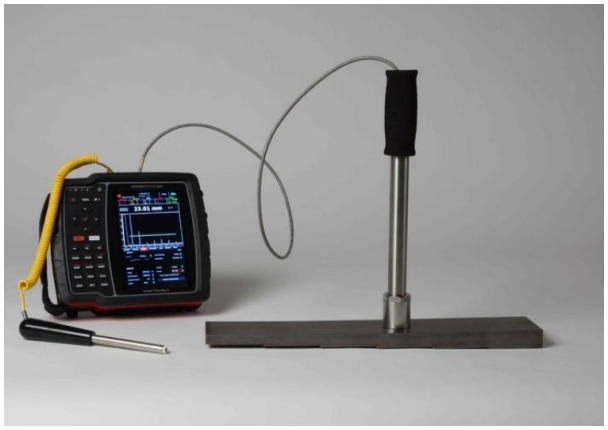
Contact: info@applus.com

EMAT Inspection

Applus+ has developed proven and tested procedures for EMAT NDT and EMAT ultrasonic testing in accordance with applicable codes. The NDT technicians at Applus+ are rigorously assessed on data acquisition and interpretation for EMAT ultrasonic testing, with both internal and external assessment.



THE Applus+ SOLUTION

For asset integrity inspections at extreme temperatures, Applus+ uses EMAT ultrasonic testing, with an electromagnetic acoustic transducer that utilises ultrasonic waves without the need for liquid couplings. Through air coupling, the component temperature does not impact negatively on an inspection.

Applus+ can deploy EMAT inspections for:

- Flaw detection in steel products
- Lamination identification for plate and bonded composites
- UT weld inspections; material characterisation
- In-service pipeline inspections, such as CUPS
- UT wall thickness measurements using the Gull QSR1.

Target customers

Electromagnetic acoustic transducers have been deployed on a variety of ultrasonic testing equipment and across a vast range of fields including:

- Upstream
- Midstream
- Downstream
- Transport

- Pipelines
- Refining
- New construction
- Power
- Aerospace
- Nuclear
- Offshore
- Maintenance

The service Applus+ provides in EMAT ultrasonic testing can capture information essential to maintaining the mechanical integrity of components in all industries.

Key customer benefits

Standard ultrasonic testing requires the use of liquid couplings for energy propagation, whereas electromagnetic acoustic transmission does not, making this application a viable option for components in service and under extreme temperatures.

Thanks to ongoing technological developments at Applus+ and its partners, potential inspection challenges can be readily overcome with this application. EMAT ultrasonic testing is suited to a variety of techniques and provides reliable results where conventional methods are not possible.