EW – 48SCT

Advanced Eddy current component test instrument

ADVANCED EDDY CURRENT
COMPONENT TEST INSTRUMENT

EW EddyWorks

Advanced Eddy Current Technology

What is Eddy-current testing(ECT) ?

Eddy current testing(ECT) is very reliable and productive electromagnetic testing method used in nondestructive testing (NDT) making use of electromagnetic induction to detect and characterize surface and sub-surface flaws in conductive materials.

Multi-Frequency Eddy Current Test(MFECT)

Technology that allows you to inspect from the surface level to a certain depth level of materials.

- With different penetration depths of multi-frequency, it optimizes the structural eddy current test for the various and challenging cases.
  It can be used for the heat treatment quality test and detect the material properties after the heat treatment such as hardness, case depth, case depth pattern and also structure, tensile strength, etc.

Field of application

[Heat treatment test]

HT : Test and verify the quality and integrity of the heat-treated metal component.
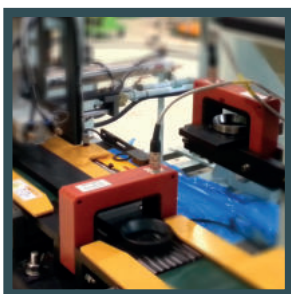
Multi-frequency Technology

● Hardness defect after heat treatment

● Poor hardening or carburization depth

● Sorting of dissimilar materials with same shapes

● Missing heat treatment process

[Crack test]

CT : Test and detect the micro-cracks on the surface of the metal component.

● Micro cracks on the surface

● Cracks after heat treatment

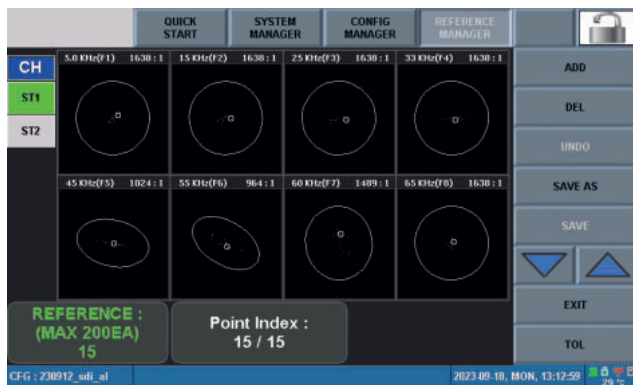● Hot forging, cold forging cracks

● Cracks during processing

[Composite test]

● Multipurpose unit

    Heat treament + Carck

[Eddy current test sensor]

EW - 48SCT

[Screen example]

Multi-frequency configuration
Heat treatment inspection with 8 multi-frequency inspection

Full-scale test
It is designed to operate at full production line speeds in tough manufacturing environments.

Multipurpose unit (CT + HT)
It is designed to mix up max. 8 channels with crack detection channels, 2 channels structure test channels and their combinations.

User friendly (very intuitive User Interface)
The intuitive UI allows the easy and simple operation via touch screen.

Multi channel set up (1ch ~ 10ch max.)
As the users require, multi channels can be set up max.
HT : Maximum 2 channels / CT : Maximum 8 channels

Machine learning algorithm (convenient set up)
Users can simply scan and record an adequate number of good parts, and the initial setup will be ready within a few minutes.

Inspection record function
Built-in inspection history manager (option)

Product Specification Sheet

Front

Rear

Model name	EW - 48SCT
Platform	Industrial Embedded (Fanless)
Channel Configuration	Heat treatment : Basic 1 channel (Maximum 2 channels) Crack : Maximum 8 channels
Frequency range	Heat treatment : 5Hz ~ 200MHz (Uses 8 frequency) Crack inspection : 10kHz ~ 10MHz
Frequency	Heat treatment : 8 frequency per channel Crack : 1 frequency per channel
Display	8.9 inch LED touch screen
Input / Output	I/O, LAN, USB, RS232
Size	320 x 170 x 270mm (W * H * D)
Weight	6.5kg
Power	100 ~ 240V / 50 ~ 60Hz, 50W
Usage Environment	Temperature : –5 ~ 48℃
Test record	Built-in test record manager (Storage capacity 16GB)
Sensor break detection	Real-time monitoring

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