COMPRESSION AND TRACTION TESTS 100 N - 2000 kN full scale

AURA UNIVERSAL

Automatic Dynamometer

for the following tests:

- Compression
- Traction
- Flexion
- Peeling





This latest generation dynamometer is a solution specifically designed for:

Cold and hot formed Manufacturers and spring manufacturers and users.

users of bars and wires with diam. up to 80 + mm.



EASYDUR SRL Via Maja 5 - 21051 Arcisate (VA) - Italy - Tel. + 39 0332 203626 - Fax +39 0332 206710 info@easydur.com - www.easydur.com

TECHNICAL TABLE

AURA UNIVERSAL	100 N - 2000 kN
Force kN	up to 2000
Number of guide columns	4
Number of ball screws	2
Height (mm)	up to 3000
Width (mm)	up to 1500
Depth (mm)	up to 1200
Weight (kg)	max 3800
Useful test height (without accessories) (mm)	1650
Useful test width (mm)	835
Min / Max test speed range (mm/min)	0,005 – 334
Precision of movement	±5µm
Test speed accuracy	(+/-) 0,1%
Calculation resolution (e.g. in compression / traction)	24 bits
Data acquisition speed - internal	10 kHz
Data acquisition speed - PC	1 kHz
Controller / Cycle time	1 kHz
Power supply	Three-phase voltage: 480 VAC +/- 10%; 50 – 60 Hz
Operating temperature	(+10 to + 38 °C)
Storage temperature	(+ 5 to +55 °C)
Humidity range	(+10 + 90 %)
PC interface	Ethernet
Drive system	AC Brushless servomotor
Noise level at maximum test speed (dBA)	<75



AURA UNIVERSALE COMPRESSION AND TRACTION TESTS 100 N - 2000 kN full scale

Our customers have the option of fitting AURA with **one, two or three load cells** (always installed).

This makes it possible to extend the range of samples to be tested, (**depending on the forces required**), always operating with maximum accuracy and repeatability of results.

The cells are protected against overload and have automatic axle release in the event of out-of-scale or unexpected impact, as well as integrated failure compensation.











Depending on the type of test to be performed, the instrument can be equipped with different **accessories**: plates, spring traction hooks, wire pulling pliers and **special equipment** in line with the various technical specifications required by the international testing standards.



The instrument may be interfaced with a range of external hardware:

- ✓ Contact and no-contact strain gauges for traction and breaking load tests.
- Digital callipers and micrometers for special compression tests.
- ✓ QR & BAR Code Reader.
- ✓ External analogue channels.

EASYDUR SRL

Via Maja 5 - 21051 Arcisate (VA) - Italy - Tel. + 39 0332 203626 - Fax +39 0332 206710 info@easydur.com - www.easydur.com



AURA UNIVERSALE COMPRESSION AND TRACTION TESTS 100 N - 2000 kN full scale

The AURA series comes with the EASY-QS Universal Test Software, which enables all types of static and quasi-static (low-frequency cyclic) testing on compression and extension springs...

- ✓ Go to a position and read the corresponding **force**.
- ✓ Go to a **load** and obtain the corresponding position.
- ✓ Stress cycles at low frequencies.
- ✓ Settlement.
- ✓ Holding of a position or load for the required time frame (Long-term creep).
- ✓ Pre-load for the detachment of the first loop of traction springs (FIP).
- ✓ Calculation of the **rigidity** of the **spring** Calculation of the **flexibility** of the spring.
- Open calculation system, with the possibility of performing dynamic automatic calculations (during the test).
- Pre-filled wizards according to the most important ASTM ISO standards for tensile breaking load tests.
- ✓ Data export via OPC-UA module.
- ✓ Reports in Excel.
- ✓ CP-CPK / PP-PPK calculation / XR programme.
- Two-way interchange with the most important business management software (SAP QDASS PANTERA etc.).





EASYDUR SRL

Via Maja 5 - 21051 Arcisate (VA) - Italy - Tel. + 39 0332 203626 - Fax +39 0332 206710 info@easydur.com - www.easydur.com