

BMT Company Profile

SUPERLOK is best quality product

Valves & Fittings/ Electric Division



 **SUPERLOK[®]**

 **BMT Co., Ltd.**
www.superlok.com



Certification

<Fitting & Valve DIV.>

- ASME (American Society of Mechanical Engineers) 'N' Stamp
- ABS (American Bureau of Shipping)
- Lloyd (Lloyd's Register of Shipping)
- DNV (Det Norske Veritas/Norwegian Assoc.)
- GL (Germanischer Lloyd)
- API (American Petroleum Institute)
- KEPIC (Korea Electric Power Industry Code)
- ISO 9001 (Renewal, 2006)
- ISO 14001 (Environmental Management System)
- OHSMS 18001 (Occupational Health and Safety Management System)
- Acquired the Nippon Kaiji Kyokai Certificate for Approval Mechanical Joint.
- Acquired Q-Class Certificate of KHNP's Qualified Supplier (KHNP: Korea Hydro & Nuclear Power Co.,Ltd).

Profile & History

1988 ~ 2003

- Established GyeongPoong Machinery Co.
- Changed the Company name to "BMT Co., Ltd"
- Designated as a "Clean Company" by Ministry of Labor
- Introduced ERP (Enterprise Resource Planning) SYSTEM
- Designated as a Fitting & Valve supplier by SAMSUNG ELECTRONICS
- Designated as a "New Technology Venture Business" by Small and Medium Business Administration (SMBA)
- Designated as a "Superior Technology Company" by Korea Technology Credit Guarantee Fund (KOTEC)

2004 ~ 2006

- Accredited as a "Promising Company" by an Industrial bank of Korea (KIUP)
- Certified an "Innovation Business Company" by Government
- Built and moved a new main factory and office to Noksan Industrial Complex in Busan.
- Established an R&D Institute.
- Awarded "The Grand Prix of the Busan Enterprises" in the Technical Field.
- Made a manager contract with Dong Yang Securities Co. regarding IPO.
- Registered a Patent and a Design of MCPD (Molded Case Power Distributor) and began an Electric business.

2007 ~ 2008

- Started to supply SUPERLOK product to KHNP (Korea Hydro & Nuclear Power company), HI and DSME, SK Energy and GS-Caltex, and GS EC.
- Registered as an official Supplier in SHI (Samsung Heavy Industries)
- Registered as an official Supplier in DSME (Daewoo Shipbuilding & Marine Engineering)
- Registered as an official Supplier in SK Corporation, GS-Caltex (Oil Refining, Crude Oil, Petroleum, Lubricants, Chemicals) and GS Engineering & Construction Corp.
- Registered as an official Supplier in Petronas Gr. Malaysia and started supply of SUPERLOK Double block & Bleed Valves and others
- Acquired the Nippon Kaiji Kyokai Certificate for Approval Mechanical Joint.
- Registered as an Official Supplier in Hyundai Heavy Industries (HHI).
- Have received the 40 and 199 pieces orders from the end-user, Petronas Carigali in Malaysia.
- Registered as an Official Vendor in Total Pazflor FPSO Project by Total S.A. for providing SUPERLOK Valves.(Total Pazflor FPSO Project to DSME)
- Registered as an Official Vendor in SK Engineering & Construction(SKEC).

2009 ~ 2011

- Completed developing the STANDARD Distribution Panel, "SPIDER", of 50 & 100 AF Plan to develop and mass-produce SPIDER for 225 AF by the end of this year Plan to advance in the Use for World-major Circuit Breakers such as ABB, Merlin Gerin, Siemens, GE and Mitsubishi as one of the BMT Core Tasks.
- Certified the Top Q-Class of Quality from KHNP (Korea Hydro & Nuclear Power) in supplying Finished Products to the nuclear power plants under operation.
- Approved as a vendor from ConocoPhillips Indonesia for Superlok products.
- Approved by NIOC(National Iranian Oil Co.) in Iran as their qualified vendor.
- Approved by Takreer in ADNOC Group in UAE as their qualified vendor.
- Approved by NISC(National Iranian Gas Co.) in Iran as their qualified vendor.

Integration Tube Fitting Series *i*-Fitting

Featured I-Fittings

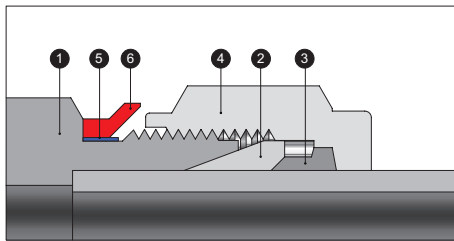
- Reduce the installation time extremely.
- Assure the perfect installation.
- No required inspection gauge.
- Make cost-down greatly by the innovated productivity.
- Easy installation available even by non-skilled worker.

How the SUPERLOK I-Fitting Works

- Able to see to separate the Inspection Ring from the products with eyes.
- Able to hear to separate the Inspection Ring from the products with ears.
- Able to touch to separate the Inspection Ring from the products with hands.



Structure



- | | |
|-----------------|-------------------|
| 1 BODY | 4 NUT |
| 2 FRONT FERRULE | 5 CHECK RING |
| 3 BACK FERRULE | 6 INSPECTION RING |

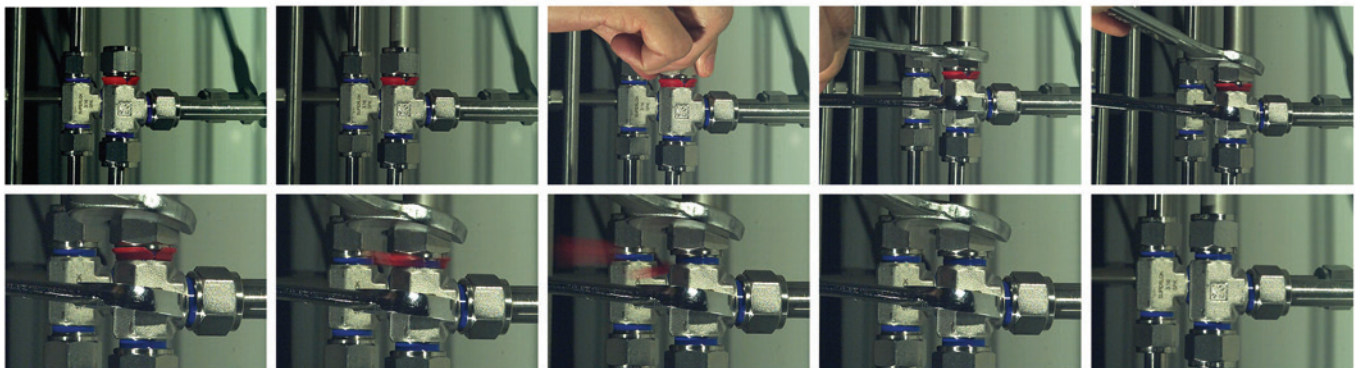
- I-Fittings is composed of Body, Front & Back Ferrules, Nut, Inspection Ring and Check Ring
- I-Fittings has the structure to check the completion of installation separating Inspection Ring from the body

Installation Procedure



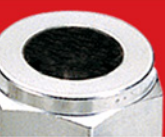
1. Prepare the required i-Fitting composed of Body, Nut, Front & Back Ferrule and Inspection Ring properly.
2. Insert tube into the Fittings fully and turn Nut to tighten firmly not to turn completely.
3. Completion of installation is shown to rotate the Nut until Inspection Ring is taking off.

Install Process View



Detail View





Fitting Series

SUPERLOK TUBE FITTINGS



APPLICATIONS

Process instrumentation, High Temperature and Cryogenic service, High pressure service, Vacuum service.

SPECIFICATIONS

- The Working pressure of SUPERLOK Tube Fittings are limited by the Working pressure of tubing.
- Working Temperature Range : -320°F to 1200°F (-196°C to 649°C)

37° FLARED TUBE FITTINGS (SAE J514)



APPLICATIONS

Hydraulic system.

SPECIFICATIONS

- Maximum Working Pressure:
8700psi(600bar)@100°F(38°C):With O-Ring Type.
5000psi(345bar)@100°F(38°C):Without O-Ring Type. And according to SAE J514
- Working Temperature Range : up to 800°F(427°C)

INSTRUMENT THREAD FITTINGS



APPLICATIONS

Process, power, instrumentation and general plumbing.

SPECIFICATIONS

- Maximum Working pressure : 10000psi(689bar)@100°F(38°C)
- Working Temperature Range : -320°F to 1000°F (-196°C to 537°C)

HIGH PRESSURE FITTINGS



APPLICATIONS

High pressure equipment, Pumping system, Hydraulic intensifier, Water blasting, Test stands.

SPECIFICATIONS

- Maximum Working pressure : up to 60000psi(4137bar)
- Working Temperature Range : -100°F to 600°F (-73°C to 315°C)

BITE TYPE TUBE FITTINGS (DIN2353)



APPLICATIONS

Hydraulic, Compressed Air, Fuel Heating, Auto Motive

SPECIFICATIONS

- Maximum Working pressure : Very Light (LL) Series PN 100bar
Light (L) Series PN 315bar
Heavy (S) Series PN 630bar
- Working Temperature Range : up to 800°F(427°C)

BITE TYPE TUBE FITTINGS (JIS B2351)



APPLICATIONS

Hydraulic, Compressed Air, Fuel Heating, Auto Motive.

SPECIFICATIONS

- Maximum Working pressure : 3600psi(25Mpa / 254kg/cm² / 248bar)
- Working Temperature Range : -4°F to 482°F (-20°C to 250°C)

FORGED FITTINGS



APPLICATIONS

Mainly for the purpose of power plant, oil and gas field.

SPECIFICATIONS

- Maximum Working pressure : 15NB to 1100NB in 2000LBS, 3000LBS, 6000LBS, 9000LBS
- Working Temperature Range : up to 1000°F (538°C)

HOSE CONNECTORS & PUSH-ON HOSE FITTINGS



APPLICATIONS

Air break system, Air conditioning system, Automotive industry.

SPECIFICATIONS

- Maximum Working pressure : 350psi(24bar)@100°F(38°C)
- Working Temperature Range : -40°F to 212°F (-40°C to 100°C)

O-RING FACE SEAL FITTINGS



APPLICATIONS

High Pressure Hydraulic System

SPECIFICATIONS

- Maximum Working pressure : 14000 psi (965bar) @100 °F(38°C)
- Working Temperature Range : -13 °F to 392 °F (-25°C to 200°C)

CLEAN FITTING



APPLICATIONS

Industry ultra-pure and high-purity gas line, Vacuum delivery system

SPECIFICATIONS

- Maximum Working pressure : 8500 psi (585 bar) @ 100°F (38°C)
- Working Temperature Range : up to 1000°F (537°C)

Valve Series

BALL VALVE SBV120 SERIES



APPLICATIONS

Control Sampling system, Process instrument.

SPECIFICATIONS

- Maximum Working pressure : 3000 psi (207bar) @ 70°F(21°C)
- Working Temperature Range : 50°F to 150°F (10°C to 66°C)

BALL VALVE SBV210 SERIES



APPLICATIONS

Pneumatic System, Instrument System.

SPECIFICATIONS

- Maximum Working pressure : 1000psi (69 bar) @ 70°F(21°C)
- Working Temperature Range : 0°F to 450°F (-17°C to 232°C)

BALL VALVE SBVH360 SERIES



APPLICATIONS

High Pressure Instrument system, Hydraulic system.

SPECIFICATIONS

- Maximum Working pressure : 10000 psi @ 70°F (21°C)
- Working Temperature Range : -22°F to 265°F (-30°C to 130°C)

DIN TYPE BALL VALVES



APPLICATIONS

Hydraulic Lines

SPECIFICATIONS

- Maximum Working pressure : 7200 psi (496bar) @ 70°F(21°C)
- Working Temperature Range : -4°F to 210°F (-20°C to 100°C)

HIGH PRESSURE FORGED BALL VALVES SBVF360 SERIES



APPLICATIONS

High pressure Instrument Lines, OIL & GAS Production.

SPECIFICATIONS

- Maximum Working pressure : 6000 psi (414 bar) @ 70°F(21°C)
- Working Temperature Range :
-65°F to 450°F(-54°C to 232°C) with PEEK seat
-65°F to 350°F(-54°C to 177°C) with PCTFE seat

TRUNNION BALL VALVES



APPLICATIONS

Instrument Air lines, GAS & CNG industry, Sampling.

SPECIFICATIONS

- Maximum Working pressure : 10000 psi (689 bar) @ 100°F(38°C)
- Working Temperature Range : 0°F to 250°F (-17°C to 121°C)

SWING-OUT BALL VALVES



APPLICATIONS

Instrument Air lines, chemical process, Oil and Gas Production.

SPECIFICATIONS

- Maximum Working pressure : 3000 psi (207 bar) @ 100°F(38°C)
- Working Temperature Range : -20°F to 450°F (-29°C to 232°C)

FLANGED BALL VALVES



APPLICATIONS

Hydraulic system, Chemical, petrochemical, Oil and Gas production.

SPECIFICATIONS

- Maximum Working pressure : ANSI Class150 to Class2500
- Working Temperature Range : -20°F to 400°F (-29°C to 204°C)

SAE FLANGED BALL VALVES



APPLICATIONS

Hydraulic system.

SPECIFICATIONS

- Maximum Working pressure : up to 6000psi(414bar) @100°F (38°C)
- Working Temperature Range : -4°F to 210°F (-20°C to 100°C)

KEY OPERATION VALVES (Ball & Needle)



APPLICATIONS

Pneumatic System, Instrument System & isolation, General service

BALL VALVE SPECIFICATIONS

- Maximum Working pressure : 1000psi (69 bar) @ 70°F(21°C)
6000psi (414 bar) @ 70°F(21°C)
- Working Temperature Range : 0°F to 450°F (-17°C to 232°C)

NEEDLE VALVE SPECIFICATIONS

- Maximum Working pressure : 5000 psi (345 bar) @ 100°F(38°C)
- Working Temperature Range : -65°F to 450°F (-54°C to 232°C)

PLUG VALVES



APPLICATIONS

Instrument Air Lines, Refinery pilot plant.

SPECIFICATIONS

- Maximum Working pressure : 3000 psi (207 bar) @ 100°F(38°C)
- Working Temperature Range : -10°F to 400°F (-23°C to 204°C)

RISING PLUG VALVES



APPLICATIONS

Line which contain small solid impurities, Instrument lines which contain viscous fluids or slurries, System which require flow regulation and full flow capabilities.

SPECIFICATIONS

- Maximum Working pressure : 6000 psi (414 bar) @ 100°F(38°C)
- Working Temperature Range : -10°F to 400°F (-23°C to 204°C)

INTEGRAL BONNET NEEDLE VALVES



APPLICATIONS

Instrument isolation, General service, Test valve.

SPECIFICATIONS

- Maximum Working pressure : 5000 psi (345 bar) @ 100°F(38°C)
- Working Temperature Range : -65°F to 450°F (-54°C to 232°C)

UNION BONNET NEEDLE VALVES



APPLICATIONS

High temperature and pressure Radioactive Service, Condensates.

SPECIFICATIONS

- Maximum Working pressure : 6000 psi (414 bar) @ 100°F(38°C)
- Working Temperature Range : -65°F to 450°F(-54°C to 232°C) with PTFE packing
Up to 1200°F(649°C) with Graphite packing

HIGH PRESSURE NEEDLE VALVES



APPLICATIONS

High pressure service, Instrument Isolation.

SPECIFICATIONS

- Maximum Working pressure : up to 10000psi(689bar) @ 100°F(38°C)
- Working Temperature Range : -65°F to 450°F(-54°C to 232°C) with PTFE packing
Up to 1200°F(649°C) with Graphite packing

INTEGRAL BONNET BAR STOCK NEEDLE VALVES



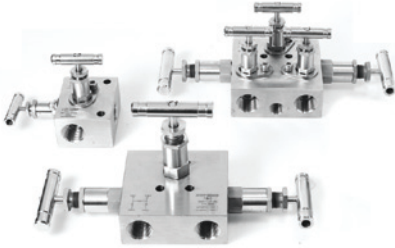
APPLICATIONS

Instrument Isolation, General service , Test Valves.

SPECIFICATIONS

- Maximum Working pressure : 6000 psi (414 bar) @ 100°F(38°C)
- Working Temperature Range : -65°F to 450°F (-54°C to 232°C)

MANIFOLD VALVES



APPLICATIONS

Pressure & Differential Pressure Instrumentation.

SPECIFICATIONS

- Maximum Working pressure : 6000 psi (414 bar) @ 100°F(38°C)
- Working Temperature Range : -65°F to 450°F (-54°C to 232°C) with PTFE packing up to 1200°F(649°C) with Graphite packing

TOGGLE VALVES



APPLICATIONS

Instrument Line , Pneumatic system.

SPECIFICATIONS

- Maximum Working pressure : 300 psi (20.7 bar) @ 100°F(38°C)
- Working Temperature Range : -20°F to 200°F (-29°C to 93°C) with PTFE stem tip

RELIEF VALVES



APPLICATIONS

Prevent over pressure to protect.

SPECIFICATIONS

- Maximum Working pressure : SRVL-300 psi (20.7 bar) @ 100°F(38°C)
SRVH- 6000 psi (414 bar) @ 100°F(38°C)
- Working Temperature Range : -10°F to 400°F (-23°C to 204°C)
- Opening Pressure : SRVL: 10psi(0.69 bar) to 250 psi (17.2bar)
SRVH: 225psi(15.5 bar) to 6000 psi (414 bar)

CHECK VALVES



APPLICATIONS

Instrument Lines, Prevent reversed flow, un-directional flow control.

SPECIFICATIONS

- Maximum Working pressure : 3000 psi (207 bar) @ 70°F(21°C)
- Cracking Pressure : 1/3 psi (0.03 bar) to 100 psi(6.9 bar)
- Working Temperature Range : -10°F to 375°F (-23°C to 191°C)

HIGH PRESSURE & ADJUSTABLE CRACKING PRESSURE CHECK VALVES



APPLICATIONS

Prevent Reversed flow, High Pressure characteristics.

SPECIFICATIONS

- Maximum Working pressure : up to 6000 psi (414 bar) @ 100°F(38°C)
- Cracking Pressure : 1/3 psi (0.03 bar) to 25 psi(1.7 bar)
- Working Temperature Range : -10°F to 375°F (-23°C to 191°C)

GAUGE & GAUGE ROOT VALVES



APPLICATIONS

Pressure Gauge , primary Isolation.

SPECIFICATIONS

- Maximum Working pressure : 6000 psi (414 bar) @ 100°F(38°C)
- Working Temperature Range : -65°F to 450°F (-54°C to 232°C) with PTFE packing up to 1200°F(649°C) with Graphite packing

EXCESS FLOW VALVES



APPLICATIONS

Fuel system , Gas system , Hydraulic & Pneumatic system.

SPECIFICATIONS

- Maximum Working pressure : up to 6000psi(414bar)@100°F(38°C)
- Working Temperature Range : up to 400°F(204°C)

DOUBLE BLOCK & BLEED VALVES



APPLICATIONS

Process piping isolation points, Direct mount to instruments, Vents and drains.

SPECIFICATIONS

- Maximum Working pressure : Class 150 to Class 2500
- Working Temperature Range :
-58°F to 400°F (-50°C to 204°C) for stainless steel and duplex valve assemblies
-50°F to 400°F (-46°C to 204°C) for carbon steel valve assemblies

BLEED & PURGE VALVES



APPLICATIONS

Venting & purging of Instrument system , Hydraulic & Pneumatic system.

SPECIFICATIONS

- Maximum Working pressure : up to 10000psi(689bar) @100°F (38°C)
- Working Temperature Range : -65°F to 850°F (-54°C to 454°C) with stainless steel ,
from -20°F to 450°F (-29°C to 232°C) with carbon steel

WATER REGULATORS



APPLICATIONS

Water Pressure Reducing system.

SPECIFICATIONS

- Maximum Working pressure : up to 220 psi (15.1 bar) @ 100°F (38°C)
- Reducing Pressure Range : 8psi (0.6 bar) to 60psi (4.1bar)
- Working Temperature Range : up to 176°F (80°C)

Others

HYDRAULIC FLANGES (SAE J518, ISO 6162)



APPLICATIONS

High pressure hydraulic system.

SPECIFICATIONS

- Maximum Working pressure : 6000 psi (414 bar) @ 100°F (38°C)
- Working Temperature Range : -13°F to 392°F (-25°C to 200°C) with sealing material FKM

FLANGES



APPLICATIONS

Petroleum , Power plant , Chemical , Boiler heat , Exchanger , Shipbuilding , Construction.

SPECIFICATIONS

- ANSI/ASME , BS , DIN , JIS , MSS
- CLASS 150, 300, 400, 600, 900, 1500, 2500

MICRON IN-LINE FILTERS



APPLICATIONS

Protection of instrument system.

SPECIFICATIONS

- Maximum Working pressure : 3000 psi (207 bar) @ 100°F (38°C)
- Working Temperature Range : -20°F to 900°F (-29°C to 482°C)
- Filtering Range : 1 to 90 Micron

VACUUM CLAMPS & ISO-KF COMPONENTS



APPLICATIONS

Vacuum system.

SPECIFICATIONS

- Vacuum rated to 1x10⁻⁸ Torr
- Leak rating : 1x10⁻⁹ std cc/s
- Maximum Working Temperature : 200°C with sealing material VITON

QUICK CONNECTORS



APPLICATIONS

All types of Instruments, Control panels, Hydraulic and Pneumatic system , Test stands, Gas supply system.

SPECIFICATIONS

- Maximum Working pressure : 3000 psi (207 bar) @ 100°F (38°C)
- Working Temperature Range : -10°F to 400°F (-23°C to 204°C)

FLEXIBLE METAL HOSES



APPLICATIONS

High Vibration , Misalignment, Piping Works for expansion, Moveable Equipment.

SPECIFICATIONS

- Maximum Working pressure : 1600 psi (110 bar) @ 70°F (21°C)
- Working Temperature Range : up to 1000°F (538°C)

Electric Division

Smart - eye Module & Smart Monitoring System



Smart-eye Module



Features

- Minimized through integration of measuring system and monitor in Bus-bar system.
- Real time display of the amount and cost of electricity used and the amount of carbon dioxide emissions.
- Possible to check the condition of the distributor and problems in it on real time at the central control station in a distant place.
- Secure to keep safely all data even in case of power failure.

Applications

- Micro-grid, data center, green ship & vessel
- Offshore oil platform power & control system
- Power plant & station, industrial buildings
- Residential market & buildings
- Needed monitoring electricity power

Representative example screen



- **Run screen**
Select the default setting and monitoring.
- Initial screen



- **Main screen**
Check the entire DATA screen.
- Each menu, go to the detail screen



- **Event screen**
Data can be checked for up to two years.
- All events that occurred two years in seconds can be saved



- **The total load by the screen**
Detail screen to move the load.
- Show all the essentials of the load

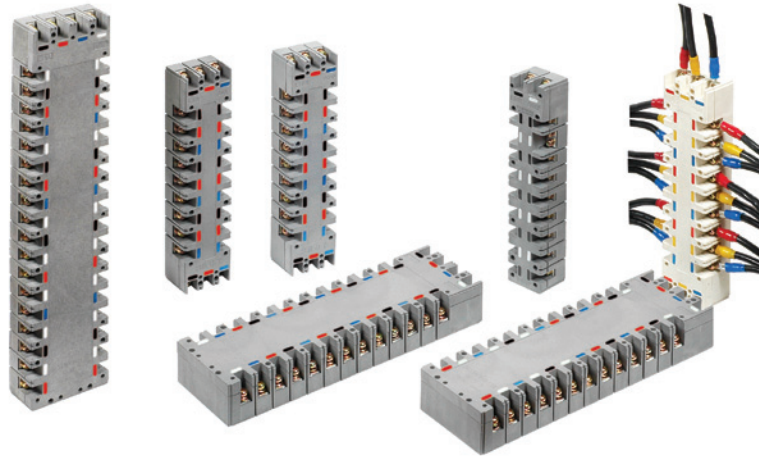


- **More by load screens**
Show details of the selected load.
- Select the load voltage, current, temperature, and active / reactive power, energy, rates, and display detailed information.



- **Daily power consumption screen**
Displays the month with electricity rates.
- Accumulated power, usage fees, daily usage, the display of projected usage.

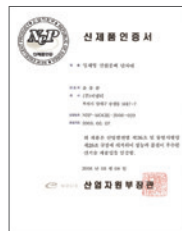
MCPD(Molded Case Power Distribution)



MCPD CERTIFICATES



CE Test Mark
Certification



Certification of New
Excellent Product



KESCO V-Check mark



New Technology of
Electric Power



Certification of
Registration



Certification Design
Registration



Certification of Patent

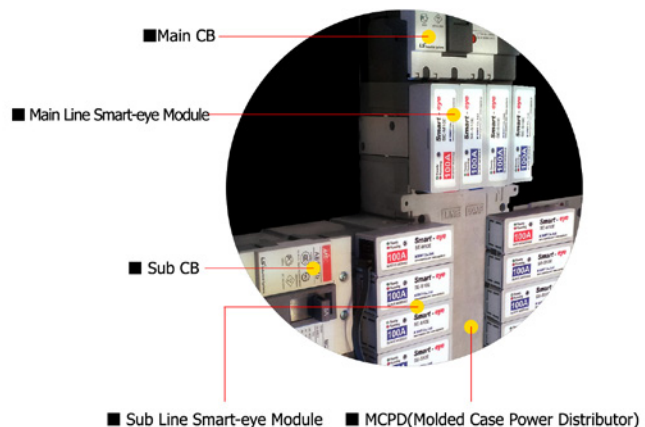


Certification Design
Registration



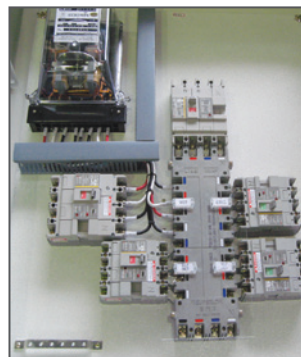
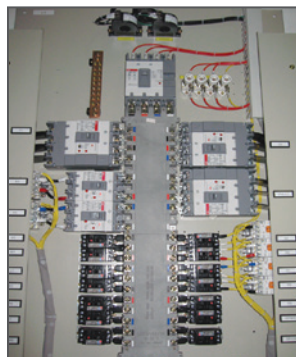
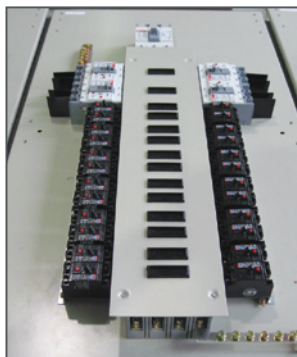
Certification of Excellent Product
of Public Procurement Service

MCPD & **Smart-eye** Module



SPIDER Power Distribution Board : **MCPD** + **Smart - eye**

MCPD APPLICATION PICTURES



Valve Series

- Key Operation Ball Valves
- Key Operation Needle Valves
- Ball Valves
- Integral Bonnet Needle Valves
- Union Bonnet Needle Valves
- Check Valves
- High Pressure Check Valves
- High Pressure Needle Valves
- Plug Valves
- Manifold Valves
- Vacuum Clamps
- Water Regulators
- Flexible Hoses
- Double Block & Bleed Valves
- Swing-Out Ball Valves
- Toggle Valves
- Bleed & Purge Valves
- Quick Connectors
- High Pressure Ball Valves
- Hydraulic Ball Valves
- Trunnion Ball Valves
- Rising Plug Valves
- Relief Valves
- Cryogenic Needle Valves
- Cryogenic Ball Valves
- Micron in-Line Filters
- Gauge Root Valves
- Hydraulic Flange and Components

Fitting Series

- Integration Tube Fittings
- Tube Fittings (Compression Type)
- Instrument Thread Fittings
- Forged Fittings
- Bite Type Tube Fittings (DIN2353)
- Bite Type Tube Fittings (JIS B2351)
- 37 Flared Tube Fittings (SAE J514)
- O-Ring Face Seal Fittings
- Hose Connectors & Push-On Hose Fittings

Electric Equipment

- MCPD(Molded Case Power Distributor)
- SPIDER
- Smart Eye Module

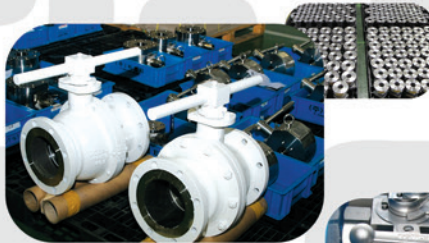
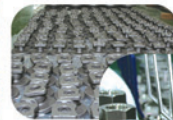
i-Fitting

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