

IRO HD

Product Overview



Polyguard IRO™ (Impact Resistant Outerwrap) & IRO™ HD (Heavy Duty) products are designed to protect field joint coatings and mainline coatings from abrasion damage during directional drilling, HDD and boring. IRO & IRO HD creates an abrasion resistant, sacrificial outer layer which protects pre-approved field joint coatings and mainline coating such as RD-6, Fusion Bond Epoxy (FBE), liquid epoxies, or any other coatings. Controlled set times, packaging and conformability provide for efficient installations in any project environment. The IRO & IRO HD line of products eliminates the potential for costly spot repairs or re-pulling pipe while providing the best mechanical protection of the underlying field-joint and mainline coatings.

Polyguard IRO has also been proven to work in conjunction with a cathodic protection (CP) system so it can be utilized in accordance with DOT and PHMSA codes.

The simple application of this system allows for speedy coating protection and backfill while also giving the most effective results of any IRO or ARO in the market. Having this IRO allows pipeline operators to apply girth weld coatings at their ideal thickness to achieve the best performance with their corrosion barrier, rather than increasing those thicknesses and losing properties such as flexibility or impact resistance. Traditional coatings are not ideal for uneven surfaces that will be installed by manners as harsh as horizontal directional drilling. By using a composite material which incorporates fibers you can improve flexibility, gouge, and abrasion resistance all while maintaining the effectiveness of the resin. This system should be utilized as a protective layer for all field joints that are installed by a trenchless method and will or could potentially impact a high consequence area (HCA) such as a road, building, populated area, or a body of water.



Simple, easy to install



Works in conjunction with cathodic protection systems



Non-shielding



Non-hazardous



Smooth profile reduces damage during bores



NO UV light or heating required (moisture cured)



Consistent application



Fast curing

IRO™ HD PROPERTIES					
Product	Laminate Properties			Cure Schedule 75°F (24°C)	
	Thickness (per Layer)	Resin Type	Application Temperature	Working Time	Set Time
IRO™ HD	0.034"	MCU	32° to 150°F (0° to 75°C)	12 min	<25 min
Product	Mechanical Properties			Gouge Resistance CSA Z245.20	
	Impact Resistance ASTM-G14 (100 mils)	Abrasion Resistance ASTM-D4060 (cycles/mil)			
IRO™ HD	49.9 J (441 in-lb)	1806		.039"	

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