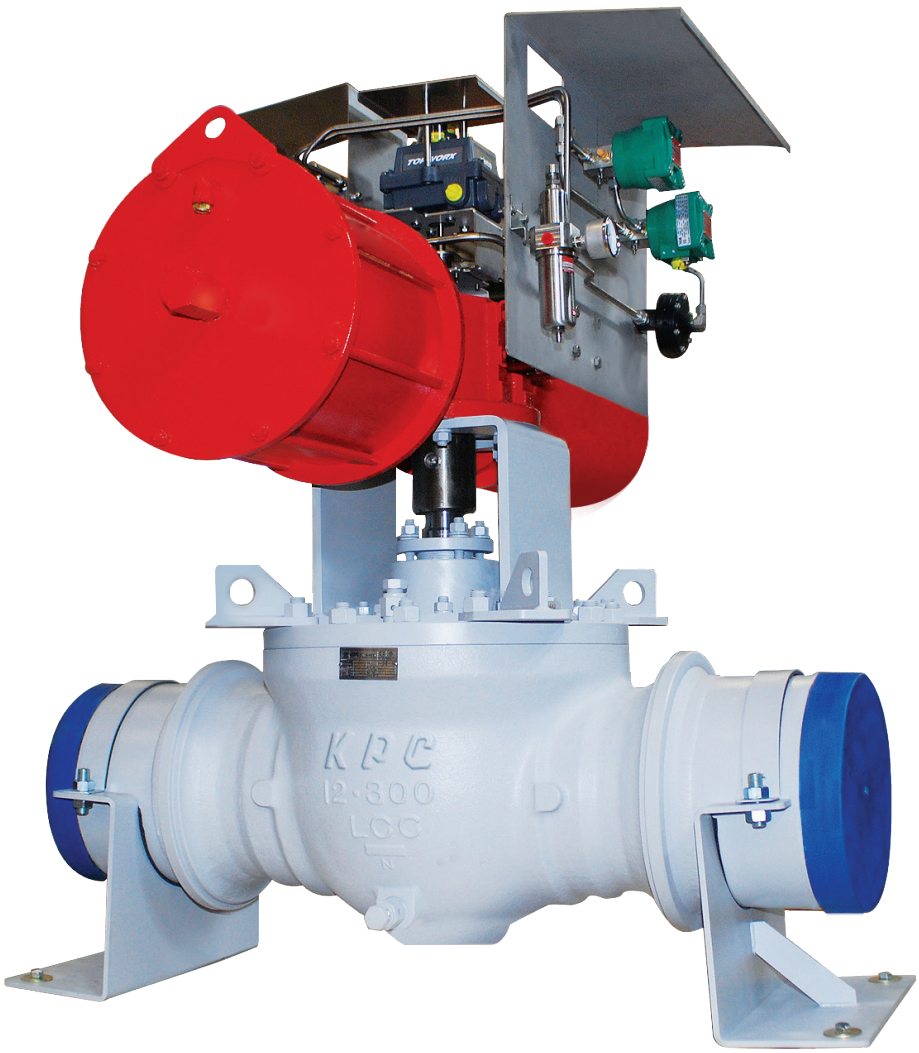
KPC

AUTOMATED BALL VALVE

| The integrated solution |



SPECIALIZED IN VALVE AUTOMATION

KPC is a specialized ball valve manufacturer with unparalleled competitiveness for valve automation and control systems. KPC has continued to develop technology and improve system to offer one-stop custom service from design, procurement, fabrication and software installation to testing of valve automation and control systems. These systems are engineered to comply fully with emergency shutdown philosophy and meet even the most stringent requirements of automation system by applying strict operating time, and safety margin in valve and actuator sizing.

Combining the strongest buying power as the top valve automation components buyer in Asia and accumulated system integration technology, KPC offers an automated valve system, which can operate the most up-to-date digital valve control and communication technology at the most competitive price.

Pneumatic, electric or hydraulic actuators… Whatever your valve automation requirement is, KPC will supply the best and most competitive solutions.

A PROVEN TRACK RECORD

KPC has extensive references and proven track records of supplying automated valves across a number of key industries.

VALVE TESTING

All pressure containing items are hydrostatically tested, seat leakage tested and functionally tested.

We can also perform high pressure gas test, packing emission, cryogenic, and advanced functional testing.

MATERIAL TESTING

- Non-destructive examination, such as Radiography, Ultrasonic, Magnetic Particle and Liquid Penetrant testing.
- Chemical analysis by computer controlled direct reading emission spectrometer.
- Mechanical testing for tensile properties at ambient and elevated temperatures, bend and hardness testing. Charpy testing at ambient, elevated and sub-zero temperatures.

QUALITY MANAGEMENT

In addition to its own highly strict company quality standards, KPC is ISO 9001 certified and has a manufacturing ability to comply with ASME, DIN, API, and other internationally recognized standards.

KPC ensures that each valve fulfills all engineering specifications, including the most demanding applications. Our goal is to provide the best product at the most competitive price with in-time delivery and the backing of a full service program.

HEALTH, SAFETY AND THE ENVIRONMENT

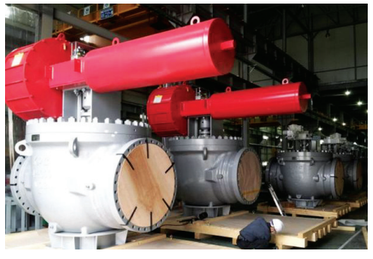
Our policy is to take a proactive and responsible attitude towards the protection of employees' health and safety. The driving force behind our performance continues to be our emphasis on behavior, networking and sharing of best practice, and the active involvement of senior management to promote and audit safety programs.

KPC fully integrates environmental management with operational systems and procedures. Our proactive approach helps to reduce impact on the environment.

AFTERMARKET SOLUTIONS

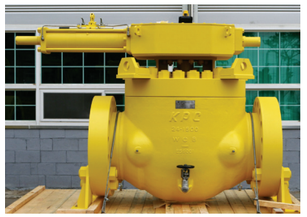
The aftermarket solutions are based on our engineering know-how and expertise for maintenance strategies, life extensions and project upgrades.





AUTOMATION CONFIGURATION
FOR ALL TYPES OF BALL VALVES

TOP ENTRY



▲ Gas Hydraulic Operated Valve


▲ Pneumatic Operated Valve



▲ Motor Operated Valve

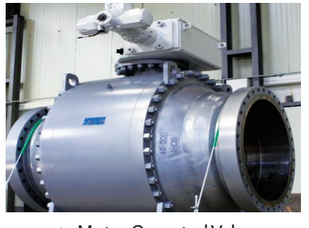
3 PCS



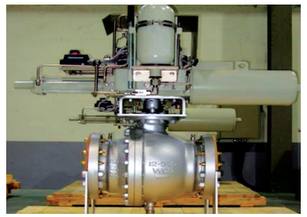
▲ Gas Hydraulic Operated Valve

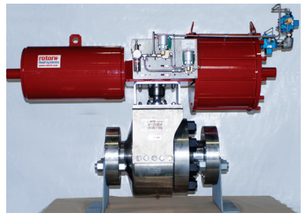


▲ Pneumatic Operated Valve

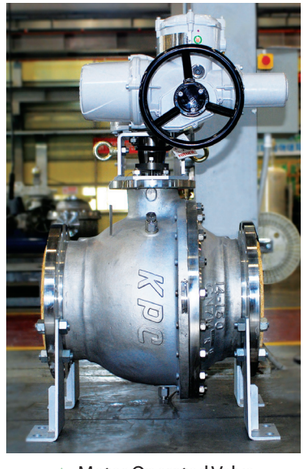

▲ Motor Operated Valve

2 PCS


▲ Gas Hydraulic Operated Valve



▲ Pneumatic Operated Valve



▲ Motor Operated Valve

THE VARIETY OF CAPABILITIES

INDUSTRIES
- Power Plant
- Oil & Gas
- Petrochemicals
- Desalination
- Steel Mill

DESIGN STANDARD
- API, ASME, ISO

TYPE OF ACTUATION
- Pneumatic
- Motor
- Hydraulic

TYPE OF VALVES
- Top Entry Ball Valve
  1/2″~60″
  Trunnion & Floating
  Casting
- 3 Piece Ball Valve
  6″~60″
  Trunnion
  Casting & Forging
- 2 Piece Ball Valve
  1/2″~40″
  Trunnion & Floating
  Casting & Forging

PRESSURE CLASS
- ASME 150# - 2500#

BODY & CAP MATERIAL
- Carbon Steel + (Overlay)
- Stainless Steel
- Duplex Stainless Steel
- Nickel Alloy
  (Inconel, Incoloy, Hastelloy, Monel)
- Titanium

TRIM MATERIAL
- Carbon Steel + (Overlay or Hard Facing)
- Stainless Steel
- Duplex Stainless Steel
- Nickel Alloy
  (Inconel, Incoloy, Hastelloy, Monel)
- Titanium

SEAT MATERIAL
- PTFE, PEEK, DEVLON, VITON, METAL

SEAL MATERIAL
- VITON, HNBR, AED, PTFE, LIP SEAL

APPLICABLE SYSTEM COMPONENTS & SPECIFICATIONS

EMERGENCY SHUT DOWN
- Partial Stroking
- Volume Booster
- Air Operated Valve
- Quick Exhaust
- Air Tank
- Pressure Transmitter

SAFETY & SECURITY
- SIL Level 3 Configuration
- Fire Proofing System
- Interlocking Device
- Leak Detector
- Fusible Plug

APPLICABLE STANDARDS

KPC ball valves are in accordance with API, ASME requirements.
The following list contains the most important applicable standards for ball valves.
The valves may be designed, manufactured and tested in accordance with other international standards on request.

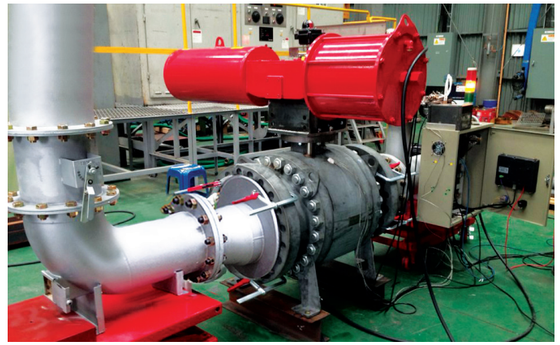
API-American Petroleum Institute	
Spec. 6D	Specification for Pipeline Valves.
Spec. 6FA	Specification for Fire Test for Valves.
Spec. RP6F	Recommended Practice for Fire Testing of Valves.
Spec. 598	Valve Inspection and Testing.
Spec. 605	Large Diameter Carbon Steel Flanges.
Spec. 607	Fire Test for Soft-seated Quarter-turn Valves.

NACE - National Association of Corrosion Engineers	
MR0175	Petroleum and Natural Gas Industries – Materials for Use in H_2S-containing Environments in Oil and Gas Production.
MR0103	Materials Resistant to Sulfide Stress Cracking in Corrosive Petroleum Refining Environments.

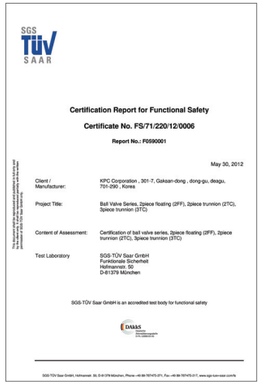
ASME- American Society of Mechanical Engineers	
B16.5	Pipe Flanges and Flanged Fittings.
B16.10	Face-to-Face and End-to-End dimensions of Valves.
B16.25	Butt Welding Ends.
B 16.34	Valves – Flanged, Threaded and Welding End.
B 31.3	Process Piping.
B 31.4	Pipeline Transportation Systems for Liquid Hydrocarbons and Other Liquids.
B 31.8	Gas Transmission and Distribution Piping Systems.
B 46.1	Surface Texture, Surface Roughness, Waviness & Lay.

ISO-International Standard Organization	
ISO 14001	Environmental Management Standard.
ISO 15848	Industrial Valves – Measurement, Test and Qualification Procedures for Fugitive Emissions.

Fugitive Emission Test



High Temperature Test



CERTIFICATE & APPROVAL

ISO 9001:2008
ISO 14001:2004
OHSAS 18001:2007
CE Mark
API SPEC 6D
API 607 / API 6FA
ISO 15848-1:2006
SIL 3 Applicable

ADCO
ADGAS
ADMA OPCO
AOL
BOROUGE
CPC
FORMOSA
GASCO
GAZPROM
HUSKY OIL OPERATIONS LTD
JORDAN PETROLEUM REFINERY COMPANY
KNPC
KOC
KPPC
LUKOIL
MINISTRY OF ELECTRICITY & WATER OF KUWAIT
MITSUBISHI
OMAN OIL COMPANY E&P LLC
PEMEX
PETROBRAS
PIC
QATAR GAS TRANSPORT COMPANY LTD
SABIC
SAMCO
SEC
SAUDI KAYAN PETROCHEMICAL COMPANY




BRIEF HISTORY

1977.10	Established Korea Precision Casting Co.
1981.08	Changed to KPC Corporation, a corporate company
1982.03	Started Ball Valve Division
1987.05	Started Special Alloy Steel Division
1988.06	Started Vacuum Arc Remelting Division
1990.05	Started Forging Division
1992.05	Developed and produced Ball Valves for NACE and High Temperature Service
1994.08	Authorized to use the API Monograms for API 6D
1997.02	ISO 9001 : 1994 certified by QCB
1997.12	Started Titanium Casting & Forging
2000.08	Started Valve Automation Center
2002.12	QA System for Material Manufacturing-certified by TÜV to European Directive 97/23/EC
2003.03	Established Material Division Factory
2003.06	QA System for Valve Manufacturing-certified by TÜV to European Directive 97/23/EC
2003.11	Newly certified ISO 9001 : 2000 for Valves and Alloy Steel Castings by TÜV
2007.06	Established a Factory for Large Size Valve Assembly
2008.01	Established a Factory for Machining Facilities
2011.01	Separated KPCM(KPC Metal) from KPC Corporation
2012.06	SIL certified by TÜV
2014.03	ISO 14001, OHSAS 18001 certified by TÜV


GAKSAN PLANT


DONGHO PLANT

KPC CORPORATION

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www.kpccorp.co.kr

Seoul office
13th fl. Dongwha-BLDG, Seosomun-ro, Seoul, Korea
TEL: 82-2-2637-9188, FAX: 82-2-2637-9118
www.kpccorp.co.kr

KPCM – High Performance Alloy

249, Wacheonseo-gil, GyeongSan-City, Korea
TEL: 82-53-852-4839, FAX: 82-53-853-6386
www.kpctitanium.com

VELOX – Forged Round Bar

22, Geumsong-ro 87-gil, GyeongSan-City, Korea
TEL: 82-53-853-8877, FAX: 82-53-964-3398
www.velox.co.kr