Rotoprobe-EX

Eddy Current Rotating Probe Test System for Bars, Wires and Tubes



Rotoprobe-EX is a fifth generation rotating probe eddy current inspection system that keeps you connected no matter where you might be in the world. You can connect to it from intranet or internet and view test signals and results in real time. It can even send you emails at your scheduled times with all test data, statistics and error conditions. The system also supports remote diagnostics over TCP/IP.

Rotoprobe-EX can detect longitudinal surface defects on ferromagnetic, non-ferromagnetic as well as austenitic bars, seamless tubes and wires. The system can be used in Offline, Inline and Spool-to-spool configurations. Digital signal processing techniques result in excellent signal-to-noise ratio. Longitudinal defects as shallow as 30 microns can be detected, depending upon the surface condition of the material under test. Unique automatic gap compensation algorithms correct for any signal variation due to eccentricity of bars etc. Additional channels for encircling coil inspection or material sorting are also available. All data is logged to a Hard Disk. Test reports can be generated in Microsoft Excel format.

A two level password security access control with extensive activity-logging and reporting keeps the system free of intentional or unintentional abuse.

- Automatic Gap Compensation
- Optional Additional Encircling Channel
- Optional Additional Grade Sorter Channel
- Three Evaluation Modes
- Variable test frequency
- Automatic Setup
- Windows Professional operating system
- Online manual and context sensitive help
- Extensive Data logging and reporting
- TCP/IP servers over Ethernet





ROTOPROBE-EX TECHNICAL DATA

Frequency Range 30 KHz to 3000 KHz **Test Channels** Up to four signal channels and AGC channels **Differential Gain** 6 dB to 65.9 dB in steps of 0.1 dB AGC Gain 6 dB to 65.9 dB in steps of 0.1 dB Phase 0 deg to 359 deg in steps of 1 deg Filters Independent High Pass and Low Pass. Thresholds Upper, Lower, Third, Sector **Evaluation Modes** Phase Sensitive Amplitude Sector (Basic as well as Advanced) Data Storage Hard Disk, USB flash drive Setup Manual, Visual and Automatic Bar / Tube Sizes 3mm to 180mm with various Rotating Heads Up to 220mm against special request Test capability The system can detect 50 micron notches on very smooth homogeneous surfaces. **Operating System** Windows Professional **User Interface** Kevboard and Mouse Screen LCD **Digital Outputs** Threshold Crossings, Result, Paint Markers **Test Automation** External PLC **Data Security** Admin/User level password protection Connectivity Intranet/Internet over Ethernet **E-mail Reports** Up to three e-mails a day at user-selected times Rotating Heads (All up to 4 signal channels) RV0 3mm..20mm at 9000 rpm RV1 4mm..40mm at 7200 rpm RV3 16mm..90mm at 3600 rpm 20mm..140mm at 3000 rpm RV4 RV5 40mm..180mm at 1500 rpm



Rotoprobe-EX displays are user-configurable. Test signals in vector and strip-chart form with thresholds for any channels can be viewed as well as eccentricity, text results and statistics.

Configure A System To Suit YOUR Needs

Choose 2 or 4 rotating channels to meet your throughput requirements.

Optional Additional Channels let you configure an economical all-in-one system for detection of transverse as well as longitudinal defects, and for sorting materials for grade.

Optional Encircling channel (Transverse Defects) Frequency: 1 KHz to 1000 KHz Gain: 20 dB to 79.9 dB in steps of 0.1 dB Threshold: Single Eval Modes: Phase sensitive, Amplitude,Sector

Optional Grade Sorting Channel

Frequency: 10 Hz to 100 KHz Threshold: Circular GO/NO-GO

Saturation / Demag systems:

Will be required for testing ferromagnetic material with encircling coils. May also be needed for improving signal-to-noise ratio for rotating probes on some materials at certain frequencies.



THE NDT TECHNOCRATS

 NDT House, 45, Dr Ambedkar Rd, Pune 411001, INDIA

 Tel: +91 20 2605 8060
 Fax: +91 20 2605 8070

 Info@technofour.com
 www.technofour.com

Technofour also manufacture automation and mechanical handling systems for offline or inline Rotoprobe-EX system configurations.