

H+ Valves

Zero-defect valves with Cetim-Trius

H+ Valves inspects the raw carbon steel parts delivered by its subcontractors thanks to Cetim-Trius, in order to systematically eliminate the parts with a non-compliant heat treatment.



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OUR CUSTOMER

Corporate name

H+ Valves

Business activity

Industrial valves and fittings

Workforce

26 people in France and 7 in Italy

« **A**fter a detailed presentation of the Cetim-Trius method, during an industrial trade fair, I was immediately convinced of the relevance of this solution », remembers Emmanuel Gaujac, general manager of H+ Valves, a small company located near Lyon (France) specialising in the manufacturing of moulded stainless steel, bronze and carbon steel valves and fittings. The quality of the heat treatment of the raw carbon steel parts supplied by subcontractor foundries is now inspected right from receipt in record time. « In fact, an operator needs approximately one or two minutes

to take ten measurements per valve - five on the body and as many on the bonnet - and approximately five minutes if he or she wants to record data », explains Emmanuel Gaujac, first user of the new inspection tool within H+ Valves. This is revolutionary considering that an operator can only make approximately ten metallographic replicas per day!

Quick and easy NDT

The Cetim-Trius solution makes it possible to analyse the metallographic structure (grain size) of carbon steel products with an ultrasonic signal. If the frequency spectrum of the signals returned by the opposite

wall of the flange is of “low-frequency” type, it means that the metallographic structure is made of coarse grains, resulting from a non-compliant heat treatment. In fact, a non-compliant heat treatment may cause low toughness and, thus, poor impact resistance at low temperature.

In order to avoid these problems, Total asked Cetim to set up a quick heat treatment quality inspection method for valves. The Cetim-Trius solution is comprised of a rugged tablet equipped with an ultrasonic board and a probe.

Cetim-Trius results to be a significant source of productivity gain for quality inspection operations: a key factor which led H+ Valves to choose this solution.

Getim's asset

Cetim is proficient with most NDT techniques used in defectology and for material characterisation. Cetim-Trius is an

opportunity for Cetim to prove its ability to develop products, from feasibility study to industrialisation.

