

# Metrology Laboratory

- Accredited Calibrations by ENAC (ISO 17025).

Acreditation #22/LC10.014

- Customized calibrations in laboratory or in situ.

- Training and consulting.

- Fixing and adjustment of measuring equipment.

- Management of calibration plans.



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Metrology Laboratory





## Electric Area

- On site calibration of automatic or manual welding machines up to 2500 Amps.
- Calibration de multimeters, amperimeters, voltmeters, amperometric clamps, etc...
- Welding parameters register.



## Temperature Area

- From -112°F up to 1.832°F with uncertainties from 32,18°F.
- Temperature recorders, temperature simulators and TLD on site verifications.
- Characterization and calibrations of temperature baths and furnaces.

## News accreditations by ENAC

- Welding machines.
- Distance meters.



## Pressure Area

- Hydraulic pressure gauge calibration up to 72.519 PSI and pneumatic up to 290 PSI.
- On site calibrations up to 40.611 PSI, PH register
- Calibrations of vacuum equipment up to 0,0001 mbar and total pressure.
- Verifications of safety valves, pressure recorder and pressure switch.



## Dimensional Area

- Measuring bench up to 157,48 inches with uncertainties to 0,09µm.
- Calibrations of any dimensional equipment, axis aligners, distance meters, tooling, tracker measurements and 3 coordinates.
- Localized machine verification positioning with laser interferometer, Tracker and Geometry.



## Other Calibrations and Verifications

- Verifications of explosimeters.
- Calibrations of densitometers, radiographic films, thickness measuring devices, U.T, gas flowmeters in welding machines, special machines and equipment (pendulum Charpy plastics, VICAT, elasticometers, resistance, tearing and fragility).
- Development of customised calibrations procedures.



## Torque Area

- Calibrations of torque equipment from 0,2 N.m up to 80.000 N.m, torque wrenches, and analyzers, torque multiplier, electric torque wrench and hydraulic torque wrench.
- Calibrations on site of torque equipment.



## Mecanic Tests Area

- Calibrations of dynamometers and bolt tensioners up to 2000kN.
- On site calibrations in Charpy ASTM impact machine and Brinell, Rockwell and Vickers hardness equipment.

- Engine/axle aligners.



- Electric screwdrivers.

