3LPE COATING PIPE

●The Component Of 3LPE Coating Pipe

●3LPE Coating Pipe

Layer 1 of 3LPE Coating: This is the layer that protects against corrosion. This layer is composed of fusion-bonded epoxy and provides excellent corrosion protection. The fusion-bonded epoxy adheres extremely well to the blasted steel surface.
Layer 2 of 3LPE Coating: This is the copolymer sticky layer. The copolymer adhesive is a grafted polyethylene compound with maleic anhydride. This material adheres well to the fusion-bonded epoxy and the top layer polyethylene.
Layer 3 of 3LPE Coating: This layer is made of polyethylene and serves as a physical barrier. Due to the similarity between the copolymer adhesive and polyethylene, they adhere easily to one another.

●Production Standards of 3LPE Coating Pipe

No.	Item		Performance Indicators
1	Tensile Strength	Axial Direction, Mpa	≥20
		Circumferential Direction, Mpa	≥20
		Deviation, %	≤15

2	Elongation after Fracture, %		≥600
3	Indentation Hardness (mm)	23℃	≤0.2
		50℃ or 70℃	≤0.3
4	Endurably Environmental Stress Cracking (F50),h		≥1000

•Minimum Thickness of 3LPE Coating Pipe

Pipe Sizes (Specified O.D.)	Minimum Coating Thickness Chart (mm)
≤ 10 3 /4" (273.1 mm)	2.5
> 12 3 /4" (323.9 mm) to ≤ 18" (457 mm)	2.8
> 20″ (508.0 mm) to ≤ 30″ (762 mm)	3
> 32″ (813.0 mm)	3.3

•3LPE Coating Pipe Production Process

Pipeline 3LPE external anticorrosion is the use of a 3LPE production line that will be coated with three different types of anti-corrosion ingredients to produce a 3LPE anti-corrosion coating. Among them, the steel pipe surface should be pretreated with rust removal grade Sa2.5 or higher, the epoxy powder bottom layer coated to spiral operation after shot blasting derusting the steel pipe; the middle layer of adhesive and the outer layer of polyethylene are coated on the continuous running steel pipe coated with powder epoxy via extrusion winding or extrusion coating, respectively.

- Pipe Surface Preparation
- Surface Pre-Treatment Cleanness Test
- AD&PE Application

- Coating Thickness and Peeling Test
- Dew Point Detection and Appearance Inspection
- Flexibility and Impact Test