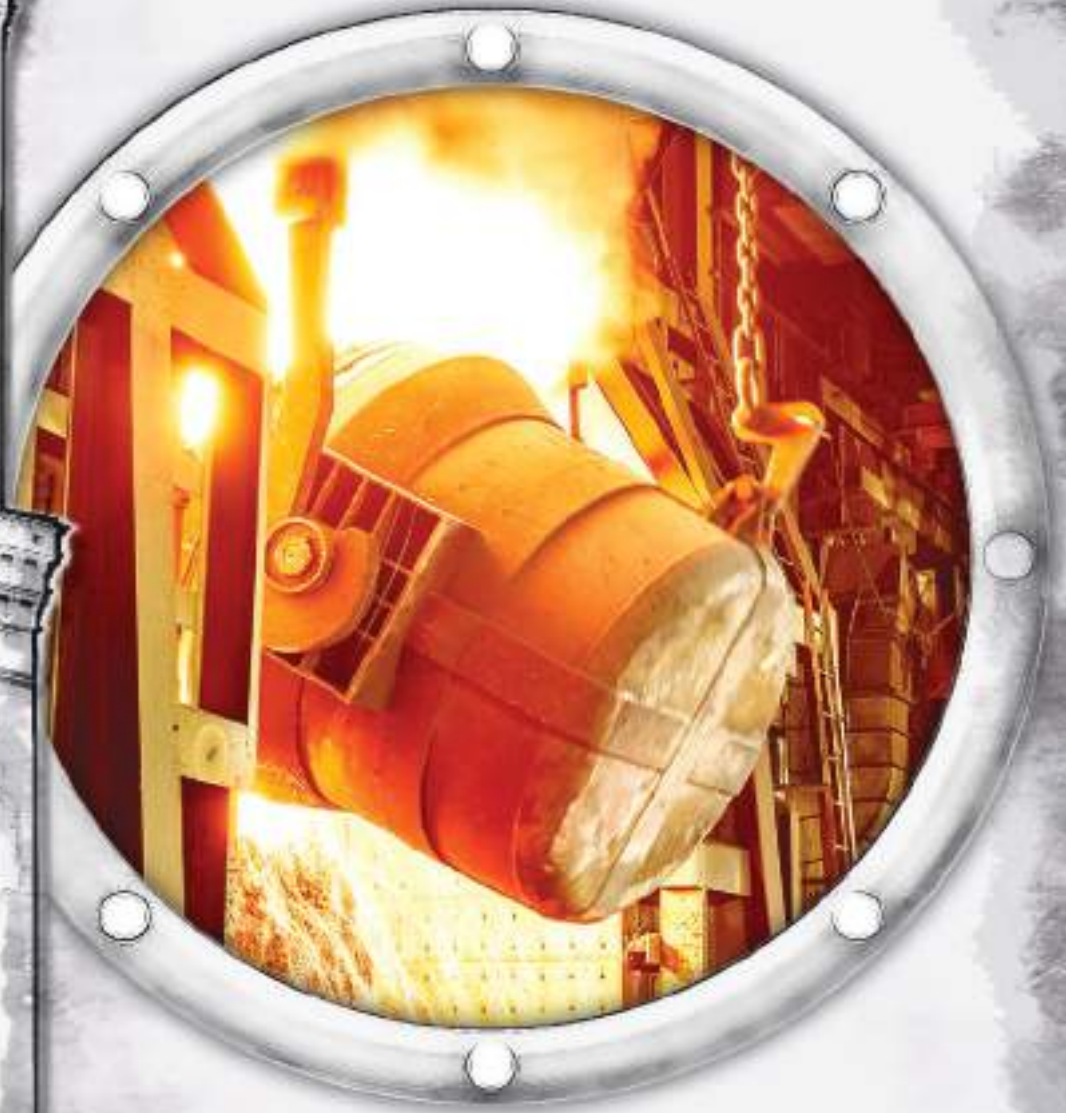


Monti & Barabino

Technical Supplies for
Industrial and Naval field
since 1880



**HIGH TEMPERATURE
PRODUCTS**



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.



SILICONE COATED FIBERGLASS SLEEVING



Silicone Sleeving is a braided sleeving which is manufactured from E-berglass yarn. It is used in demanding environments where temperatures reach up to 1000 degrees F (538 degrees C.). Due to its unique construction, wall thickness at a nominal weight increase thereby providing better insulation against heat. Because it is manufactured by the unique braiding process, it is extremely exible, allows for expansion, and easily conforms. It nds ready application as an insulation and/or protective covering in a variety of industries.

It is used to insulate steam tracer lines in oil re neries, as thermal and electrical insulation for the wire and cable industry, in glass manufacturing, for covering tines in metal re ning, foundries and steel mills, and wherever else a high temperature barrier might be required.

Sleeve	Fiberglass Filament	
Fire resistance	Self-extinguishes	
Coating	Red Silicone	
Max continuous operating temperature	Fiberglass	560 °C
	Silicone:	260° C
Peak operating temperatures	10 - 20 min	1000° C
	15 - 30 sec	1600° C
Inside diameter	10 - 125 mm	



THERMAL PROTECTION FOR EXHAUST GAS DUCTS



GENERALITY

The **THERMAL PROTECTION FOR EXHAUST GAS DUCTS** are specifically indicated for the thermal and acoustic insulation in ship's engine rooms. The thermal protection fixing system has been designed in order to allow an easy disassembling for maintenance purposes. Each kind of thermal protection can be tailor-made according to Customer' specification.

Structure

The internal structure of the **THERMAL PROTECTION FOR GAS DUCTS** is made by an insulating felt that ensures thermic and acoustic reduction in the engine room. Such insulating felt is coated with special fabrics suitable to resist to very high temperatures (500 - 800°C). The external coating is made by heat resistant fabrics with metallic reinforcements and a silicon, aluminum or steel outer layer.



THERMAL INSULATION MB EXOWRAP



SOLAS REGULATION II-2/15.2.10 STATES THAT:

“A surfaces with temperatures above 220° C which may be impinged as a result of a fuel system failure shall be properly insulated.”

MB EXOWRAP INSULATION SYSTEM is the quick and easy way to insulate high temperature surfaces in vessel engine rooms; it is made from biosoluble vitreous silicate fibre reinforced with an outer jacket of heat sealed aluminum foil. In tape or blanket format, **MB EXOWRAP** is applied in one step eliminating the need for bulky and time consuming layered insulation.

Can be easily removed and reinstalled several times by using the special sealing tape; has been tested up to 1000°C to be used in engine room.

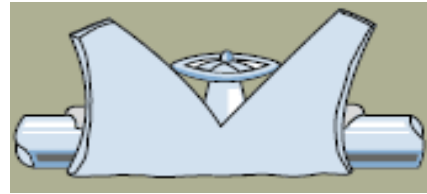
Commercial dimensions

Width	Lenght	Thickness	Box	Format
50 mm (2")	7,7 mt (25')	3 mm (1/8")	24	TAPE
100 mm (4")	3,3 mt (10')	12 mm (1/2")	6	
300 mm (12")	7,7 mt (25')	25 mm (1")	2	BLANKET
600 mm (24")	7,7 mt (25')	25 mm (1")	1	

APPLICATION

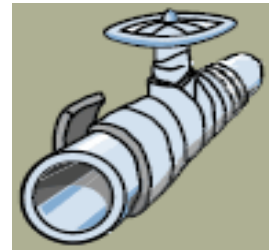
Tape

For use on bent and flanged pipes in areas where maintenance is not a consideration and/or space is limited. ExoWrap® has a pressure sensitive adhesive on the inner side for ease of installation.



Remove dirt, oil, scale and excessive moisture from surface.

ExoWrap® is wound around the pipe in a spiral motion using a 50% overlap to ensure good adhesion. Be sure that the foil edges are securely fastened. Ends can be secured with wire or clips if desired. For removal, unwind or cut the **ExoWrap®** Tape from the pipe. Tape is not reusable.



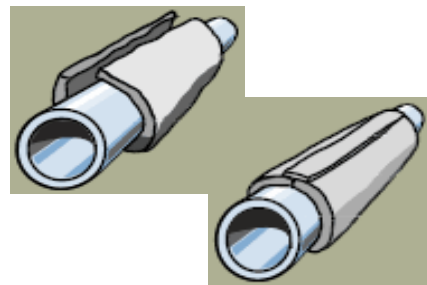
Blanket

For use on straight pipes, valves, exhaust equipment, turbochargers, angled and uneven surfaces. And, anywhere that insulation is required. **ExoWrap®** Blankets are secured with **ExoWrap®** 'Silihesive' Tape for ease of maintenance.



Cut the **ExoWrap®** Blankets to size with a utility knife or shears. Wrap around the surface to be insulated, butting the ends together forming a seam. Secure and seal the seam with Silihesive Tape.

To remove **ExoWrap®** Blanket, cut the Silihesive Tape and unwrap from metal surface. To reinstall, new Silihesive Tape must be applied.



MINERAL FIBER BLANKET

GENERALITY

Obtained from fibers of calcium, magnesium and silicates, ensures thermal insulation up to an operating temperature of 1000° C. It is an excellent solution to the problems of thermal insulation with excellent mechanical and physical properties. Suitable to be used for a wide range of applications in the production of refractory and thermal insulation panels. Excellent thermal shock resistance.



FEATURES

Flexible insulation, strong and light, whose special weave allows not to use caking elements, resulting in obtaining a woven fiber particularly resistant, soft and easy to be cutted and shaped. Completely inorganic, it does not generate toxic gases or fumes while using in temperature.

Chemical Analysis	Silica / Calcium / Magnesium
Combustibility	Class 0
Fumes emission	Class 0
Operating Temperature	1000°C / 1150° HT version
Peak Temperature	1200°C / 1300° HT version
Tickness	from 13 to 50 mm
Density	from 64 to 168 kg/m ³
Width	600 / 1200 mm
Length	from 3700 to 14700 mm

Illustrations and values here shown are to be considered as indicative and may be changed without notice.

JAGOLIT 11 HIGH TEMPERATURE ASBESTOS FREE CARDBOARD

GENERALITY

It is a special roll consisting of mica and special fibers, bound together with a good quality elastomer resistant to very high temperatures. It has been specifically designed for the seals industry and heat shields, bagged type of use in the exhaust systems of exhaust gases (manifolds, catalytic converters, particulate filters FAP, with thermal protection accessories etc.) And can be successfully employed in other industrial sectors (furnaces, boilers, various equipment, appliances etc.) where thermal protection screens are required.



FEATURES

Density	0,95 g/cm ³				
Compressibility	28%				
Recovery	29%				
Tensile Stength	6 Mpa transversal				
Decrease after combustion					
400°C	14,50%	600°C	17,0%	800°C	20,0%

Ageing changes		
22 h a 200°C IN AIR	Compressibility	25% ASTM F36
	Recovery	27% ASTM F36
	Volume decrease	2,70%
	Tensile Strength	1,4 Mpa ASTM F152

Temperature °C	100	150	200	250	300	400	500	600
Conductivity W/(M*k)	0,072	0,076	0,079	0,082	0,086	0,093	0,100	0,110

APPLICATIONS

Specifically designed to realize heat-screens or fillers of semi-metallic gaskets. In the automotive sector, the heat screens made with Jagolit can be used to bring down the heat and noise of exhaust manifolds, diesel particulate filters (FAP), catalysts and, generally, in all the exhaust apparatus.

AvSil 84CH® SILICA FABRIC



Silica **Fabric 84CH®** is the preferred choice in the thermal protection of equipment and personnel in high temperature applications. silica **Fabric 84CH®** can withstand molten metal temperatures and can protect personnel and equipment at intermittent temperatures up to 1,800°F (1,000°C).

APPLICATIONS

Silica **Fabric 84CH®** can be used for fabricated as welding drop cloths, stress relief blankets, protective screens/covers, furnace curtains, insulation mats and cable tray wraps. silica Fabrics are used extensively in the Power Generation, Refinery, Shipbuilding, Ship Repair and Metal Processing industries.

FEATURES

Working Temperature	950°C
Max base textile Working Temperature	1650°C
Combustibility: BS 476 part 7, 1971	Class 1
Weight	600 g/mq
Thickness	0,76 mm
Color	pale yellow

Silica fabrics can meet Military Specs MIL-C-24576A and MIL-I-24244C upon request.

AvSil 188CH® SILICA FABRIC



Silica **Fabric 188CH®** is the preferred choice in the thermal protection of equipment and personnel in high temperature applications. silica **Fabric 188CH®** can withstand molten metal temperatures and can protect personnel and equipment at intermittent temperatures up to 1,800°F (1,000°C).

APPLICATIONS

Silica **Fabric 188CH®** can be used for fabricated as welding drop cloths, stress relief blankets, protective screens/covers, furnace curtains, insulation mats and cable tray wraps. silica Fabrics are used extensively in the Power Generation, Refinery, Shipbuilding, Ship Repair and Metal Processing industries.

FEATURES

Working Temperature	950°C
Max base textile Working Temperature	1650°C
Combustibility: BS 476 part 7, 1971	Class 1
Weight	1200 g/mq
Thickness	1,37 mm
Color	pale yellow

Silica fabrics can meet Military Specs MIL-C-24576A and MIL-I-24244C upon request.

CALZA CV



Texturized glass fiber sleeve, silicon coated version also available for waterproof applications at temperatures not exceeding 200 °C.

APPLICATIONS

Suitable for thermal insulation in general, pipe insulations, cable covering.

FEATURES

Operating temperature	500 °C
Peak temperature	600 °C
Combustibility: BS 476 part 7, 1971	Class 1
Thickness	2,5 / 3 mm

“9N” INSULATING MILLBOARD



Insulating asbestos free millboard and refractory ceramic fibers. It is in form of high density rigid boards, suitable for a variety of heat resistant and thermo-insulating applications.

COLOR: Grey

APPLICATIONS

- Refractory panels
- Thermal insulation
- Gaskets
- Walls
- Insulation in the presence of high temperatures

FEATURES

Density	Kg/m ³	910
Operating Temperature	°C	850
Tensile Strength	MPa	3,0
Loss on Ignition	% weight	18
Thermal Conductivity	W/mK	0,10 a 400 °C
Linear reduction after 24h	%	<2
Standard Sizes	m x m	1 x 1
Standard Thickness	mm	1,5 -10

C3V INSULATING ROPE



C3V glass insulating rope consists of glass fibres, without any binding agents, enclosed in a open nesh knit braided sleeving. This product is mainly used for insulating piping.

APPLICATIONS

The base fibres are inorganic, sterile and non-combustible. They do not rot and are not affected by funguses, bacteria or insects. The rope has a low heat conductivity and can be used for temperatures up to 550°C. It is light and resistant to oils, solvents and many chemical agents (however, it is advisable to avoid contact with live steam).

FEATURES

Working Temperature	550°C
Peak Temperature	600 °C
Combustibility: BS 476 part 7, 1971	Class 1
Thermal Conductivity	0,06 W/mK
Heat Transfer Coefficient	3 W/m ² K

17V TWISTED ROPE



The **17V** twisted rope is made entirely of glass yarns, suitable to operate at very high temperatures. The cord is an extremely flexible and soft gasket.

APPLICATIONS

Furnace joints; seal joints for stoves and ovens; pipe insulation; joints for coke furnace doors; thermal insulation of electric wires.

FEATURES

Working Temperature	500°C
Peak Temperature	600 °C
Combustibility: BS 476 part 7, 1971	Class 1

N/V TAPES



Tape made of fiber glass "E" continuous filament, texturized.

APPLICATIONS

Suitable for thermal insulation in general and in particular for pipes and artifacts.

FEATURES

Operating Temperature	500 °C
Peak temperature	600 °C
Flammability: BS 476 Part 7, 1971	Class 1
Thickness	1.5 mm and 3 mm

19V1 PACKING



The **19V1** packing is braided with 4 diagonals and is produced entirely using textured yarns resistant to 550°C with low density.

APPLICATIONS

Wood boilers, industrial furnaces, high temperature seals, in the boiler, iron metallurgy, petrochemical industries and in foundries for sealing boiler and furnace doors.

FEATURES

Working Temperature	500°C
Peak Temperature	600 °C
Combustibility: BS 476 part 7, 1971	Class 1

MB 411



Fiberglass fabric "E type", one side coated with red silicone rubber.

APPLICATIONS

Textile expansion joints, protection barrier and thermal insulation.

FEATURES

Working Temperature	250°C
Max base textile Working Temperature	600°C
Combustibility: BS 476 part 7, 1971	Class 1
Weight	865 g/mq
Thickness	0,8 mm
Textile weight	565 g/mq
Textile thickness	0,6 mm
Color	White / Red

MB 180



Fabric made from glass fibers "E" type continuous filament, dual gridded texture. Aluminized version also available.

APPLICATIONS

Light duty. Suitable to produce insulating mattresses, protective blankets, insulating panels and thermal insulation. Recommended in the presence of radiant heat and when a clean and waterproof is required.

FEATURES

Working Temperature	500°C
Max base textile Working Temperature	600°C
Combustibility: BS 476 part 7, 1971	Class 1
Weight	200 g/mq - 300 g/mq aluminized version
Thickness	0,18 mm - 0,2 mm aluminized version
Color	White

MB 400



Fabric fibers made of “E” glass continuous filament, double-gridded texture.
Aluminized version also available.

APPLICATIONS

Light duty. Suitable to produce insulating mattresses, panels and protective blankets.
Recommended in the presence of radiant heat and when a clean and waterproof is required.

FEATURES

Working Temperature	500°C
Max base textile Working Temperature	600°C
Flammability: BS 476 Part 7, 1971	Class 1
Weight	420 g/m ² - 520 g / m ² aluminized version
Thickness	0,4 mm – 0,42 mm aluminized version
Thermal conductivity	0,06 W/mK
Color	White

MB 540



Fiberglass fabric "E type", each side coated with grey silicone rubber.

APPLICATIONS

Textile expansion joints, protection barrier and thermal insulation.

FEATURES

Working Temperature	250°C
Max base textile Working Temperature	500°C
Combustibility: D.M. 20.06.84	Class 1
Textile weight	540 g/mq
Textile thickness	0,4 mm
Reaction to Oil ASTM D 471 – Olio 3	None
Loss on Ignition UNI 6536	<11%
Weave	Satin
Color	Grey

MB 800



Fabric fibers made of "E" glass continuous filament, double-gridded texture.
Aluminized version also available.

APPLICATIONS

Thermal insulation, insulating and blankets. Recommended in the presence of radiant heat and when a clean and waterproof is required.

FEATURES

Working Temperature	500°C
Max base textile Working Temperature	600°C
Flammability: BS 476 Part 7, 1971	Class 1
Weight	800 g/m ² - 900 g/m ² aluminized version
Thickness	0.7 mm - 0,8 mm aluminized version
Color	White

MB 1000



Fabric made of glass yarn E obtained from continuous filament texturized. It presents valid resistance to high temperature peaks retaining flexibility and mechanical properties. It offers excellent resistance to traction and vibration, high chemical stability against oils, fuels and the most corrosive agent.

APPLICATIONS

Thermal insulation. Suitable to manufacture protection and insulation blankets, thermal protection of machineries.

FEATURES

Working temperature	550°C
Combustibility	Class 0
Weight	1000 g/mq
Thickness	1,5 mm
Thermal conductivity	0,06 W/mK
Heat Transfer Coefficient	23,6 W/m ² K
Color	White

MB 1050



Is made by a special texturized fibreglass yarn with improved insulating properties of the finished products. The surface is treated to increase resistance to heat and flame.

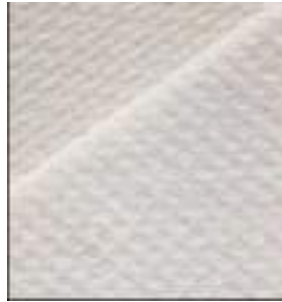
APPLICATIONS

Suitable to realize thermal insulation and blanket in the presence of very high temperatures, flames and welding operations. It is characterized by a high degree of resistance to splashes of molten metal which evolve, for example, by during intersect a metal plate (oxygen cutting) on ship decks.

FEATURES

Working Temperature	1000°C
Combustibility: BS 476 part 7, 1971	Class 1
Weight	1050 g/mq
Thickness	1,2 mm
Thermal Conductivity	0,06 W/mK
Tensile Strength warp/weft ISO 4606	5000/2500 N/50mm
Weave DIN 61-101 1	Plain
Color	Light Blue

MB 1106



Glass cloth woven from textured “E” glass fibres and coated on both sides with white silicone rubber.

APPLICATIONS

Particularly indicated for protection when in presence of radiant heat, including sparks and molten metal splash. Ideal for the manufacture of blankets, bellows and expansion joints.

FEATURES

Working Temperature	250°C
Peak Temperature of base cloth	500°C
Weight	2200 g/mq
Tensile Strength warp/weft	3500 N/50mm
Thickness	2,7 mm +/- 8%
Thermal Conductivity	0,06 W/mK
Weave	Plain
Color	White

MB 1600R



Made with P.A.N (polyacrylonitrile) yarn fibers and synthetic fibers characterized by high mechanical resistance. Very good properties in thermal insulation, nonflammable. It does not melt. Coated one side with uncured natural rubber.

APPLICATIONS

Thanks to the particular characteristics of the fibers P.A.N. pre-oxidised, this fabric provides excellent thermal insulating qualities of mechanical and abrasion resistance.

Suitable for construction of manholes and railings for boilers.

FEATURES

Working Temperature	250°C
Combustibility: D.M. 26.06.84	Class 1
Weight	1600 g/mq
Thickness	1,5 mm
Thermal Conductivity	0,06 W/mK
Color	Grey



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