

# BMT Company Profile



**SUPERLOK®**

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

## System Certificates (as of AUG 2021)



ISO 9001      ISO 14001      ISO 45001      KEPIC-MN      PED Module H



API 6D      ASME-N      ASME-NPT      ASME-NS



## Product (Type Approval) Certificates (as of AUG 2021)

PRODUCT/TYPE	DESCRIPTION/AUTHORITY
Cryogenic Ball Valves	BV (1/2", 1", 2", 2-1/2", 3", 4", 6", 10") / DNV·GL (1/2", 3/4", 1", 1-1/4", 1-1/2", 2", 4", 6", 10") / LR (1/2", 3/4", 1", 1-1/2", 2", 3", 4", 6", 10") / KR (1/2", 1", 2", 4")
Cryogenic Block&Bleed Valves	DNV·GL (1/2"), KR (1/2")
Cryogenic Needle Valves	BV (1/2"), KR (1/2", 3/4", 1"), ABS (1/2")
Cryogenic Globe Valves	BV (1/2", 2", 2-1/2", 4", 6", 8") / DNV·GL (1/2", 3/4", 1", 1-1/4", 1-1/2", 2", 3", 4", 6", 8", 10", 12") / LR (1/2", 3/4", 1", 1-1/2", 2", 4", 6", 8") / KR (1/2", 3/4", 2", 3", 10", 12")
Cryogenic Gate Valves	KR (2", 10")
Cryogenic Check Valves	KR (1/2", 2", 10")
Flanged Ball (SBVE) Valves	LR (3/4")
Tube Fittings	SUPERLOK Tube Fittings (ABS / BV / DNV·GL / NK / LR) / Bite Type Tube Fittings (DNV·GL / NK / LR / NK / ABS) / SAE 37° Flared Tube Fittings (DNV·GL)
CNG (ECE Regulation 110) Components	SUPERLOK Tube Fittings, High Pressure Ball/Check Valves, Trunnion Ball Valves, Receptacles, Filters
EC Type Approval of a Hydrogen Component	SUPERLOK Tube Fittings
CRN (Canadian Registration Number)	Instrument Tube Fittings, Pipe Fittings, Instrument Valves, Flange Adapters, Filters

## NOC/IOC Vendor Registration (as of MAR 2021)

Qatar Petroleum (QP)
Petrobras
Chevron
ExxonMobil
Abu Dhabi National Oil Company (ADNOC)*
Petroleum Development Oman (PDO)
ORPIC (Oman Refinery Company)
Kuwait National Petroleum Company (KNPC)
Kuwait Oil Company (KOC)
National Iranian Gas Company (NIGC)
National Iranian Oil Engineering & Construction Co. (NIOEC)
NIOC (National Iranian Oil Company)
NPC (National Petrochemical Company)
PT. PERTAMINA (LIMITED) RU Cilacap
SABIC (Saudi Basic Industries Corporation)
Iran Gas Engineering and development co. (IGEDC)
Iranian Central Oil Field Co. (ICOFC)
Iranian Offshore Oil Co. (IOOC)

\* For subsidiary companies: ADGAS, ADMA-OPCO, BOROUGE, FERTIL, TAKREER, ZADCO

## Major Milestones

<b>2021</b>	Factory 3 was established (Yangsan-si, Korea)
<b>2019</b>	Listed as an official supplier of UHP products for SAMSUNG Electronics
<b>2018</b>	Listed as an official supplier of: Cryogenic valves for SHI, HHI, and DSME; and UHP products for SK Hynix and LG Display
<b>2016</b>	World Class 300 Company Designation (Small/Medium Business Administration of S.Korea)
<b>2015</b>	Presidential Citation for Venture Vitalization (President of S.Korea)
<b>2013</b>	2nd Factory was established
<b>2012</b>	UHP Division was started up Cryogenic Valves were launched
<b>2011</b>	i-Fitting & Process Valve series were launched Partnership with Schneider Electric for Distribution Boards
<b>2009</b>	HQ and Factory (1st) were moved to Yangsan
<b>2008</b>	Tin Tower Order of Industrial Service Merit (President of S.Korea)
<b>2007</b>	Listed on KOSDAQ market
<b>2005</b>	BMT R&D Center was established Electric & Energy Division was started up
<b>1988</b>	Gyeong Pung Machinery Co. (current BMT Co., Ltd.) was founded

## CRYOGENIC BALL VALVES



### APPLICATIONS

Cryogenic liquids such as liquefied oxygen, nitrogen, argon

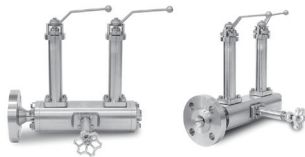
### SPECIFICATIONS

Size : 1/2 to 14 in.

Working Pressure : Class 150 to 2500

Temperature : down to -320°F (-196°C)

## CRYOGENIC DBB VALVES



### APPLICATIONS

Cryogenic liquids such as liquefied oxygen, nitrogen, argon

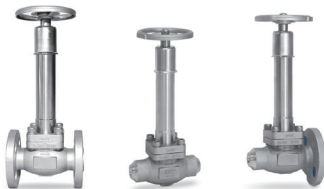
### SPECIFICATIONS

Size : 1/2 to 4 in.

Working Pressure : Class 150 to 2500

Temperature : down to -320°F (-196°C)

## CRYOGENIC NEEDLE VALVES



### APPLICATIONS

Cryogenic liquids such as liquefied oxygen, nitrogen, argon

### SPECIFICATIONS

Size : 1/2 to 1-1/2 in.

Working Pressure : Class 150 to 2500

Temperature : down to -320°F (-196°C)

## CRYOGENIC GLOBE VALVES



### APPLICATIONS

Cryogenic liquids such as liquefied oxygen, nitrogen, argon

### SPECIFICATIONS

Size : 1/2 to 14 in.

Working Pressure : Class 150 to 2500

Temperature : down to -320°F (-196°C)

## CRYOGENIC GATE VALVES



### APPLICATIONS

Cryogenic liquids such as liquefied oxygen, nitrogen, argon

### SPECIFICATIONS

Size : 2 to 8 in.

Working Pressure : Class 150 to 300

Temperature : down to -320°F (-196°C)

## CRYOGENIC CHECK VALVES



### APPLICATIONS

Cryogenic liquids such as liquefied oxygen, nitrogen, argon

### SPECIFICATIONS

Size : 1 to 14 in.

Working Pressure : Class 150 to 300

Temperature : down to -320°F (-196°C)

## BALL VALVES (FLOATING/TRUNNION MOUNTED)



### APPLICATIONS

Hydraulic system, Chemical / Petrochemical, Oil and Gas production

### SPECIFICATIONS

Size : 1/2 to 24 in.

Working Pressure : Class 150 to 2500

Temperature : -51 to 500°F (-46 to 260°C)

up to 842°F (450°C) with metal seat

## BLOCK & BLEED VALVES



### APPLICATIONS

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

### SPECIFICATIONS

Size : 1/2 to 16 in.

Working Pressure : Class 150 to 2500

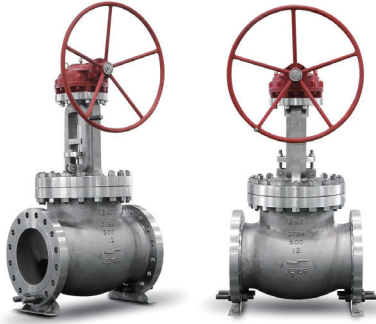
Temperature : -51 to 500°F (-46 to 260°C)

up to 842°F (450°C) with metal seat



# INDUSTRIAL VALVES

## GLOBE VALVES



- **APPLICATIONS**  
Hydraulic system, Chemical/Petrochemical, Oil & Gas production
- **SPECIFICATIONS**  
Size : 1/2 to 16 in.  
Working Pressure : Class 150 to 2500  
Temperature : -49 to 842°F (-45 to 450°C)

## SAE FLANGED BALL VALVES (SBVE)



- **APPLICATIONS**  
Hydraulic system
- **SPECIFICATIONS**  
Size : 1/2 to 5 in.  
Working Pressure : up to 6000 psi (414 bar) @100°F (38°C)  
Temperature : -4 to 392°F (-20 to 200°C)

## BALL VALVES (SBV120H)



- **APPLICATIONS**  
Instrument air line
- **SPECIFICATIONS**  
Size : 1/16 to 3/4 in., 3 to 12 mm  
Working Pressure : up to 3000 psi (206 bar) @100°F (38°C)  
Temperature : 50 to 150°F (10 to 66°C)

## BALL VALVES (SBV210)



- **APPLICATIONS**  
Instrument air line
- **SPECIFICATIONS**  
Size : 1/4 to 1 in., 6 to 16 mm  
Working Pressure : up to 1000 psi (69 bar) @100°F (38°C)  
Temperature : 0 to 450°F (-17 to 232°C) with PTFE seat

## BALL VALVES (SBVH360)



- **APPLICATIONS**  
High pressure instrument system, Hydraulic system
- **SPECIFICATIONS**  
Size : 1/4 to 1 in., 6 to 25 mm  
Working Pressure : up to 6000 psi (414 bar) @100°F (38°C)  
Temperature : -65 to 302°F (-54 to 150°C) with PCTFE seat  
-65 to 500°F (-54 to 260°C) with PEEK seat

## TRUNNION BALL VALVES (SBT)



- **APPLICATIONS**  
Instrument air lines, GAS & CNG industry, Sampling
- **SPECIFICATIONS**  
Size : 1/8 to 1/2 in., 6 to 12 mm  
Working Pressure : up to 10000 psi (689 bar) @100°F (38°C)  
Temperature : 0 to 450°F (-17 to 232°C)

## SWING-OUT BALL VALVES (SWB)



- **APPLICATIONS**  
Instrument air lines, Chemical process, Oil and Gas production
- **SPECIFICATIONS**  
Size : 1/4 to 2 in.  
Working Pressure : up to 3000 psi (206 bar) @100°F (38°C)  
Temperature : -20 to 450°F (-29 to 232°C)

## KEY OPERATION BALL VALVES (SBVL)



- **APPLICATIONS**  
Pneumatic system, Instrument system & isolation, General service
- **SPECIFICATIONS**  
Size : 1/4 to 1 in., 6 to 25 mm  
Working Pressure : up to 6000 psi (413 bar) @70°F (21°C)  
Temperature : 0 to 450°F (-17 to 232°C) with PTFE seat



## BALL VALVES TO DIN STANDARD (SBVD370)



### APPLICATIONS

Hydraulic lines

### SPECIFICATIONS

Size : 4mm to 42mm

Working Pressure : up to 7200 psi (496 bar) @100°F (38°C)

Temperature : -4 to 210°F (-20 to 100°C)

## FORGED HIGH PRESSURE BALL VALVES (SBVF360)



### APPLICATIONS

High pressure instrument lines, Oil & Gas production

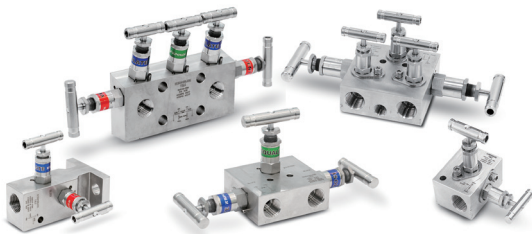
### SPECIFICATIONS

Size : 1/8 to 3/4 in., 3 to 16 mm

Working Pressure : up to 6000 psi (414 bar) @100°F (38°C)

Temperature : -65 to 200°F (-54 to 93°C) with PCTFE seat  
-65 to 350°F (-54 to 177°C) with PTFE seat

## MANIFOLD VALVES



### APPLICATIONS

Pressure switch, Pressure transmitters, Differential pressure instrumentation

### SPECIFICATIONS

Size : 1/4 to 1/2 in

Working Pressure : up to 6000 psi (414 bar) @100°F (38°C)

Temperature : -65 to 450°F (-54 to 232°C) with PTFE packing  
up to 1200°F (649°C) with Graphite packing

## MODULAR MOUNTING SYSTEM



### APPLICATIONS

General pressure and differential pressure measurements

### SPECIFICATIONS

Manifold (Standard) : 2- and 4-valve

Process/Vent Connection : G 1/4 Female, NPT 1/4 Female

Working Pressure : up to 6000 psi (414 bar) @38°C (100°F)

Temperature : up to 200°C (392°F)

## UNION BONNET NEEDLE VALVES (SUNV)



### APPLICATIONS

High pressure and high temperature services, Severe and corrosive services, Condensate sampling systems

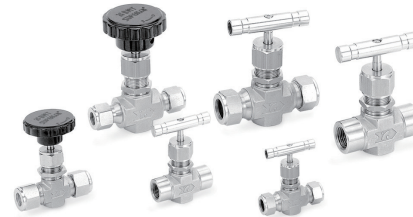
### SPECIFICATIONS

Size : 1/4 to 1 in., 6 to 25 mm

Working Pressure : up to 6000 psi (414 bar) @100°F (38°C)

Temperature : -65 to 450°F (-54 to 232°C) with PTFE packing  
-65 to 600°F (-54 to 315°C) with PEEK packing  
up to 1,200°F (649°C) with Graphite packing

## INTEGRAL BONNET NEEDLE VALVES (SINV)



### APPLICATIONS

Instrument isolation, General service, Test valves

### SPECIFICATIONS

Size : 1/8 to 3/4 in., 3 to 18 mm

Working Pressure : up to 5000 psi (345 bar) @100°F (38°C)

Temperature : -65 to 450°F (-54 to 232°C) with PTFE packing  
-65 to 600°F (-54 to 315°C) with PEEK packing

## INTEGRAL BONNET BAR STOCK NEEDLE VALVES (SBNV)



### APPLICATIONS

Instrument isolation, General service, Test valves

### SPECIFICATIONS

Size : 1/8 to 1 in., 6 to 25 mm

Working Pressure : up to 6000 psi (414 bar) @100°F (38°C)

Temperature : -65 to 450°F (-54 to 232°C) with PTFE packing  
-65 to 600°F (-54 to 315°C) with PEEK packing

## HIGH PRESSURE BAR STOCK NEEDLE VALVES (SHBNV)



### APPLICATIONS

High pressure service, Instrument isolation

### SPECIFICATIONS

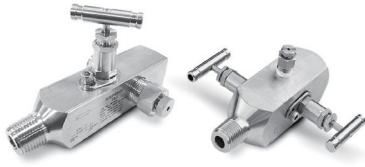
Size : 1/4 to 1/2 in.

Working Pressure : up to 10000 psi (689 bar) @100°F (38°C)

Temperature : -65 to 450°F (-54 to 232°C) with PTFE packing  
up to 1200°F (649°C) with Graphite packing

# INDUSTRIAL VALVES

## INSTRUMENTATION GAUGE VALVES (SGBV)



### APPLICATIONS

Pressure gauge, Primary isolation

### SPECIFICATIONS

Size : 1/2 to 3/4 in.

Working Pressure : up to 6000 psi (414 bar) @100°F (38°C)

Temperature : -65 to 450°F (-54 to 232°C) with PTFE packing  
up to 1200°F (649°C) with Graphite packing

## CHECK VALVES (SPCV)



### APPLICATIONS

Instrument lines, Prevention of reversed flow, Uni-directional flow control

### SPECIFICATIONS

Size : 1/8 to 1 in., 6 to 25mm

Working Pressure : up to 3000 psi (206 bar) @100°F (38°C)

Cracking Pressure : 1/3 to 25 psi (0.03 to 1.7 bar)

Temperature : -10 to 375°F (-23 to 191°C) with Viton seal

## ADJUSTABLE CHECK VALVES (SACV)



### APPLICATIONS

Pressure switch, Pressure transmitters, Differential pressure instrumentation

### SPECIFICATIONS

Size : 1/4 to 3/8 in., 6 to 8mm

Working Pressure : up to 3000 psi (206 bar)

Cracking Pressure : 3 to 600 psi (0.2 to 14.3 bar)

Temperature : -10 to 375°F (-23 to 191°C) with Viton seal

## ONE-PIECE CHECK VALVES (SOCV)



### APPLICATIONS

Pressure switch, Pressure transmitters, Differential pressure instrumentation

### SPECIFICATIONS

Size : 1/4 to 3/4 in.

Working Pressure : up to 3000 psi (206 bar)

Cracking Pressure : 1/3 to 25 psi (0.02 to 1.7 bar)

Temperature : -10 to 375°F (-23 to 191°C) with Viton seal

## ONE-PIECE ADJUSTABLE CHECK VALVES (SOACV)



### APPLICATIONS

Pressure switch, Pressure transmitters, Differential pressure instrumentation

### SPECIFICATIONS

Size : 1/4 to 1/2 in.

Working Pressure : up to 3000 psi (206 bar)

Cracking Pressure : 3 to 600 psi (0.2 to 41.3 bar)

Temperature : -10 to 375°F (-23 to 191°C) with Viton seal

## HIGH PRESSURE CHECK VALVES (SHCV)



### APPLICATIONS

Prevention of reversed flow, High Pressure characteristics

### SPECIFICATIONS

Size : 1/8 to 1 in., 6 to 25 mm

Working Pressure : up to 6000 psi (414 bar) @100°F (38°C)

Cracking Pressure : 1/3 to 25 psi (0.03 to 1.7 bar)

Temperature : -10 to 375°F (-23 to 191°C) with Viton seal

## PLUG VALVES (SPV130)



### APPLICATIONS

Control panels, Specialty gas systems, Chemical delivery

### SPECIFICATIONS

Size : 1/8 to 1/2 in., 6 to 12 mm

Working Pressure : up to 3000 psi (206 bar) @100°F (38°C)

Temperature : -10 to 400°F (-23 to 204°C)

## RISING PLUG VALVES (SRPV)



### APPLICATIONS

Lines containing small solid impurities, Viscous fluids or slurries,  
Systems requiring flow regulation and full flow capabilities

### SPECIFICATIONS

Size : 1/4 to 3/4 in.

Working Pressure : up to 6000 psi (414 bar) @100°F (38°C)

Temperature : -20 to 400°F (-28 to 204°C)

# INDUSTRIAL VALVES

## TOGGLE VALVES (STV)



### APPLICATIONS

Test panels, Purge systems, Rapid open/close systems

### SPECIFICATIONS

Size : 1/8 to 1/2 in., 3 to 12mm

Working Pressure : up to 300 psi (20.6 bar) @100°F (38°C)

Temperature : -20 to 200°F (-28 to 93°C)

## INDUSTRIAL EXCESS FLOW VALVES (SEFV)



### APPLICATIONS

Fuel system, Gas system, Hydraulic & Pneumatic system

### SPECIFICATIONS

Size : 1/8 to 1/2 in., 6 to 12 mm

Working Pressure : up to 6000 psi (414 bar) @100°F (38°C)

Temperature : -10 to 400°F (-23 to 204°C) with Viton seal

## BLEED VALVES (SBLV)



### APPLICATIONS

Venting of instrument system, Hydraulic & Pneumatic system

### SPECIFICATIONS

Size : 1/8 to 3/4 in.

Working Pressure : 10000 psi (689 bar) @100°F (38°C)

Temperature : -65 to 850°F (-54 to 454°C)

## PURGE VALVES (SPUV)



### APPLICATIONS

Purging of instrument system, Hydraulic & Pneumatic system

### SPECIFICATIONS

Size : 1/4 to 1/2 in.

Working Pressure : up to 4000 psi (275 bar) @100°F (38°C)

Temperature : -65 to 600°F (-54 to 315°C)

## RELIEF VALVES (SRVL & SRVH)



### APPLICATIONS

Overpressure protection

### SPECIFICATIONS

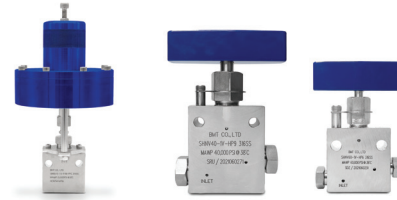
Size : 1/4 to 1/2 in., 6 to 12 mm

Working Pressure : up to 300 psi (21 bar) @100°F (38°C) for SRVL  
up to 6000 psi (414 bar) @100°F (38°C) for SRVH

Opening Pressure : 10 to 250 psi (0.69 to 17.2 bar) for SRVL  
225 to 6000 psi (15.5 to 414 bar) for SRVH

Temperature : -10 to 400°F (-23 to 204°C)

## MEDIUM/HIGH PRESSURE NEEDLE VALVES (SMNV & SHNV)



### APPLICATIONS

Medium/High pressure equipment, Pumping system, Hydraulic intensifier, Water blasting

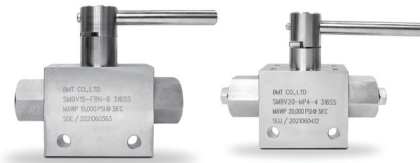
### SPECIFICATIONS

Size : 1/4 to 1 in.

Working Pressure : up to 20000 psi (1380 bar) @72°F (22°C) for SMNV  
up to 60000 psi (4137 bar) @72°F (22°C) for SHNV

Temperature : 0 to 450°F (-17 to 232°C) with PTFE packing  
up to 1200°F (648°C) with optional grafoil packing

## MEDIUM PRESSURE BALL VALVES (SMBV)



### APPLICATIONS

Medium pressure equipment, Pumping system, Hydraulic intensifier, Water blasting

### SPECIFICATIONS

Size : 1/4 to 1 in.

Working Pressure : up to 20000 psi (1380 bar) @72°F (22°C)

Temperature : 0 to 400°F (-17.8 to 204°C)

## MEDIUM/HIGH PRESSURE CHECK VALVES (SMPCV & SHPCV)



### APPLICATIONS

Prevention of reversed flow, Medium/High pressure characteristics

### SPECIFICATIONS

Size : 1/4 to 1 in.

Working Pressure : up to 20000 psi (1380 bar) @72°F (22°C) for SMPCV  
up to 60000 psi (4137 bar) @72°F (22°C) for SHPCV

Cracking pressure : 14 psig ~ 26 psig (0.966 bar ~ 1.794 bar)

Temperature : • O-ring type : -50°F (-45°C) to 500°F (260°C)

• Ball type : -110°F (-79°C) to 1200°F (649°C)

## MEDIUM/HIGH PRESSURE RELIEF VALVES (SMRV & SHRV)



### APPLICATIONS

Over pressure protection

### SPECIFICATIONS

Size : 9/16 in.

Working Pressure : up to 20000 psi (1380 bar) @72°F (22°C) for SMRV  
up to 60000 psi (4137 bar) @72°F (22°C) for SHRV

Temperature : 32°F (0°C) to 400°F (204°C) for SMRV

-110°F (-79°C) to 500°F (260°C) for SHRV



# INDUSTRIAL FITTINGS

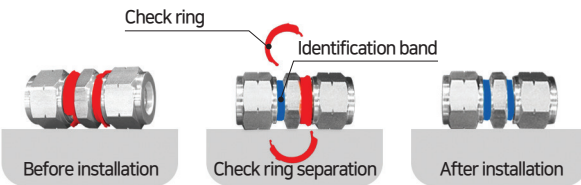
## i-Fitting

SUPERLOK Tube Fittings & Valves with i-Fitting



### i-Fitting Features

- i-Fitting components include: body, front & back ferrule, nut, identification band, and check ring
- The check ring is essentially a built-in gap gauge, which separates when a fitting is tightened to the point of perfect compression
- Solves over- and under-tightening problems
- Increases installer safety in high pressure and dangerous chemical environments
- Improves productivity and reduces costs
- Industry changing, patented design by BMT

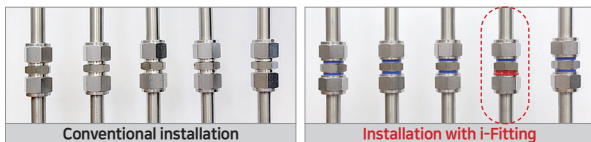


### Why i-Fitting is the Right Choice?

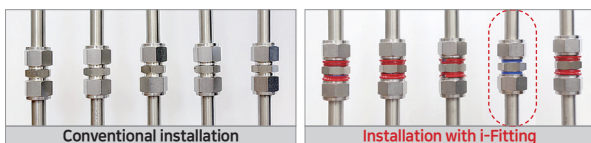
**PERFECT CONNECTION** can be **SEEN, HEARD, FELT** with the **SAFEST** fitting in the market!!

Most tube fitting leaks are caused by improper installation. i-Fittings, developed by BMT, ensures a safe, quick, and precise connection every time. i-Fittings eliminate errors during installation by incorporating a patented check ring on every fitting. The check rings, which function as a built-in gap gauge, separate as a fitting is tightened to the exact point of perfect compression. This quality control and safety feature indicates that a fitting has been tightened properly and is not easily confused with other fittings on a job that have not been tightened.

#### Q1 Which one requires more tightening?



#### Q2 Which one is completely installed from pre-assembly?



### SUPERLOK TUBE FITTINGS

SINGLE/DOUBLE FERRULE COMPRESSION TYPE



#### APPLICATIONS

Research, Analytical and process instrumentation, Oil and gas, Power, Petrochemical, Semiconductor

#### SPECIFICATIONS

Size : 1/16 to 2 in., 2 to 38 mm  
Working Pressure : governed by the pressure rating of tubing  
Temperature : -320 to 1200°F (-196 to 649°C)

### DIN TUBE FITTINGS (DIN2353 BITE-TYPE)



#### APPLICATIONS

Hydraulic, Compressed air, Fuel heating, Automotive

#### SPECIFICATIONS

Size : 4 to 42 mm  
Working Pressure : PN 100 bar for LL (Very Light)  
PN 315 bar for L (Light)  
PN 630 bar for S (Heavy)  
Temperature : -76 ~ 752°F (-60 ~ 400°C)

### JIS TUBE FITTINGS (JIS B2351 BITE-TYPE)



#### APPLICATIONS

Hydraulic, Compressed air, Fuel heating, Automotive

#### SPECIFICATIONS

Size : 1/8 to 1-1/2 in., 4 to 50 mm  
Working Pressure : up to 7250 psi (500 bar)  
Temperature : -76 ~ 752°F (-60 ~ 400°C)

# INDUSTRIAL FITTINGS

## 37° FLARED TUBE FITTINGS TO SAE J514



### APPLICATIONS

Hydraulic system

### SPECIFICATIONS

Size : 1/8 to 2 in., 2 to 50 mm

Working Pressure : 8700 psi (600 bar) @100°F (38°C) with O-Ring

5000 psi (345 bar) @100°F (38°C) without O-Ring

Temperature : up to 800°F (427°C)

## O-RING FACE SEAL FITTINGS



### APPLICATIONS

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

### SPECIFICATIONS

Size : 1/8 to 1 in.

Working Pressure : up to 13000 psi (910 bar) @100°F (38°C)

Temperature : up to 550°F (287°C)

## INSTRUMENTATION THREAD FITTINGS



### APPLICATIONS

Process, power, instrumentation and general plumbing

### SPECIFICATIONS

Size : 1/8 to 1 in.

Working Pressure : 10000 psi (689 bar) @100°F (38°C)

Temperature : -320 to 1000°F (-196 to 537°C)

## FORGED FITTINGS



### APPLICATIONS

Hydraulic, Compressed air, Fuel heating, Automotive applications

### SPECIFICATIONS

Size : up to 4 in.

Working Pressure : 2000, 3000, 6000, 9000 lbs

Temperature : up to 1000°F (538°C)

## DIELECTRIC FITTINGS



### APPLICATIONS

Isolation of monitoring instruments from the effects of electric current

### SPECIFICATIONS

Size : 6 to 12 mm

Working Pressure : up to 5000 psi (206 bar)

Temperature : -40 to 200°F (-40 to 93°C)

Electrical Resistance of Insulators :  $10 \times 10^6 \Omega$  at 10 V (dc) at 70°F (20°C)

## PUSH-ON HOSE FITTINGS



### APPLICATIONS

Air break system, Air conditioning system, Automotive applications

### SPECIFICATIONS

Size : 6 to 25 mm

Working Pressure : up to 350 psi (24 bar) @100°F (38°C)

Temperature : -40 to 212°F (-40 to 100°C)

## PRE-FORMING FITTINGS

· BMT developed & patented design

· Medium-pressure double ferrule tube fittings



### APPLICATIONS

Suitable for applications requiring: higher pressure, excellent corrosion-resistance, special metals and alloys, and/or heavy-wall tubing

### SPECIFICATIONS

Size : 1/4 to 1 in., 6 to 25 mm

Working Pressure : up to 15000 psi (1,034 bar)

Temperature : -423 to 1200°F (-252 to 649°C)

Material : Titanium, Super Duplex, Alloy C-276/400/20, 316 Stainless Steel

## MEDIUM/HIGH PRESSURE FITTINGS



### APPLICATIONS

Medium pressure equipment, Pumping system, Hydraulic intensifier, Water blasting, Test stands

### SPECIFICATIONS

Size : 1/4 to 1 in.

Working Pressure : up to 60000 psi (4137 bar)

Temperature : -423 to 1200°F (-252 to 649°C)

# OTHER INDUSTRIAL PRODUCTS

## BREAK-AWAY COUPLINGS



### APPLICATIONS

Emergency disconnect, safe transfer of media (including liquefied gases)

### SPECIFICATIONS

Size: up to 8 in.  
Working Pressure: up to 362.5 psi (25 bar)  
Temperature: Down to -321°F (-196°C)  
Breaking Force : 13 KN

## MICRON FILTERS (SIF, STF)



### APPLICATIONS

Protection of instrument system

### SPECIFICATIONS

Working Pressure : up to 3000 psi (207 bar) @70°F (21°C) for SIF (In-line)  
up to 6000 psi (414 bar) @70°F (21°C) for STF (Tee)  
Temperature : -20 to 900°F (-29 to 482°C) for SIF (In-line)  
-40 to 250°F (-40 to 121°C) for STF (Tee)  
Filtering Range : 0.5 to 90 Micron

## HYDRAULIC FLANGES



### APPLICATIONS

High pressure hydraulic system

### SPECIFICATIONS

Working Pressure : up to 6000 psi (413 bar)  
Temperature : -20 to 1000°F (-29 to 538°C)

## VACUUM CLAMPS & ISO-KF COMPONENTS



### APPLICATIONS

Vacuum system

### SPECIFICATIONS

Vacuum rated to  $1 \times 10^{-9}$  Torr  
Leak rating :  $1 \times 10^{-9}$  std cc/s

## INSTRUMENTATION QUICK CONNECTORS (SQC)



### APPLICATIONS

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

### SPECIFICATIONS

Working Pressure : 3000 psi (207 bar) @100°F (38°C)  
Temperature : 400°F (204°C) with VITON

## HYDRAULIC QUICK COUPLINGS



### APPLICATIONS

Easy connection/disconnection in hydraulic systems, general industrial applications

### SPECIFICATIONS

Working Pressure : 5000 psi (345 bar) @100°F (38°C)  
Temperature : -15 to 400°F (-26 to 204°C)  
Maximum Working Temperature : 400°F (204°C) with VITON

## TUBING



### APPLICATIONS

A variety of analytical and process instrumentation applications

### SPECIFICATIONS

Type : Seamless Coiled/Straight Tubing, Pre-insulated Tubing  
Size : 1/8 to 2 in., 3 to 25 mm

## FLEXIBLE METAL HOSES



### APPLICATIONS

High vibration, Misalignment, Piping works for expansion, Movable equipment

### SPECIFICATIONS

Pressure Rating : up to 1600 psi (110 bar) @100°F (38°C)  
Temperature : -325 to 800°F (-200 to 426°C)

## SWAGING UNITS



### APPLICATIONS

Flaring, Cutting ring assembly & Ferrule swaging

### SPECIFICATIONS

Tube Diameter Range (OD) : Maximum 42mm for Metric Tube  
Maximum 2" for Fractional Tube

## TUBE BENDERS



### APPLICATIONS

Tube bending

### SPECIFICATIONS

Tube Diameter Range (OD) : 1/4 to 1/2 in.

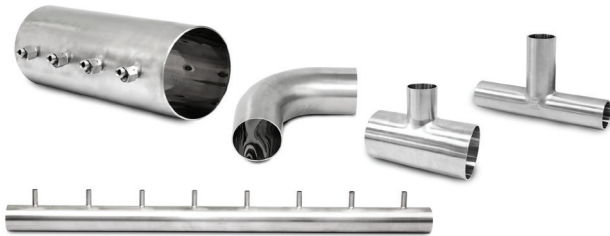


## WELD & METAL SEAL FITTINGS



Size : 1/8 to 1 in.  
 Working Pressure : governed by the pressure rating of tubing  
 Temperature : up to 1000°F (537°C)  
 Grades : BA, EP

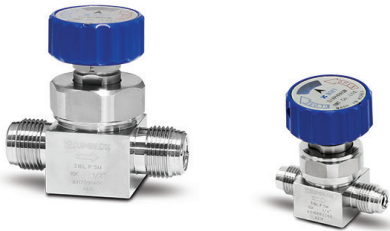
## BEND FITTINGS



Size : Pipe 8 to 550A, Tube 1/4 to 6 in.  
 Working Pressure : governed by the pressure rating of tubing  
 Temperature : up to 1000°F (537°C)  
 Grades : AP, MP, BA, EP

## DIAPHRAGM VALVES (DV1)

LOW PRESSURE · MANUAL · STANDARD



Size (Cv) : 1/4 to 3/4 in. (0.3 to 0.7)  
 Working Pressure : up to 145 psi (10 bar)  
 Temperature : 14 to 302°F (-10 to 150°C)  
 Grades : AP, MP, BA, EP

## DIAPHRAGM VALVES (DV2)

LOW PRESSURE · MANUAL · FORGED



Size (Cv) : 1/4 to 3/4 in. (0.3 to 0.7)  
 Working Pressure : up to 145 psi (10 bar)  
 Temperature : 14 to 302°F (-10 to 150°C)  
 Grades : AP, MP, BA, EP

## DIAPHRAGM VALVES (PDV1)

LOW PRESSURE · PNEUMATIC · STANDARD



Size (Cv) : 1/4 to 3/4 in. (0.3 to 0.7)  
 Working Pressure : up to 145 psi (10 bar)  
 Temperature : 14 to 302°F (-10 to 150°C)  
 Grades : AP, MP, BA, EP

## DIAPHRAGM VALVES (SODV1)

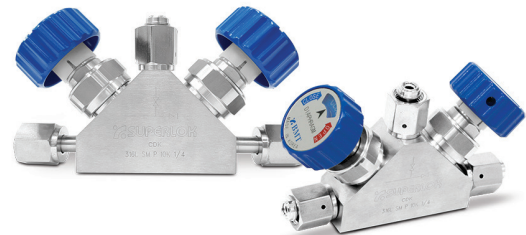
LOW PRESSURE · MANUAL · SHUT-OFF



Size (Cv) : 1/4" to 3/4" (0.3 to 0.7)  
 Working Pressure : up to 145 psi (10 bar)  
 Temperature : 14 to 302°F (-10 to 150°C)  
 Grades : AP, MP, BA, EP

## DIAPHRAGM VALVES (BDV1)

LOW PRESSURE · MANUAL · BLOCK



Size (Cv) : 1/4 in. (0.3), 1/2 in. (0.7)  
 Working Pressure : up to 145 psi (10 bar)  
 Temperature : 14 to 302°F (-10 to 150°C)  
 Grades : AP, MP, BA, EP

## DIAPHRAGM VALVES (PBDV1)

LOW PRESSURE · PNEUMATIC · BLOCK

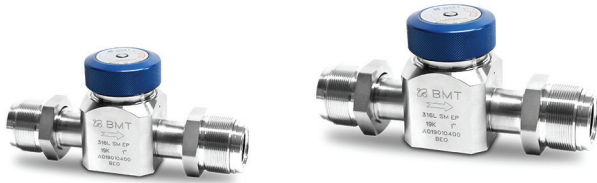


Size (Cv) : 1/4 in. (0.3), 1/2 in. (0.7)  
 Working Pressure : up to 145 psi (10 bar)  
 Temperature : 14 to 302°F (-10 to 150°C)  
 Grades : AP, MP, BA, EP

# UHP PRODUCTS

## DIAPHRAGM VALVES (HFDV1)

LOW PRESSURE · MANUAL · HIGH FLOW



Size (Cv) : 1 in. (3.5)  
Working Pressure : up to 270 psi (18.6 bar)  
Temperature : 14 to 176°F (-10 to 80°C)  
Grades : AP, MP, BA, EP

## DIAPHRAGM VALVES (HDV1)

HIGH PRESSURE · MANUAL · STANDARD



Size (Cv) : 1/4 in. (0.1), 1/2 in. (0.27)  
Working Pressure : up to 3045 psi (210 bar)  
Temperature : 14 to 302°F (-10 to 150°C)  
Grades : AP, MP, BA, EP

## DIAPHRAGM VALVES (HPDV1)

HIGH PRESSURE · PNEUMATIC · STANDARD



Size (Cv) : 1/4 in. (0.1), 1/2 in. (0.27)  
Working Pressure : up to 3045 psi (210 bar)  
Temperature : 14 to 302°F (-10 to 150°C)  
Grades : AP, MP, BA, EP

## DIAPHRAGM VALVES (HPFPDV1)

HIGH PRESSURE · PNEUMATIC · HIGH FLOW



Size (Cv) : 1/2 in. (0.5)  
Working Pressure : up to 3,045 psi (210 bar)  
Temperature : 14 to 104 °F (-10 to 40°C)  
Grades : AP, MP, BA, EP

## BELLOWS VALVES (BV1)

LOW PRESSURE · MANUAL · STANDARD



Size (Cv) : 1/4 to 3/4 in. (0.36 to 2.6)  
Working Pressure : up to 145 psi (10 bar)  
Temperature : 14 to 302°F (-10 to 150°C)  
Grades : AP, MP, BA, EP

## BELLOWS VALVES (PBV1)

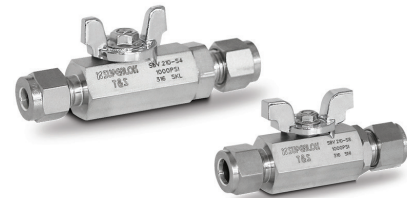
LOW PRESSURE · PNEUMATIC · STANDARD



Size (Cv) : 1/4 to 1/2 in. (0.36 to 1.1)  
Working Pressure : up to 145 psi (10 bar)  
Temperature : 14 to 302°F (-10 to 150°C)  
Grades : AP, MP, BA, EP

## CLEAN BALL VALVES (SBV210)

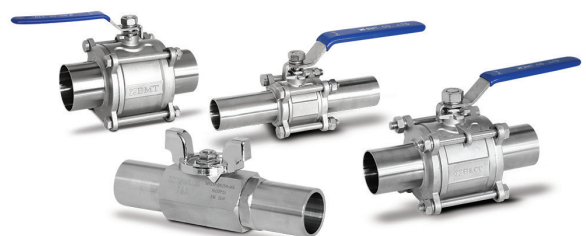
HEX TWO-PIECE



Size (Cv) : 1/4 to 1 in. (1.25 to 16)  
Working Pressure : up to 1000 psi (69 bar)  
Temperature : 14 to 176°F (-10 to 80°C)  
Grades : AP, MP, BA, EP

## CLEAN BALL VALVES (BLV1)

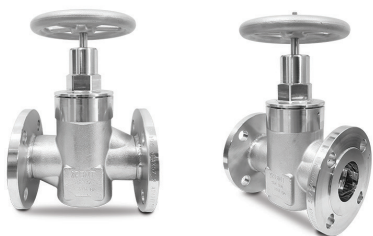
THREE-PIECE



Size (Cv) : 15A to 100A (41 to 2317)  
Working Pressure : up to 145 psi (10 bar)  
Temperature : 14 to 176°F (-10 to 80°C)  
Grades : AP, MP, BA, EP

## BELLOWS VALVES (BV2)

LOW PRESSURE · MANUAL · FORGED



Size (Cv) : 1 to 2 in. (4.1 to 16), 15 to 50A (2.9 to 21)  
 Working Pressure : up to 145 psi (10 bar)  
 Temperature : 14 to 176°F (-10 to 80°C)  
 Grades : AP, MP, BA, EP

## BELLOWS VALVES (PBV2)

LOW PRESSURE · PNEUMATIC · FORGED



Size (Cv) : 3/4 to 2 in. (2.9 to 16), 15 to 50A (2.9 to 21)  
 Working Pressure : up to 145 psi (10 bar)  
 Temperature : 14 to 176°F (-10 to 80°C)  
 Grades : AP, MP, BA, EP

## BELLOWS VALVES (BV3)

LOW PRESSURE · MANUAL · CASTING



Size (Cv) : 65 to 550A (81 to 3400)  
 Working Pressure : up to 145 psi (10 bar)  
 Temperature : 14 to 176°F (-10 to 80°C)  
 Grades : AP, MP, BA, EP

## CHECK VALVES (CV1)

LOW PRESSURE · MANUAL · STANDARD



Size (Cv) : 1/4 to 1/2 in. (0.55 to 0.7)  
 Working Pressure : up to 3000 psi (206 bar)  
 Nominal Reseal Pressure : 4 psi (0.276 bar)  
 Nominal Cracking Pressure : 2 psi (0.138 bar)  
 Temperature : 14 to 176°F (-10 to 80°C)  
 Grades : AP, MP, BA, EP

## REGULATORS (PR1, PR2)



Size (Cv) : 1/4 in. (0.06 or 0.2), 1/2 in. (0.5)  
 Max. Rated Inlet Pressure : 600, 1000, 3500 psi (41.4, 69, 241 bar)  
 Outlet Pressure Range : 30, 60, 100, 150, 250 psi (2.1, 4.1, 6.9, 10.3, 17.3 bar)  
 Temperature : -15 to 302°F (-26 to 150°C)  
 Grades : BA, EP

## IGS MANUAL VALVES (SHUTOFF TYPE)



Size (Cv) : 1.125" (0.2), 1.5" (0.2)  
 Max. Working Pressure : 1 Mpa  
 Working Temperature : PCTFE -10 to 80 °C (14 to 176 °F)  
 PFA -10 to 150 °C (14 to 302 °F)  
 Grade : EP

## IGS PNEUMATIC VALVES (NORMALLY CLOSE)



Size (Cv) : 1.125" (0.2), 1.5" (0.2)  
 Max. Working Pressure : 1 Mpa  
 Actuator Operating Pressure : 0.4 ~ 0.6 Mpa  
 Working Temperature : PCTFE -10 to 80 °C (14 to 176 °F)  
 PFA -10 to 150 °C (14 to 302 °F)  
 Grade : EP

## IGS REGULATORS



Size (Cv) : 1.125" (0.08), 1.5" (0.08)  
 Max. Rated Inlet Pressure : 150 psig (10.3 bar)  
 Outlet Pressure Ranges : 3 to 30, 60, 100 psig (0.2 to 2.1, 4.1, 6.9 bar)  
 Design Proof Pressure : 150% of Maximum rated pressure  
 Operating Temperature : -40 to 71 °C (-40 to 159.8°F)  
 Grade : EP



## METAL CLAD SWITCHGEAR (MCSG)

BMT's Metal Clad Switchgear (MCSG) has the **highest level of safety** and **reliability features**. The segregation between compartments (Circuit Breaker, Main Bus Bar, Cable, and Low Voltage compartments) using metal partitions minimizes the spread of internal arc / explosion accident to peripheral devices.

- ✓ Reduced installation space
- ✓ Enhanced safety / reliability
- ✓ Convenient maintenance and inspection
- ✓ Digitalization of protection/control systems
- ✓ Reliable design and performance



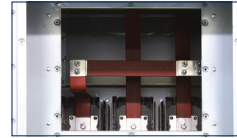
**Low Voltage Compartment**

- Enough space for connection, disconnection and testing of internal wiring.
- Steel construction of the panel connecting wiring duct (at the top of the panel).



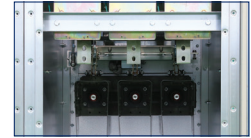
**CB Compartment**

- The positions of the breaker can be flipped (Run → Test) while the door is closed.
- Inspection window for circuit breakers on the door.
- Strong internal pressure structure of the hinges and lockers.
- Metal Shutter and Shutter Padlock for safe repair and maintenance.
- IP cover on the front of the breaker.



**Bus Compartment**

- The isolated structure of the busbar compartment prevents the fault spread of accident to adjacent switchgears.



**Earthing Switch**

- A device to ensure the safety of maintenance by discharging the load side current in the Test and Drawout position.



**Cable Compartment**

- Sufficient spaces for main circuit wiring.
- Insulation cap for dielectric of Earthing Switch.
- Bottom-entry incoming & outgoing (Top-entry is not available).



**Ventilation Cover**

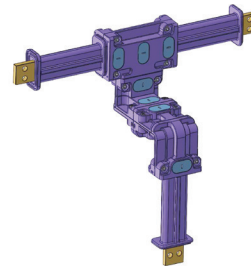
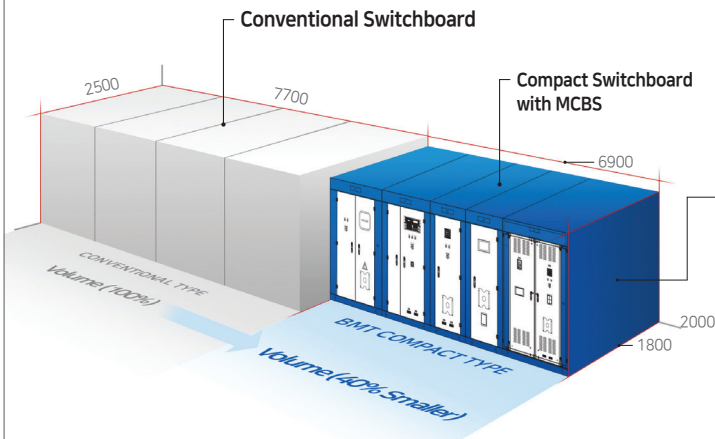
## COMPACT SWITCHBOARDS

**Volume Reduced by 40% & Busbar Saved by 10%**

**BMT Compact Switchboard dramatically reduces spatial constraints** of power receiving facilities and electrical rooms in factories, buildings, etc.

BMT compact switchboards are designed and manufactured safer and more compact with MCBS, BMT's own patented technology. With a seismic design and type certified quality, BMT compact switchboards are suitable for the requirements of various industrial fields including power generation facilities, plants, and construction.

- ✓ Outstanding safety/convenience
- ✓ Compact Structure
- ✓ Convenient Operability and Expandability
- ✓ Certified Product with Patented Technologies



MCBS Basic Structure



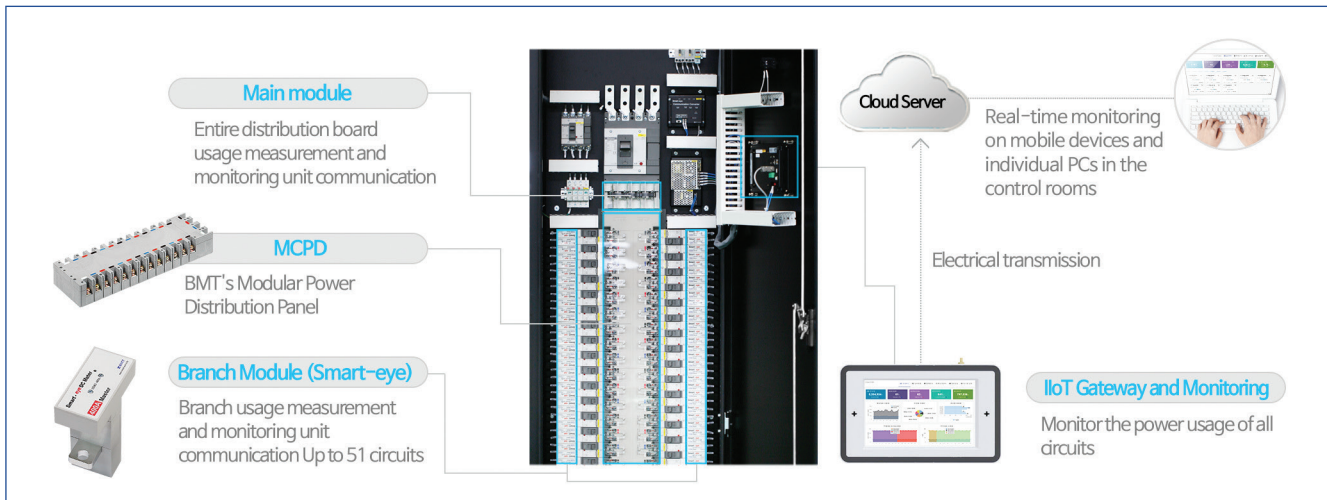
Interior of Compact Switchboard (MCBS applied)

## SMART DISTRIBUTION BOARDS

**BMT Smart Distribution Board is an optimum system to increase power energy efficiency**

BMT Smart Distribution Boards use MCPD and Smart-eye technologies – BMT’s own patented technologies – to offer values differentiated from conventional distribution boards. Smart-eye provides solutions for energy monitoring and control; and MCPD simplifies the existing complex and costly busbar assembly process and enhances the safety.

- ✓ Easy and Simple Installation and Maintenance
- ✓ Safety Accident Prevention
- ✓ Smart Electric Power Management: Power Quality Control and Energy Savings (up to 30%)
- ✓ Interfaces between Various Systems such as EMS, BAS, and Enterprise Management System

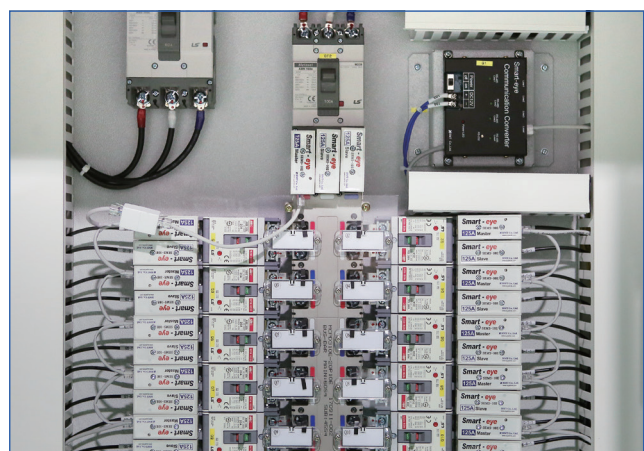
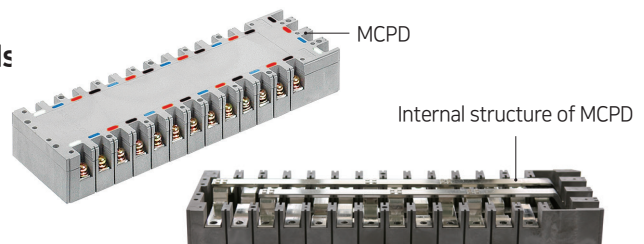


Conceptual Diagram of Smart Distribution Boards

## MCPD (MOLDED CASE POWER DISTRIBUTOR)

**Essential for more convenient, safe easy-to-use, and economical distribution boards and switchboards**

MCPD is a new-concept power distribution unit that replaces the traditional complex busbars (arranged vertically and horizontally) by one integrated configuration where busbars are pre-configured inside one Molded Case, an insulation case uniformized, modularized, and standardized. This feature enables simple and excellent production of distribution boards and switchboards without complex and expensive busbar assembly processes, and allows easy repair and maintenance.



Interior of MCPD installed distribution board

- ✓ Excellent Usability
- ✓ Uniformization and Standardization
- ✓ Economical
- ✓ High Electrical Safety
- ✓ Compact and Perfect
- ✓ Compatibility and Applicability
- ✓ Suitable for Emergency Construction Patented Product

## Fittings & Valves

PROCESS VALVE



INSTRUMENTATION FITTING & VALVE



ULTRA HIGH PURITY FITTING & VALVE

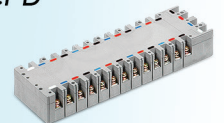


## Electric & Energy

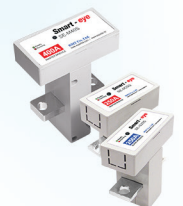
SWITCHBOARD



DISTRIBUTION BOARD & MCPD



ENERGY MANAGEMENT SOLUTION



# BMT Co., Ltd. BUSINESSES

PROUDLY MADE IN KOREA

[www.superlok.com](http://www.superlok.com)