2-way,sts304,yt1000l
SAMSUNG ELECTRIC	SW890T-15A	BELLOWS VALVE
	VM-1000-350A(40k)	ON-OFF
HYUNDAI STEEL	CG-065DS/ACT370mm	65A (10K)
Brazil Camacary 2&3 Dpp	BALL VALVE	40A,3-WAY
SAMSUNG ELECTRIC	SW840G-200A	BELLOWS VALVE
	SW840G-50A(10K)	
	SW840G-15A	
IRAQ KAR3 8.5MW	3-WAY MANUAL BALL V/V	L-POR / APL210,16K,SCS13
HYUNDAI STEEL	501G-20K-250A	
PANAMA 57MW PPS	3-WAY APL210 BALL V/V	25A / L-POR
	3-WAY MANUAL BALL V/V	40A SCS13 16K / T-POR
	3-WAY MANUAL BALL V/V	40A SCS13 16K / L-POR
LG CHEM- PAJU	2Way v/v Repair-ACP-200A	TRIM ,SEAT
	2Way v/v Repair-HCB-200A	
	2Way v/v Repair-Valmac-VM1100	
	2Way v/v Repair-AGVB-80A	
	2Way v/v Repair-AGVB-100A	
HYUNDAI STEEL	VM-1000-100A	
	VM-1000-200A	
SAMSUNG ELECTRIC	SW840G-50A(10K)	
	SW840G-100A(10K)	
	SW840G-80A(10K)	
	SW840G-40A(10K)	
	SW840G-150A(20K)	
	SW840G-65A(20K)	
	SW840G-40A(10K)	
	SW840G-40A(10K)	
HYUNDAI STEEL	GLOBE CONTROL VALVE	10K
		10K
	2-way Pneumatic Ball V/V	10K,ON-OFF

CUSTOMER	ITEM	APPLICATION
HYUNDAI STEEL	CG-200A/480 DIA	10K.CH WATER
SAMSUNG ELECTRIC	SW840G-40A(10K)	
FS CENTER	SW840G-50A(10K)	BELLOWS VALVE
	SW890G-15A	
	SW890T-15A	
POSCO (KWANG YANG)	CG 100A 10K외	HYDROGEN GAS
FS CENTER	SW840G-40A(10K)	
DAYOUNG TECH	ACTUATOR	290 ACTUATOR
SAMYOUNG PNP	CG-350A (40K)	YT3400L,4-20mA
HIH	SG-SERIES	(WATER)10K
	SG-SERIES FOR Water	
	CG-150A-RA480	
KOLON	CG-80A CF8M 300#	MIXING GAS
HYUNDAI STEEL	CG-250A (300#)	HYDROGEN GAS
DAYOUNG TECH	SG-SERIES	(WATER)10K
HYUNDAI STEEL	VM-1300-200A	RETROFIT
HYUNDAI ENGINEERING	GATE , GLOBE	PHILIPPINES THERMA VISAYAS 석탄화력 발전소
	SWING CHECK , LIFT CHECK	
	Y-LIFE CHECK VALVE	
BAHRAIN BMP(SAMJIN JMC)	TEFLON LINED BALL VALVE	
HYUNDAI ROTEM	BUTTERFLY 600# TRIPPLE OFF-SET	

HANWHA IGV & BOV

CONTROL VALVE EXPERIENCE 2016~2017

PROJECT	ITEM
PROJ. : PROVISION OF ENGINEERING,PROCUREMENT AND CONSTRUCTION(EPCC) OF WATER MANAGEMENT SYSTEM (PHASE 1) FOR PETRONAS CARIGALI IRAQ HOLDING B.V.'S GARRAF OPERATIONS	
SAMSUNG ELECTRONIC	VALVE,CONTROL - BLOCK
HANWHA GENERAL CHEMICAL	PNEUMATIC, ACTUATOR, CONTROL
LINDE GRODNO	PNEUMATIC, ACTUATOR ,CONTROL
LINDE VOGAR	PNEUMATIC, ACTUATOR ,CONTROL
MALYK GOK BOV	VALVE,CONTROL - BOV
GANGXIN	PNEUMATIC, ACTUATOR ,CONTROL
KUMHO	VALVE,CONTROL - BOV
TRISONIC	PNEUMATIC, ACTUATOR ,CONTROL
SAUDI ARAMCO JAZAN IGV	PNEUMATIC, ACTUATOR ,CONTROL

PROJECT	ITEM
SAUDI ARAMCO JAZAN ON,OFF	VALVE,CONTROL - ON,OFF
S-OIL AREA 3	PNEUMATIC, ACTUATOR , CONTROL
S-OIL AREA 2,4	PNEUMATIC, ACTUATOR , CONTROL
S-OIL OXIDATION	PNEUMATIC, ACTUATOR , CONTROL
TISINGO	PNEUMATIC, ACTUATOR , CONTROL
BIDBOLAND	PNEUMATIC, ACTUATOR , CONTROL
SAMSUNG ELECTRONIC	VALVE,CONTROL - BLOCK
KIA HWASEONG BOV	VALVE,CONTROL - BOV
POSCO GWANGYANG	PNEUMATIC, ACTUATOR ,CONTROL
ANYANG FGC	PNEUMATIC, ACTUATOR ,CONTROL
KIA HWASEONG BLOCK	VALVE, CONTROL - BLOCK
DSME MOL	PNEUMATIC, ACTUATOR ,CONTROL
HYDROSTOR	PNEUMATIC, ACTUATOR ,CONTROL
ALMALYK GOK IGV	PNEUMATIC, ACTUATOR ,CONTROL
SAUDI ARAMCO ASPHALT	PNEUMATIC, ACTUATOR ,CONTROL
KNPC ZOR	PNEUMATIC, ACTUATOR ,CONTROL
FADHILI	PNEUMATIC, ACTUATOR ,CONTROL
E_KW_HEC_KNPC AL-Zour LNGI Air COMP	PNEUMATIC, ACTUATOR ,CONTROL
SPPC FGC IGV	PNEUMATIC, ACTUATOR ,CONTROL
KAZANORGSINTEZ IGV	PNEUMATIC, ACTUATOR ,CONTROL

HANWHA IGV & BOV

CONTROL VALVE EXPERIENCE 2018

PROJECT	ITEM
HANWHA GTG IGV	PNEUMATIC, ACTUATOR , CONTROL
YUANLI METAL	PNEUMATIC, ACTUATOR , CONTROL
CTCI TRACK 4A	PNEUMATIC, ACTUATOR , CONTROL
FARABI IGV	PNEUMATIC, ACTUATOR , CONTROL
CTCI IGV	PNEUMATIC, ACTUATOR , CONTROL
한화 CHEMICAL 여수	PNEUMATIC, ACTUATOR ,CONTROL
CJ PASURUAN	PNEUMATIC, ACTUATOR ,CONTROL
BRAZIL BRASKEM CAPUAVA	PNEUMATIC, ACTUATOR ,CONTROL
GANGXIN	PNEUMATIC, ACTUATOR ,CONTROL
MOZAMBIQUE IGV	PNEUMATIC, ACTUATOR ,CONTROL
TEST LEAGUE	PNEUMATIC, ACTUATOR ,CONTROL
KUMHO MITSUI CHEMICALS	PNEUMATIC, ACTUATOR ,CONTROL
HYUNDAI POWERTECH	PNEUMATIC, ACTUATOR ,CONTROL
HYUNDAI TRANSYS	PNEUMATIC, ACTUATOR ,CONTROL
LINDE GIHENG	PNEUMATIC, ACTUATOR ,CONTROL
HYUNDAI MOTOR JUNJU	PNEUMATIC, ACTUATOR ,CONTROL
2018 FADHILI	PNEUMATIC, ACTUATOR ,CONTROL
TAKHIATASH	PNEUMATIC, ACTUATOR ,CONTROL

PROJECT	ITEM
HANWHA TOTAL TEST LEAGUE	PNEUMATIC, ACTUATOR ,CONTROL
ASE BOEING	PNEUMATIC, ACTUATOR ,CONTROL
LINDE TEMIRTAU IGV	PNEUMATIC, ACTUATOR , CONTROL
TEST LEAGUE GLOBE, BUTTERFLY	GLOBE, BUTTERFLY CONTROL VALVE
LINDE SEOSAN COOLING WATER	VALVE,CONTROL - BLOCK
SMALL TEST LEAGUE	GLOBE CONTROL VALVE, BOV
LINDE SEOSAN	PNEUMATIC, ACTUATOR , CONTROL
DONGYANG P&F	PNEUMATIC, ACTUATOR ,CONTROL
COSMODAYN	PNEUMATIC, ACTUATOR ,CONTROL
RUSSIA TAFNEFT	PNEUMATIC, ACTUATOR ,CONTROL
LINDE SHALALA	PNEUMATIC, ACTUATOR ,CONTROL
PRAXAIR	PNEUMATIC, ACTUATOR ,CONTROL
ALMALYK GOK IGV	PNEUMATIC, ACTUATOR ,CONTROL
YEOSU Y4 NG BOOSTER IGV	PNEUMATIC, ACTUATOR ,CONTROL
SSAB	GLOBE CONTROL VALVE, BOV
YUANLI METAL	PNEUMATIC, ACTUATOR ,CONTROL
HYDROSTOR TERRAMIN	BLOCK VALVE, BOV
HONGREN GAS	PNEUMATIC, ACTUATOR ,CONTROL
SIAD BAC, MAC	PNEUMATIC, ACTUATOR ,CONTROL

HANWHA IGV & BOV

CONTROL VALVE EXPERIENCE 2019

PROJECT	ITEM
LINDE (KIHEUNG)	PNEUMATIC, ACTUATOR, CONTROL
LINDE (TEMIRTAU)	PNEUMATIC, ACTUATOR, CONTROL
ROMANIA DURO	PNEUMATIC, ACTUATOR, CONTROL
TAMBAK	PNEUMATIC, ACTUATOR, CONTROL
ARAMCO BERRI GAS IGV	PNEUMATIC, ACTUATOR, CONTROL
TEST LIGUE	GLOBE CONTROL VALVE
PRAXAIR IGV	PNEUMATIC, ACTUATOR , CONTROL
LINDE 3.5 IGV	PNEUMATIC, ACTUATOR , CONTROL
SHENZHEN REJUN IGV	PNEUMATIC, ACTUATOR , CONTROL
HIHI BOTAS IGV	PNEUMATIC, ACTUATOR , CONTROL
SHI JAWA	PNEUMATIC, ACTUATOR , CONTROL
NANYANG YIDA GAS GLOBE	GLOBE CONTROL VALVE
HONGYUAN GAS IGV	PNEUMATIC, ACTUATOR , CONTROL
FORTUNE AA IGV	PNEUMATIC, ACTUATOR , CONTROL
HANWHA GENERAL CHEMICAL IGV	PNEUMATIC, ACTUATOR , CONTROL
LINDE VOGAR IGV	PNEUMATIC, ACTUATOR , CONTROL
UAE LAYYAH GAS	PNEUMATIC, ACTUATOR , CONTROL
LAYYAH IGV	PNEUMATIC, ACTUATOR , CONTROL

PROJECT	ITEM
APUS CARSON IGV	PNEUMATIC, ACTUATOR , CONTROL
SUZHOU OXYGEN BNC_RCV	GLOBE CONTROL VALVE
LG CHEMICAL 여수 IGV	PNEUMATIC, ACTUATOR , CONTROL
GS CALTEX IGV	PNEUMATIC, ACTUATOR , CONTROL
SIAD NORWAY IGV	PNEUMATIC, ACTUATOR , CONTROL
APUS CARSON IGV	PNEUMATIC, ACTUATOR , CONTROL
APUS BIG RIVER RCV	GLOBE CONTROL VALVE
APUS BIG RIVER STEEL IGV	PNEUMATIC, ACTUATOR , CONTROL
US APCI	PNEUMATIC, ACTUATOR , CONTROL
SUZHOU OXYGEN IGV	PNEUMATIC, ACTUATOR , CONTROL
MESSER TATRAGAS	PNEUMATIC, ACTUATOR , CONTROL
CN_MingJu Gas_LOX3200	PNEUMATIC, ACTUATOR , CONTROL
LINDE TAIWAN TAICHUNG NIC	PNEUMATIC, ACTUATOR , CONTROL

HANWHA IGV & BOV

CONTROL VALVE EXPERIENCE 2020

PROJECT	ITEM
YNCC IGV	PNEUMATIC CONTROL SYSTEM
KOGAS TEG IGV	PNEUMATIC CONTROL SYSTEM
KOGAS TEG BYPASS	BUTTERFLY CONTROL VALVE
KOGAS TEG QCV	BUTTERFLY ON-OFF VALVE
SIEMENS MASIAN IGV	PNEUMATIC CONTROL SYSTEM
SUZHOU OXYGEN IGV	PNEUMATIC CONTROL SYSTEM
CN_GuangXing Gas_MNC IGV	PNEUMATIC CONTROL SYSTEM
ARAMCO MARJAN PKG12 IGV	PNEUMATIC CONTROL SYSTEM
AIR FIRST DAESAN IGV	PNEUMATIC CONTROL SYSTEM
JINCHENG STEEL	BUTTERFLY CONTROL VALVE
GUANGJU GLOBAL MOTORS	BUTTERFLY CONTROL VALVE
CN_Sito Bio Technology_MAC IGV	PNEUMATIC CONTROL SYSTEM
PETRONAS GAS IGV	PNEUMATIC CONTROL SYSTEM
ARAMCO MARJAN #6 IGV	PNEUMATIC CONTROL SYSTEM
ARAMCO MARJAN #12 IGV	PNEUMATIC CONTROL SYSTEM
ARAMCO HUGRS IGV	PNEUMATIC CONTROL SYSTEM

Products

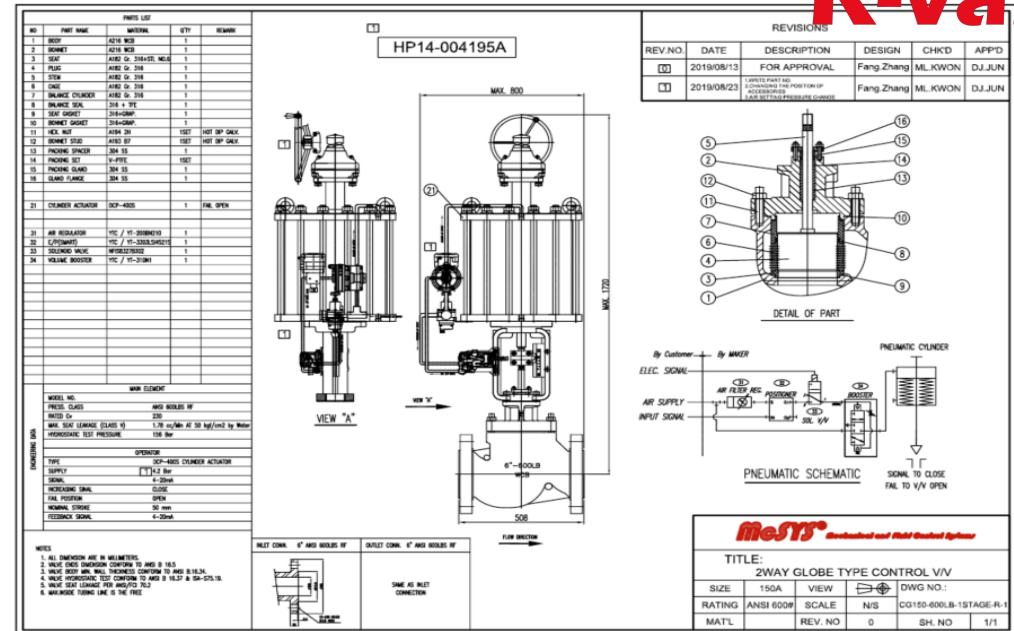
Control Valves (1)

2/3-WAY GLOBE CONTROL VALVE

- ✓ 15A-50A VSD 21/31 SERIES
- ✓ 15A-150A VFD 21/31 SERIES
- ✓ 15A-150A VFD 22/32 SERIES

2/3-WAY SCPH2/SUS VALVE

- ✓ 100A-350A VBD 21/31 SERIES





- 2-Way Globe Control Valve
- ✓ 15A-500A SG/CG series
- ✓ Diaphragm

- 2-Way Ball Valve

- Butterfly Valve

Products

Control Valves (3)

- Bellows Globe Control Valve
 - ✓ Used for Chemical fluid, Oil, Steam, Gas



McSYS Order Process(1)_Sizing Sheet

CONTROL VALVE DATA SHEET									
McSYS		Project		UAE Layyah CCPP FGC RCV		Tag No.			
		Customer				Q'ty		SHT. No. 1	
		UR. Client				Revision No.		Date 19/8/23	
		Inq./P.O. No.				Serial No.			
		Process							
Application									
Fluid		GAS		AIR		Critical Pr.		BarA	
UNITS		RECYCLE		MIN. at 49hz		MIN. at 50hz		MIN. at 51hz	
Flow Rate		Kg/hr		63108		20556		18756	
Inlet Pressure		BarA		40.77		40.77		40.77	
Outlet Pressure		BarA		29.913		29.913		29.913	
Differential Pressure		Bar		10.857		10.857		10.857	
Inlet Temperature		Deg C		142		127		113	
Molecular Weight		MW		17.13		17.13		17.13	
Specific Heat Ratio		k		1.29		1.3		1.3	
Compressibility		Z		0.9873		0.9835		0.9795	
Required Capacity		Cv		178.81		56.43		54.43	
Opening Travel		% LIN		76.97		21.93		19.8	
Predicted SPL		dBA		75		< 70		< 70	
Inlet Pipe Size		12 Inch		STD		Sch.		41	
Outlet Pipe Size		12 Inch		STD		Sch.		56	
Design Pressure		(Min)		[Max]		50 BarG		57	
Design Temperature		(Min)		-20 [Max]		150 Deg C		58	
Max. Shut-Off Dp.		50		Bar				59	
Model No.								60	
Body Type		2WAY GLOBE						61	
Body Size		6" (150A)						62	
Pr. Rating		ANSI 600 LBS						63	
End Connection		RF FLANGED						64	
Bonnet Type		STD						65	
Flow Direction		FLOW TO OPEN						66	
Lining		N/A						67	
Trim Type		MULTI HOLE (1 - STAGE)						68	
Port Size		5 in		Rated Cv		230		69	
Flow Character.		LINEAR		Stroke		50 mm		70	
Plug Type		BALANCED						71	
Seat Leakage		ANSI Class V						72	
Body /Bonnet		A216 Gr. WCB (SCPH 2)						73	
Stem		A182 Gr. 316						74	
Plug /Disc /Ball		A182 Gr. 316						75	
Seat Ring		A182 Gr. 316 + STL NO.6						76	
Cage /Retainer		A182 Gr. 316						77	
Balance Seal		316 + TFE						78	
Packing		V - PTFE						79	
Gasket		316+GRAP. - SPIRAL WOUND						80	
Actuator Type		PNEUMATIC CYLINDER						81	
Mfr / Model		DCP-4005						82	
Actuator Size		16in CYL						83	
Failure Mode		VALVE OPEN						84	
Supply (Max)		4.2 Barg						85	
Manual Override		TOP/SIDE HANDLE (BLOCK)						86	
Notes / Special Instruction								87	
Bolt / Nut : A193 Gr. B7/A194 Gr. 2H + Hot Dip Galv.								88	
(Stud bolt / Heavy hex nuts)								89	
C								90	
B								91	
A		2019-08-23		For Approval		MLKWON		92	
No.		Date		Revision Description		Prepared By		Reviewed By	
								93	
								94	

CONTROL VALVE CALCULATION SHEET					
Valve Sizing : Gas Flow					
Tag Number :					
Trim Type	MULTI HOLE (1 - STAGE)			Rated Cv	230
Body Size	6" (150A)			Rangeability	30
Inlet Line Size	12	Inch		Modified Ratio	0.00
Outlet Line Size	12	Inch			
Outlet Line Schedule	STD	Sch.			
Flow Rate Unit	Kg/hr		Temperature Unit	Deg C	
Pressure Unit	BarA		Velocity Unit	m/sec	
	Transl.	Transl.	Turb.	Turb.	Turb.
Condition Title	RECYCLE	MIN. at 49hz	MIN. at 50hz	MIN. at 51hz	
Flow Rate	63108	20556	20268	18756	
Inlet Pressure	40.77	40.77	40.77	40.77	
Outlet Pressure	29.913	29.913	29.913	29.913	
Diff. Pressure	10.857	10.857	10.857	10.857	
Inlet Temperature	142	127	113	130	
Molecular Weight	17.13	17.13	17.13	17.13	
Specific Heat Ratio	1.29	1.3	1.32	1.3	
Compressibility	0.9873	0.9835	0.9795	0.9843	
Calculated Cv	178.810	56.430	54.430	51.690	
Stroke % (EQ%)	84.7	48.0	47.4	46.5	
Stroke % (Linear)	77.0	21.9	21.0	19.8	
Stroke % (Modified)	77.0	21.9	21.0	19.8	
Allow. Dp-Checked [Psi]	425.3	428.6	435.2	428.6	
Acoustic Velocity	509.9	502.5	497.4	504.4	
Outlet Valve Velocity	64.7	20.3	19.3	18.7	
Outlet Line Velocity	16.2	5.1	4.8	4.7	
Choked Flow	None	None	None	None	
Noise Level [dBA]	75	< 70	< 70	< 70	
Match No.	0.031	0.01	0.009	0.009	

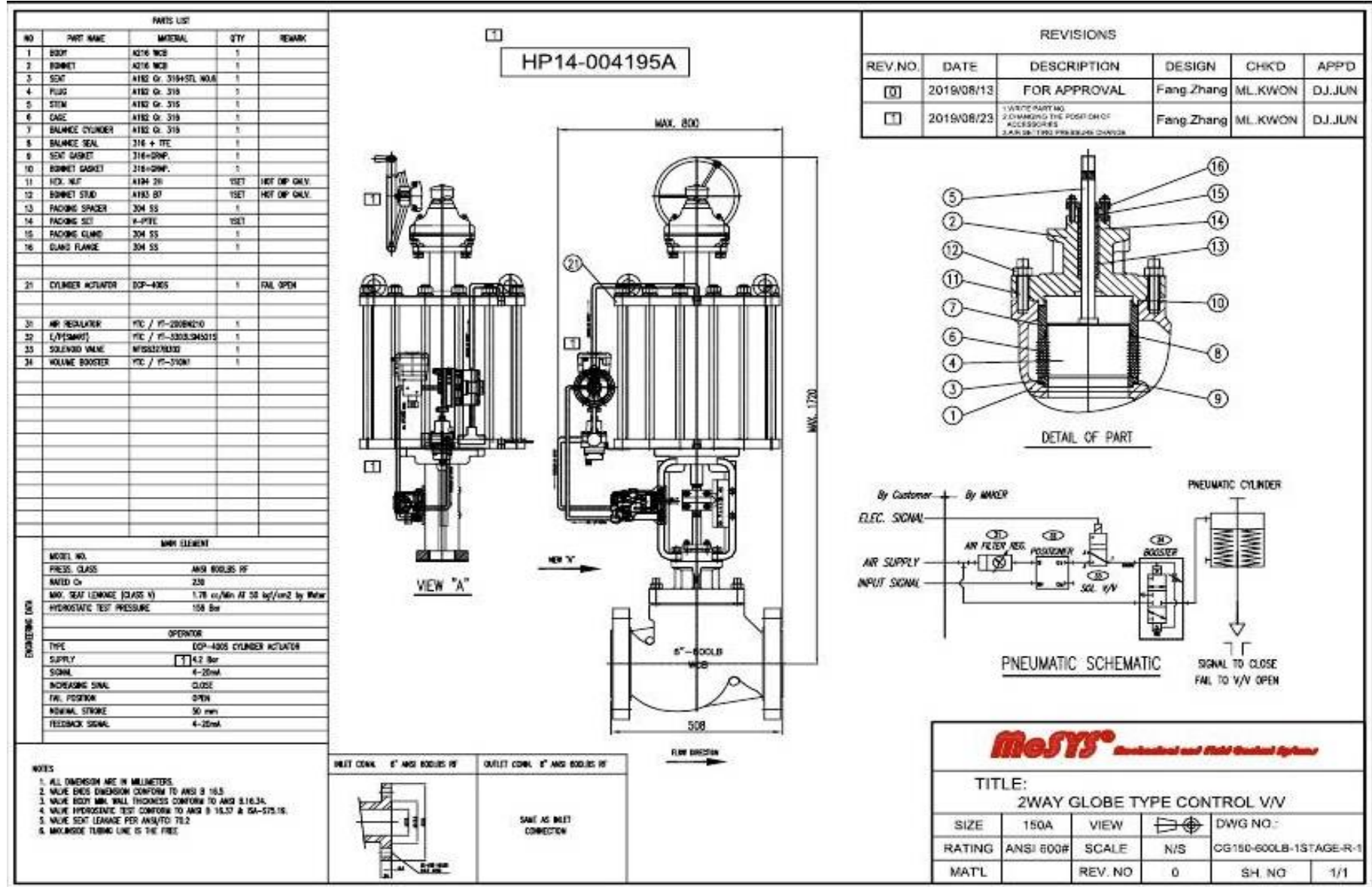
- ✓ Ex. : UAE LAYYAH CCPP FGC_RCV PJT
- ✓ 고객 요구사항에 맞춰 VALVE 설계 및 추천

McSYS Order Process(2)

DATA SHEET

- ✓ Ex. : UAE LAYYAH CCPP FGC_RCV PJT
- ✓ 고객 요구사항에 맞춰 VALVE 설계 및 추천

McSYS®		DATA SHEET	
DATE : 2019-11-29		CUSTOMER :	
PROJECT : UAE Layyah CCPP FGC_RCV		REVISION : 8	
		PART NO : PNEUMATIC CONTROL VALVE	
GENERAL			
1	TAG NO.		
2	QUANTITY	P & ID NO.	
3	LINE SIZE	LINE SCHEDULE	
4	SERVICE		
5	ENCLOSURE		
BODY & TRIM			
6	TYPE OF BODY		GLOBE CONTROL VALVE
7	BODY SIZE	PORT SIZE	6"
8	END CONNECTION & RATING		ANSI 600# RF
9			ASTM-A105
10		BODY	SUS 316
11		STEM	SUS 316
12		SEAT	SUS 316 + STL NO. 8
13		ETC	MFR STD.
14	BONNET TYPE		MFR STD.
15	TRIM FORM		MULTI HOLE (MULTI = 1STAGE)
ACTUATOR			
16	ACTUATOR		PNEUMATIC CYLINDER / DCP-4500
17	ACTUATOR MANUAL OVERRIDE		TOP/SIDE HANDLE (BLOCK)
18	ACTUATOR MAT'L		STEEL
19	AIR SUPPLY PRESSURE (BAR)		4.2 BAR
20	ACTION		AIR TO CLOSE
21	FAIL POSITION		OPEN
22	IP GRADE		IP65
POSITIONER			
23	MODEL NO.		YT-503BL4521S
24	TYPE		BIPOSITIVE / HART / FEEDBACK
25	IN, OUT PUT SIGNAL		4-20mA
26	AMB TMP.		-30°C~60°C (보통저온은 해당지점 온도조건 미충)
27	ELECTRIC CONNECTION		1/2" NPT
28	EXPLOSION PROOF		Ex Ia IIC T4/T5 Gb (IECEx)
29	IP GRADE		IP65
30	AIR SUPPLY PRESSURE (BAR)		4~7 BAR
31	SE. CERT.		SEL 2
32	GAUGE		SS316 적용
SOLENOID			
33	MODEL NO.		ASCO / NF1500275002
34	TYPE		2-way, Direct acting
35	MAT'L		SS316L
36	ELECTRIC CONNECTION		1/2" NPT
37	INSULATION CLASS		H
38	VOLTAGE		DC 24V
39	RESET		AUTO
40	EXPLOSION PROOF		Ex Ia IIC T4 (IECEx)
41	IP GRADE		IP67
42	SE. CERT.		SEL 2
43	AMB TMP.		-20°C~60°C (보통저온은 해당지점 온도조건 미충)
44	WATT		0.5 W
AIR SET			
45	MODEL NO.		YT-2003N210
46	FREU. CONN.		3/4" NPT
47	AMB TMP.		-20°C~70°C
48	FILTER		5 MICRON
49	GAUGE		SS316 적용
VOLUME BOOSTER			
50	MODEL NO.		YT-315H1
51	AMB TMP.		-20°C~70°C
PROCESS CONDITIONS			
52	FLUID		
53	FLOW RATE UNIT	STATE	
54	FLOW RATE	M3/hr	
55	INLET PRESSURE	PSI	
56	OUTLET PRESSURE	PSI	
57	TEMPERATURE	°F	
58	MAX. SHUT OFF ΔP	PSI	
59	VISCOSITY		
60	CALCULATED Cv		
61	MODEL NO.		
62	NOTE:		• STROKE TIME 단락을 위해 VOLUME BOOSTER 추가 • OPEN < 1s, CLOSE < 5s • SOLENOID : 진공저항용으로 사용 (POSITIONER <-> VOLUME BOOSTER 사이 동작) • HANDLE COLOR : BLACK • Bolt / Nut : A193 Gr. B7/A194 Gr. 2H + Hot Dip Galv. (Std bolt / Heavy hex nuts) • PAINT : MFR STD. • FITTING : SWAGelok SS316 이상 • TUBING : SWAGelok(OEM) SS316 이상
63	REVISION :		- 1 : VALVE SIZE 변경 / 방화등급 변경 / 액세서리 부속명 변경 (이하 COMMENT 참조) - 2 : FITTING MAKER 변경 / STROKE TIME 변경 / VALVE SIZE 변경 - 3 : AIR CONN. SIZE 변경 - 4 : 송전요청도면 추가, TUBING 변경 - 5 : 방화 요청에 따른 ACCESSORY 위치 변경 - 6 : 방화 요청에 따른 ACCESSORY 위치 변경 - 7 : 도면 상 AIR SET GAUGE 형상 수정 - 8 : SETTING PRESSURE 변경 - 9 : STROKE TIME 단락을 위해 AIR CONN. 3/4" NPT 적용



V-notch Valve, Mega Valves

MCSYS SPECIAL VALVE

V-Notch ball valve



Mega-I Valves

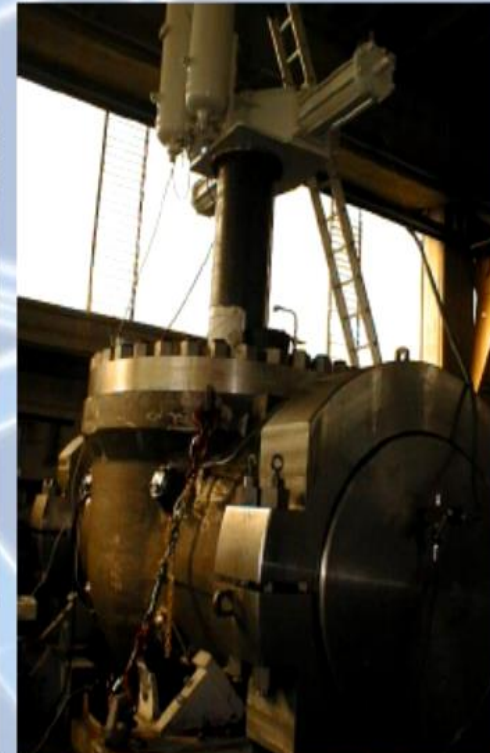


Teflon Lined Valve



Forged Ball Valve

56" 600 Top Entry



Actuator



Spring return SHD actuator equipped with a positioner for modulating service



Double acting CHD actuator with hydraulic damping system for damping of the valve closing stroke.



Hydraulic actuator



☐ Pneumatic Actuator

☐ Hydraulic Actuator



Actuator (1)



☐ Electro-Hydraulic Linear Actuator

- HVAC systems and industrial uses for pressure, temp. & flow control
- 2/3-way Globe Valves/VSD/VFD/VBD/VFDS series



☐ Motor Geared Valve Actuator

- Heating or Air-conditioning System, Ice Thermal Storage System
- High Torque and High Speed

Actuator (2)



☐ Electric Linear Actuator

- Heating or Air-conditioning System, Ice Thermal Storage System

☐ Damper Electric Actuator

- Control in ventilation or Air-conditioning equipment

☐ Diaphragm Actuator

- Spring Diaphragm, Spring Cylinder, Double Cylinder



Assembled Valves with 3rd Party Actuators

❑ Control Valve + 3rd Party Actuator

- Customized product is possible



Motor Actuator (1)



Motor Actuator (2)



Pneumatic Actuator



Motor Actuator (3)



Assembled Valves

❑ BAS Valve + MOTOR Actuator



Elec. Motor 2-Way



Diaphragm 2-Way



Elec. Motor 3-Way



Hydraulic 2-Way



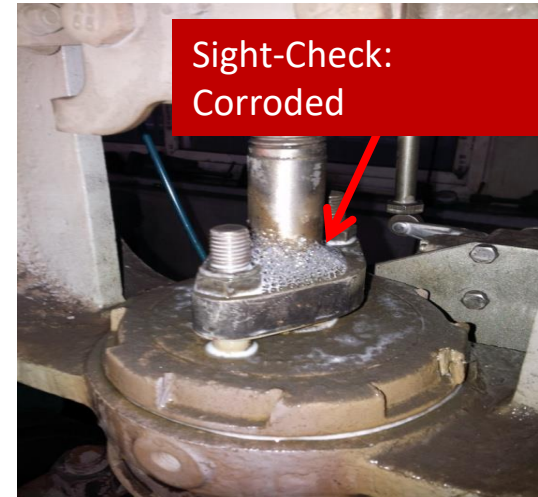
Diaphragm Valve of KOSO, Japan

- ❑ Size: 20K 250A
- ❑ Appearance Inspection

Before Repair



Sight-Check:
Corroded



Air Test: 300L/min leakage
measured





Diaphragm Valve of KOSO, Japan

❑ Component Inspection after Decomposition





Diaphragm Valve of KOSO, Japan

Repairing Trim



Assembled Trim after repairing





Diaphragm Valve of KOSO, Japan

❑ Repairing Valve





Diaphragm Valve of KOSO, Japan

❑ Test after Repairing

Elec. Signal Test



Air Test Bench



No leakage





Diaphragm Valve of KOSO, Japan

❑ After Repair



Thank you for your attention

K-val[®]

McSYS
Be the highest of standards



www.j-mcsys.com

McSYS[®] *Mechanical and fluid Control Systems*