



UV-curing FRP Shield

Product Description

UV-curing FRP Shield is an epoxy polyurethane resin pre-impregnated fiber-reinforced outer wrap material, curing by means of Ultraviolet light.

UV-curing FRP Shield is applied as an additional mechanical protection layer on the corrosion preventing coating systems of pipelines to provide a high performance protection against mechanical impacts, weathering, UV-radiation and chemicals.

After curing with UV-light, UV-curing FRP Shield forms a hard, smooth and highly abrasion resistant shell on top of previously applied coating systems, making it ideal for thrust(slick) bore, directional drilling, or other mechanical protection applications. It has been specified and installed successfully for twenty years and has a proven track record as an abrasion resistance overlay (ARO).



Applications:

Directional Drilling

Thrust (slick) Bore

Pull Throughs

Pipeline Protection in Severe Handling Applications

Protection of Mainline Coatings

Features/Benefits

- Fast and easy to apply.
- 100% Solids, no VOC.
- Excellent mechanical properties.
- Superior abrasion resistance .
- Widely used in directional drill and thrust bore applications.
- Resistant to cold, hot, wet and chemically aggressive environments.
- Wide operational temperature range.
- Complete curing can be obtained by UV-light sources or by sunlight.
- Long pot life when sheltered from UV-light sources.
- Standard thickness 2.50 mm . (also available in 1.2mm, 1.5 mm, 2.0mm)





UV-curing FRP Shield

Product Properties

Physical Properties	Test Method	Value
Material State	--	Solid
Thickness	ISO 4593:1993(E)	2.5mm±0.2mm
Density	ISO 1183	4000 g/m ²
Light Sources For Curing	--	UV-A lamps or Sunlight
Application Temperature	--	-30°C to +85 °C
Tensile Strength	ISO 527-4	250MPa
Compressive Strength	ISO 14126	500 MPa
Flexural Strength	ISO 14125	480MPa
Abrasion Resistance	ASTM D4060	70 cycles/micron
Hardness	ASTM D2240	Barcol:≥50 Shore D:≥85
Impact Resistance	ASTM G14	25J