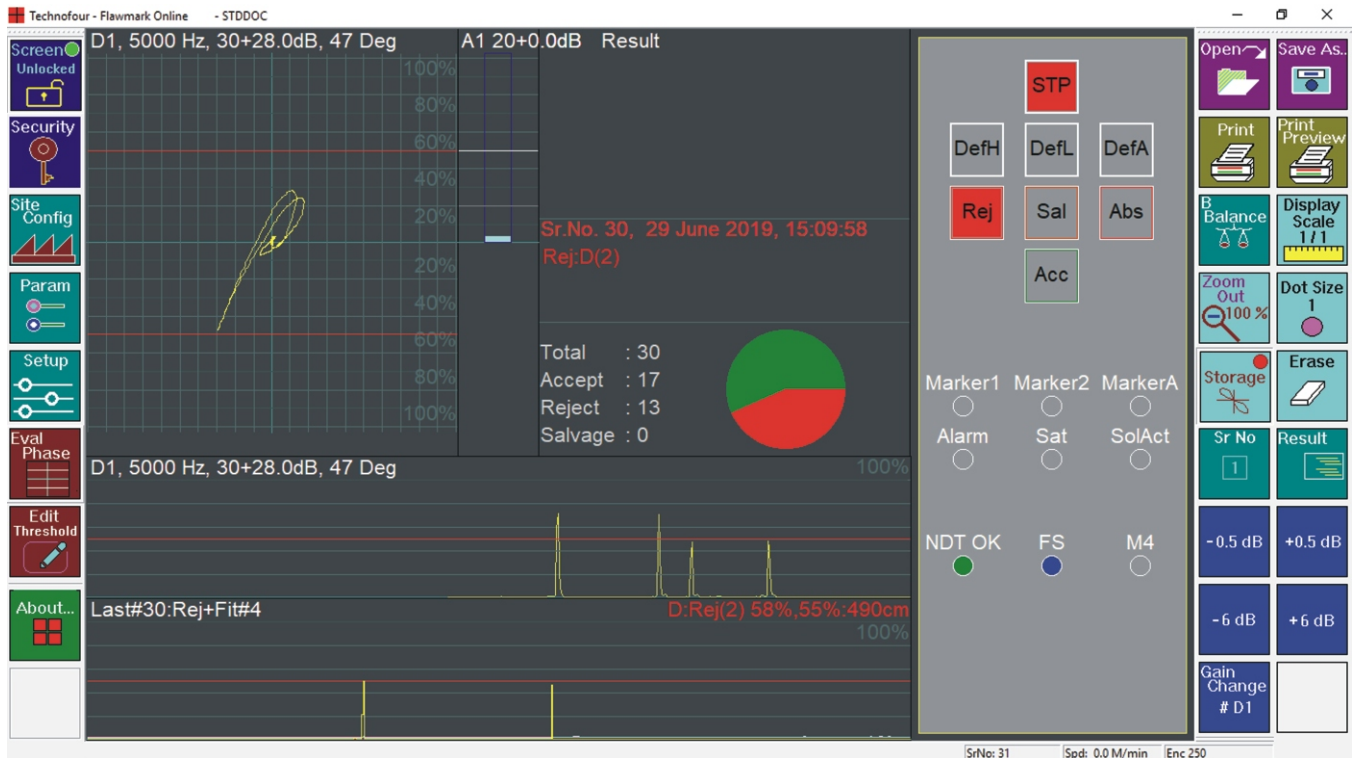


Flawmark-SP-X

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



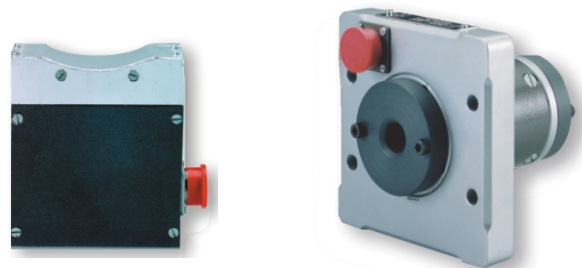
Flawmark-SP-X is a modern reliable non-destructive Eddy Current system for inspection of metal tubes and wires.

Flawmark-SP-X 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 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.

An absolute channel can be configured for Online systems for detection of open welds etc.

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
- Three Evaluation Modes
- Two thresholds for differential channels
- Online, Offline, Inline and Spool-to-spool
- Extensive Data logging and reporting
- Optional Remote Control / Monitoring



Segment and Encircling Test Heads

FLAWMARK-SP-X TECHNICAL DATA

Test Frequencies

2, 5, 10, 20, 30, 60 and 100 KHz

Test Channels

1 Differential + 1 Absolute Optional

Differential Channel Gain

0 dB to 86 dB in steps of 0.5 dB

Absolute Channel Gain

0 dB to 66 dB in steps of 0.5 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, Sector

Evaluation Modes

Phase Sensitive (differential channel)
Amplitude (differential and absolute channel)
Sector (Phase + Amplitude) (differential only)

Balance

Smart Auto-balance for absolute channel

Data Storage

Hard Disk, USB flash drive

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

User Interface

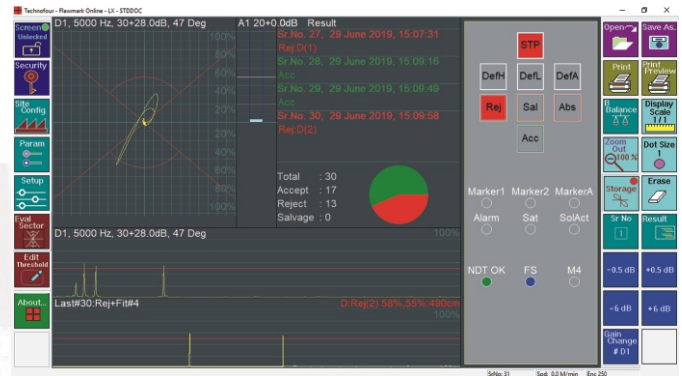
Keyboard and Mouse, LCD Monitor

Digital Outputs

Threshold Crossings, Result, Paint Markers

Test Automation

External PLC

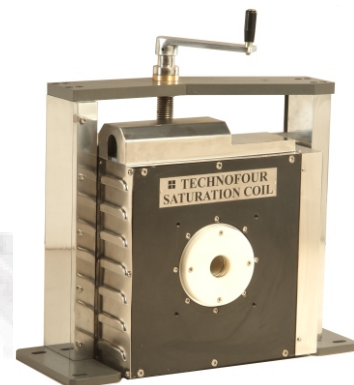


Test signals in vector and strip-chart form with thresholds can be viewed as well as test results and statistics. Modern user interface simplifies setup and operation.

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.

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



Magnetic Saturation Coil with coil platform



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