

HEAT SHRINK SLEEVE SYSTEM
TECHNICAL DATASHEET

PRODUCT DESCRIPTION

The **tecnosleeve** coating system is specially designed for the protection of pipelines, bends, elbows and, in general, buried and / or submerged accessories. This system consists of a first **tecnosleeve-epoxy** barrier and a second layer of **tecnosleeve** (heat-shrinkable sleeve) with high adhesion and impermeability that makes it the ideal system for the corrosion protection of pipelines and welded joints with excellent adhesion in transition areas that have 3-layer PP and epoxy in general.

Corrosion protection is provided by the first layer of **tecnosleeve-epoxy**, which is a 100% solids per volume, fast drying coating with high impermeability and temperature resistance, and the **tecnosleeve** (heat shrinkable sleeve), that when heated shrinks and allows the adhesive to flow onto metal, epoxy or coated surfaces.

MAIN FEATURES

- Excellent resistance to cathodic disbondment.
- Long-term corrosion protection.
- Does not harden or crack over time.
- High impermeability and completely hydrophobic.
- Easy application and high performance, requires minimal training.
- Excellent resistance to water, acids, salts and chemicals.
- Excellent resistance to cutting forces.
- Excellent compatibility with cathodic protection.
- It does not require curing time; the service is immediate.
- There is no need to wait for specific environmental conditions for its application.
- Environmentally friendly and non-toxic.

SALES CODE

The following sales code has been designed to assist you in the product selection.

tecnosleeve 65 450 18 Temperature Diameter Width Thickness (ºC) (inch) (mm) (mm) 2.0 65 12 450 80 14 600 2.5 16 900 ••• ... 18 other (*) other (*) other (*) etc

As an example, the code **tecnosleeve 65-18-450-2.5** indicates a tecnosleeve with temperature resistance for continuous operation up to 65°C to be applied in a 18" pipeline joint; the **tecnosleeve** will have a width of 450 mm and 2.5 mm thickness.



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tecnosleeve-epoxy PROPERTIES

PROPERTY	TYPICAL VALUE	TESTING METHOD
Color	Black or Gray	
Solids per volume	100 %	
Thickness	100 – 500 micron (4-20 mil)	
Typical coating	2 m²/L	
Flash Point Part A	253° C	
Flash Point Part B	260° C	
Specific gravity	1.65	ASTM D3289-D3
Hardness Shore D	86	ASTM D2240
Adhesion to steel	>14 MPa (>2,030 psi)	ASTM D4541
Mixing Ratio	1:1 Part A : Part B in volume	

tecnosleeve PROPERTIES

PROPERTY	TYPICAL VALUE	TESTING METHOD
Peeled to steel	35 N/cm	ASTM D4541
Low temperature flexibility	10 mm radius	ASTM D2671
Cathodic disbondment	0.95	ASTM G8, 30 days @ 23° C
Impact resistance	Pass	DIN EN 12068
Resistance to indentation	Pass	DIN EN 12068
Dielectric strength	35 kV	ASTM D-149
Tape thickness	2.5 mm and others	
Tape width	450, 600, 900 mm and others	
Roll length	10, 15, 20, 30 m and others	

tecnosleeve PROPERTIES (backing)

PROPERTY	TYPICAL VALUE	TESTING METHOD
Stress strain	20 MPa (2,900 psi)	ASTM D638
Elongation at break	550%	ASTM D638
Specific gravity	0.95	ASTM D792
Cutting effort (lap shear)	40 psi	ASTM D1002
Electric resistance	20 kV/mm	ASTM D-149
Water absorption	0.06%	ASTM D570
Shrink force	240 kPa (35 psi)	ASTM D638
Resistivity	1 x 10 ¹⁶ ohm-cm	ASTM D257



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tecnosleeve PROPERTIES (adhesive)

PROPERTY	TYPICAL VALUE	TESTING METHOD
Softening point	85° C	ASTM E-28
Elongation at break	550%	ASTM D638
Specific Gravity	0.95	ASTM D792
Hardness, shore D	40 psi	ASTM D2240
Electric resistance	20 kV/mm	ASTM D-149
Water absorption	0.05%	ASTM D570 0.05%
Shrink force	240 kPa (35 psi)	ASTM D638
Resistivity	1 x 10 ¹⁶ ohm-cm	ASTM D257

SAFETY PRECAUTIONS

The products of the **tecnosleeve** system are 100% solids by volume with which they use a minimum amount of solvent, however, the use of organic vapor filters is recommended for their application. Use personal protective equipment for any work activity with our products.

TECHNICAL SERVICE

For any technical questions regarding the use of our products, let us support you by contacting our commercial technical department. Contact us, we have NACE certified professionals in industrial coatings ready to support you.

PRESENTATION OF THE PRODUCTS

The following table shows the presentation of the products for consumer clarity.

PRODUCT	USE	PRESENTATION	PACKING
tecnosleeve-epoxy	Primer of the surface prepared for application of the blanket.	700 mL kit. Mixing ratio 5:1.	
tecnosleeve	Corrosion resistance.	According to the diameter of the duct and the requested conditions. The blanket and the blanket seal are usually delivered	



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WARRANTY AND LIMITATION OF LIABILITY

TECNOLOGIA TOTAL will not be in any case responsible for damages of any nature that could be derived from an inadequate use of the product. Before using the product, the user must determine if the product is suitable for its intended use, taking all risks and liability that could be derived from its use.

If it's proved that a product is faulty due to manufacturing or its material at the time of sale, or that it does not fulfill during its warranty period the indicated properties in this technical sheet, the only responsibility of TECNOLOGIA TOTAL will consist of replacing the buyer with the quantity of product that is found to be defective. TECNOLOGIA TOTAL does not take any responsibility for any additional cost such as manufacturing cost, withdrawal or re-application of the products. If TECNOLOGIA TOTAL offers a warranty to their clients, express or implicit, or a compensation that differs from the stablished in this section, this stipulation can not be altered unless a signed agreement by the parties.





