Nadcap Accredited Magnetic Particle Inspection

Magnetic particle inspection is an extremely sensitive non-destructive testing (NDT) method for use on ferrous materials. It can detect minute cracks open to the surface as well as some sub-surface discontinuities. Magnetic particle inspection is one of the most economical and fastest ways to ensure that ferrous materials are safe and ready for use in the field. In simplified terms, this type of non-destructive inspection is performed by creating a magnetic field around the material being tested and then applying a carrier fluid holding particles typically made up of iron oxide. Any defect in the surface or just under the surface of the subject material will distort the magnetic field surrounding it, causing the particles in the carrier fluid to be drawn to it. This attraction is easily detected and identified. If there are no flaws in the material, the particles within the magnetic field will remain evenly distributed throughout. The productivity and sensitivity of this method makes magnetic particle inspection a standard requirement in the inspection industry.

THE Applus+ SOLUTION

With ten Nadcap-accredited locations in the US and four in the UK, Applus+ is the largest provider of Nadcap-accredited NDT services in both of these markets.

Our testing capabilities cover almost all of the potential applications and industry requirements of magnetic particle inspection. Conventional methods of direct or induced magnetisation are performed with either portable or fixed inspection systems. Multidirectional systems are typically employed for large-volume NDT projects.

Applus+ only uses magnetic particle equipment and supplies from reputable manufacturers, who ensure their products meet code requirements. Our technicians are trained in accordance with a written practice that complies with NAS410/EN4179. Applus+ has qualified technicians and staff available to meet our clients’ needs as challenges arise.

Target customers
Nadcap accreditation is required to carry out the magnetic particle inspection of aerospace components.

Key customer benefits

Partnering with Applus+, a Nadcap-approved provider, assures our clients that they are complying with industry requirements.

When applied properly, MT also provides:

- Increased product reliability
- Improved production processes by identifying problems in a timely fashion so that they can be corrected
- Reduced costs in terms of fewer returned items and less rework
- Overall improved quality

Contact: info@applus.com