

Aeroform

Industrial autoclaves: Testing without dismantling

Aeroform, which specialises in manufacturing heating systems for baking composites, sub-contracts the requalification operations for its industrial autoclaves so that it can balance the workload of its staff more effectively.



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OUR CUSTOMER

Corporate Name
Aeroform France

Activity
Manufacturer of heating systems for baking composites

Turnover
One million Euros in 2011 (France)

Workforce
8 employees (in France)

Aeroform manufactures heating systems for baking composite materials, mainly for the aeronautical industry but also for the shipping and wind-power sectors - and even Formula One. As well as designing ovens, drying chambers and other presses, this Lyon-based SME specialises in industrial autoclaves that can deliver heat under pressure, thus avoiding porosity formation on the composite. This technique is employed in manufacturing strategic parts such as helicopter and wind-turbine blades and structural parts for aircraft. The company also undertakes maintenance operations and the requalification of its products. "There is a regulatory

requirement in France to requalify industrial autoclaves every ten years", explains Frank Martel, the manager of Aeroform. To obtain the requalification, pressure equipment from 0.5 bar must be able to withstand 1.5 to 1.8 times its maximum operating pressure. However, requalification using hydraulic re-testing requires the complete dismantling of the interior of the autoclaves. This results in production being halted, which can be a lengthy process.

Prioritising acoustic testing

Aeroform decided to suggest another type of testing to its customers, which is quicker and circumvents the need to

dismantle the equipment: testing using acoustic emission. "It is efficient but requires a significant amount of work and a great deal of expertise. That is why we decided to forge a partnership with Cetim, to whom we have entrusted several regulatory requalifications for industrial autoclaves", says Franck Martel.

Cetim also carries out dynamic and real-time comprehensive monitoring using acoustic emission tests to ease the workload for the SME. "It is a quick test for our customers - it lasts a week at most - and it is also a way for us to balance the workload of our teams", continues Frank Martel.

This expert partnership with an "innovative service provider", launched in 2002, has led to the Lyon-based company entrusting all its requalifications to Cetim.

Cetim's asset

Cetim specialises in technologies for acoustic emission testing. Equipped with the appropriate



human and technical resources, it works in close partnership with its customers. Cetim is able to offer a comprehensive service that includes the mechanical overhaul and requalification of equipment.