

Twistec™ Probes

Innovative Eddy Current Testing Probe for Twisted Tube® Inspection



The **Twistec** probe is the only reliable solution capable of inspecting non-ferromagnetic Twisted Tube® heat exchangers.

To address the unique helical shape of such tubes, **Twistec** probes feature a miniature slip ring and a special combination of coils. **Twistec** probes rely on a pair of rotating oval coils that reduce the noise from the twisted tubes's helix and a head equipped with two "feelers" that press down the coils they contain against the tube's inner surface. This innovative, patent-pending design ensures that flaws are properly detected, characterized, and sized, wherever they are on the circumference of the tube, unlike traditional bobbin probes.

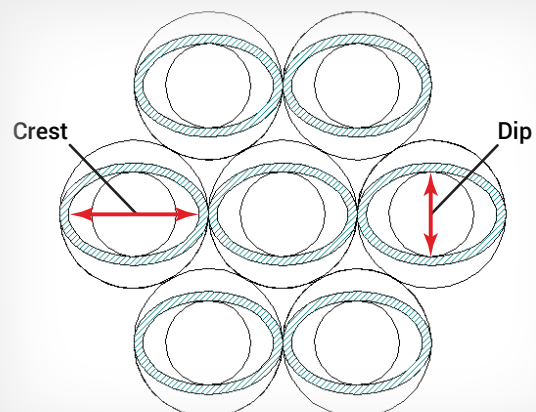


When standard ECT probes are inserted in Twisted Tubes®, the probes cannot provide reliable data because the flaws on the wall furthest from the tube's center (crest) produce much weaker and distorted signals compared to same-size flaws in the narrow section, closest to the tube's center (dip). This is because of the liftoff created by the tube's geometry between its walls and the ECT probe. This amount of liftoff translates into a lower probability of detection and less accurate sizing.

Benefits and Features

- Unique, adaptive mechanical design* that adjusts to the geometry of twisted tubes to minimize liftoff and optimize results
- Improved flaw detection, sizing, and characterization over conventional bobbin and IRIS probes
- Four ECT channels and indications of whether defects are in crests or dips of tubes
- Operators will have an easier time extending the useful life of Twisted Tube® HX with the high-quality results of **Twistec** probes

*Patent pending



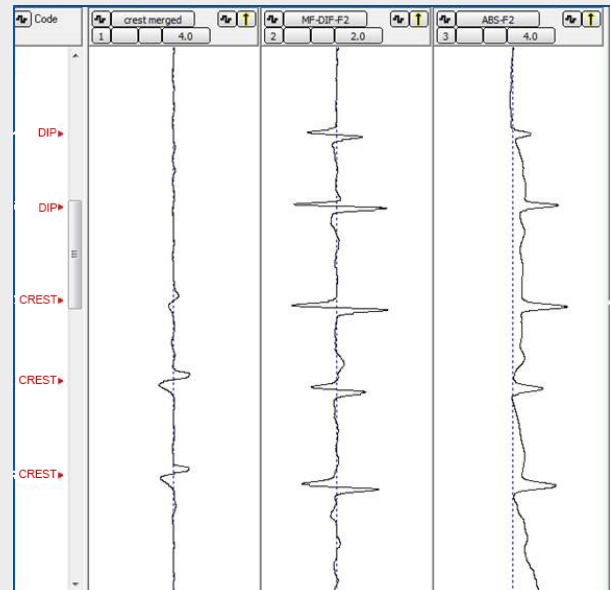
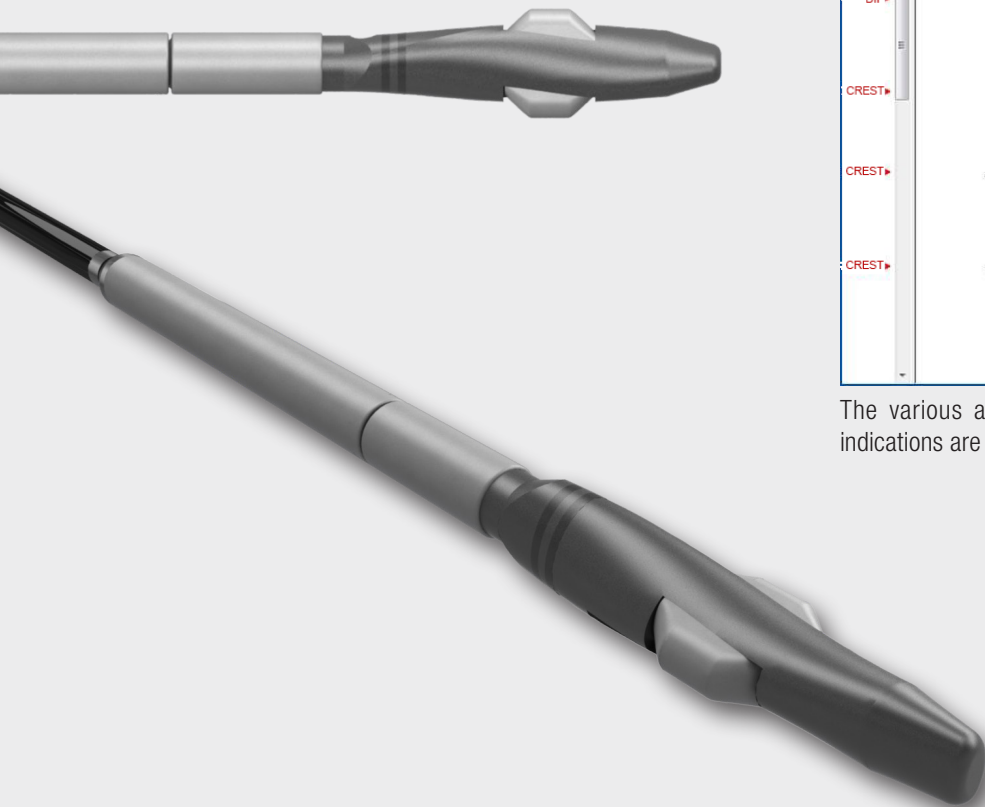
Specifications

Item	Value
Coil technologies	Oval bobbin (absolute/differential) Pancake coils × 2
Material	Non-ferromagnetic. Experience on 300-series stainless steel, Inconel, copper, nickel, brass, and titanium.
Minimum tube inner diameter	15.9mm (0.625 in)
Maximum test speed	0.3 m/s (12 in/s)
Probe life	Typically, up to 1500 tubes
Poly	9 mm (0.375 in) premium, non-kink, strong nylon
Connector	41-pin Amphenol/ITT Cannon

Available Models

Available models cover:

Item	Value
Nominal tube outer diameter (circular cross section)	19.1 mm (0.750 in) 22.2 mm (0.875 in) 25.4 mm (1.000 in)
Nominal wall thickness	1.25–3.05 mm (0.049–0.120 in)
Helix pitch	152.4–203.2 mm (6–8 in)



The various available channels allow ascertaining where indications are located

