



Full Scale Component Testing

Experience

Since 1996, CTA has specialised in the field of testing of strategic aircraft components such as flaps (Airbus A320, Airbus A380 and Embraer KC-390), landing gear doors (Airbus A380, A320 and A400M), elevators (Embraer ERJ-170 and Airbus A320), rudders (Embraer ERJ-170 and KC-390) or Horizontal Stabilizers (Embraer ERJ-170, Sikorsky S-92 and Embraer E2).

Know-How

CTA has developed its own load application system for components such as horizontal tail planes and elevators. This system has been validated for use on Airbus and Embraer test campaigns and uses rubber pads and load distribution whiffletrees to optimise test frequency and enable multi-actuator synchronisation.

Our company has extensive experience designing modular technical floors to optimise test rig functionality and reduce costs, along with positioning and assembly of test rigs for multi-hinge components (sliding/enforced displacement).

CTA uses validated instrument interfaces (links, rods, lugs, etc.) to ensure accurate and reliable measurement.

Capacities

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

12 MTS Control systems work stations

2000+ strain gauge data acquisition channels

Load cells, torque transducers, LVDT's, pressure transducers and temperature sensors.

Hydraulic actuators from 25kN up to 5000 kN.

Temperature generators and humidity chambers

3D non-contact displacement measurement, high speed video camera, ultrasonic inspection equipment