

MAC to feature NDT instruments and systems at Tube 2022 in Germany

6 H20



MAGNETIC Analysis Corp will feature non-destructive testing instruments and systems for testing tube, pipe and bar at stand number 6H20 at Tube 2022 Düsseldorf in Germany in June. Highlights at the booth will include MAC'S latest Echomac® Systems for testing ERW welded tube. Systems ranging from the cost effective robotic and cantilevered phased array ultrasonic designs to conventional cantilever UT systems will be available.

An Echomac® PA TW Robot system, installed recently at a Midwest US tube mill, is uniquely able to measure the tube profile and monitor the scarfing trim tool operation in the heat affected zone, often within 40ft of the welder, at temperatures up to 252°F (122°C). This upstream location in the weld line gives the operator instant feedback when the scarfing tool is bad or broken, allowing immediate adjustment of the welding operation, and saving many feet of would-be tube scrap. Real time B and C-scan views of the quality of the weld and seam-trim tool alert the operator to issues such as undercuts and other failures with the scarfing process. High PRF can be used based on thickness to get a detailed weld profile with high resolution and no averaging or AGC is



used for processing the data.

A key feature of the system is the minimal operator intervention during operation. The wide coverage of the test head can handle typical shifts in the weld location, and the electronically

controlled transducers can vary the pulse timing of the individual elements to inspect with multiple angles, if needed, all without any manual intervention. Installation can also be in a lower temperature area below 140°F (60°C) for ID/OD longitudinal flaw detection and profile monitoring, after the forming and shaping operation.

The Echomac® 25mm UT Rotary, which is designed for high performance applications, such as tubular product for nuclear and aerospace installations, is another important test option for tube producers. This equipment provides 100 per cent coverage at high throughput rates on thin wall product ranging from 5 to 25mm diameter.

The 630mm overall length of the Rotary allows for ease of installation when upgrading existing inspection lines. Wall thickness as thin as 0.3mm and tubes as short as 1m can be successfully tested.

The 25mm Rotary is part of MAC's line of UT Rotaries, which range up to 500mm capacity. MAC's Echomac FD-6/6A instrumentation is available for use with the 25mm Rotary providing outstanding inspection of ID/OD, longitudinal and transverse flaws, wall thickness and dimensional evaluation including conditions of eccentricity and ovality.

MAC's Echomac® SM is a compact convenient UT Instrument, which covers all kinds of applications in a small package. With up to 8 test channels, the Echomac® SM can inspect tube for wall thickness, flaws, eccentricity and dimensions.

For high speed inspection of small diameter tube and wire for surface flaws such as seams and laps, the 20mm Rotomac® Eddy Current rotary is designed to operate at speeds up to 18,000rpm using highly sensitive non-contact testing for superior results on product from 2 to 20mm diameter.

MAC Engineers will be available to discuss the company's full range of phased array and conventional ultrasonic, eddy current and flux leakage test systems.

Trade fairs to offer ecoMetals trails

North Entrance



HOW green are the wire, cable, tube and pipe industries? How sustainably do they produce and how environmentally friendly is the handling of the materials used? These are questions that the new ecoMetals campaign wants to demonstrate in guided tours.

During the wire and Tube trade fair, trade visitors will be offered daily guided tours, so-called ecoMetals-trails, to exhibitors for whom the terms sustainability, energy efficiency and resource conservation are not just lip service but lived practice.

At their exhibition stands, they demonstrate how new technologies, machines and systems in their production facilities improve the energy and carbon dioxide balance in order to minimise the company's ecological footprint.

They also explain to visitors how they manage to reconcile economy and ecology in their production and process chains. This seems to be more important than ever in order to survive in international competition and to remain a sought-after business partner. The meeting point for all free tours is the ecoMetals information counter at the North Entrance of the Düsseldorf Exhibition Centre.

Tube 2022
www.tube.de

Magnetic Analysis Corp
www.mac-ndt.com