

Flawmark-EX

Non-destructive Eddy Current Test System for Tubes, Bars and Wires



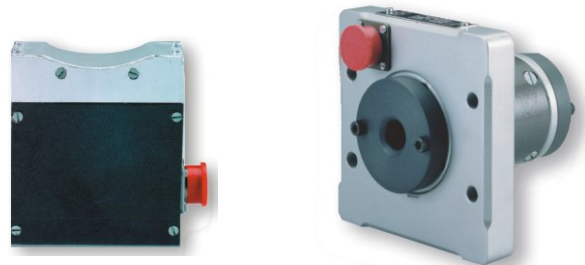
Flawmark-EX is a highly advanced thoroughbred from Technofour stables. This seventh generation Flawmark keeps you connected no matter where you might be in the world. You can connect to it from intranet or internet and view test signals and results in real time. It can even send you E-mails at your scheduled times with all test data, statistics and error conditions. An SPC display is available for online systems that shows the history of your mill up to the past 24 hours, with eddy current signals. The system also supports remote diagnostics over TCP/IP.

Flawmark-EX can detect cracks, pin-holes, open welds, voids, inclusions, concentrated porosity, weld defects, slivers, opened up skin laminations, deep pittings as well as mechanical damage in metal tubes, bars and wires. Ferromagnetic, non-ferromagnetic as well as austenitic materials can be inspected by the system in Online, Offline, Inline and Spool-to-spool configurations. The inspection can be carried out as per API, ASTM, DIN, BS, ETTC, JIS, IS or other standards. All data is logged to a Hard Disk. Test reports can be generated in Microsoft Excel format.

An absolute channel can be configured for Online systems for detection of open welds etc. Multifrequency and multichannel options are available for advanced use.

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

- Differential as well as Absolute channels
- Encircling as well as Segment Test Heads
- Multifrequency and multichannel options
- Four Evaluation Modes
- Three thresholds for differential channels
- Automatic Setup
- Online, Offline, Inline and Spool-to-spool schemes
- Windows Professional operating system
- Online manual and context sensitive help
- Extensive Data logging and reporting
- TCP/IP servers over Ethernet
- Optional grade-sorter channel for offline systems



Segment and Encircling Test Heads

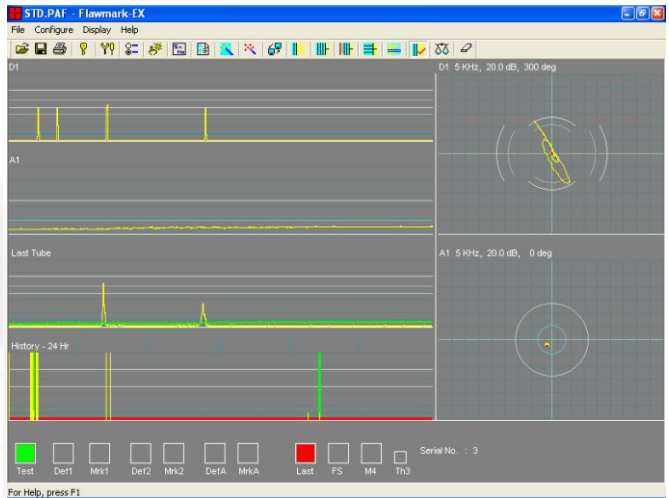


TECHNOFOUR

THE NDT TECHNOCRATS

FLAWMARK-EX TECHNICAL DATA

Frequency Range	1 KHz to 1000 KHz
Test Channels	1 Differential + 1 Absolute
Differential Gain	14 dB to 91.9 dB in steps of 0.1 dB
Absolute Gain	0 dB to 59.9 dB in steps of 0.1 dB
Phase	0 deg to 359 deg in steps of 1 deg
Filters	Independently adjustable High Pass and Low Pass. Can Auto-track in online configurations.
Thresholds	Upper, Lower, Third, Sector, Multiple sector
Evaluation Modes	Phase Sensitive (differential channels) Amplitude (all channels) Sector (Phase + Amplitude) (differential only) Advanced Sector (Multiple adjustable sectors)
Balance	Differential channel: Automatic Absolute channel: Smart auto-balance
Data Storage	Hard Disk, USB flash drive
Setup	Manual, Visual and Automatic
Tube Diameters	1mm to 219mm for encircling test heads 25mm to 520mm for segment test heads
Test capability	API 5L/5LX, ASTM A450, BS 3889, ETTC, JIS and several other international standards
Operating System	Windows Professional
User Interface	Keyboard and Mouse
Screen	LCD
Digital Outputs	Threshold Crossings, Result, Paint Markers
Test Automation	External PLC
Connectivity	Intranet / Internet over Ethernet
Variants	Flawmark-EX : Single frequency at a time Flawmark-EX-2 : Two frequencies simultaneous



Flawmark-EX displays are quite configurable. Test signals in vector and strip-chart form with thresholds for any channels can be viewed as well as SPC, test results and statistics

Magnetic Saturation and Demagnetization
Magnetic saturation is required for testing ferromagnetic tubes in all cases. Technofour offer several sizes of saturation coils and yokes for using with encircling as well as segment test heads. Demagnetization is then required for all offline systems and may be necessary for some online applications. Smaller Saturation and Demagnetization coils are air-cooled, while larger coils are water-cooled.

Optional Grade Sorter Channel
One channel can be added to offline systems for grade sorting. This channel can offer a frequency range of 10 Hz to 100 KHz with a circular Go/No-Go threshold.

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



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



Magnetic Saturation Coil