

Cameron France Using **ultrasound** to check welding

Cameron France has tested in its workshops the advantages of the TOFD method for controlling welded joints. The fast, accurate and clear results make this the method of the future.

At the end of 2000, the boiler construction profession asked Cetim for verified elements to assess the interest of the TOFD (Time Of Flight Diffraction) method, with no danger of radiation.

Ultrasound diffraction

This process uses ultrasound diffraction to detect defects in welded joints. It offers accurate measuring of position and size, thanks to current imaging capacities and provides more effective controls in production. The inspection of one meter of welding with a 50 mm thicknen takes just a few seconds! The measurements are provided in millimetres, there is no need to recalibrate

the equipment, the detection does not depend on defect orientation and the method can be used up to a temperature of 250 °C.

Several positive tests

Tests conducted at Cameron were used to control, in parallel with the usual X-ray measurements, the welding of the dished products such as valve bodies. "We have already carried out several positive tests with Cetim;" says Pierre Barreau, in charge of quality at Cameron France. *"The measurements are fast, the material is light and response is immediate. A positive impact for our customers who can also view the images. In short, a technique that is far*



more economical. We could apply this more widely to the verification of circular or semi-circular weldings. The time saved would be highly significant because Xray controls are complex to implement: adapted installations, management of radioelements, operator dosimetry monitoring, recycling of chemical products relative to radiogram development and specific administrative processing."

OUR CUSTOMER

Corporate name:
Cameron France

Activity:
Manufacturer of industrial valves and drilling materi

Turnover:
125 million euro

Country:
France

Contact:
Cameron France, which employs 550 people, is one of the main prime contractors in the Béziers region (34).

Cetim's asset

By responding to the demands of its professional commissions, Cetim is providing industrialists with verified indications regarding the interest of new technical procedures, while helping them to implement the came in their workshops.

