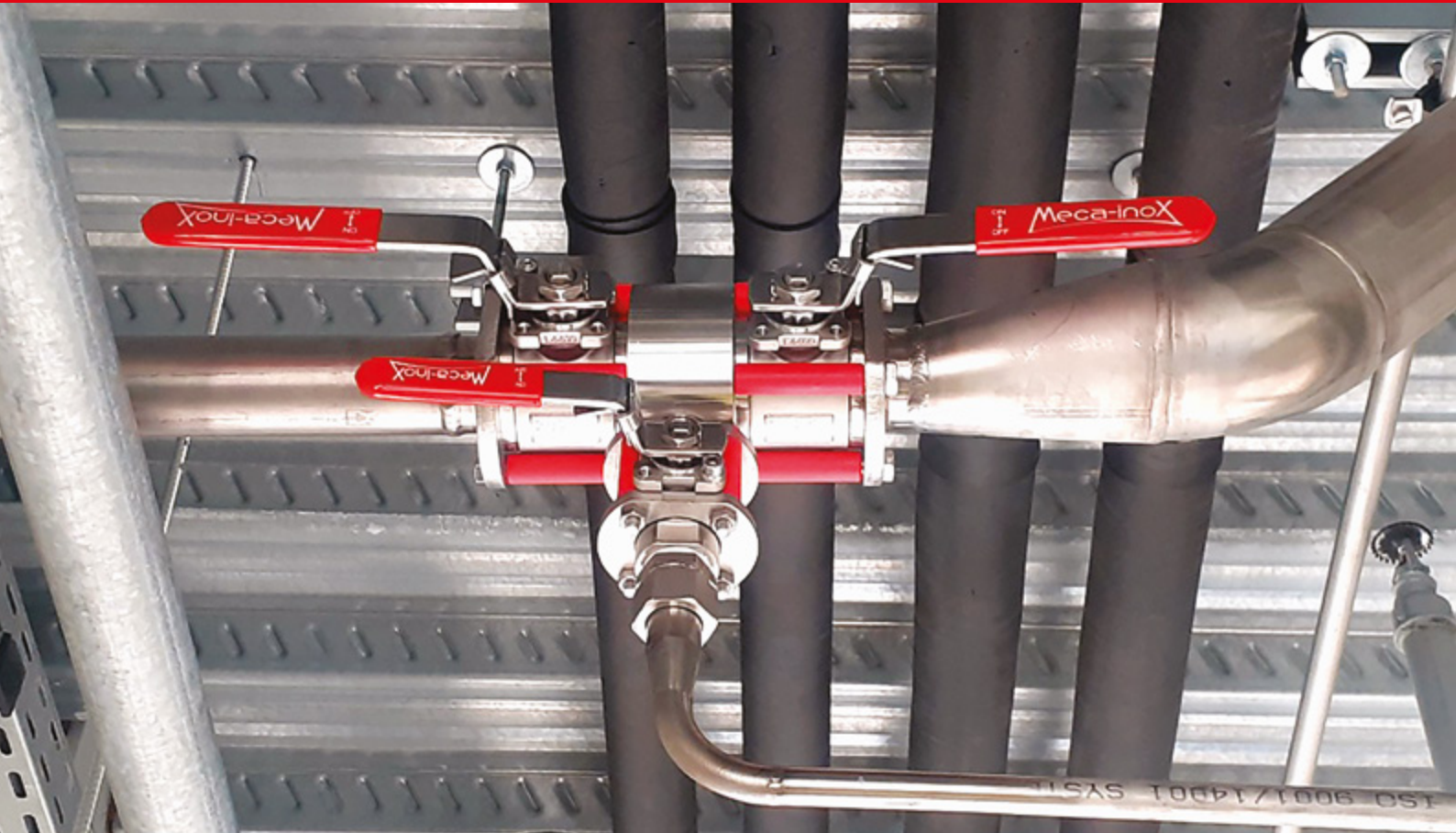


Meca-inox

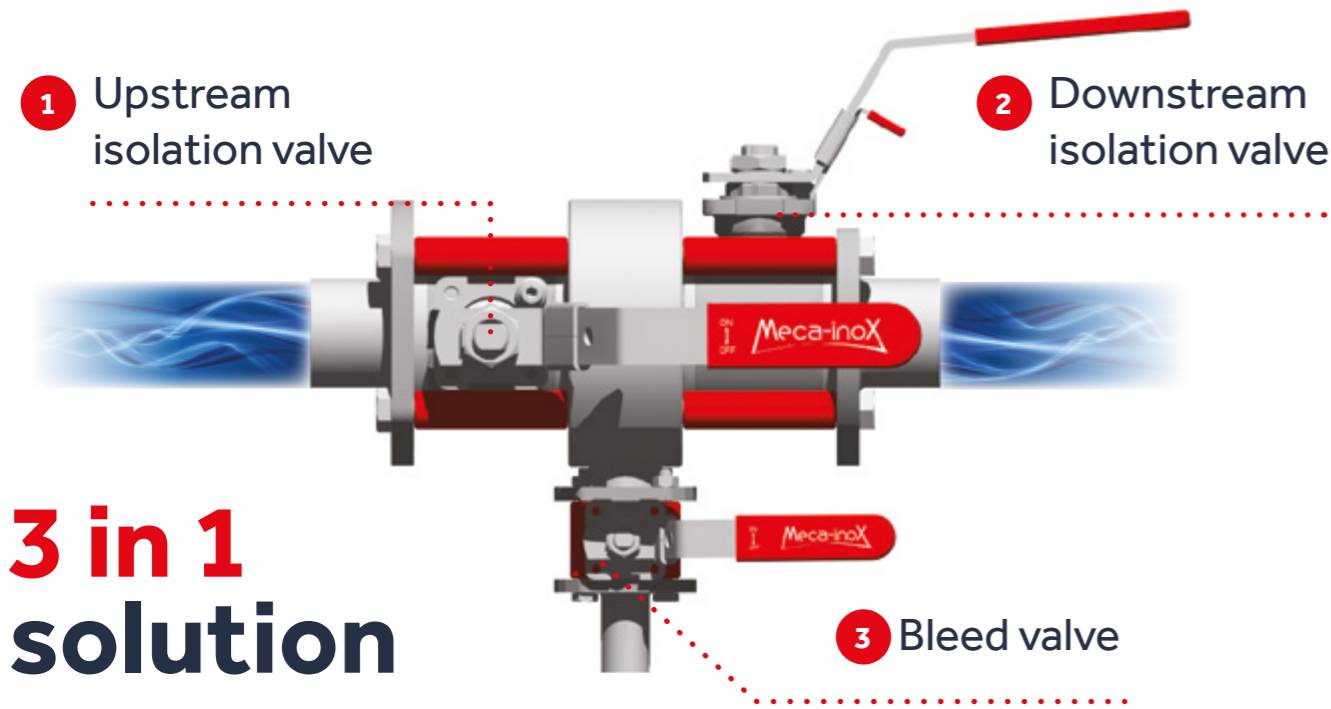
BALL VALVES

**Double Block and Bleed Ball valve
your 3 in 1 solution**





Double Block and Bleed
Ensure safety
of your operators



3 in 1 solution



Guarantee of total tightness on dangerous fluids

with double isolation (2 valves mounted in series). Risk of leakage avoided to protect operators and installations, particularly during equipment maintenance or cleaning on this line.



Avoid risk of overpressure

bleed the remaining fluid between valve 1 and 2.

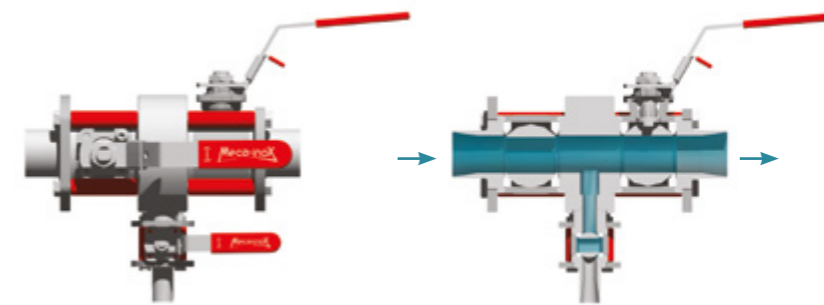


Close & lock all valves

in single and limited area instead of manipulating 3 separate and distant valves.

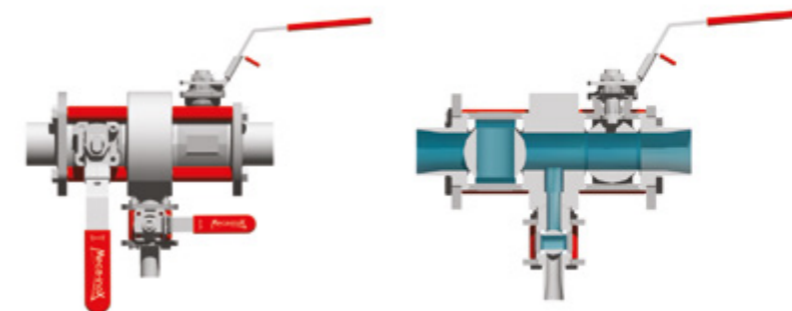
Working principles

Normal operation



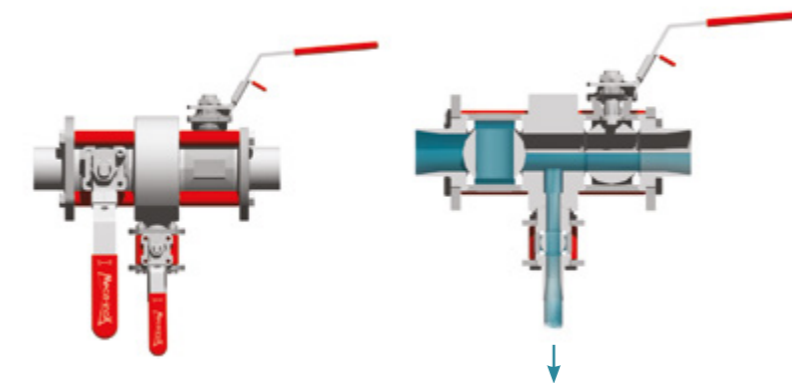
Main line valves are in open position, while the bleed valve is closed. Fluids flows through the DBB valve.

Maintenance operation



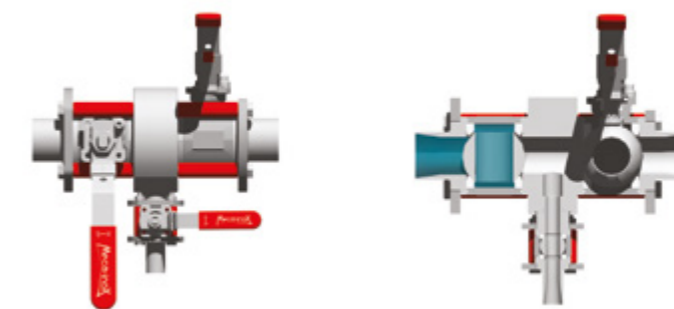
STEP 1

The upstream valve **1** is closed, while the downstream valve **2** is open. The bleed valve **3** is closed.



STEP 2

The bleed valve **3** is open, to evacuate the remaining fluid to a secured event pipe.



STEP 3

Downstream valve **2** is closed, ensuring double sealing of the pipe section.
The downstream section is now fully isolated and secured for intervention or maintenance works.



Increase safety
Ease your maintenance

PERFORMANCE & RELIABILITY

✓ **Safety for operators and installations during maintenance interventions**

Internal tightness :
« classA » ace. to EN12266-I.
< 10-3 mbar.L/s (He at 50 bars)
Sealing at each valve seats

✓ **Valves isolation in a single area**

No risk of unclosed valves

AVAILABILITY & MAINTENANCE

✓ **Availability within 4-6 weeks**

after receipt of order

✓ **Meca-Inox standard spare parts**

for maintenance

✓ **Full traceability**

of the valve and its components

«PLUG & PLAY» DESIGN

✓ **Easy and fast installation**

DBB valves with orbital welding or flanged ends are delivered fully assembled for direct mounting on fluid piping.

✓ **3-1 compact design**

Welding operations during installation reduced by 2. Junction base entirely machined. No additional loose flanges or welding.

✓ **Connection modularity**

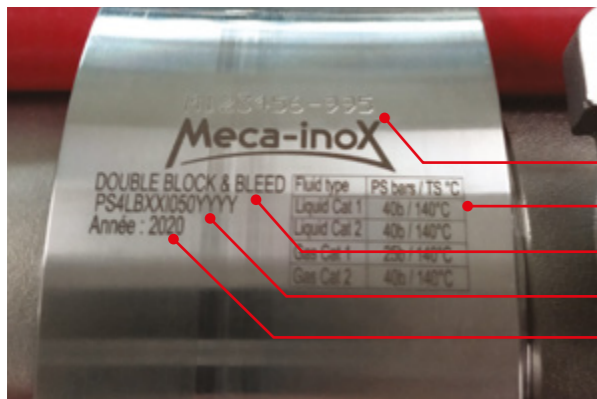
Choice of endings: orbital welding, flanges PN40/PN16, mix available (Other ends possibilities : BW, SW, BSP / NPT...)

✓ **Actuation modularity**

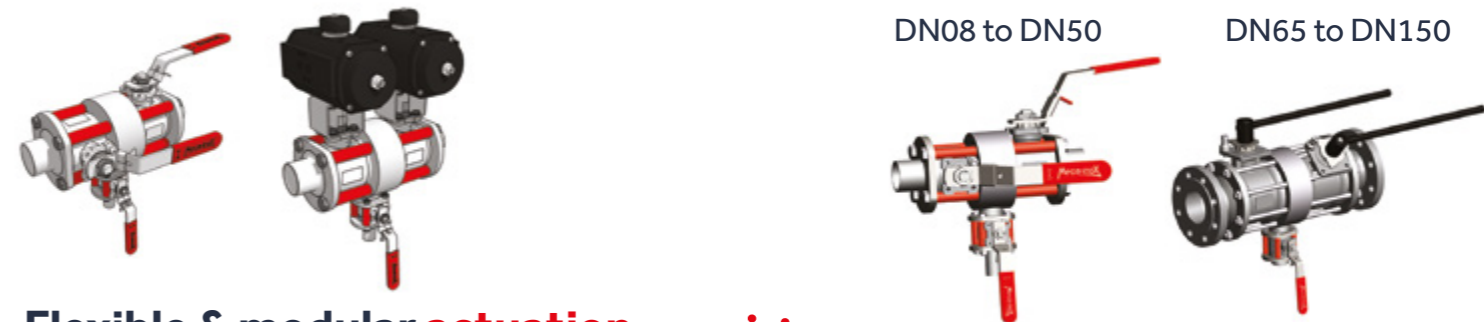
Lockable manual lever or actuated. Mix available

Marking

- Traceability number
- Ps / Ts max. value
- Valve Type
- Product Code
- Production year



Multiple combination



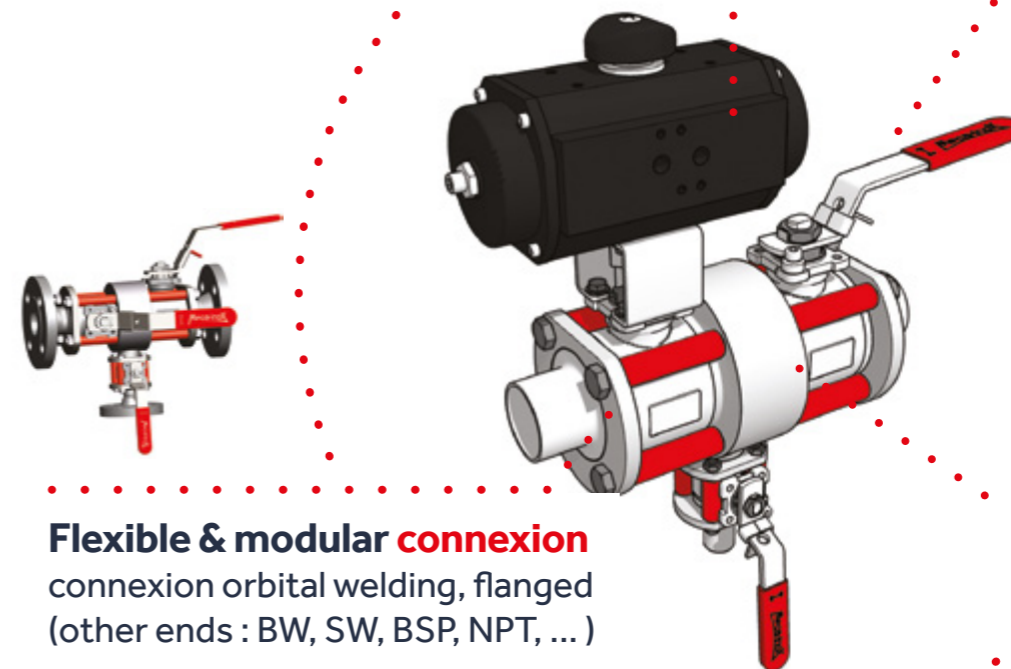
Flexible & modular actuation

lockable manual or actuated (mix available)

DN08 to DN50

DN65 to DN150

From **DN08 to DN 150**



Flexible & modular connexion

connexion orbital welding, flanged (other ends : BW, SW, BSP, NPT, ...)

Junction base

Sealing between bleed valve and junction base



Assembling of a DN80 DBB

A unique know-how

Our DBB valve are **made in our factory at Gisors (Normandy – France).** They result from **more than 65 years of expertise in ball valve.**



Applications

The DBB PZ4 valve

- Steam and High Temperature Fluids
- Temperature range: from -30°C to +280°C
- All industries utilities.
- Explosion prevention of fuel, natural gas boilers.
- Steam isolation for safety measure and staff injuries prevention. Steam for drying, extraction or heating. Sampling connection. Clean steam (food industries).

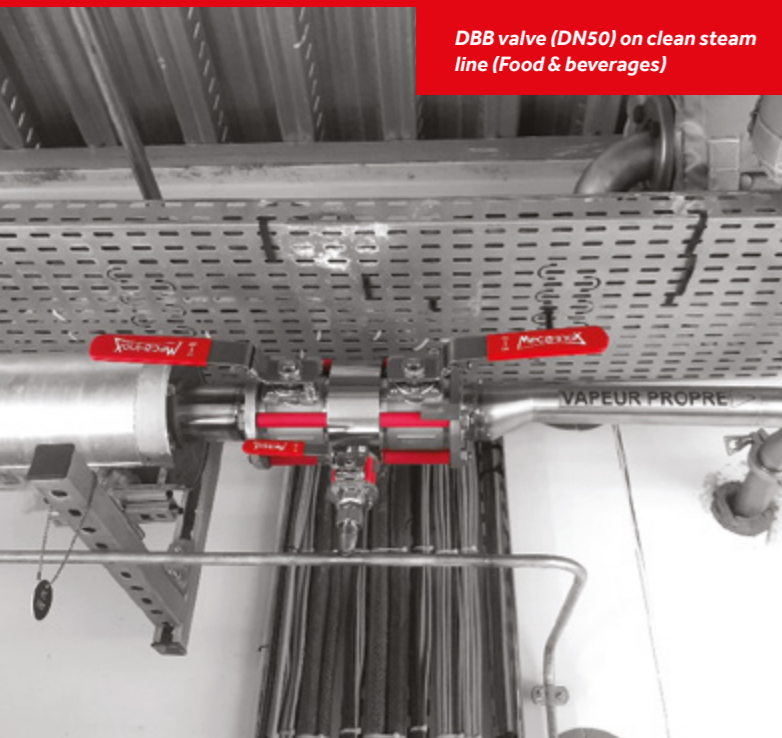


DBB valves (DN100) on heat-insulated boiler manifold heater (Food & beverages)



The DBB PS4 valve

- Corrosive and dangerous fluids
- Temperature range : from -50°C to +190°C
- Petrochemicals (Olefins, Aromatics) and Downstream Process. (polymers, thermoplastics, elastomers)
- Heating steam for reactors
- Paints, resins, coating. (steam line, acids & bases, oxydised reagents)
- Chemical injection & cleaning processes



DBB valve (DN50) on clean steam line (Food & beverages)

Technical datas for PS4 and PZ4 DBB valves

Temperature Range @ 1 bar		PS4 : -50°C to +190°C	PZ4 : -30°C to +280°C
Material	Body	Stainless Steel 316L 1.4409	
	Seats	PS4 : PTFE TFM1600	PZ4 : PTFE +20% PEEK
	Sealing joints	PTFE	
	Junction base	Stainless Steel 316L 1.4408	
Connexion	Piping size	DN08 to DN150	
	Valve body DN size	DN15 to DN100	
Options	Actuation Type	Manual : lockable lever	
	Others options	Cavity filler seats, electrical continuity, degreased	
Certification & norms	Standard Compliance	PS4 : DESP 2014/68/UE (Cat 1 Pipe & Vessels) FDA 21CFR	PZ4 : DESP 2014/68/UE (Cat 1 Pipe & Vessels) FDA 21CFR CE-1935/2014 (Food & Ingredients -30°C à +121°C) (Steam, hot water, oils : -30°C à +250°C) BNIC
	Options	ATEX II 2GD	

Maximum operating pressure per fluid group

In compliance with PED, datas applicable for orbital welding ending.

Body Size	Liquid Group 1 (dangerous) PS MAX	Liquid Group 2 PS MAX	Gas Group 1 (dangerous) PSMAX	Gas Group 2 PS MAX
DN15	100 bars to +20°C			
DN20	100 bars to +20°C			
DN25	70 bars to +20°C			
DN32	PS4 : 60 bars to +110°C PZ4 : 60 bars to +160°C	70 bars to +20°C	PS4 : 30 bars to +150°C PZ4 : 30 bars to +220°C	70 bars to +20°C
DN40	PS4 : 60 bars to +110°C PZ4 : 60 bars to +160°C	50 bars to +20°C	PS4 : 25 bars to +150°C PZ4 : 25 bars to +220°C	50 bars to +20°C
DN50	40 bars to +140°C	50 bars to +20°C	PS4 : 20 bars to +150°C PZ4 : 20 bars to +220°C	50 bars to +20°C
DN65	PS4 : 30 bars to +150°C PZ4 : 30 bars to +185°C	40 bars to +20°C	PS4 : 15 bars to +165°C PZ4 : 15 bars to +250°C	40 bars to +20°C
DN80	PS4 : 25 bars to +150°C PZ4 : 25 bars to +220°C	40 bars to +20°C	PS4 : 12 bars to +165°C PZ4 : 12 bars to +250°C	40 bars to +20°C
DN100	PS4 : 20 bars to +150°C PZ4 : 20 bars to +140°C	25 bars to +20°C	PS4 : 10 bars to +165°C PZ4 : 10 bars to +250°C	25 bars to +20°C

Dimensions of the DBB Valve

Units	Body size DN	Bleed DN (BSP ending)	Orbital welding ending			Flanged endings (EN1092-1)			Others endings (BW, SW, BSP, NPT)		
			width D	length L	weight	width D	length L	weight	width D	length L	weight
	15	DN15	204,4	98,7	3,1	217,4	98,7	4,6	157,4	98,7	3,1
	20		218,6	102,7	4,7	238,6	102,7	6,7	173,6	102,7	4,6
	25		236,4	108,2	5,4	256,4	108,2	7,5	196,4	108,2	5,3
	32		261,2	118,7	9,1	290,2	118,7	12,8	220,2	118,7	8,9
	40		277,2	126,2	11,1	318,2	126,2	15,1	243,2	126,2	10,9
	50		336,0	137,2	20,4	381,0	137,2	25,8	301,0	137,2	20,3
	65	DN25	364,0	187,2	33,8	452,0	187,2	41,0	342,0	187,2	34,0
	80		420,0	192,2	47,5	502,0	192,2	55,7	402,0	192,2	47,9
	100		478,0	212,2	73,6	572,0	212,2	83,5	452,0	212,2	74,0

MECA-INOX EUROPE

1, rue de la Croix des Maheux
F-95031 CERGY-PONTOISE CEDEX
T. + 33 (0)1 78 47 80 00
infos@meca-inox.com

meca-inox.com

INDUSTRIAL PLANT

12, rue de la Haute Borne
ZAC Le Mont de Magny
27140 GISORS – France

A BRAND OF GROUP

Meca-inox
SINCE 1955



BALL VALVES MADE IN FRANCE

WORLDWIDE AVAILABLE