The leading multi-technology instrument for surface and tubing applications is designed to be the most versatile, reliable, and powerful EC platform on the market.

**ECTANE 2**

*Applications*
- **Surfaces**
  - Corrosion detection
  - Crack detection
  - Welds
  - Turbines
  - Castings
  - Etc.
- **Tubing**
  - Ferrous and non-ferrous

**REDDY FOR SURFACES**

This turnkey ECA system is designed to perform critical surface inspections. Its fast and easy deployment, better PoD, length and depth sizing capabilities, data recording capacity, and consistent results help replace PT and MT.

**REDDY FOR TUBING**

Designed specifically for AC and tubing inspections, the system is compatible with all air-conditioner and ECT probes on the market without the need for adapters and the integrated software enables on-the-fly reporting.

**LYFT**

Reinventing PEC, the solution is designed for CUI and other critical applications. Often superior to radiography/striping because it does not require access to both sides or surface preparation, and has no health hazards, making it much more cost efficient.

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**EDDYFI PRODUCT LINE**

The leading multi-technology instrument for surface and tubing applications is designed to be the most versatile, reliable, and powerful EC platform on the market.

**Applications**
- **Surfaces**
  - Corrosion detection
  - Crack detection
  - Welds
  - Turbines
  - Castings
  - Etc.
- **Tubing**
  - Non-ferrous
    - Air conditioners
    - Chillers

**Typical Battery Autonomy**
- 8 hours
- 6–8 hours
- 6–8 hours
- 6–8 hours

**Supported Inspection Technologies**
- ECT, ECA, TECA, RFT, NFT, MFL, IRIS
- ECA, TECA
- ECT
- Pulsed eddy current (PEC)
- Pulsed eddy current array (PECA)

**Data Acquisition**
- Up to 50,000 samples/s
- Up to 50,000 samples/s
- Up to 50,000 samples/s
- Up to 350 m/s (115 ft/s)

**SmartMux ECA Channels**
- 64, 128, 256
- 32, 64, 128

**ECT Probe Inputs**
- 8
- 4
- 4

**ECT Frequency Range**
- 5 Hz–10 MHz
- 5 Hz–10 MHz
- 5 Hz–10 MHz

**IRIS Turbine Speed**
- Up to 100 RPM
- Up to 100 RPM
- Up to 100 RPM

**Nominal Wall Thickness**
- Up to 150 mm (6 in)
- Up to 300 mm (12 in)

**Setup Technology**
- SmartPulse
- Compensated wall thickness (CWT) tool

**Undersizing Compensation**

**Supported Weather Jackets**
- Stainless steel up to 1.5 mm (5/64 in)
- Aluminium up to 1 mm (3/32 in)
- Galvanized steel up to 1 mm (3/32 in)

**Supported Part Geometry**
- From 25 mm (1 in) OD to flat

**Automatic Reporting**
- √
- √
- √

**Unique Features**
- Multi-technology instrument
- Final proven—hundreds of units in service
- Dedicated surface ECA inspection solution
- Portable and rugged
- Instant, automated reporting
- Shortest complete inspection time in the industry
- Accessible CUI integrity management solution
- Most powerful and easy-to-use screening system on the market
Welds and plates
√

Up to 3 mm (0.12 in)
√

120 °C (248 °F)
√

Volumetric
√

Up to 102 mm (4 in)
√

ECT, ECA, RFT, NFT, NFA, MRPC, MFL, IRIS
√

Heat exchangers,
7 mm (0.28 in)
√

Ferrous, non-ferrous
71 mm (2.8 in)
√

Pipes and plates
√

Up to 200 mm/s (8 in/s)
√

TUBES
Non-ferrous
0–13 mm (0–0.5 in)
√

I-Flex
√

Up to 25 mm (1 in)
√

0.5 mm (0.02 in)
√

Gear
√

√

√

High-Res. Sharck
√

LINE
Welds
1 m/s (3.3 ft/s)
√

√

√

Heat exchangers
Axial, circumferential
√

Underwater
±2 mm (0.08 in)
√

0.25–1 MHz
√

6–25 mm (0.25–1.00 in)
√

13–153 mm (0.5–6 in)
√

0.6–800 kHz
√

Fin-fan air coolers
Ferrous
All-in-one, linked to Ectane/Magnifi
0.1 m/s (4 in/s)
√

Tank Floor
100 m (330 ft)
√

6.35–9.53 mm (0.25–0.38 in)
√

Up to 2 mm (0.08 in)
√

√

2× for higher speed control
NFA
70 °C (158 °F)
√

25–102 mm (1–4 in)
√

53 mm (2.1 in)
Up to 200 mm/s (8 in/s)
√

1 m/s (3.3 ft/s)
√

70 °C (158 °F)
Ferrous, non-ferrous
0.3 m/s (1 ft/s)
√

34–128 mm
√

Pitting, wall loss,
√

0–300 mm (0–12 in)
√

√

√

√

Air conditioners
Smooth, curved
√

Up to 3 mm (0.12 in)
CUI, CUF, FAC
46 mm (1.8 in)
√

A / C
3 mm (0.12 in)
70 °C (158 °F)
√

70 °C (158 °F)
Ferrous, non-ferrous
0.6–800 kHz
√

±10 %
70 °C (158 °F)
GS Cladding
Up to 6 mm (0.24 in)
Ferrous, non-ferrous
Up to 6 mm (0.24 in)
3.0×0.5 mm
√

CUI, CUF, FAC
Ferrous,  non-ferrous
7 mm (0.3 in)
Welds
√

Up to 200 mm/s (8 in/s)
Ferrous
0–2.5 m/s (0–8 ft/s)
√

Up to 38 mm (1.5 in)
62 mm (2.4 in)
√

√

Axial, circumferential
√

0.3–1 m/s (1–3.3 ft/s)
400 mm (15.75 in)
√

Automated sequences
controlled w probe guns

**THE BEST EM TESTING PRODUCTS—BAR NONE**

The Eddyfi product line focuses mainly on high-performance advanced electromagnetic solutions for the inspection of critical components and assets. Eddyfi products are the industry’s best performing and most reliable test instruments, acquisition and analysis software, as well as standard and more importantly—specialized surface array and tubing probes. Eddyfi-line products constantly propel the limits of electromagnetic testing to new heights in an attempt to respond to your ever-changing inspection challenges.

**THE EDDYFI LINE PROBES**

**TECA**

**APPLICATIONS**
- Welds and plates
- Nuts
- Welds and plates
- Pipes and plates

**MATERIALS**
- Ferrous
- Ferrous
- Ferrous
- Ferrous

**SURFACE-BREAKING CRACKS**
- ECT, ECA, RFT, NFT, NFA, MRPC, MFL, IRIS

**LENGTH & DEPTH SIZING**
- 3.0–6.5 mm (0.12–0.26 in)
- 1.0–3.5 mm (0.04–0.14 in)
- 3.0–6.5 mm (0.12–0.26 in)
- 2.0–8.5 mm (0.08–0.33 in)

**DETECTABLE DEFECTS (LxD)**
- 7 mm (0.28 in)
- 7 mm (0.28 in)
- 7 mm (0.28 in)
- 3 mm (0.12 in)

**MAX. MEASURABLE CRACK DEPTH**
- ±10 %
- ±10–20 %
- ±2 mm (0.08 in)
- ±2 mm (0.08 in)

**SIZING ACCURACY**
- Up to 3000 mm/s (118 in/s)
- Up to 3000 mm/s (118 in/s)
- Up to 3000 mm/s (118 in/s)
- Up to 3000 mm/s (118 in/s)

**SCAN SPEED**
- Up to 100 mm/s (3.94 in/s)
- Up to 70 mm/s (2.76 in/s)
- Up to 70 mm/s (2.76 in/s)
- Up to 100 mm/s (3.94 in/s)

**LIFTOFF TOLERANCE**
- 3.0×0.5 mm
- 3.0×0.5 mm
- 3.0×0.5 mm
- 3.0×0.5 mm

**COVERAGE**
- 53 mm (2.1 in)
- 30 mm (1.2 in)
- 7 mm (0.3 in)
- 71 mm (2.8 in)

**ECT, RFT, NFT, MFL**
- A/C
- DefHi
- NFA
- IRIS

**TUBES**

**APPLICATIONS**
- Heat exchangers, for fan air coolers
- Air conditioners
- Heat exchangers
- Fire fan air coolers
- All tubing apps

**MATERIALS**
- Ferrous, non-ferrous
- Non-ferrous
- Non-ferrous
- Ferrous
- Ferrous, non-ferrous

**DETECTABLE DEFECTS**
- Pitting, voids, cracks, volumetric
- Pitting, wall loss, axial, circumferential
- Axial, circumferential
- Axial, circumferential
- Volumetric

**INSPECTION SPEED**
- 0.3–1.0 mm (0.02–0.06 in)
- 1.0 mm (0.04 in)
- 1.0 mm (0.04 in)
- 0.3 mm (0.01 in)
- 0.1 mm (0.004 in)

**SEALED**
- Yes
- Yes
- Yes
- Yes
- Yes

**REPLACEABLE PARTS**
- Yes
- Yes
- Yes
- Yes
- Yes

**SIZING CAPABILITIES**
- Yes
- Yes
- Yes
- Yes
- Yes

**COMPATIBLE WITH COMPETITION**
- Yes
- Yes
- Yes
- Yes
- Yes

**HIGH DURABILITY**
- Yes
- Yes
- Yes
- Yes
- Yes

**C-SCAN IMAGING**
- Yes
- Yes
- Yes
- Yes
- Yes

**PROBOT**

**APPLICATIONS**
- Smooth, curved surfaces
- Nuts
- Smooth, curved surfaces
- Gears

**MATERIALS**
- Ferrous, non-ferrous
- Non-ferrous, non-ferrous
- Non-ferrous, non-ferrous
- Ferrous, non-ferrous
- Ferrous, non-ferrous

**FAR-SURFACE CORROSION**
- Yes
- Yes

**SUBLURFACE DEFECTS**
- Yes
- Yes

**SURFACE-BREAKING DEFECTS**
- Yes
- Yes
- Yes
- Yes

**LENGTH SIZING**
- Yes
- Yes

**MIN. DETECTABLE CRACK LENGTH**
- 0.5–1.5 mm (0.02–0.06 in)
- 0.5–1.5 mm (0.02–0.06 in)
- 0.5 mm (0.02 in)
- 5 mm (0.20 in)

**FREQUENCY RANGES**
- 0.5–98 kHz
- 50–800 kHz
- 0.6–800 kHz
- 0.25–1 MHz

**PENETRATION (STAINLESS STEEL/ALUMINUM)**
- Up to 800 mm (31.5 in)
- Up to 1.0 m (39.4 in)
- Up to 1.0 m (39.4 in)
- Up to 1.0 m (39.4 in)

**COVERAGES**
- 34–128 mm (1.34–5.04 in)
- 34–128 mm (1.34–5.04 in)
- 34–128 mm (1.34–5.04 in)
- 58–112 mm (2.28–4.40 in)

**INSPECTION TECHNOLOGY**
- ECT, EFT, NFT, MFL, MECS, IRIS

**INSPECTION SPEEDS**
- 0–2.5 m/s (0–8 ft/s)

**WEIGHT**
- 23 kg (50 lb)

**DESIGNED TO IP65**
- Yes

**SINGLE OPERATOR**
- Yes

**POLY DIAMETER RANGE**
- 6.35–9.53 mm (0.25–0.38 in)

**ENCODED DATA**
- 3+ for higher speed control

**DATA SYNCHRONIZATION**
- All-in-one, linked to Ectane/Magnifi

**AUTOMATION**
- Automatic sequences controlled w probe guns