

Flint-Coat

A flint reinforced epoxy coating used for external casing and tubing applications. The high temperature resin is embedded with flint particles to create an extremely rough and hard surface.



Features

- Improves bond between cement and casing
- Chemically inert
- Resistant to CO₂, brine, and H₂S
- Protects freshwater zones by avoiding communication losses
- Provides cathodic protection
- Highly temperature resistant



Benefits

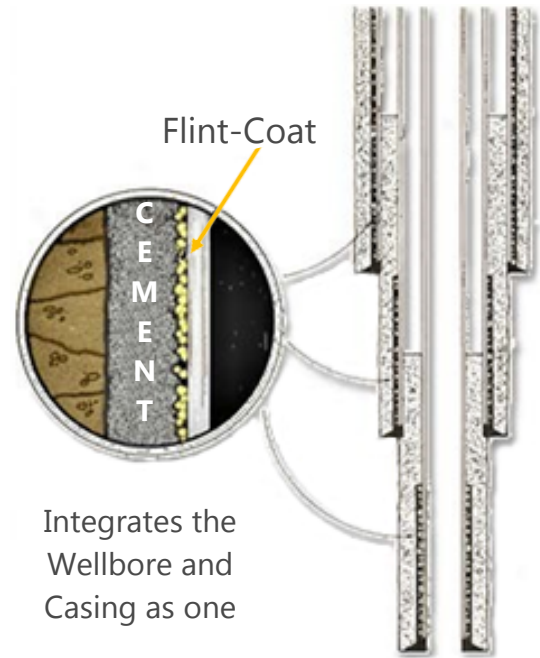
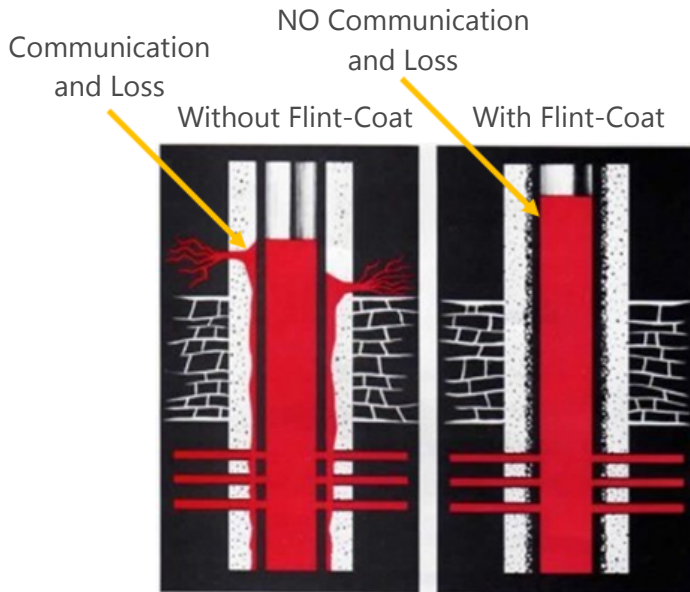
- High retention with wet cement, significantly improving the bond
- Prevents gas migration
- Improves corrosion protection effectiveness
- Excellent abrasion, chemical, and acid resistance
- Reduction in workovers and well maintenance
- Reduced spending on replacement tubing



Applications

- Production casing through unconsolidated zones
- External corrosion protection on downhole tubulars
- Coated tubing between injection intervals
- Increase bond strength of pipe to cement interface
- Isolate wellbores

Don't forget your coat for outside protection



SPECIFICATIONS:

Physical Properties	Measurement	Unit	Method
Coating Type	Epoxy with Flint Aggregate	-	-
Operating Temperature	149 (300)	°C (°F)	-
Pressure Rating	Yield Strength of Pipe	-	-
Coating Thickness (recommended)	35-45 (890-1100)	mm (µm)	-
Mechanical Properties	Measurement	Unit	Method
Impact Resistance	4.1 (36.3)	Joules (in. lbs)	ASTM G14
Static Coefficient of Friction	0.187	-	-
Pull-Off Strength (Adhesion)	13.8 (1997)	MPa (psi)	ASTM D4541
Shear Test at 100°C (212°F)	15.3 (2219)	MPa (psi)	ASTM D1002
Salt Spray and Salt Fog Test, 672+ hours	PASS	hours	ISO 7253
Chemical Resistance	Test Results	Method	
Cathodic Disbondment: 30 days, 23°C (73.4°F)	1.5mm	ASTM G8-96	
Corrosion Test: 7 days, 427°C (800°F)	Test Results	ASTM G8-96	
5% Acetic Acid	EXCELLENT	ASTM G8-96	
10% Acetic Acid	EXCELLENT	ASTM G8-96	
37.5% Hydrochloric Acid	GOOD (discoloration)	ASTM G8-96	
50:50 Hydrochloric:Hydrofluoric Acid	GOOD (discoloration)	ASTM G8-96	
5% Lactic Acid	EXCELLENT	ASTM G8-96	
50% Sulfuric Acid	EXCELLENT	ASTM G8-96	
10% Nitric Acid	EXCELLENT	ASTM G8-96	
85% Phosphoric Acid	FAIR (surface attack)	ASTM G8-96	
50% Sodium Hydroxide	EXCELLENT	ASTM G8-96	
Toluene, Butyl, Ethyl Alcohol, Methyl Isobutyl Ketone, Chloroethane	EXCELLENT	ASTM G8-96	