

TRAINING OFFERES

✓ Non Destructive Testing (NDT)

- NDT by UT1 and UT2 ultrasound,
- NDT by RT1 and RT2 radiography,
- ECT1, ECT2 eddy current control,
- MT1, MT2 magnetoscopy,
- VT1, VT2 visual examination of welds,
- Liquid penetrant: PT1 and PT2,
- Control by MFL .

✓ Welding

- Arc welding : TIG, MIG/MAG, ...,
- Welding of different materials (steels, aluminium alloys,...),
- Friction stir welding.

✓ Materials, metallurgy

- Heat treatment of materials,
- Mechanical testing of materials,
- Metallographic analysis,
- Materials characterization (SEM,XRD ,EBSD...).

✓ Corrosion

- Corrosion of metallic materials (causes, mechanisms and anti corrosion protection),
- Corrosion inhibitors,
- Anti-corrosion coatings,
- Monitoring and measurement of corrosion potential.

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INTELLIGENT EMBEDDED SYSTEMS PLATFORM -BOU ISMAIL



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TECHNOLOGICAL PLATFORM OF MECHANICAL AND ROBOTIC SYSTEMS FOR INTERVENTIONS AND SERVICES



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WELDING, INDUSTRIAL CONTROL AND EXPERTISE COMPANY



Subsidiary CSC Expertise Spa



The head quarter: Industrial Zone of
Bou-Ismaïl N° 30 Tipaza -Algeria



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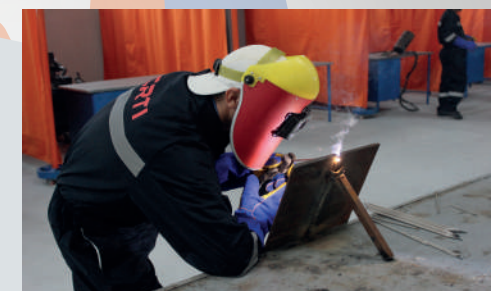
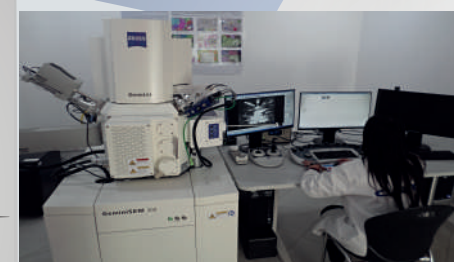
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MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH
GENERAL DIRECTORATE OF SCIENTIFIC RESEARCH AND
TECHNOLOGICAL DEVELOPMENT

RESEARCH CENTRE IN INDUSTRIAL TECHNOLOGIES - CRTI -



EXPERTISE FOR THE
BENEFIT OF THE INDUSTRY

www.crti.dz



OUR SKILLS

The Research Centre in Industrial Technologies, under the supervision of Ministry of Higher Education and Scientific Research, embodies several research and development structures at the national scale (the east, center and the west of Algeria).

The CRTI is generally specialized, in the field of industrial technologies. Its areas of interest including:

- ✓ Non-destructive testing (NDT),
- ✓ Thin films and coating technology,
- ✓ Aero-inspection of industrial installations (drone),
- ✓ Welding and joining techniques,
- ✓ Steel industry, metallurgy and mechanics,
- ✓ Corrosion and materials durability,
- ✓ Control of manufacturing processes,
- ✓ Qualifying training (Welding, NDT, Metallurgy, Corrosion,...),
- ✓ Accompanying industrial companies with in view of their accreditation according to ISO referential 17025,
- ✓ Calibration of NDT equipments and temperature measuring devices using standards traceable to the International System of Units (SI),
- ✓ Mechanical testing and chemical analysis in compliance with ISO/IEC 17025



Research Centre in Industrial Technologies

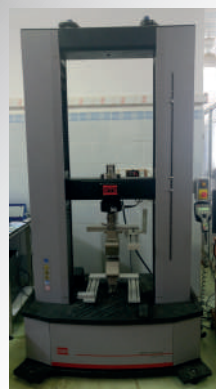
OUR SERVICES

Welding Technology

- Arc welding, TIG, MIG / MAG, submerged arc welding, ...
- Approbation of welders.
- Elaboration and qualification of welding procedures.



Mechanical Testing



- Mechanical testing of materials :
Tensile testing, fatigue, bending, resilience, hardness, micro hardness, ...
- Nano and micro indentation.

Material Analysis

- Micrographic and macrographic observation of materials.
- Chemical analysis of materials composition.
- In-situ chemical composition analysis.



Control Of Manufacturing Processes



- Monitoring industrial installations by infrared thermography.
- Monitoring rotating machines by vibration analysis.
- Quality control of processes and products.

Non-destructive Testing



- Ultrasonic control of industrial installations.
- Control of pipelines by guided waves
- Control of welds by radiography.
- Control of industrial installations by magnetic and electromagnetic techniques.

Calibration / Metrology



- Calibration of NDT equipments (ultrasonic and eddy current flaw detectors, thickness gauges, yokes, radiometers/lux meters, hardness testers, etc.)
- Calibration of temperature measuring devices (infrared thermometers, digital probe thermometers, temperature recorders, climatic chambers, etc.)
- Verification of measuring instruments(caliper, palmer,...).



Corrosion

- Diagnosis of corrosion phenomena of industrial installations.



- Dimensioning of cathodic protection systems.

