

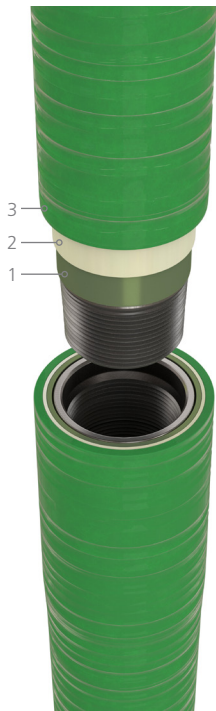
# TenCoat™ Shield

## External Coating

Three layer external coating with excellent mechanical properties to provide corrosion protection for casing and tubing, designed to withstand the most demanding transportation and running operations.

### APPLICATIONS

- Production tubing
- Injection tubing between packers in multi-zone completions
- Replacement casing in well repairing
- Casing with cathodic corrosion protection
- Casing in contact with corrosive formations



TenCoat™ Shield illustration

### GENERAL CHARACTERISTICS

THREE LAYER PRODUCT	1ST LAYER	Fusion bonded epoxy for corrosion protection
	2ND LAYER	Adhesive—bonds 1st layer and 3rd layer
	3RD LAYER	Glass reinforced plastic GRP for mechanical protection during transportation, handling and installation
THICKNESS	2 – 4 mm (0.079" – 0.157")*	
WORKING TEMPERATURE	Up to 121°C (250°F)	
SIZES	2 3/8" to 5 1/2"	
CONNECTIONS	TenCoat™ Shield can be applied onto pipes with any API or TenarisHydril connection	
ACCESORIES	TenCoat™ Shield can be applied in several completion accessories such as pup joints, blast joints and injection mandrels	

\* Custom designed thickness could be specified for particular applications

### BENEFITS

- High resistance to corrosive fluids
- Excellent mechanical resistance, designed to withstand casing and tubing running operations and tools
- Excellent adherence between layers for optimal torque transmission
- High resistance to hydrocarbons

### TESTING

TESTS	CONDITIONS	EVALUATION
MAKE AND BREAK (M&B)	–5 1/2" OD samples –2 7/8" OD Samples –2 3/8" OD samples	3 make and breaks for each sample. Torque applied was the same as for regular connections. Jaws and dies used were the same as for regular connections.
IMMERSION	50% brine – 25% toluene – 25% kerosene Temperature: 120°C – 10 and 30 days	Visual inspection Thickness measurement
AUTOCLAVE	50% brine – 25% toluene – 25% kerosene Temperature: 120°C – P:3000 psi with 100% CO <sub>2</sub> 30 days	Visual inspection Thickness measurement Microscope analysis (by SEM)
IMPACT	New Sample 350 J 700 J 1,400 J	Visual inspection



For additional information, please visit  
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