

TDS 10 · PE / PP CORROSION PROTECTION AND WRAPPING SYSTEM

PE Anti-Corrosion Tape

Polyethylene anti-corrosion tape · PE pipeline wrap



SYSTEM ROLE · PRIMARY WRAP · OUTER WRAP

External wrapping system for buried steel pipelines and fittings.

Product description

A pipeline wrapping tape manufactured from a roughened low-pressure high-density polyethylene film backing and a modified bituminous rubber adhesive, combined by a solvent-free co-extrusion hot-lamination process. Thin-adhesive and thick-adhesive configurations are available to suit different soil-stress conditions.

Typical system configuration



Zhuohuang systems are modular. The configuration above is typical for this product; components are added or omitted according to substrate condition, geometry, operating environment and project specification.

ALSO USED AS A PROTECTIVE OUTER WRAP

PE tape is used both as a primary corrosion protection wrap and as an economical protective outer wrap over another system on buried pipework. Thin- and thick-adhesive configurations allow the outer layer to be specified independently of the primary wrap.

KEY CHARACTERISTICS

- High initial tack and strong overlap bonding
- Backing and adhesive do not delaminate in storage or service
- Pinhole-free with high dielectric strength
- Good heat-ageing and weathering resistance

TYPICAL APPLICATIONS

- Buried steel pipelines in oil, gas and chemical service
- Municipal gas and water networks
- Steel fittings and field joints
- Rehabilitation of aged pipeline coatings

WHY IT MATTERS

Feature	What it means on site
High initial tack and overlap bonding	The wrap stays where the crew put it during lowering-in and backfill.
High dielectric strength, no pinholes	Supports the cathodic protection design instead of drawing current at defects.
Dual role	The same product line serves as the primary wrap and as a buried outer wrap, which simplifies stock and ordering.

TYPICAL APPLICATIONS — FIELD PHOTOGRAPHS



Buried pipeline construction



Gas distribution main



Field joints and fittings

Technical properties

Property	Typical / standard value	Test method
Backing	Roughened HDPE film	—
Adhesive	Modified bituminous rubber	—
Manufacturing process	Solvent-free hot lamination	—
Thickness range	0.4–2.0 mm	—
Widths	50–300 mm	—
Roll lengths	15 / 20 / 50 / 60 m	—
Primer	Modified bitumen primer	—

Values are typical or standard configurations for the grade described and are not universal acceptance limits. Where a property is not listed, it is not declared for this grade in the source technical documentation. Confirm the applicable grade and project acceptance criteria before order.

Sizes and packaging

Size	Reference	Packing
300 / 150 / 100 / 75 / 50 mm	carton 420×420×320	36–72 m ² / carton by gauge
200 mm	carton 410×210×420	24–48 m ² / carton by gauge
230 mm	carton 420×420×260	27.6–55.2 m ² / carton
250 mm	carton 420×420×260	30–60 m ² / carton

Carton content depends on the ordered thickness and roll length combination.

Third-party verification

INDEPENDENT LABORATORY TEST	
Report number	CTG2409251378A_SR177AC
Laboratory	Shenzhen Third-Party Testing Technology Co., Ltd. (CTG)
Accreditation	CMA / CNAS accredited laboratory
Sample tested	PE Anti-Corrosion Tape (including matching primer)
Test basis	GB/T 6672-2001, GB/T 1040.3-2006, GB/T 2792-2014, GB/T 1408.1-2006, GB/T 31838.2-2019, GB/T 1037-2021, GB/T 1725-2007, GB/T 1728-2020
Date of issue	11 October 2024
Conclusion	All tested items assessed as Pass.
This report was issued on this product.	

The full report is available on request. A faithful English transcription is issued as a separate single-product file and in the compilation Zhuohuang Test Reports – English Compilation. A test report records the properties measured on the sample submitted; it is a test result, not a system certification.

Application

Step	Procedure
01	Remove oil, dirt and unstable corrosion products. Prepare the steel to the project-specified cleanliness.
02	Apply the compatible modified bitumen primer uniformly and allow it to reach the specified condition.
03	Spiral wrap the tape under controlled tension with the specified overlap, keeping the adhesive in continuous contact with the steel.
04	Press the tape around weld profiles and at overlaps so that no channel remains.
05	Inspect (visual and holiday detection where specified) before lowering-in and backfilling; protect the completed wrap during handling.

STORAGE

Store sealed in the original packaging in a cool, dry, ventilated place, away from direct sunlight, open flame, strong heat, strong oxidising agents and sources of ignition. Keep clear of contamination. Unopened material can be stored long-term at ambient temperature.

HEALTH AND SAFETY

The products in this range are not classified as dangerous goods for supply. Wear grease-resistant gloves and avoid contact with the eyes. Wash hands with soap and water after handling. Combustion releases carbon monoxide and hydrocarbon by-products. Consult the product safety data sheet before use; it is supplied on request.

WASTE

Avoid or minimise waste wherever possible. Do not discard waste material, including packaging, in the surrounding environment. Follow all applicable disposal legislation.

DISCLAIMER

The information in this document is based on Zhuohuang product records, manufacturer data and third-party test reports available at the date of issue. Values are typical or standard configurations and are not universal acceptance limits. Product performance depends on substrate condition, surface preparation, geometry, operating temperature and exposure. Confirm the applicable grade, current packaging, project acceptance criteria and the relevant safety data sheet before order and application.

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