



**T100 Inner Tape**

### Coating System for pipelines-Inner Layer

T100 series are 2-Ply polyethylene (PE) anticorrosive adhesive tapes. It is Cold wrap tape coating system for Corrosion Protection of Water, Oil and Gas Pipelines.

The inner-layer tape shall be applied after the Primer and before the Outer-layer tape.

In order to promote high adhesion of the coating system to the pipe, the more higher Solid content primer is recommended. More Primer Solid content , providing maximum handling for the coating system with PE tapes.

### Features

- Excellent adhesion to pipe and self.
- Can be applied over a wide temperature range .
- Good conformability and consistent uniform thickness.
- Easily applied with no special equipment.
- Compatible with common pipe coatings.
- Excellent resistance to cathodic disbonding.
- Meets ASTM D 1000 and EN12068 Standard.
- Cold applied.

### Technical Data sheet

Type	T138-15	T145-18	T151-20	T164-25	T176-30
Total thickness	0.381mm	0.454mm	0.510mm	0.635mm	0.762mm
Polyethylene Film	0.254mm	0.254mm	0.305mm	0.330mm	0.254mm
Butyl Rubber Adhesive	0.127mm	0.200mm	0.205mm	0.305mm	0.508mm
Elongation at break	250%	260%	280%	300%	300%
Tensile Strength	54.0N/cm	55.0N/cm	61.5 N/cm	64.5N/cm	68.0N/cm
Yield Strength	36.0N/cm	36.6N/cm	40.5 N/cm	43.0N/cm	45.3N/cm
Peel Adhesion to Primed Pipe	23.0N/cm	26.0N/cm	26 .0N/cm	34.0N/cm	35.0N/cm
Adhesion to backing at	5.1 N/cm	5.2N/cm	5.2N/cm	5.4N/cm	5.4 N /cm
Dielectric Strength	23.0 KV	25.0 KV	25.5 KV	27.0 KV	29.0 KV
Cathodic Disbondment	6.4mm				
Volume Resistivity	≥2.2X10 <sup>15</sup> ohm.cm				
Water Vapor Transmission rate	≤0.15g/m <sup>2</sup> /24h				
Water Absorption Rate	≤0.06%				
Application Temperature	-34 °C to +85 °C				
Max Serve Temperature	+85 °C				
Available Roll Size(width* length)	50 to 750mm X 15 to 240 m				
Color	Black				



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Text Data sheet

Physical Properties	Test Method	Typical Value	
		English	Metric
Total thickness	ASTM D 1000	25 mils	0.635mm
Backing thickness	ASTM D 1000	13 mils	0.330mm
Adhesive thickness	ASTM D 1000	12 mils	0.305mm
Width	-	9"	228mm
Length	-	600'	183m
Backing color	-	Black,	Black
Tensile strength	ASTM D 1000	36.3 lbs/in	64.5 N/cm
Elongation	ASTM D 1000	280%	280%
Peel Adhesion to primed steel pipe	ASTM D 1000	311oz/in	34 N/cm
Cathodic Disbondment	ASTM G 8	0.252 in radius	6.4mm
Dielectric Strength	ASTM D 149	27.0 KV	27.0 KV
Volume Resistivity	ASTM D 257	2.4×10 <sup>15</sup> ohm.cm	2.4×10 <sup>15</sup> ohm.cm
Water Absorptivity	ASTM D 570	0.06%	0.06%
Water Vapor Transmissioin Rate 24 h	ASTM F 1249	0.083 g/100sq in/24hr	0.13 g/ m <sup>2</sup> .24h
Application Temperature	-	-29°F to 185 °F	-34°C to +85 °C
Max Service Temperature	-	185°F	+85 °C

(Width of Coating in inches) × (Area of pipe in square feet)\*

-----=Squares \*\*of Coating Required

(Width of coating in inches-Overlap in inches) × 100

\*Area of pipe in square feet=(Diameter in inches)/12×3.1416×(Length in feet)

\*\*One square=One hundred square feet=9.29 square meters

(Width of Coating in mm) × (Area of pipe in square meter)\*

-----=Square meter of Coating Required

(Width of coating in mm-Overlap in mm)

\*Area of pipe in square meter=(Diameter in mm)/1000×3.1416×(Length in meter)