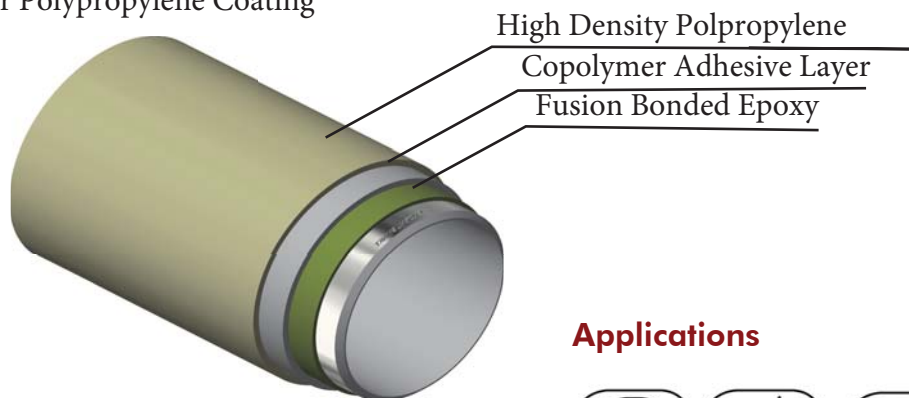


## 3LPP PIPE

Three Layer Polypropylene Coating



### Product Description

The three layer polypropylene consists of a Layer of FBE followed by an outer layer of Polypropylene which provides the toughest, most durable pipe coating for Corrosion and erosion. This anti-corrosion system consist is excellent for protection of small and large pipelines with high opertaing temperatures.

### Applications

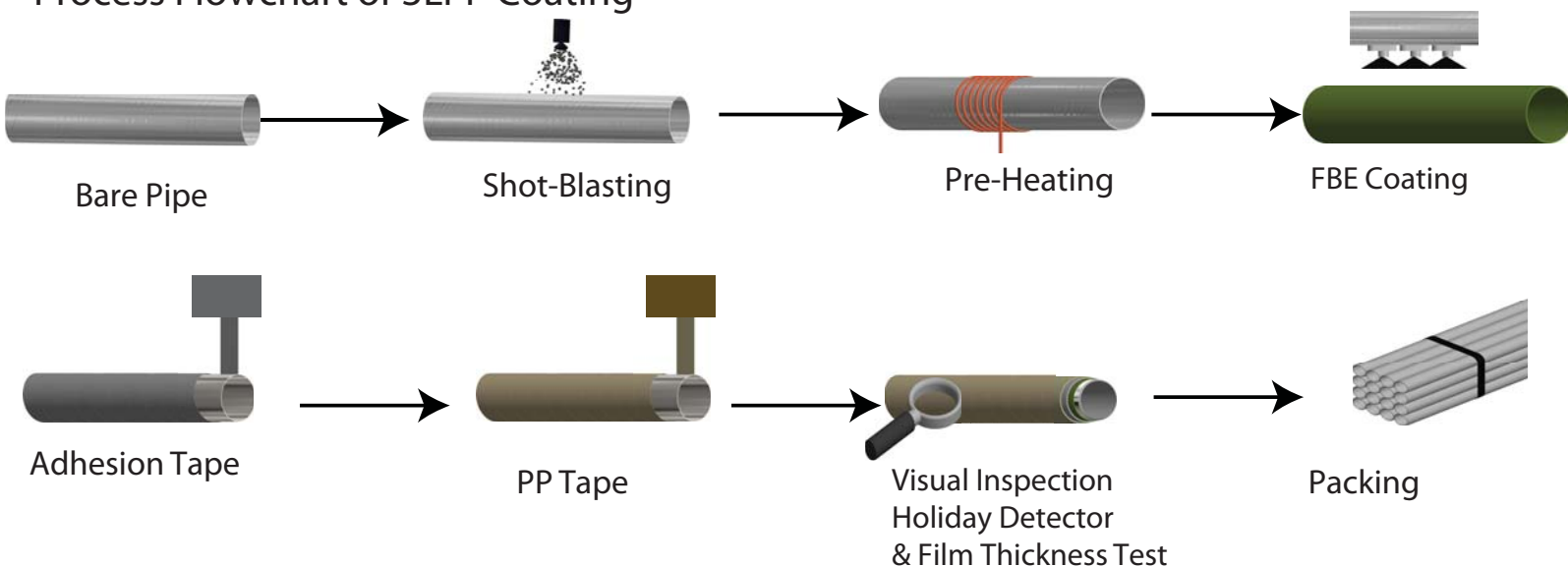


### Related Standards and Specifications

- DIN 30670
- DIN 30678
- ISO 21809-1
- ASTM F 1545-97

Additional standards may also apply after contacting an Insupipe sales agent.

### Process Flowchart of 3LPP Coating



#### Contact us

Al Mafraq Industrial City  
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# 3LPP PIPE

Thickness			
Layers	1st layer	2nd layer	3rd layer
Thickness	Minimal thickness of 125 µm	Minimal thickness of 150 µm	Minimal thickness between 1.8 and 4.7 mm
*Please refer back to one of our sales agent to be consulted to ensure that the correct formulation will be provided.			
Chemical Resistance			
Chemicals			HDPP
Acids, Dilute or Weak			E
Acids, Strong or Concentrated			G
Alcohols, Aliphatic			E
Aldehydes			G
Bases/Alkali			E
Esters			G
Hydrocarbons, aliphatic			G
Hydrocarbons, aromatic			N
Hydrocarbons, halogenated			N
Ketones, aromatic			N
Oxidizing agents, strong			F
Continuity			
Free of defects and discontinuities, delaminations,			
Resistance to cathodic disbondment			
Average radius of cathodic disbondment	at 23 °C/28 d; -1,5 V	≤7 mm	
	at 65 °C/24 h; -3,5 V	≤7 mm	
	Maximum operating temperature/28; -1,5 V	≤15 mm	
Total coating thickness **(mm)			
Pm (kg/m)	light duty (onshore sandy soil)	moderate duty (clay soils, absence of backfill)	heavy duty (rocky soil or offshore)
Pm ≤ 15	1,3	1,7	2,1
15 < Pm ≤ 50	1,5	1,9	2,4
50 < Pm ≤ 130	1,8	2,3	2,8
130 < Pm ≤ 300	2,2	2,5	3,2
300 < Pm	2,5	3,0	3,8
**Total required coating thickness may be reduced by a maximum of 10 % on the weld seam for SAW-welded pipes.			
Tests based Standards			
Thickness testing		ISO 21809	
Holiday inspection		ISO 21809	
Impact test		ISO 21809	
Cathodic disbondment test		ISO 21809	
Maximum operating temperature		Hardness Shore D	
-20 to +110 °C		≥60	
Elongation at break at 23 °C ± 2 °C		Impact strength at 23 °C ± 3 °C	
≥400 %		>10 J/mm	
Tensile yield strength at 23 °C ± 2 °C			
≥20 MPa			

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