



Wraparound Heat Shrink Sleeves

Quanmin Heat Shrink Sleeves provides a range of anticorrosion protection, use for field girth weld joints in distribution and transmission system. As wraparound heat-shrinkable products, provide corrosion protection solutions for oil, gas and water transmission pipelines.



2 Layer-Primerless Wraparound Sleeves

2 Layer: Primerless Wraparound Sleeves with Mastic adhesive, is a two-layer field-joint coating system without any primer coating.



- Max operating Temperature for pipeline:
45°C (113°F), 60°C (140°F), 65°C (149°F), 85°C (185°F)
- First layer: Low preheat Mastic adhesive;
- Second layer: Radiation cross-linked HDPE backing.
- No primer required for two-layer products – install directly on cleaned, preheated surface.
- Available in Unisleeve construction – One-piece protective sleeve with pre-attached closure patch.
- Available in Bulk rolls consisting – Two piece protective sleeve with separate closure patch.

Applications

Oil pipelines



Gas pipelines



Water pipelines



Girth-weld joints





Heat Shrink Anticorrosion Coating System

Shandong Quanmin Plastic, China

WPS ambient

Wraparound sleeve without Epoxy Primer

Coating the Co-polymer based Mastic Adhesive, low preheat sealant adhesive layer.

Pipelines operating Temperature up to 45°C (113 °F)

Property	Test method	Typical value
Backing	Radiation cross-linked HDPE backing	
Specific Gravity	ASTM D-792	0.94g/cm ³
Tensile strength	ASTM D-638	24 MPa (3480 psi)
Elongation	ASTM D-638	600%
Hardness	ASTM D-2240	55 Shore D
Dielectric strength	ASTM D-149	35 KV/mm (900 volts/mil)
Water absorption	ASTM D-570	0.05%
Color	Black or Yellow	
Adhesive	Low preheat Mastic adhesive	
Softening point	ASTM E-28	95°C (203 °F)
Lap shear	ASTM D-1002	33N/cm ² (48psi)@ 23 °C(73 °F)
	@1.25mm(0.05")/min	
	EN 12068/DIN 30672	0.3 N/mm ² @ 23 °C(73 °F)
	@10mm(0.4")/min	
Sleeve	Bulk rolls consisting – Two piece protective sleeve with separate closure patch	
Peel to Steel	ASTM D-1000	60N/cm @ 23 °C(73 °F)
	@305mm (12")/min	
	EN 12068	3.9 N/mm @ 23 °C(73 °F)
	@10mm (0.4")/min	
Cathodic disbondment	EN 12068,30days	8 mm radius,@ 23 °C(73 °F)
Impact resistance	ASTM G-14	35 in-lbs
	EN 12068 class B30	>8Nm
Penetration resistance	ASTM G-17	no holiday with10 KV detector @ 23 °C(73 °F)
	EN 12068 class B30	0.8mm
Low temperature flexibility	ASTM D-2671-C	-5 °C(23 °F)
Pipeline Operating Temp.	45 °C(113 °F)	
Minimum Installation Temp.	60 °C(140 °F)	
Mainline Coating Compatibility	PE, PP, FBE, PU	
Products Thickness	WPST	WPS/B
Backing (as supplied)	0.55mm (0.022in)	0.76mm (0.030in)
Backing (fully free recovered)	0.76mm (0.030in)	1.00mm (0.040in)
Adhesive (as supplied)	1.40mm (0.055in)	1.20mm (0.047in)

Sleeves Standard Ordering Size:

Roll width: 285mm (11in), 450mm (17in), 500mm (20in), 600mm (24in), 870mm (34in)

Roll length: 20m (66ft), 30m (100ft).

Sleeve cut lengths and appropriate closure patch widths depend on the pipe size.

Closure Standard Ordering Size:

Width: 100mm (4in), 150mm (6in), 200mm (8in)

Length: 285mm (11in), 450mm (17in), 500mm (20in), 600mm (24in)



Heat Shrink Anticorrosion Coating System

Shandong Quanmin Plastic, China

WPS ambient

Wraparound sleeve without Epoxy Primer

Coating the Butyl-rubber based Mastic Adhesive, low preheat sealant adhesive layer.

Pipelines operating Temperature up to 45°C (113 °F)

Property	Test method	Typical value
Backing	Radiation cross-linked HDPE backing	
Specific Gravity	ASTM D-792	0.94g/cm ³
Tensile strength	ASTM D-638	24 MPa (3480 psi)
Elongation	ASTM D-638	600%
Hardness	ASTM D-2240	55 Shore D
Dielectric strength	ASTM D-149	35 KV/mm (900 volts/mil)
Water absorption	ASTM D-570	0.05%
Color	Black or Yellow	
Adhesive	Low preheat Mastic adhesive	
Softening point	ASTM E-28	100 °C (212 °F)
Lap shear	ASTM D-1002	11N/cm ² (16psi)@ 23 °C(73 °F)
	@1.25mm(0.05")/min	
	EN 12068/DIN 30672	0.1 N/mm ² @ 23 °C(73 °F)
	@10mm(0.4")/min	
Sleeve	Bulk rolls consisting – Two piece protective sleeve with separate closure patch	
Peel to Steel	ASTM D-1000	23 N/cm @ 23 °C(73 °F)
	@305mm (12")/min	
	EN 12068	1.5 N/mm @ 23 °C(73 °F)
	@10mm (0.4")/min	
Cathodic disbondment	EN 12068,30days	9 mm radius,@ 23 °C(73 °F)
Impact resistance	ASTM G-14	35 in-lbs
	EN 12068 class B30	>8Nm
	EN 12068 class C30	>15Nm
Penetration resistance	ASTM G-17	no holiday with10 KV detector @ 23 °C(73 °F)
	EN 12068 class B30	0.8mm
	EN 12068 class C30	0.8mm
Low temperature flexibility	ASTM D-2671-C	-40 °C(- 40 °F)
Pipeline Operating Temp.	45 °C(113 °F)	
Minimum Installation Temp.	60 °C(140 °F)	
Mainline Coating Compatibility	PE, PP, FBE, PU	
Products Thickness	WPS-B30	WPS-C30
Backing (as supplied)	0.76mm (0.030in)	1.00mm (0.040in)
Backing (fully free recovered)	1.00mm (0.040in)	1.40mm (0.055in)
Adhesive (as supplied)	1.20mm (0.047in)	1.50mm (0.060in)

Sleeves Standard Ordering Size:

Roll width: 285mm (11in), 450mm (17in), 500mm (20in), 600mm (24in), 870mm (34in)

Roll length: 20m (66ft), 30m (100ft).

Sleeve cut lengths and appropriate closure patch widths depend on the pipe size.

Closure Standard Ordering Size:

Width: 100mm (4in), 150mm (6in), 200mm (8in)

Length: 285mm (11in), 450mm (17in), 500mm (20in), 600mm (24in)



Heat Shrink Anticorrosion Coating System

Shandong Quanmin Plastic, China

WPS C50

Wraparound sleeve without Epoxy Primer

The most widely use for pipeline operating at ambient and elevated temperatures

Pipelines operating Temperature up to 60° C (140° F)

Property	Test method	Typical value
Backing	Radiation cross-linked HDPE backing	
Specific Gravity	ASTM D-792	0.94g/cm ³
Tensile strength	ASTM D-638	24 MPa (3480 psi)
Elongation	ASTM D-638	600%
Hardness	ASTM D-2240	55 Shore D
Dielectric strength	ASTM D-149	35 KV/mm (900 volts/mil)
Water absorption	ASTM D-570	0.05%
Color	Black or Yellow	
Adhesive	Low preheat Mastic adhesive	
Softening point	ASTM E-28	82°C (180 °F)
Lap shear	ASTM D-1002	90N/cm ² (130psi)@ 23°C(73 °F)
	@1.25mm(0.05")/min	23N/cm ² (33psi)@ 60°C(140 °F)
	EN 12068/DIN 30672	0.87 N/mm ² @ 23°C(73 °F)
	@10mm(0.4")/min	0.076 N/mm ² @50°C(122 °F)
Sleeve		
Peel to Steel	ASTM D-1000	81 N/cm @ 23°C(73 °F)
	@305mm (12")/min	
	EN 12068	5.8 N/mm @ 23°C(73 °F)
	@10mm (0.4")/min	0.52 N/mm@50°C(122 °F)
Cathodic disbondment	EN 12068,30days	10mm radius,@ 23°C(73 °F)
	ASTM G-42,30days	4.4mm radius,@60°C(140 °F)
Impact resistance	ASTM G-14	35 in-lbs
	EN 12068 class C	> 15Nm
Penetration resistance	ASTM G-17	no holiday with10 KV detector @60°C(140 °F)
	EN 12068 class C50(10N/mm ²)	0.8mm @50°C(122 °F)
Low temperature flexibility	ASTM D-2671-C	-25 °C(-13 °F)
Pipeline Operating Temp.	60 °C(140 °F)	
Minimum Installation Temp.	70 °C(158 °F)	
Mainline Coating Compatibility	PE, PP, FBE	
Products Thickness	WPS-C50	
Backing (as supplied)	1.00mm (0.040in)	
Backing (fully free recovered)	1.40mm (0.055in)	
Adhesive (as supplied)	1.50mm (0.060in)	

Sleeves Standard Ordering Size:

Roll width: 285mm (11in), 450mm (17in), 500mm (20in), 600mm (24in), 870mm (34in)

Roll length: 20m (66ft), 30m (100ft).

Sleeve cut lengths and appropriate closure patch widths depend on the pipe size.

Closure Standard Ordering Size:

Width: 100mm (4in), 150mm (6in), 200mm (8in)

Length: 285mm (11in), 450mm (17in), 500mm (20in), 600mm (24in)



Heat Shrink Anticorrosion Coating System

Shandong Quanmin Plastic, China

WPS 65M

Wraparound sleeve without Epoxy Primer

The most widely use for pipeline operating at ambient and elevated temperatures

Pipelines operating Temperature up to 65° C (149° F)

Property	Test method	Typical value	
Backing	Radiation cross-linked HDPE backing		
Specific Gravity	ASTM D-792	0.94g/cm ³	
Tensile strength	ASTM D-638	24 MPa (3480 psi)	
Elongation	ASTM D-638	600%	
Hardness	ASTM D-2240	55 Shore D	
Dielectric strength	ASTM D-149	35 KV/mm (900 volts/mil)	
Water absorption	ASTM D-570	0.05%	
Color	Black or Yellow		
Adhesive	Low preheat Mastic adhesive		
Softening point	ASTM E-28	110℃ (230 ℉)	
Lap shear	ASTM D-1002	56 N/cm ² (81psi) @ 23 ℃(73 ℉)	
	@1.25mm(0.05")/min	4 N/cm ² (6psi) @ 65 ℃(149 ℉)	
	EN 12068/DIN 30672	0.54 N/mm ² @ 23 ℃(73 ℉)	
	@10mm(0.4")/min	0.01 N/mm ² @ 65 ℃(149 ℉)	
Sleeve			
Peel to Steel	ASTM D-1000	130 N/cm @ 23 ℃(73 ℉)	
	@305mm (12")/min	4.8 N/cm @ 65 ℃(149 ℉)	
	EN 12068	5.2 N/mm @ 23 ℃(73 ℉)	
	@10mm (0.4")/min	0.15 N/mm @ 65 ℃(149 ℉)	
Cathodic disbondment	EN 12068,30days	13mm radius,@ 23 ℃(73 ℉)	
	ASTM G-42,30days	6mm radius,@ 65 ℃(149 ℉)	
Impact resistance	ASTM G-14	80 in-lbs	
	EN 12068 class B	>8 Nm	
	EN 12068 class C	>15 Nm	
Penetration resistance	ASTM G-17	no holiday with10 KV detector @ 65 ℃(149 ℉)	
Low temperature flexibility	ASTM D-2671-C	-30℃(-22 ℉)	
Pipeline Operating Temp.	65 ℃(149 ℉)		
Minimum Installation Temp.	70 ℃(158 ℉)		
Mainline Coating Compatibility	PE, PP, FBE		
Products Thickness	WPS 65M/B	WPS 65M/1.2×1.5	WPS 65M/C
Backing (as supplied)	0.75mm (0.030in)	0.90mm (0.035in)	1.00mm (0.040in)
Backing (fully free recovered)	1.00mm (0.040in)	1.20mm (0.047in)	1.40mm (0.055in)
Adhesive (as supplied)	1.00mm (0.040in)	1.50mm (0.060in)	1.50mm (0.060in)

Sleeves Standard Ordering Size:

Roll width: 285mm (11in), 450mm (17in), 500mm (20in), 600mm (24in), 870mm (34in)

Roll length: 20m (66ft), 30m (100ft).

Sleeve cut lengths and appropriate closure patch widths depend on the pipe size.

Closure Standard Ordering Size:

Width: 100mm (4in), 150mm (6in), 200mm (8in)

Length: 285mm (11in), 450mm (17in), 500mm (20in), 600mm (24in)



Heat Shrink Anticorrosion Coating System

Shandong Quanmin Plastic, China

WPS 80M

Wraparound sleeve without Epoxy Primer

The most widely use for pipeline operating at ambient and elevated temperatures

Pipelines operating Temperature up to 85°C (185 °F)

Property	Test method	Typical value	
Backing	Radiation cross-linked HDPE backing		
Specific Gravity	ASTM D-792	0.94g/cm³	
Tensile strength	ASTM D-638	24 MPa (3480 psi)	
Elongation	ASTM D-638	600%	
Hardness	ASTM D-2240	55 Shore D	
Dielectric strength	ASTM D-149	35 KV/mm (900 volts/mil)	
Water absorption	ASTM D-570	0.05%	
Color	Black		
Adhesive	Low preheat Mastic Adhesive		
Softening point	ASTM E-28	125 °C (258 °F)	
Lap shear	ASTM D-1002	144 N/cm² (99psi) @ 23 °C(73 °F)	
	@1.25mm(0.05")/min	15 N/cm² (10psi) @ 80 °C(176 °F)	
	EN 12068/DIN 30672	0.810 N/mm² @ 23 °C(73 °F)	
	@10mm(0.4")/min	0.019 N/mm² @ 80 °C(176 °F)	
Sleeve			
Peel to Steel	ASTM D-1000	80 N/cm @ 23 °C(73 °F)	
	@305mm (12")/min	0.30 N/cm @ 80 °C(176 °F)	
	EN 12068	1.60 N/mm @ 23 °C(73 °F)	
	@10mm (0.4")/min	0.15 N/mm @ 80 °C(176 °F)	
	DIN 30672	5.4 N/mm @ 23 °C(73 °F)	
	@100mm (4")/min		
Cathodic disbondment	EN 12068,30days	12mm radius,@ 23 °C(73 °F)	
	ASTM G-42,30days	17mm radius,@ 80 °C(176 °F)	
Impact resistance	ASTM G-14	64 in-lbs	
	EN 12068 class B	>8 Nm	
	EN 12068 class C	>15 Nm	
Penetration resistance	ASTM G-17	no holiday with10 KV detector @ 80 °C(176 °F)	
Low temperature flexibility	ASTM D-2671-C	-50 °C(-58 °F)	
Pipeline Operating Temp.	85 °C(185 °F)		
Minimum Installation Temp.	100 °C(212 °F)		
Mainline Coating Compatibility	PE,PP, FBE		
Products Thickness	WPS 80M/B	WPS 80M/1.4×1.1	WPS 80M/C
Backing (as supplied)	0.75mm (0.030in)	1.05mm (0.040in)	1.05mm (0.040in)
Backing (fully free recovered)	1.00mm (0.040in)	1.40mm (0.055 in)	1.40mm (0.055in)
Adhesive (as supplied)	1.00mm (0.040in)	1.10mm (0.043 in)	1.50mm (0.060in)

Sleeves Standard Ordering Size:

Roll width: 285mm (11in), 450mm (17in), 500mm (20in), 600mm (24in), 870mm (34in)

Roll length: 20m (66ft), 30m (100ft).

Sleeve cut lengths and appropriate closure patch widths depend on the pipe size.

Closure Standard Ordering Size:

Width: 100mm (4in), 150mm (6in), 200mm (8in)

Length: 285mm (11in), 450mm (17in), 500mm (20in), 600mm (24in)