Heat Shrink Anticorrosion Coating System

Shandong Quanmin Plastic, China

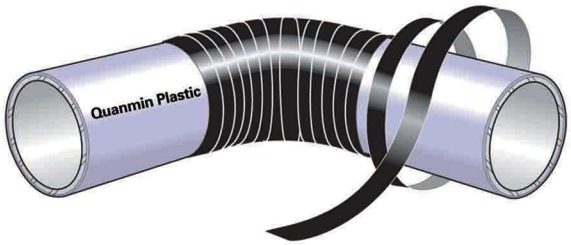
Heat Shrinkable Wrapping Tape-WPT

Primerless cross-linked Heat-shrinkable Tape Wrap for Pipe Bends

WPT-MA: Mastic Adhesive coating;

WPT-BR: Butyl Rubber Adhesive coating;

WPT-CA: Copolymer Adhesive coating;



Heat Shrinkable Tape is a hand wrapped tape, consist of a cross-linked polyethylene backing, coated with a protective heat sensitive adhesive which effectively bonds to steel substrates. Wrapped tape is designed for corrosion protection of bends, elbows and less than DN300 straight pipes.

Adhesive: Low preheat high-shear strength adhesive;

Backing: Radiatioin cross-linked flexible LDPE backing;

Color: Black or Yellow

Without primer coating when installation on pipe surface. The backing is heated and shrinks tightly around the substrate. At the same time, the sealing adhesive melts and is forced into all surface irregularities.

Hand wrapped, heat shrinkable corrosion protection tape.

Standard Ordering Size:

Roll width: 35mm (1.5in) to 300mm (12in);

Roll length: 10m(33ft),15m (50ft).

Applications

Oil pipelines

Gas pipelines

Water pipelines

Bends

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Physical Properties

Property	Test method	WPT-MA	WPT-BR	WPT-CA
Backing				
Thickness as supplied	ASTM D1000	0.5mm(0.020in)	0.5mm(0.020in)	0.5mm(0.020in)
Specific Gravity	ASTM D792	0.93g/cm^3	0.93 g/cm^3	0.93 g/cm^3
Tensile strength	ASTM D638	22 MPa (3190psi)	20 MPa (2900psi)	22 MPa (3190psi)
Elongation	ASTM D638	900%	600%	900%
Hardness	ASTM D2240	50 Shore D	46 Shore D	50 Shore D
Adhesive				
Thickness as supplied	ASTM D1000	0.7mm(0.028in)	0.7mm(0.028in)	0.7mm(0.028in)
Softening point	ASTM E28	82℃（180 ℉）	100 ℃（212 ℉）	94 ℃（201 ℉）
Shear strength	ASTM D1002	90 N/cm^2 (130 psi)	45 N/cm^2 (65 psi)	117 N/cm^2 (170 psi)
	EN 12068	0.87 N/mm^2	0.43 N/mm^2	1.10 N/mm^2
Tape				
Fully Recovered Thickness	ASTM D1000	1.5mm(0.060in)	1.5mm(0.060in)	1.5mm(0.060in)
Peel to Steel	ASTM D1000	81 N/cm	47 N/cm	120 N/cm
	EN 12068	7 N/mm	3 N/mm	7.8 N/mm
Water Absorption	ASTM D570	0.05%	0.04%	0.05%
Cathodic disbondment	EN 12068 30days	10mm radius	8mm radius	11mm radius
Impact resistance	EN 12068			
	Class B	＞8 Nm		
	Class C		＞15 Nm	＞15 Nm
Dielectric Voltage Brkdwn	ASTM D149	27 KV/mm	27 KV/mm	27 KV/mm
Low Temp Flexibility	ASTM D2671C	-25 ℃(-13 ℉)	-20 ℃(-4 ℉)	-30 ℃(-24 ℉)
Pipeline Operating Temp.		50 ℃(122 ℉)	50 ℃(122 ℉)	55℃(131 ℉)
Minimum Installation Temp.		70 ℃(158 ℉)	70 ℃(158 ℉)	70 ℃(158 ℉)
Mainline Coating Compatibility		PE, FBE	PE, PP, FBE, PU, Bit, CT	PE, FBE

Application Table (Length of Tape Required)

Pipe Size		Tape Width		Tape Length	
DN	Inch	(mm)	(Inch	(m)	(ft)
25	1	50	2	2.8	9.2
40	1.5	50	2	4.0	13.1
50	2	50	2	5.2	17.1
80	3	50	2	8.5	27.9
100	4	50	2	11.1	36.4
125	5	75	3	12.3	40.4
150	6	75	3	14.3	46.9
200	8	100	4	16.3	53.5
250	10	100	4	23.1	75.8
300	12	100	4	30.4	99.7
>300	>12	150	6	formula	-

The following formula can be used:

Length of tape=Pipe Ø x 3.14 x L/W

L=length of area to be covered.

W=1/2 of tape width(50% overlap)