

# COMPANY PRESENTATION

### TAILOR MADE SOLUTION FOR OIL&GAS APPLICATIONS











1963- starting production activity

2009- first building fully dedicated to stem machining

2010- certification ISO and API Q1

2012- new building for CNC machining

2014- new building for service department

2016- start VALMAR company

2016- new integrated system according to UNI EN ISO

9001; OHSAS 8001; UNI EN ISO 14001

INOX MECC is an Italian benchmark for the manufacturing of valve components in the Oil & Gas industry and a complete range of instrumentation valves for different application as well. Thanks to its background is able to provide a tailor made solutions for all the Oil&Gas application







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InoxMecc policy is the following: being able to offer the higher standards, from the single item to full batches, from small to big dimensions, through an internal manufacturing production and qualified sub-suppliers with the most upgrade level of equipment and knowledge and relying on highly qualified, flexible and skilled staff. Modern equipment, consolidated skills and 'just in time' process management ensure both prompt responses and the highest technical and quality performance as well as competitive prices for the petrochemical market

### INOX MECC MANUFACTURING PRODUCTION RANGE





Inoxmecc is able to manufacture

- Valve components
  - Stem, bodies, closures, glande flanges, bonnets. Discs, seats, flanges
- Instrumentation monoblock valves
  - Sampling valves
  - Injection valves
  - Instrumentation DBB
- Monoflanges
  - T-bar
  - antitamper
  - O.S.&Y.
- Manifolds
  - From series 1 to series 5
- Needle valves
- Bleeders
- Cavity plugs
- Relief valves
- Injection grease fittings and check valves





### MATERIAL AVAILABILITY





Inoxmecc has a dedicated area of 6000 sqm to stock raw materials.

The entire range of alloys like AISI 410, 316 and 304 steels, duplex, superduplex, titanium, nickel alloys (Inconel 625, Inconel718) and hastelloy are ready in our warehouse to be able to delivery the components as a fast track items.

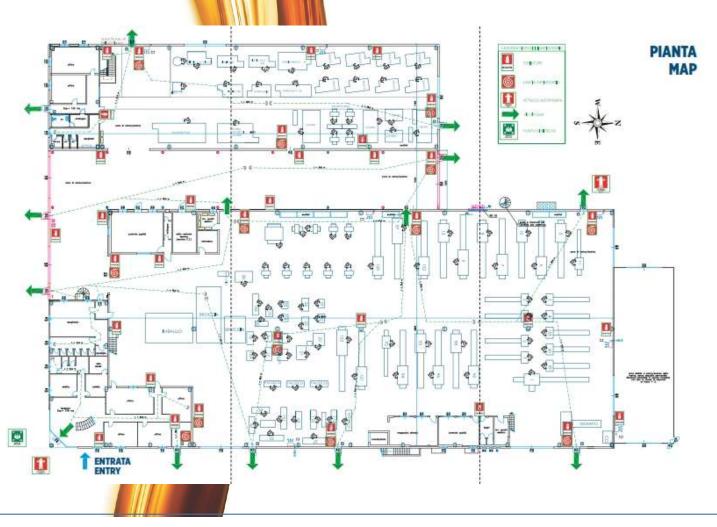
Each material is 100% controlled by the PMI testing and duly certified and we have a complete traceability during our production line according to ISO and API certification.

In addition to the above we can provide you the complete item with special coatings and surface treatments

From a quality point of view we can carry on standard NDT or supplementary laboratory tests such as MICRO, Impact Test, Corrosion Test and more.

# EXISTING WORSHOP AND OFFICES









#### MANUAL MACHINING

• 8 parallel lathes

#### **CNC MACHINING**

- 22 Lathes
- 7 engined Y-axes lathes
- 11 engined lathes
- 2 teach-in lathes
- 7 sliding headstock lathes
- 4 engined sliding headstock lathes maximum turning diameter with loader: 105 mm

maximum length with loader: 1700 mm maximum turning diameter: 900 mm

maximum length: 8000 mm

#### **CNC MACHINING CENTER**

- 2 cnc machining centers
- 1 four axes cnc machining center
- 2 five axes cnc machining centers
- 10 manual drilling machines
- 3 universal manual drilling machines
- 2 shearing machines maximum drilling machining: 4000 X 1200 X

#### **THREADING**

• 15 threading machines

#### **LAPPING**

- 3 roller lapping machines maximum diameter: 98 mm
- 3 lapping machines maximum diameter: 430 mm

#### **CUTTING CENTER**

• 4 CNC sawing machines maximum diameter: 430 mm

#### **BROACHING DEPARTMENT**

#### **SEAL PRESSES**

- 5 Automators
- Automatic vertical storage MODULA
- Automatic insert storage MATRIX

#### LIFTING EQUIPMENT

- 3 OverHead cranes (6.3 tons)
- 3 OverHead travelling cranes (max. 2 tons)
- 6 fork trucks (max. 25 tons)

**TESTING WORK BENCHES (max 10.000 PSI)** 

*800* 



#### **DIMENSIONAL INSPECTION**

- Durometers, feeler gauges, surface roughness gauges
- TESA digital altimeters
- Micrometer gauges, calibers, interior and exterior digital marketing gauges
- Projectors
- Mechanical and magnetic comparison equipment
- Three-dimensional coordinate measuring machine (maximum measures 2500X1500X100 mm)

#### **NON-DESTRUCTIVE TESTING**

- PT: Dye penetrant examination & black light
- MT: Magnetic Particles examination
- UT: Ultrasonic examination

#### **TEST EQUIPMENT**

• Hydraulic and pneumatic horizontal testing maximum pressure 630 bar

#### CHEMICAL ANALYSIS

• Niton Thermoscientific XRF



#### **OUTSOURCING TESTS:**

We also use outsourcing, getting support from outside laboratories for tests that are not carried out at INOX MECC such as:

- UT: Ultrasonic examination
- RT: Radiographic Examination Capability of shooting on site, x-ray films development and reading in house (ASME reference plates)
- Charpy-V impact test
- Micrography

#### **QUALIFIED PERSONNEL**

INOX MECC personnel is qualified to carry out all the above mentioned controls. In particular, for Non-Destructive Tests, INOX-MECC staff includes fully trained, qualified and certified personnel in accordance with STN-TC-1A and EN 473 requirements





#### Inoxmecc has the following certification

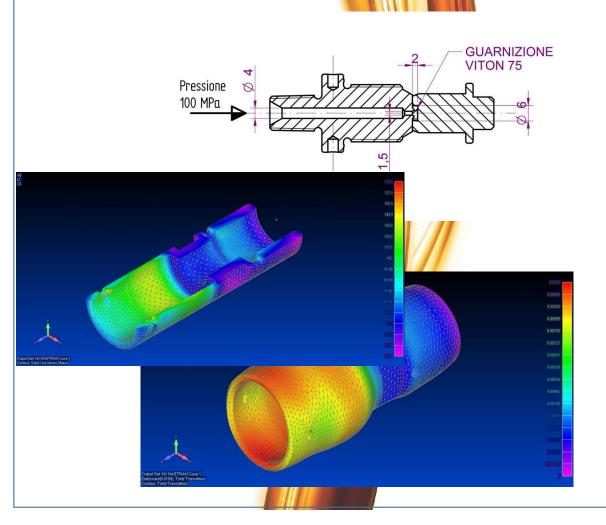
- ISO 9001
- API Q1
- API 6A

The following certification is under process

- PED
- EU Export Compliance License
- Quality, Environmental and Safety Integrated System according to UNI EN ISO 9001; OHSAS 8001; UNI EN ISO 14001

# R&D AND TECHNICAL OFFICE DEPARTMENT





Our R&D and technical department can support you and provide the best solution required, designing a fully tailor made products according to the project specification both in terms of design and material requirements.

Each single components are designed using a 3d software and verified according to the ASME code and other applicable standard or we can use a FEM analysis to provide you the real 3D overall stress and strain for very critical components



# DESIGN AND ENGINEERING FEATURES



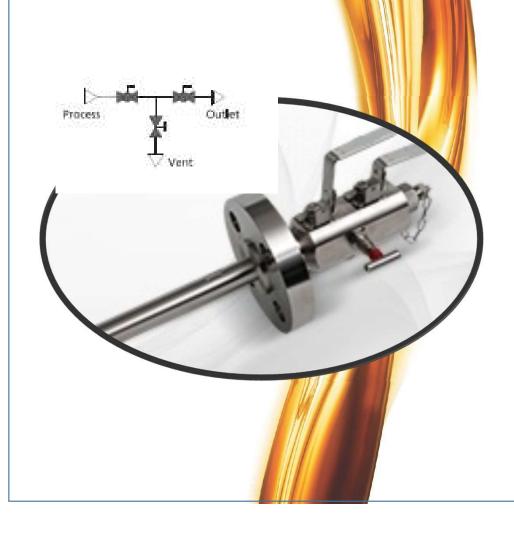
- Stem from ½ to 70 inch and up to 8000 length
- Body, closures, bonnets, gland flange
- Discs. Gates, seat for through conduit

 Bearing, bearing retainer, stem extension





# INSTRUMENTATION MONOBLOCK VALVES



### **SAMPLING VALVES**

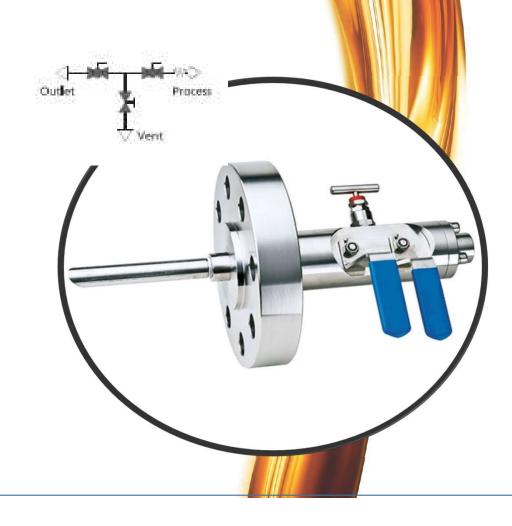
#### Features:

- with sampling probe
- instrumentation side with plug
- packing peek or Graphite
- flange acc. to ASME B16.5
- testing according to API 598 nad E
- firesafe acc. to ISO 10497/API 607, API 6FA
- bore size 12.7mm

- Carbon steel A105 or LF2
- Stainless Steel grade 316(L)
- Duplex F51 and superduplex F53,F55
- 6Mo material (F44)
- Monel 400
- Hastelloy C276
- Inconel 625 and Incoloy 825
- Nace material available on request



# INSTRUMENTATION MONOBLOCK VALVES



### **INJECTION VALVES**

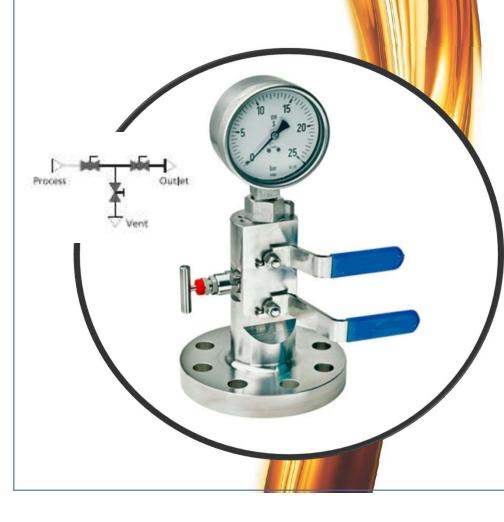
#### Features:

- With injection quill
- Process side with check
- packing peek or Graphite
- flange acc. to ASME B16.5
- testing according to API 598 nad E
- firesafe acc. to ISO 10497/API 607, API 6FA
- bore size 12.7mm

- Carbon steel A105 or LF2
- Stainless Steel grade 316(L)
- Duplex F51 and superduplex F53,F55
- 6Mo material (F44)
- Monel 400
- Hastelloy C276
- Inconel 625 and Incoloy 825
- Nace material available on request



# INSTRUMENTATION MONOBLOCK VALVES



### INSTRUMENTATION DBB VALVES

#### Features:

- Instrumentation side suitable for gauges
- packing peek or Graphite
- flange acc. to ASME B16.5
- testing according to API 598 nad E
- firesafe acc. to ISO 10497/API 607, API 6FA
- bore size 12.7mm

- Carbon steel A105 or LF2
- Stainless Steel grade 316(L)
- Duplex F51 and superduplex F53,F55
- 6Mo material (F44)
- Monel 400
- Hastelloy C276
- Inconel 625 and Incoloy 825
- Nace material available on request

### MONOFLANGE VALVES



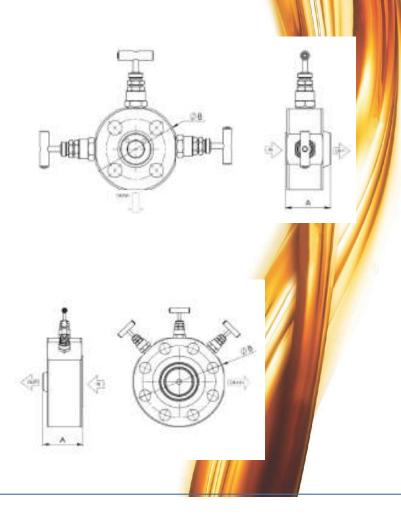




#### Features:

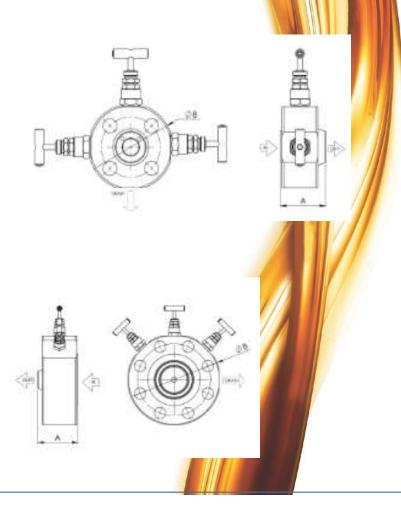
- Single Block and Double block
- Single Block and Bleed and Double Block and Bleed
- Flange acc. to ASME B16.5- Threaded acc. to ASME B1.20.1
- Packing in PTFE or Graphite
- inlet flanged/outlet NPT
- drain 1/4" NPT –option for 1/2" NPT
- design and testing according to API 598 and EEMUA 182

- Carbon steel A105 or LF2
- Stainless Steel grade 316(L)
- Duplex F51 and superduplex F53,F55
- 6Mo material (F44)
- Monel 400
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### ANTI TAMPER

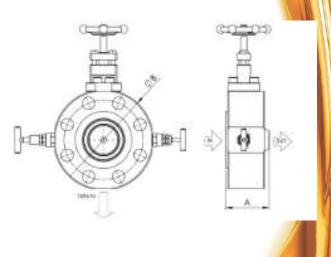
#### Features:

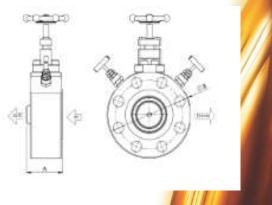
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- Flange acc. to ASME B16.5- Threaded acc. to ASME B1.20.1
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- design and testing according to API 598 and EEMUA 182

- Carbon steel A105 or LF2
- Stainless Steel grade 316(L)
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- Monel 400
- Hastelloy C276
- Inconel 625 and Incoloy 825
- Nace material available on request









### <u>O.S.&Y</u>

#### Features:

- Single Block and Double block
- Single Block and Bleed and Double Block and Bleed
- Flange acc. to ASME B16.5- Threaded acc. to ASME B1.20.1
- Packing in PTFE or Graphite
- inlet flanged/outlet NPT
- drain 1/4" NPT –option for 1/2" NPT
- design and testing according to API 598 and EEMUA 182

- Carbon steel A105 or LF2
- Stainless Steel grade 316(L)
- Duplex F51 and superduplex F53,F55
- 6Mo material (F44)
- Monel 400
- Hastelloy C276
- Inconel 625 and Incoloy 825
- Nace material available on request





### SERIES FROM 1 to 5

#### Features:

- NPT/NPT
- NPT/FLANGED
- FLANGED/FLANGED
- with standard tee bar- with antitamper T-bar
- packing ptfe/graphoil
- RATING #6000 OPTION #10000

- Carbon steel A105 or LF2
- Stainless Steel grade 316(L)
- Duplex F51 and superduplex F53,F55
- 6Mo material (F44)
- Monel 400
- Hastelloy C276
- Inconel 625 and Incoloy 825
- Nace material available on request



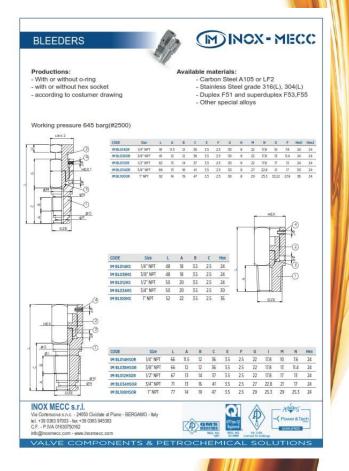


#### Features:

- In female / Out female
- In male / Out female
- Non rotating lower stem
- Standard with tee bar-optional with antitamper
- Class rating and temperature are based on ASME codes
- Packing ptfe/graphoil
- rating #6000 and #10000

- Stainless Steel grade 316(L)
- Duplex F51 and superduplex F53,F55
- 6Mo material (F44)
- Monel 400
- Hastelloy C276
- Inconel 625 and Incoloy 825
- Nace material available on request

### **BLEEDERS**







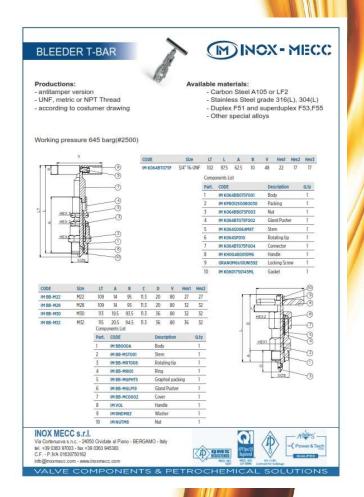
INOX-MECC

- With or without o-ring-
- with or without hex socket-
- according to costumer drawing

- Carbon Steel A105 or LF2
- Stainless Steel grade 316(L), 304(L)
- Duplex F51 and superduplex F53,F55
- Other special alloys



# BLEEDERS WITH TEE-BAR





- antitamper version
- UNF, metric or NPT Thread
- according to costumer drawing

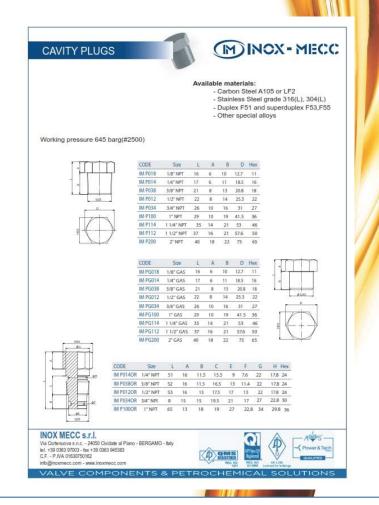
#### Available materials:

- Carbon Steel A105 or LF2
- Stainless Steel grade 316(L), 304(L)
- Duplex F51 and superduplex F53,F55
- Other special alloys



INOX-MECC

# CAVITY PLUGS







- NPT with o-ring
- according to costumer drawing

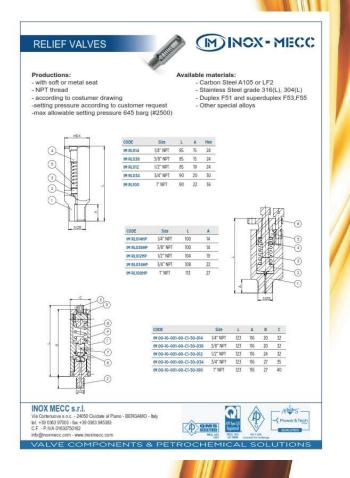
#### Available materials:

- Carbon Steel A105 or LF2
- Stainless Steel grade 316(L), 304(L)
- Duplex F51 and superduplex F53,F55
- Other special alloys



INOX-MECC

### RELIEF VALVES





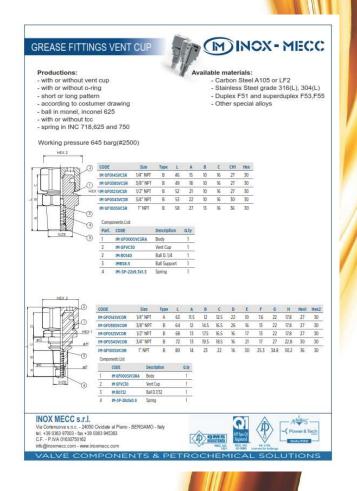


- with soft or metal seat
- NPT thread
- according to costumer drawing
- setting pressure according to customer request
- max allowable setting pressure 645 barg (#2500)

- Carbon Steel A105 or LF2
- Stainless Steel grade 316(L), 304(L)
- Duplex F51 and superduplex F53,F55
- Other special alloys



# INJECTION GREASE FITTINGS





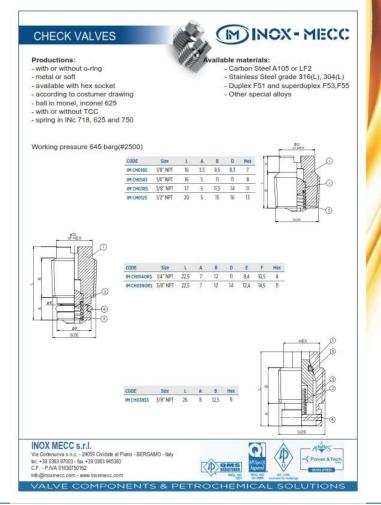
- with or without vent cup
- with or without o-ring
- short or long pattern
- according to costumer drawing
- ball in monel, inconel 625
- with or without tcc
- Spring in INC 718,625 and 750
- Working pressure 645 barg (#2500)

- Carbon Steel A105 or LF2
- Stainless Steel grade 316(L), 304(L)
- Duplex F51 and superduplex F53,F55
- Other special alloys





# CHECK VALVES





#### Features:

- with or without o-ring
- metal or soft-
- available with hex socket
- according to costumer drawing
- ball in monel, inconel 625
- with or without TCC
- spring in INc 718, 625 and 750
- Working pressure 645 barg (#2500)

- Carbon Steel A105 or LF2
- Stainless Steel grade 316(L), 304(
- Duplex F51 and superduplex F53,F55
- Other special alloys

