



LEMSC



Mechanical Testing, Structures and Civil Engineering Lab

WHAT WE OFFER : services and expertise

- Characterization of materials or structures
- Access to characterization infrastructure / equipment
- Measurement campaign realized by UCLouvain staff/members
- Collaborative research



TEST FLOOR (200 m²) – Design of structural tests

- 10 jacks (from 1t to 100t)
- 25 movable sensors
- Independent electronics and pump
- Various frame configurations



Material testing

- Testing machines from 100 N to 5000 kN, axial and axial-torsion, static and fatigue loading
- Impactor (max 1600 J energy)
- Temperature chambers (-70°C +250°C and +1200°C)
- DIC equipment with 4 cameras
- High speed camera



Accredited tests under ISO 17025 certification

- Tension on steel, fatigue, corrosion under tension, relaxation of prestressing and reinforcing steel
- Tension and compression tests on Fiber Reinforced Resin Composite
- Compression and shear tests on rubber bearings



Special tests on Railway Equipment



Collaborative research

- Characterization of materials or structures – on wood elements, metallic materials (Al, Ti, Steel), concrete, bricks, composite, resin, Fiber Resin Composites (FRC), connections, samples, beams, floors, columns, walls, etc.

CONTACT

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(1) Test floor (200 m²) – (2) Optical measurements of displacements fields (Digital Image Correlation) – (3) MTS hydraulic machine BIONIX 25kN – (4) Strain gages technique