

Barrus RED 1500kN servo-hydraulic testing system



The **Barrus RED 1500kN servo-hydraulic testing system** is a high-performance universal testing solution designed for **precise and repeatable material testing**. Engineered to handle high-capacity **tensile, compression, bending, and shear tests**, this system delivers superior accuracy, robust control, and advanced automation, making it ideal for **metallurgical labs, research institutions, and industrial quality control applications**. *



Key Features and Benefits

Unmatched Load Capacity & Precision

With a **1500kN force capacity**, this system is built for rigorous high-strength material testing. The integrated **servo-hydraulic control system** ensures **stable, smooth, and accurate force application**, maintaining precise control even at low speeds.

Versatile Testing for Multiple Applications

The system supports a wide range of materials, including **metals, fasteners, construction materials, and composites**. Whether conducting **tensile, compression, bending, or shear tests**, the Barrus RED 1500kN offers **modular test configurations** to meet diverse industry needs.

Advanced Servo-Hydraulic Technology

Equipped with a **closed-loop servo-hydraulic system**, the machine delivers **high stability and fast response**, ensuring smooth force application and reliable test execution. The **intelligent force, displacement, and deformation control modes** provide **unparalleled precision** for research and industrial applications.

Optimized for Accuracy & Efficiency

Featuring **high-resolution load cells, precision extensometers, and advanced digital displacement measurement**, the Barrus RED 1500kN achieves **±1% accuracy** across the 1%-100% load range. The **built-in hydraulic automatic clamping system** simplifies sample preparation and ensures consistent gripping force during testing.

User-Friendly Control & Data Management

A **PC-based control software** enable **real-time monitoring, test automation, and comprehensive data analysis**. The system supports **multiple testing standards** and generates **customizable reports**, making it an essential tool for modern testing labs.



Robust & Reliable for Industrial Use

The **rigid 4-column frame design** ensures exceptional **structural stability**, reducing deformation under high loads. The **servo-hydraulic actuator** delivers **smooth, powerful motion**, ensuring repeatable test results in **demanding environments**.

Why Choose Barrus RED 1500kN?

- **High-capacity universal testing system** for a wide range of applications
- **Industry-compliant testing** (ISO, ASTM, EN standards)
- **Advanced servo-hydraulic technology** for precise force application
- **User-friendly interface** with automated data acquisition & reporting
- **Built for reliability & long-term operation** in industrial settings

Upgrade your testing capabilities with the **Barrus RED 1500kN servo-hydraulic testing system** - where precision meets power.



Technical Specifications

General technical data for Barrus RH 1500

Parameter	Specification
Machine Type	Servo-hydraulic universal testing system
Frame Design	Four-column, two-workspace with threaded spindle drive
Maximum Load Capacity	1500 kN (1%-100% range)
Available Load Capacities	1000 kN, 1200 kN, 2000 kN, 3000 kN (optional models)
Accuracy Class	1%
Control System	Advanced digital control unit with high-speed data acquisition
Grips	Hydraulic wedge-type grips for round (ø8-30mm) and flat specimens (0-40mm)
Jaw Surface	150 × 120 mm
Built-in Compression Plates	ø160 mm
Max. Specimen Length for Tensile	1000 mm
Max. Specimen Height for Compression	850 mm
Max. Testing Movement	250 mm
Distance Between Columns	800 mm
Control Modes	Force, displacement, and deformation control
Loading Speed	0.1 - 80 mm/min

Power Supply: 3-phase, AC 380V ±10%, 50Hz

Dimensions: 1100 × 850 × 3100 mm and 1200 × 700 × 750 mm

Net Weight: 5500 kg

* The pictures for illustration only. Includes optional elements. The delivered outfit may differ.

