

PRODUCT DESCRIPTION

The **tecnolato** coating system is specially designed for pipelines and appurtenances that are either aerial, buried or submerged. This system consists in a layer of **tecnolato-primer**, a layer of **tecnolato-tape**, and a finishing layer for mechanical protection of **tecnolato-shield** (polyethylene tape with butyl adhesive); it is also possible to apply an alternative finishing layer of **tecnolato-rockshield** (polyethylene mesh) that provides a higher protection to the pipeline when the burial material has coarse particles.

The corrosion protection is provided by a formula of inert petrolatum waxes, plasticizers with silica sealers, and moisture repellants that inhibit the corrosion process.

Additionally, with the addition of the **tecnolato-mastic** over the primer, the complex structures such as flanges, valves, and other appurtenances can be coated, obtaining a long-lasting protection against corrosion.

SURFACE PREPARATION

A pre-cleaning of the surface has to be done before the surface preparation according to SSPC SP1 – solvent cleaning, using water or paint solvent to remove oil and other existing contaminants.

The surface must be prepared with hand tool cleaning, removing all calamine, oxide, paint, and other materials according to SSPC SP2/SP3 – hand and power tool cleaning.

Although the **tecnolato** system is designed for direct application over the metallic surface, in some cases it can be installed over an existing coating, as long as it has excellent adhesion; it is considered that the coating can remain on the substrate if it can not be lifted or detached with a spatula.

Previous to the application of **tecnolato-primer**, the surface needs to be completely free of dust, dirt, oil, and other contaminants, which can be done using water or solvent according to SSPC SP1.

INSTALLATION CONDITIONS

There are no specific conditions of substrate humidity or environmental conditions for the coating system installation because this product can be applied under water, the products of the **tecnolato** system do not require induction time and can be applied as soon as the container is opened. It is also clear that the remaining product that was not used can be closed and saved for the next application because the products never cure.

INSTALLATION

tecnolato-primer installation:

After the surface preparation is finished, a homogeneous layer of **tecnolato-primer** is applied using nitrile gloves, until the surface is completely covered with a 2-8 mil thickness layer, including 2 additional inches on each side of the coating area.

The **tecnolato-primer** has the advantage that it can be applied over moist surfaces or under water, displacing the water and allowing the installation of the **tecnolato tape**.



tecnolato-mastic installation:

It is only used if an irregular surface is going to be protected; the product shapes the edges of flanges and appurtenances, in order to give an appropriate contour for the installation of the **tecnolato-tape**.

It is applied over the irregular surface, filling the spaces until an oval or cylindrical surface is achieved and facilitating the coating application.



tecnolato-tape installation:

Following the primer installation, it is applied over the **tecnolato-primer** or the **tecnolato-mastic** with 50% overlapping, tightening the tape to avoid air bubbles. Over the **tecnolato-mastic**, the tapes can be applied helically with a variable angle, and when necessary using pre-cut strips. If an air bubble is formed, return and rearrange the tape.



tecnolato-shield installation:

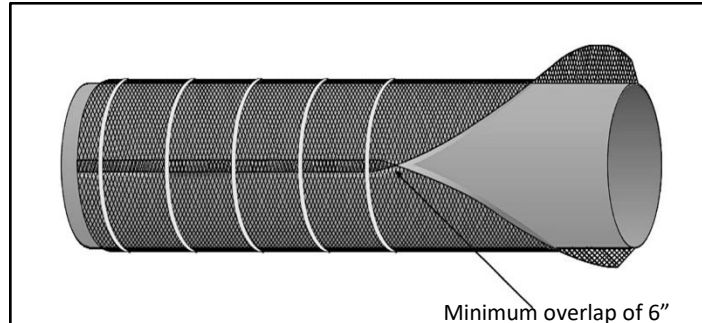
It is used to provide an additional protection, in order to avoid damages on the coating system and to allow the pipeline burial. In this step the polyethylene tape is installed with a 50% overlap, tightening the tape to avoid air bubbles. Over complex configurations, the tapes can be applied helically with a variable angle, and when necessary using pre-cut strips.



tecnolato-rockshield installation:

When there are coarse particles in the burial material and there is a risk of affecting the coating system, the **tecnolato-rockshield** (polyethylene mesh) is used in order to avoid mechanical damage of the **tecnolato-tape**.

Unroll the **tecnolato-rockshield** and wrap the pipeline with a 6-inch overlap. Adjust the mesh with polypropylene tapes, leaving a distance of 70 cm between tapes. Then place the new mesh of tecnolato-rockshield leaving a 6-inch overlap with respect to the previous one.



For large diameter pipelines it is recommended that two installers work together with the tape's overlapping, each one located at one side of the pipeline.

Please watch the installation videos on our webpage for further information.

QUALITY CONTROL

- Test with holiday detector at 10 kV over the **tecnolato-tape** and at 12 kV after the installation of the **tecnolato-shield**. If the protective layer is **tecnolato-rockshield** use 10 kV for testing.
- Visual inspection to identify and correct areas with blisters or insufficient overlapping.
- Verify that the **tecnolato-rockshield** adjustment tapes have enough tension to avoid its movement.

SAFETY MEASURES






All the **tecnolato** system products have 100% of solids per volume, so they use a low quantity of solvent, however, it is recommended to use organic vapor filters for their installation as a precaution. Use personal protection equipment for any activity that require 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 cathodic protection professionals ready to support you in product selection.

PRODUCT ORDERING INFORMATION

The following table shows the packaging information of each product.

PRODUCT	USE	PACKAGING INFO	PACKAGING APPEARANCE
tecnolato-primer	Surface primer and adherence promoter of the petrolatum tape. It is a petrolatum product with a high fusion point in a hydrocarbon solvent.	Bucket - 4 kg Color: Yellow	
tecnolato-mastic	Homogenize irregular surfaces to allow the continuous application of the tecnolato-tape .	Bag – 3 kg Color: Yellow	
tecnolato-tape	Corrosion resistance and inhibition, hydrophobic product.	Roll - 1.2mm x 50mm x 10m. Roll - 1.2mm x 100mm x 10m. Roll - 1.2mm x 150mm x 10m. Roll - 1.2mm x 300mm x 10m. Color: Yellow.	
tecnolato-shield	Coating system product.	Roll - 0.38mm x 150mm x 30m. Color: Black, White or Yellow. Roll's center: 76 mm.	
tecnolato-rockshield	Mechanical protection of the system for pipeline burial material with coarse particles.	Roll - TECNOLOGÍA TOTAL selects the diameter and length according to the diameter and length to be repaired of the pipeline. Color: Black or Gray.	

WARRANTY AND LIMITATION OF LIABILITY

TECNOLOGÍA 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 TECNOLOGÍA TOTAL will consist of replacing the buyer with the quantity of product that is found to be defective. TECNOLOGÍA TOTAL does not take any responsibility for any additional cost such as manufacturing cost, withdrawal or re-application of the products. If TECNOLOGÍA TOTAL offers a warranty to their clients, express or implicit, or a compensation that differs from the established in this section, this stipulation cannot be altered unless a signed agreement by the parties.

