Replacement of Manual by Mechanized UT Inspections in the Energy, Forging and Railway Industry

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Abstract

In the forging industry, in conventional power stations and also in the railway industry manual UT inspections are replaced at a steadily growing rate by mechanized inspections. Reasons for this are increasing requirements concerning the detectability of small defects and also the documentation.

For this purpose Cegelec NDS (former MAN and ALSTOM) develops and deploys mechanized inspection systems for their own applications and also sells turnkey systems to the energy, forging and railway industry.

With more than 130 systems sold worldwide during the last years, Cegelec NDS is the world market leader for this type of applications.

By using the examples of

- an inservice inspection of a conventional low pressure rotor,
- pre service inspection of a gas turbine test disc and
- the inservice inspection of a hollow axle of a high speed train

the applicable systems are described and the advantages of the new technique are shown.

Keywords:

forging and railway industry, conventional power stations, mechanized UT inspection