

Messier Dowty Outstanding load tests

Messier Dowty called on the experts of the Mechanical Component Fatigue division to validate the bogie developed for a heavier version of a long-range aircraft: a successful initial association which marks the start of other partnerships with this company.



It is evidently not an easy task to replace the wheels of an aircraft! For the first time, Messier Dowty called on the Cetim experts to test and validate the bogie of a long range aircraft (High Growth Weight) during this delicate phase. They built a high capacity test bench able to withstand 160 tons for the occasion.

A successful first

"We generally perform our landing gear tests internally," explained Monique Quiterio, test engineer.

However, we sometimes entrust individual test operations to subcontracting laboratories which have partnerships with the aeronautics industry."

Messier-Dowty however decided to call on Cetim engineers for this test of the bogie structure and resistance to loads: a first!

"Cetim's experts immediately understood the technical difficulties, the stakes, our objectives and made a very competitive commercial bid", added Monique Quiterio.

A budding cooperation

The tests which started in January 2006, extended over several months.

"120 gauges were installed on the bogie for these tests", added Monique Quiterio.

Objective: ensure that neither plastification nor cracking occurs upon loading. The last phase of the study involved "extreme case" tests which must be withstood by the bogie without rupture.

"These tests were conclusive for our bogie and our partnership with Cetim proved to be extremely positive", concluded Monique Quiterio.

The proof of this being that Messier Dowty has since then entrusted Cetim with two other tests on smaller parts.

OUR CUSTOMER

Corporate name
Messier Dowty

Sales turnover
EUR 700 million

Workforce
3,300 people

Context
Messier Dowty which is a part of the Safran Group, designs and manufactures landing gear systems for aircraft

Cetim's asset



Cetim has specific expertise in terms of certification with personnel dedicated to tests and measurement specialists. It builds specific test benches and coordinates the operators in order to perform tests in line with the customers' instructions and those of their instructing parties.