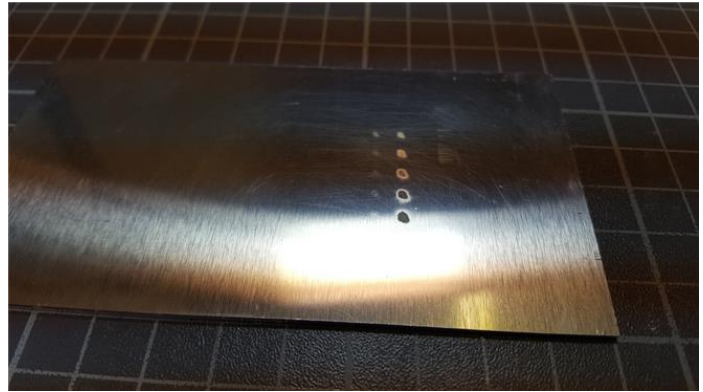


Rain Erosion Test -Bench



We have developed a robust Rain Erosion Test Bench delivering OEM & Tier1s in aero structures with accurate results on samples.

The bench test equipment is dedicated to deliver results from rain droplets impacts event. DVI (detailed visual inspection), IMI (microscopic inspections) and measure of weight loss are performed for damage characterization.

The rain erosion tests bench developed at SONACA test center is based on PJET technique, allowing comparative testing of rectangular flat samples.

The tests machine is calibrated to erode samples with the following characteristics:

- Water droplet velocity: 180 or 225 m/s.
- Water droplet size: 2 mm dia.
- Frequency of impingement: 40 Hz.
- Water: demineralized water without additives ($< 5\mu\text{S}$) at 19°C
- Constancy of impacting water temperature

Our erosion testing service performs tests on:

- Composite panels
- Metallic skins clad or not or painted
- Rubber, Butyl or PTFE seals
- Sealants
- Any type of surface finish

Specimen length [mm]: 160.0

Specimen width/dia [mm]: 110.0

Specimen height/thk [mm]: 2.3

Data acquisition: Operational parameters are recorded automatically

Project heritage: The expertise developed by Prototype & Test Center has been built on testing wing movable skins and is now available to the automotive, railway, military and wind industry.

Certification :

- AS/EN/JISQ 9100