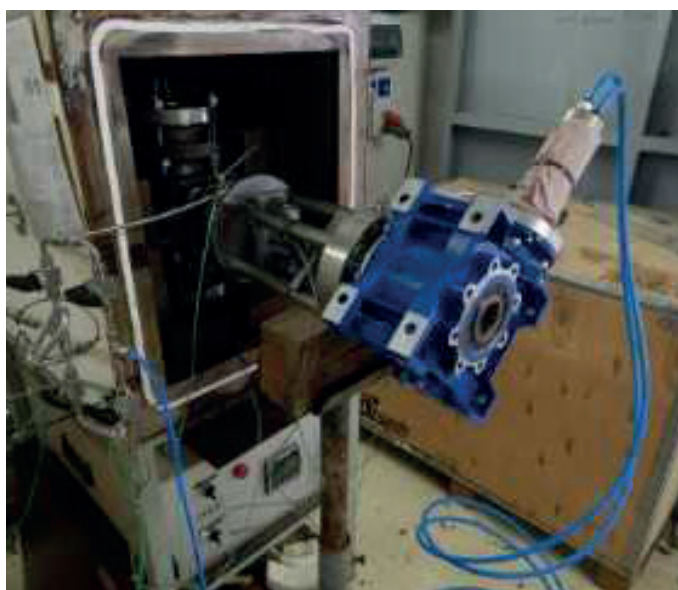




Guichon Valves

Close monitoring of fugitive emissions

Guichon Valves has developed valves that accurately match the specifications of an oil company. The valves were qualified for fugitive emissions at high and low temperatures on the same test bench.



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OUR CUSTOMER

Corporate name
Guichon Valves

Turnover
Approximately 10.5 million euros in 2018

Workforce
80 people

Business activity
The company, founded in 1921, is a specialist designer and manufacturer of special custom-made valves. The French company joined the Valco group in 2015 and exports more than 85% of its production across five continents.

Guichon Valves is a specialist manufacturer of custom-made industrial valves and fittings. Therefore, when the manufacturer was approached by an international oil company to design a valve tailored to the unique characteristics of one of its processes, its engineering department was able to easily identify the technical solution and the most suitable materials for this application. However, the valve had to meet strict leak-tightness specifications. *“We regularly design and manufacture this type of valve but it is not often that we are required to qualify the valve for fugitive emis-*

sions”, stated Fabien Chavel, Project Manager at Guichon Valves.

Strict requirements

In the interest of environmental protection, safety and process optimisation, Guichon Valves was required by the oil group to carry out tests in keeping with especially stringent specifications. The tests had to be performed at a pressure of 20 bars, at room temperature, low temperature (-45°C) and high temperature (+200°C). The major difficulty of the tests was that the low temperature, room temperature and high temperature cycles all had to be performed successively on the same test bench without removing the valve between each cycle. *“Qualification tests for fugitive emissions are usually carried out at either high or low temperatures. The management of high and low temperatures on the same system is a much more technically complex feat”*, explained Emmanuel Sauger, from

Cetim, to whom Guichon Valves entrusted its prototype valves for their qualification with respect to fugitive emissions.

A test bench was specifically designed and featured a heating device and a cooling system so that the tests could be carried out at the required temperatures without removing the valves. The helium leak tightness and operability tests were performed under the supervision of an inspector from the oil group. *“The sniffer leak detection tests revealed that the very low level of fugitive emissions fully complied with our customer’s acceptance criteria”*, added Fabien Chavel.

Cetim's asset



Cetim boasts the technical expertise and material resources to design a test bench and define test procedures to measure the fugitive emissions of valves and fittings under operating, temperature and pressure conditions specified by a manufacturer.