



METRO- LOGY

THE EXCELLENCE OF MEASUREMENT
AND SERVICES

CERIB
Concrete expertise

OUR STRENGTHS

WITH 50 YEARS OF EXPERIENCE
AND A BROAD SPECTRUM OF KNOW-HOW,
CERIB'S METROLOGY AND INSTRUMENTATION TEAM
CAN GUARANTEE YOUR COMPANY
CERTIFIED EXPERIENCE AND HIGH-QUALITY SERVICE
CLOSE AT HAND.

ATTENTIVE TO YOUR NEEDS

Our expertise ensures the quality of your measurements for:

- > controlling your manufacturing processes and guaranteeing the quality of your products
- > taking reliable measurements with dependable traceability
- > connecting your instruments reliably and coherently.

RECOGNIZED TECHNICAL COMPETENCE

CERIB Épernon is accredited by the French Committee for Accreditation (COFRAC), in accordance with NF EN ISO/IEC 17025, for its operations in the laboratory and in the field.

- > Forces
- > Pressures
- > Weights and weighing
- > Dimensions - Sieves
- > Test machines
- > Thermostatic environmental chambers



ACCREDITATION N° 1.0001
MACHINES D'ESSAIS MÉCANIQUES
ENCEINTES CLIMATIQUES
PORTÉE DISPONIBLE
SUR WWW.COFRAC.FR



ACCREDITATION N° 2.1019
FORCES/ COUPLES
ACCREDITATION N° 2.1132
PRESSION
ACCREDITATION N° 2.1161
MASSES
ACCREDITATION N° 2.1954
DIMENSIONNEL
PORTÉE DISPONIBLE
SUR WWW.COFRAC.FR

CERIB Épernon is ISO 9001 certified by AFNOR Certification for all its metrology operations in the laboratory and in the field.

- > Calibration and/or verification of measurement and testing apparatus





CUSTOMIZED SERVICE CLOSE AT HAND

CERIB has more than 600 m² of laboratory space in Épernon, south-west of Paris, and 10 mobile laboratories that travel throughout France for assignments in the field.

The CERIB Indian Ocean team based in Saint Denis, on Réunion Island, possesses laboratories and all the technical resources required for carrying out assignments rapidly, all year round, throughout the Indian Ocean area.

Our teams of expert metrologists will attend to your needs and respond rapidly to your requests wherever you may be (France, Europe, further afield).

In addition to calibration services, CERIB can help your company through special intracompany or intercompany training sessions.

DEDICATED SPACE

We have a platform where customers can download documents issued by CERIB. You can therefore obtain all the PDF files concerning the work we perform for you at your facilities or in our laboratories.

EXPERTISE

MECHANICAL TESTING MACHINES

RANGES

- > Tensile strength: up to 300 kN
- > Compressive strength: up to 6,000 kN
- > Lengths: up to 100 mm

TYPES OF APPARATUS CALIBRATED

- > Compressive / tensile-strength testing machines
- > Plate bearing test apparatus
- > Pullout test apparatus

STANDARDS

- > NF EN 12390-4
- > NF EN 772-1
- > NF EN ISO 9513
- > NF EN ISO 7500-1

TEMPERATURE / HUMIDITY

RANGE

- > -20°C to 190°C

TYPES OF APPARATUS CALIBRATED

- > Temperature measurement chains
- > Thermostatic environmental chambers
- > Ovens
- > Thermostatic baths
- > Preservation trays
- > Air-conditioned rooms
- > Water-bath heating systems

STANDARDS

- > FD X 15-140
- > NF EN IEC 60068-3-5

AND ALSO

SPECIFIC EQUIPMENT ASSOCIATED WITH MATERIALS TESTING

MICRO-DEVAL RING AND BALL LOS ANGELES COVER METER MIXER

GYRATORY COMPACTOR DYNAMIC PENETROMETER SAND-EQUIVALENT APPARATUS

SLAB COMPACTOR BENKELMAN BEAM INTERNAL VIBRATOR

FORCES / TORQUES

RANGES

- > Tensile strength: up to 250 kN
- > Compressive strength: up to 6,000 kN
- > Torque: up to 500 Nm

TYPES OF APPARATUS CALIBRATED

- > Force sensors
- > Scales
- > Ring dynamometers
- > Torque wrenches
- > Torque meters
- > Stress meters

STANDARDS

- > Méthodes de mesure internes
- > Norme NF EN ISO 376

DIMENSIONS

TYPES OF APPARATUS CALIBRATED

- > Dial gauges
- > Displacement sensors
- > Callipers
- > Depth gauges
- > Sieves
- > Wire sensors, inclinometers
- > Grid sieves
- > Extensometers

WEIGHTS

RANGE

- > 1 g to 20 kg

TYPES OF APPARATUS CALIBRATED

- > Calibration weights

CALIBRATION METHOD

- > Double weighing

CLOSE-UP

3D GEOMETRICAL MEASUREMENT

FIELDS

- > Automatic 3D vision measuring machine
- > XY measuring table, 300 mm x 300 mm, with 0.1-µm-resolution linear encoders
- > Optical quality-control system (high-resolution camera, programmable motorized zoom (up to 400x))
- > Lighting control (programmable LEDs)

CHARACTERISTICS MEASURED

- > Sieves used for grain-size analysis
- > Geometry (arrises, diameters, radii, etc.)

STANDARDS

- > Procedure for sampling meshes of sieves to be checked, as per standards NF EN ISO 3310-1 and 2

VOLUMES

RANGE

- > 2 ml to 10 l

TYPES OF APPARATUS CALIBRATED

- > Piston-operated volumetric apparatus
- > Admixture pumps
- > Measuring cylinders

STANDARDS

- > Norme NF EN ISO 8655-5
- > NF EN ISO 8655-6

WEIGHING

RANGES

- > 1 g to 3,000 kg with calibration weights
- > Up to 6,000 kg with Leviatys®

TYPES OF APPARATUS CALIBRATED

- > Bench scales
- > Floor scales, beltscales (on site)

CALIBRATION METHOD

- > As per in-house weighing method

PRESSES

RANGES

- > From -1 bar to 1,000 bars relative pressure for laboratory and field measurements

TYPES OF APPARATUS CALIBRATED

- > Metal pressure gauges
- > Pressure sensors
- > Binder recovery test pressure gauge
- > Vacuum gauges

STANDARDS

- > In-house procedure for pressure

ELECTRICAL MEASUREMENT

RANGES

- > 1 mV to 1,020 V
- > 1 µA to 20 A
- > 1 Ω to 1,100 MΩ

TYPES OF APPARATUS CALIBRATED

- > Multimeters
- > Current clamps
- > Insulation testers

CALIBRATION METHOD

- > As per in-house method, using calibrator

TAILORED SOLUTIONS

FOR ALL OUR CUSTOMERS

INDIVIDUALIZED STUDIES

and fine tuning. These services concern verification procedures consistent with the equipment used:

- choice of parameters to be checked and of the calibration procedure, in accordance with conditions of use,
- fine tuning of calibration procedure, evaluation of measurement uncertainty associated with the check and, where applicable, decision on conformity by means of comparison with an acceptance criterion.

FIELD CALIBRATION

Field calibration concerns test stands, multi-parameter checks, adjustment of adaptor parts, and setting up for force measurements.

Examples: field weighing stations, force/pressure/dimension measurement on same test stand, creep tests, dynamic measurement, measurement in force range up to 18,000 kN, acquisition of force/time curves for verification of loading ramp-up speeds.

THE EXPERT PERSONNEL

of CERIB's Metrology teams is individually qualified for each measurement field.

GUARANTEE

CERIB guarantees the traceability of measurements against national gauging standards.

IN FRENCH OVERSEAS TERRITORIES AND INTERNATIONALLY

CERIB has facilities on Réunion Island that make all the company's expertise and know-how available to customers in and around the Indian Ocean.



Large numbers of calibration campaigns are also carried out in Guyana, Martinique and Guadeloupe, in French Polynesia, New Caledonia, and in the laboratories of testing centres in Belgium, Algeria, Tunisia, etc.

CERIB also provides services internationally for evaluations and to provide technical assistance for setting up metrology laboratories.

SCOPE OF INTERVENTION

CERIB'S METROLOGY TEAM WORKS
IN MANY FIELDS

// MECHANICAL INDUSTRIES

// AUTOMOTIVE INDUSTRY

// AERONAUTICS INDUSTRY

// RAILWAY INDUSTRY

// NUCLEAR INDUSTRY

// CHEMICAL AND CHEMICAL-RELATED INDUSTRIES:
CHEMICALS AND PETROLEUM
PHARMACEUTICS AND COSMETICS

// CONSTRUCTION AND CONSTRUCTION MATERIALS:
CONCRETE
AGGREGATE
CEMENTS AND HYDRAULIC BINDERS

// ROAD AND GEOTECHNICAL TESTING

// POLYMER AND COMPOSITE MATERIALS

// AGRICULTURE AND AGRI-FOODSTUFFS INDUSTRY



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