



TESI ENVIRAWRAP™

Corrosion protection using induced-tension polymer wraps



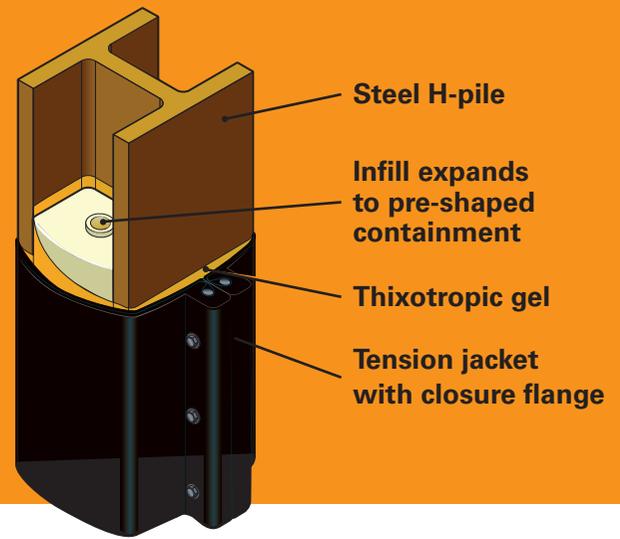
Extra-large-diameter one-piece wraps on mooring monopiles, Yanbu, Saudi Arabia, January 2016

- One-piece construction
- Totally UV-stable
- High abrasion resistance
- Facilitates substrate inspection
- Custom-designed
- Conforms to any size and shape
- Hot work permit not required
- 10-year warranty

NEW PRODUCT LINE

ENVIRA-H-WRAP

Since the induced-tension wraps were first developed in 1985–87, the proven advantages have always been to reduce installation to its simplest possible form. Envira-H-Wrap continues this concept by utilizing a diver-friendly, gel-impregnated infill system as an alternative to the traditional rigid polystyrene blocks.



ENVIRAWRAP STD (Standard)

■ *Easy one-piece installation*

Full-length Geon™ closure flanges are factory-fitted with corrosion-resistant self-threading fasteners.

■ *Minimal surface preparation*

Corrosion-inhibited gel flows to totally encapsulate and protect the substrate without the use of primers, fillers or tapes. The mechanical removal of marine growth and delaminated iron oxide is all that is necessary.

■ *Tried-and-true technology*

20+ years of providing inshore splash zone and underwater corrosion protection for piles, pipelines and risers. Projects have been conducted from northern waters to the tropics.

■ *Environmentally safe*

Residual elasticity within the multilayer fabric safely maintains the wrap in position and prevents leaching of the corrosion inhibitor into the environment.

■ *Corrosion rate monitoring*

May be fitted with weight loss coupons or remote corrosion rate monitoring.

■ *Custom-made to fit*

Suits any diameter from 50 mm to 3 meters. May be interlocked to accommodate any required protected length.

■ *Built for the toughest environments*

Withstands the degradative influences of environmental UV, ozone and temperature variations. Highly abrasion- and impact-resistant.

■ *Inspections made easy*

The wrap can easily be opened and resealed to allow for substrate inspection.

■ *Repairs*

In the unlikely event of exterior damage, the wrap can be repaired by fitting another wrap over the damaged area.



ENVIRAWRAP HD (Heavy-Duty)

■ **Multilayer, heavy-duty construction**

Envirawrap HD is the heavy-duty, multi-scrim version of the STD. It is specifically designed to provide protection to offshore oil and gas risers or inshore applications subject to external impact damage.

■ **Easy installation**

As with the STD, installation has been reduced to its simplest possible form, saving hours of diver and rigging time. Does not require substrate shotblast preparation.

■ **Custom-made for tough conditions**

Supplied in interlocking modular lengths. Polyurethane provides the highest abrasion resistance.

■ **Active protection**

Available with unique anti-fouling outer layer. Provides active protection with environmentally safe corrosion inhibitors.

Custom-built white wraps for heat-reflecting surface



BARGEWRAP

■ **Easy installation**

Designed to provide simple high-speed installation for a multitude of subsea and onshore applications. Installation topside, underwater or in a pipeline trench is carried out with pneumatically or hydraulically operated tools, driving a reusable closure caliper. Typical installation times for pipe diameters of 200–610 mm are 8 minutes per joint, depending on diameter. Cold-applied – no hot work permit required. Does not require shotblast substrate preparation.

■ **Extreme performance**

Independently tested to operate in the temperature range of up to 120°C. Low-temperature versions are available for above-ground applications where ambient temperatures can be as low as –40°C.

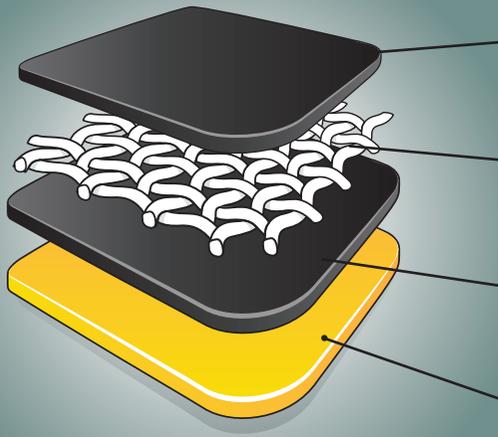
■ **Custom applications**

Bargewrap provides an ultrafast alternative field joint coating solution on the lay barge and tie-in coating stations, or it may be applied subsea by divers, when used as a coating repair method. High-temperature, hydrophobic corrosion-inhibiting gel prevents water entrapment during underwater applications.

■ **Perfect fit**

Closure around the joint is via a thermally formed flange, designed to follow field joint contours. Hoop tension induced into the fabric during installation locks the system in place.





Outer polyurethane layer

Highly abrasion-resistant and UV-stable.
Long-term environmental outer barrier.

Memory-enhanced polyamide reinforcing scrim

During installation, these scrims create hoop tension forces sufficient to resist long-term creep, as well as one-hundred-year storms.

Inner polyurethane layer

Polyester felt inner layer

Active corrosion inhibitors or biocides are pre-blended into a range of hydrophobic and thixotropic gels. These gels are factory-applied to the absorbent felt inner layer in quantities calculated to provide a service life of more than 25 years.



How does Envirowrap work?

Hoop tension imposed in the tough, resilient outer skin forces the inner layer against the surface of the substrate, thereby causing the sealant and its corrosion inhibitor to form a close association with the substrate.

The thixotropic nature of the sealant allows it to be exuded into any surface irregularities, thereby providing a seal and preventing the contact of oxygenated water against the riser, pipe or pile.

Since production began in 1985, Envirowrap has reached its fifth generation of product perfection.



HEADQUARTERS
Via Piave, 20/11
20071 Vermezzo con Zelo (MI)
Italy
T +39 02 9440501
F +39 02 9449087



USA
10617 Jefferson Chemical Rd
Conroe, TX 77031
USA
T +1 936 441 5678
F +1 936 756 5566



UAE
Plot 1K-20#W-1 | PO Box 50865
Al Hamriyah Free Zone, Sharjah - UAE
T +971 6 5667114
F +971 6 5668115
M +971 543 733958

info@tesigroup.com
www.tesigroup.com

