

# Monti & Barabino

Technical Supplies for  
Industrial and Naval field  
since 1880



**CONNECTION AND  
EXPANSION JOINTS**



**Monti & Barabino**, established in 1880, is based in Genoa and operates in the field of Technical Items supplies for the Industrial and Maritime Sectors.

The extremely wide experience matured in more than 135 years of activity and its highly qualified personnel composed by technicians, marine engineers, naval architects etc., enables the Company to offer the most complete and efficient technical and commercial assistance.

Moreover, the products stocked in its large warehouse allows it to promptly satisfy any kind of enquiry, while its workshop is able to manufacture all types of packings and gaskets comprising the moulding of rubber and elastomer of various types, including silicon, Fluoropolymer, Polyurethane, etc.

Since February 2004, Monti & Barabino S.p.A. improved its Quality Management System in accordance with **UNI EN ISO 9001** regulations, obtaining the certification through **R.I.N.A.** This prestigious acknowledgement is a confirmation of our constant effort in offering excellent quality and service to all those Customers who have chosen and will choose our Company as their supplier.



Our workshop, acting as  Official distributor, is able to offer:

- FLEXIBLE HOSES FOR LOW, MEDIUM AND VERY HIGH PRESSURE
- MED APPROVED FLEXIBLE HOSES
- TYPE APPROVED SHIP TO SHORE AND INDUSTRIAL COMPOSITE HOSES
- HIGH PRESSURE STEAM HOSES
- HIGH PRESSURE CLEANING HOSES
- RUBBER, STAINLESS STEEL AND TEXTILE EXPANSION JOINTS

Moreover:

- HYDRAULIC TEST FACILITIES
- MANAGEMENT OF TESTING PROCEDURES IN PRESENCE OF CLASSIFICATION BODIES
- PRESSED FITTINGS ON LARGE BORE RUBBER HOSES UP TO 10"

**MECHANICAL WORKSHOP** and **PIPE WORKSHOP** are available for the execution of customized processes on our semi-finished products. Thanks to the wide availability of **WAREHOUSE** we are able to satisfy your needs in a short time, organizing and managing your shipments in a very short time.

We perform CNC turning and cutting on rubber and metal semi-finished products; we mold details and rubber gaskets.



We produce gaskets in any material, even according to Customer's design, including padded copper and spiral wound gaskets.

We sew and assemble insulating mats and textile joints: wide choice of fabrics for high temperatures.



Laser marking of finished products and components

We are an authorized **Parker** assembling center, hydraulic hoses up to 3" and industrial hoses up to 10".  
Ask for our **FLEXIBLE HOSES** and **ACCESSORIES CATALOG**



Approved welders able to manufacture special fittings according to Customer's specifications.

We perform internal hydrostatic tests, also in the presence of an external Certifying Body.



## EKAFLEX TEXTILE EXPANSION JOINTS

### GENERALITY



Ekaflex joints are used as connecting elements between rigid pipes in various applications in the naval and industrial field. Where suitable, they are extremely advantageous compared to a rubber joint or steel. Considering the same size, they are able to support bigger displacements, have a smaller dimension and a limited weight. Easy to be installed, it does not require maintenance. Accidental breakage can be easily repaired even by unskilled personnel. They can be made in any shape and size able to satisfy the most varied requirements of application.

### STRUCTURE

Ekaflex are made by overlapping layers of fabric suitably selected according to the operating conditions and fluids. A series of internal layers enables the joint to be stress and temperature resistant. The outer layer (generally silicon rubber), make it waterproof. They are able to work within a temperature range that goes from - 60 ° C to + 1200 ° C and with variable maximum pressures depending on their structure.



## LAYERS FEATURES

### **Silica or Fiberglass textiles**

They are made with Silica or Fiberglass yarn and guarantee an excellent resistance to high temperatures (650 °C glass - 1000 °C silica). They also offer excellent resistance to most chemicals.

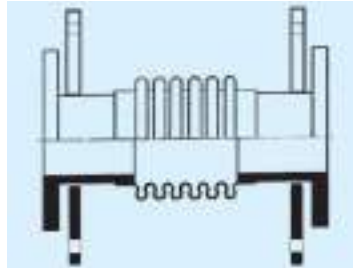
Externally it is applied a layer of glass fabric with silicone which guarantees the perfect watertightness.



### **Reinforcing elements**

To ensure the highest gas impermeability, special glass-PTFE layers are inserted inside the joint. The whole joint can be also reinforced by inserting a thin metal wire mesh net. The final product is then completed by sealing the inner and outer layers with silicone adhesives. The result is an extremely flexible and waterproof expansion joint.

## EXPANFLEX MB-E1 STAINLESS STEEL EXPANSION JOINTS, RINA APPROVED



APPROVED



**EXPANFLEX MB-E1** is an axial Type Approved multiwall expansion joint, without circumferential weld. Made in AISI 321 Stainless Steel T.I.G. welded, or other grades of Stainless Steel upon request. Designed with flanged or weld ends, in accordance with UNI, ASA or Customer specifications. An internal sleeve made of Stainless Steel can be supplied upon request.

**From ND 40 to ND 800**  
**Special diameters available upon request**

### Features

Excellent reliability, no ageing, absence of permeability, resistant to corrosion, high working temperature.

The corrugations are formed by a controlled process which made **EXPANFLEX MB-E1** free from friction and lamination, allowing constancy and accuracy of the corrugation profile with minimal material yielding. Internal sleeve made from rolled and welded austenitic stainless steel plate is available upon request.

Suitable for correction of static offsets and compensation for thermal expansion and movements in the presence of hydraulic oil, diesel fuel, naphtha, brine, fresh water, sea water, air vent, compressed air, desalination, lubricant oil, steam up to 220°C.



## MB MED FIREPROOF RUBJOINT FUEL LINE RUBBER JOINT - MED APPROVAL



**S.O.L.A.S.** regulations, Safety Of Life At Sea, are generally regarded as the most important of all international treaties concerning the safety of merchant ships. The actual regulations, dated 1974, with its amendments has been adopted also in Europe as a guidelines for the maritime field.

In compliance with the above mentioned regulation, fuel line hoses shall be constructed in accordance with **MED 2002/75/EC** directive concerning fire resistance requirements of the fuel pipelines.

**MB MED FIREPROOF RUBJOINT** completely satisfy the technical requirements recommended in the 96/98/CE directive and further amendments ISO 15540:1999 and ISO 15541:1999 where technical parameters are fixed. The expansion joint is covered with a special fire resistant fiberglass sleeve, easy to be installed thanks to stainless steel springs and hooks.

To satisfy the above mentioned requirements, **MB MED FIREPROOF RUBJOINT** has been tested by applying a flame for 30 minutes at the required temperature of 800 +/- 50°C with a working pressure of 5 bar. The specimen is than tested at a pressure twice the working parameter for 15 minutes, in order to confirm that the flexible hose is in conformity with the specifications.



← - MB MED FIREPROOF RUBJOINT -

**DIMENSIONS E TECHNICAL DATA**

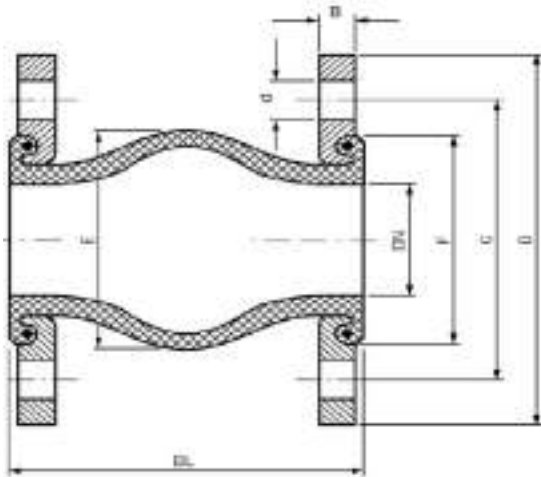
Working Pressure 1,6 MPa (Safety factor 1:4)

1 MPa = 1 N/mm<sup>2</sup>= 10 Bar

DN	Lenght	E	F	COMPENSATION				Vacuum		Weight
								No Spring	Spring	
mm	mm	mm	mm	C	A	L	AN			Kg
25/32	130	77	72	30	20	20	35°	0,8	1,0	2,8
40	130	85	80	30	20	20	35°	0,8	1,0	3,3
50	130	95	90	30	20	20	35°	0,7	1,0	3,7
65	130	110	105	30	20	20	30°	0,6	1,0	4,8
80	130	125	120	30	20	20	30°	0,5	1,0	5,3
100	130	145	140	30	20	20	25°	0,5	1,0	6,2
125	130	170	165	30	20	20	25°	0,4	1,0	8,2
150	130	195	190	30	20	20	15°	0,3	1,0	11,2
200	130	245	240	30	20	20	15°	0,3	1,0	16,8
250	130	295	290	30	20	20	10°	0,2	1,0	21,6
300	130	345	340	30	20	20	10°	0,2	1,0	30,1

C= compression      A= elongation      L= lateral      AN= angular

For flanges dimensions see standard regulations



**MED APPROVED FUEL LINES ALSO AVAILABLE**



## TYPE APPROVED RUBBER EXPANSION JOINTS



### GENERALITY

Joints rubber bellows expressly designed to ensure the compensation of thermal expansion and vibration damping in the pipelines. The floating flanges, available in carbon steel or AISI 316, UNI or ASA, ensure ease and speed of installation.

### APPLICATIONS

The bodies are made of different elastomers to ensure a solution for every application. Available in different lengths, are suitable in plants and premises for industrial and civil applications to compensate for extension caused by temperature change and axial movements, as well as to dampen vibrations and noise arising from pumps, motors, turbines etc.

### APPROVALS

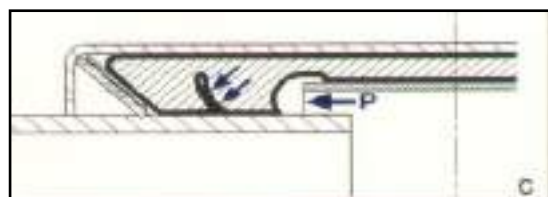
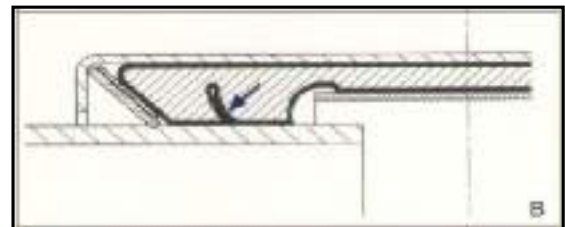
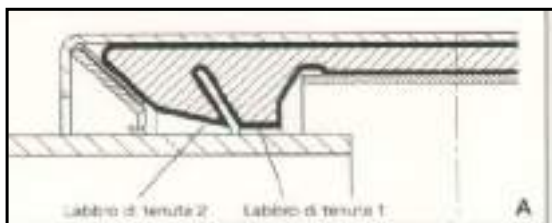
Type Approved by the major Classification Societies.

## PIPECONNECT STAINLESS STEEL EXPANSION JOINTS

**PIPECONNECT**, jointing system in stainless steel, is an effective, fast and economical solution for all your needs, both in the marine and industrial sectors. It is suitable for the connection of metal pipes, to replace flanged joints, welded or threaded.



Built in a simple way, it is the most technically advanced, practical and economical instrument for the maintenance responsible for both naval and industrial installations. They can be used in the presence of axial movements. The toothed conical ring perfectly adheres to the surface of the pipe, giving the joint an excellent resistance to vibration and, thanks to special internal seals, is ensured a perfect seal.







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