



Hydraulic Systems Testing

Experience

Since 2000 CTA has tested the hydraulic systems of numerous aircrafts, including the Airbus A340 NLGR/CLGR Actuators, Airbus A380 NLGR Actuator, Airbus A400M DRAS and LG System and the Airbus A350 MLGR Actuator.

Moreover, CTA has developed test benches for servovalves whose tests are performed under high pressure and thermal conditions using fluids such as skydrol and red oil.

Know-How

CTA has significant experience of the design of test rigs capable of reproducing the kinematics of hydraulic actuators during flight.

CTA has developed its own pressure application systems for these different tests using pressure converters and pressure multipliers to apply line pressure to the test chambers, thereby minimising the risks posed by skydrol use.

On the other hand, CTA has specific test benches made in the premises in order to test valves and servovalves under extreme conditions handling skydrol, red oil and fuel, including endurance, pressure, thermal, HALT, fire and vibration testing.

Capacities

1500 m2 testing area (2 buildings) and special steel tracks for test rig assembly

12 Specific control systems for hydraulic systems testing

Load, pressure, displacement and temperature recording

Load cells, Torque transducers, LVDT's, Pressure Transducers and Temperature Sensors

Hydraulic actuators, skydrol pressure converters and multipliers up to 1000bar

Temperature generators and Humidity Chambers

3D non-contact displacement measurement, High Speed Video camera, Ultrasonic Inspection Equipment