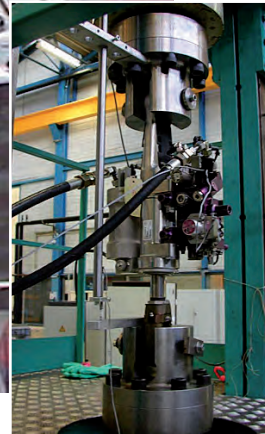
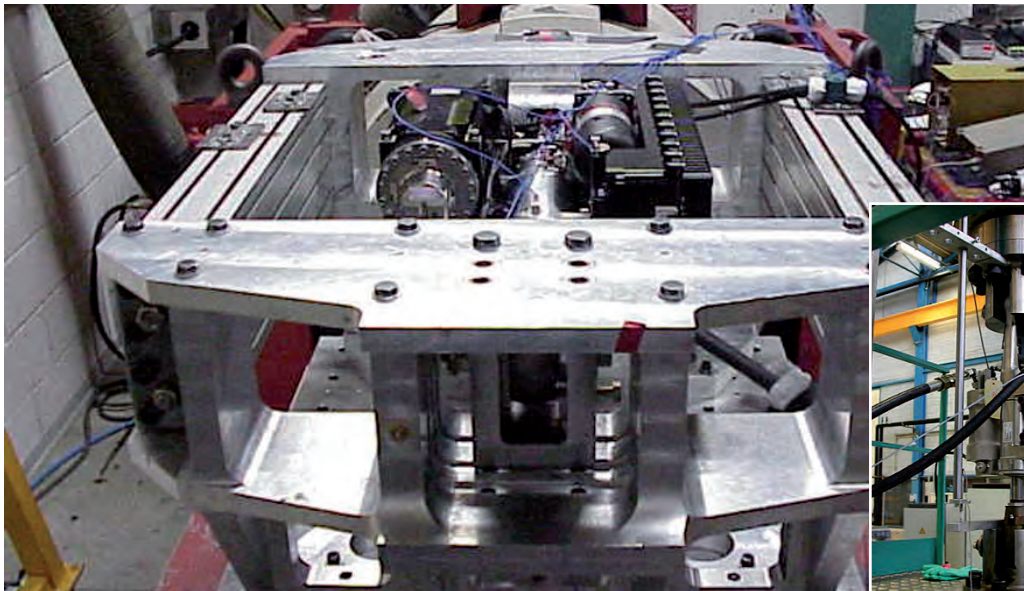


Goodrich

# Airbus A380 Program: high level test benches

Airbus A380's features lead to an exceptional project and the high safety level required commands to submit its components to rigorous mechanical tests, at levels that were never yet reached.



for all servos in the test environment specific to aeronautics. The hydraulic systems are fed with Skydrol, a highly aggressive fluid, under pressures of several hundreds of bars which are still unusual on aircrafts.

Thanks to their capacity to listen and analyze, as to their high technical skills, Cetim's engineers, in close collaboration with Goodrich's project team, carried out the tests in time and acquired an experience feedback optimizing the control's reliability.

## OUR CUSTOMER

**Corporate name**  
Goodrich

**Activity**  
Supplier of systems and services to aerospace and defense industries

**Sales turnover**  
4,7 billion US dollars in 2004

**Context**  
Goodrich Corporation, is one of the 500 world's largest companies. Based in North Carolina, it employs more than 21.000 people spread on a hundred sites in 16 countries

## Unforgiving tests

In particular, the servos acting on control surfaces (roll, pitch, yaw), must prove their resistance to the static and dynamic forces met in service. They must also withstand exceptional dynamic stresses, known as "windmilling", which correspond to what they would endure in the very unlikely case where blades would escape from an engine. In these situations, the tested materials must not only resist, but also go on operating.

## Quick... a test bench

Taking into account the project's dimension and the specification standards, no existing test bench was suitable in terms of size and power (flow, pressure, accelerations, etc).

The date planned for the startup of this exceptional aircraft left only little time.

## An experience meeting specific needs

It was thus necessary to design, build and adjust quickly a facility, appropriate



**Cetim's asset**

Cetim not only designs the facilities and manages tests according to drawn up specifications, it also accompanies its customers to define the testing devices and conditions required in order to analyze the results and suggest ways for improvement.