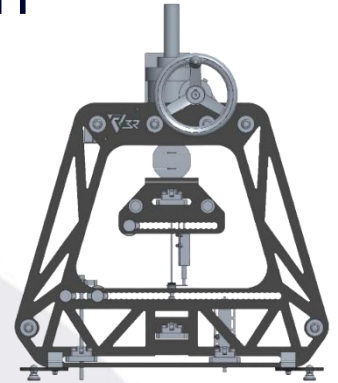


Manual Educational Test Bench

Educational Mechanical Testing – 5 kN

The 3R manual educational test bench is a compact and accessible solution for learning the fundamental principles of strength of materials through tensile and bending load cases. It provides a **compact** and **cost-effective alternative** to a higher-capacity motorized test bench.



Available Tests

- 3 points bending
- 4 points bending
- Cantilever beam bending
- Tensile testing of threaded rods

Item	Specification
Architecture	High-rigidity portal frame
Actuator	Manual handwheel
Transmission	Translating screw drive
Actuator stroke	100 mm
Maximum capacity	5 kN
Dimensions (L × W × H)	573 × 449 × 711 mm

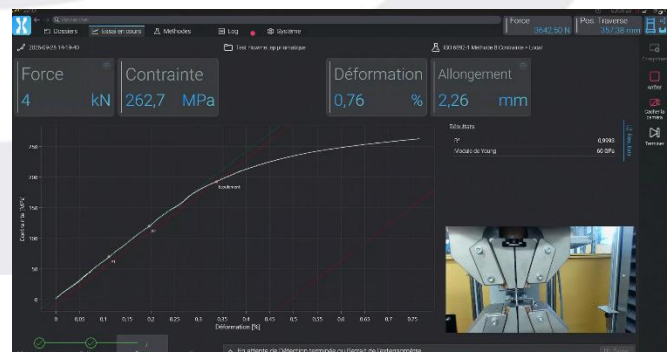
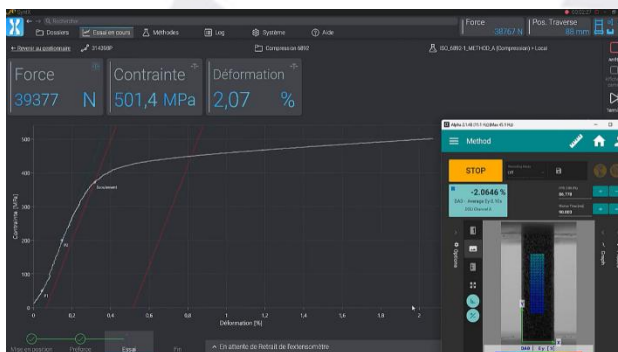
Instrumentation

- S-beam load cell
- 125 mm displacement sensor for actuator travel monitoring
- 25 mm displacement sensor for strain and deflection measurement

Signal conditioning
via a USB interface

Data Acquisition and Analysis with Synt'X Software

Start data acquisition in just a few clicks, display curves in real time, and export test data. Developed and maintained by 3R, Synt'X is reliable, scalable, and intuitive software.



Diagrams

