

application note



Metal Hardness Testing

Blue Light Industry L.L.C.

How does the Equotip 3 contribute to keeping critical oil field equipment safe?

Induction hardening is primarily used for surface treatment. The heating process does not affect the core structure. It is possible to limit the process to those areas where it is functionally desired. Non treated sections of the material are unaffected and are easier to machine. During the induction hardening process it is imperative to check the desired hardness has been achieved throughout the surface of the work piece. Failure to do so will have deleterious effects on life of critical oil field equipment.

Application

Blue Light Industry L.L.C. uses Equotip 3 to study properties of items that are to be cast. Heat treated and induction hardened components need to be checked for hardness to evaluate the efficiency of the process. Blue Light uses Equotip 3 for these hardness measurements and provides reports in Vickers, Rockwell and Brinell scales according to the grade of metal.

The Equotip 3 is used for plotting the hardness profile across the surface as well as to calculate the average hardness for a sample under test.

Customer Quote

The Equotip 3 is an invaluable tool that provides accurate and reliable results. Its large display screen makes on-site quality testing very easy. We are very happy with the Equotip 3 for our hardness testing applications.

*Blue Light Industry L.L.C, Dubai, U.A.E.
- Proceq customer since 2008.*

Profile

Customer

Blue Light Industry L.L.C, Dubai, U.A.E., is a service foundry capable of producing all grades of steel, cast iron and nonferrous castings. Also provides services such as heat treatment, chrome plating and nickel plating typically used in the marine, construction, cement, crusher, transport and oil field industries.

Employees

140 in Dubai, UAE

Requirements

- Precise hardness measurements on cast heat treated and induction hardened components.
- Hardness measurements on very large components and in areas which are difficult to access.
- Instant, accurate and repeatable measurements.

Proceq Product

Equotip 3 with impact device D

Benefits to the Customer

- Hardness measurements on components that cannot be tested by standard testing equipment.
- Efficient in a highly hostile environment.
- Ease of handling and portability.