

AURA TENSILE

BREAKING LOAD, ELONGATION AND BENDING CLASS 0.5 TESTS

The **AURA** model is an electro-mechanical system instrument. This allows our customers to perform their tests with the highest precision and the lowest possible energy consumption. Thanks to our internal EASYQS software (running on Windows 10) developed by our R&D department over the last 20 years, our customers can fully work following the **Industry 4.0 method**, thanks to the possibility of interfacing AURA Machine with all the Customer Management Software. Depending on the different applications, we are able to provide video, automatic or manual strain gauges, for elongation tests with the highest precision, in compliance with the specific standards. Easydur can also supply automatic tensile testing systems, for "IN LINE" control, using the latest generation of robots.



TENSILE TEST STANDARDS OF REFERENCE

Based on the type of sample being tested and the testing method, the **AURA** series allows the customer to complete different types of tests meeting the most important world standards:

Sheet steel: ASTM E517, ASTM E345, ASTM E446, DIN 50154

Ducts and pipes: ISO 3183, ISO 6892-1, ASTM A370,

Metal tensile tests with climate chamber: ASTM E21, ISO 6892-2, ISO 6892-3, GOST 9651

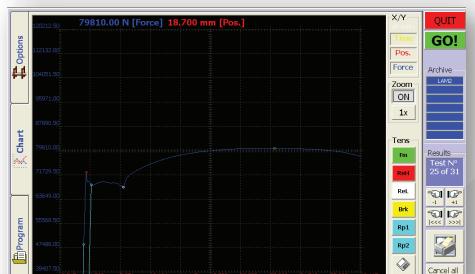
Metal bending tests: ISO7438, ISO 5173, ASTM E190, ASTM E290

cast and forged products: ISO 3266, EN 818-X, EN 1677-X

Welded metal: ISO 4136, ISO 5178, ISO 5173

Alloy samples: ASTM B348, ASTM B557

Hot rolled steel: ISO 6892-1



Easy to use software

EASYDUR SRL

Via Maja 5 - 21051 Arcisate (VA) - Italy - Tel. +39 0332 203626 - Fax +39 0332 206710

info@easydur.com - www.easydur.com

AURA TENSILE

BREAKING LOAD, ELONGATION AND BENDING CLASS 0.5 TESTS

AURA TENSILE	100 kN	150 kN
Force kN	100	150
Number of guide columns	4	4
Number of ball screw	2	2
Height (cm)	210	210
Width (cm)	111	111
Depth (cm)	87	87
Weight (kg)	680	680
Vertical Test space (without Grips) [mm]	1200	1200
Horizontal Test space	512	512
Testing speed Range min max (mm/min)	0,005 - 484	0,005 - 484
Position control resolution	± 1 µm	± 1 µm
Frame axiale stiffness (kN/mm)	275	350
Force measurement accuracy	Class 0.5 from 1% of load cell capacity /	Class 0.5 from 1% of load cell capacity /
Precision class	Class 1 from 0.2 % of load cell capacity as EN ISO 7500-1	Class 1 from 0.2 % of load cell capacity as EN ISO 7500-1
Displacement measurement accuracy	± 5 µm	± 5 µm
Testing speed accuracy	(+/-) 0,1%	(+/-) 0,1%
Calculated resolution (for example in tensile / compression direction)	24 bits	24 bits
Data acquisition rate, internal	10 kHz	10 kHz
Data Acquisition Rate at the PC	1 kHz	1 kHz
Controller /Cycle Time	1 kHz	1 kHz
Power supply	Single Phase Voltage: 230 VAC +/- 10%; 50 - 60 Hz Three Phase Voltage: 480 VAC +/- 10%; 50 to 60 Hz. Power supply must be free of spikes	Single Phase Voltage: 230 VAC +/- 10%; 50 - 60 Hz Three Phase Voltage: 480 VAC +/- 10%; 50 to 60 Hz. Power supply must be free of spikes
Operating Temperature	(+10 to + 38 °C)	(+10 to + 38 °C)
Storage Temperature	(-40 + 66 °C)	(-40 + 66 °C)
Humidity Range	(+10 + 90 %)	(+10 + 90 %)
Interface for PC	Ethernet	Ethernet
Drive System	AC Servo motor Brushless	AC Servo motor Brushless
Noise level at maximum test speed (dBA)	<75	<75

AURA TENSILE

BREAKING LOAD, ELONGATION AND BENDING CLASS 0.5 TESTS

AURA TENSILE	250 kN	400 kN
Force kN	250	400
Number of guide columns	4	4
Number of ball screw	2	2
Height (cm)	230	236
Width (cm)	130	145
Depth (cm)	98	118
Weight (kg)	2000	3200
Vertical Test space (without Grips) [mm]	1300	1200
Horizontal Test space	650	835
Testing speed Range min max (mm/min)	0,005 - 514	0,005 - 514
Position control resolution	± 1 µm	± 1 µm
Frame axiale stiffness (kN/mm)	350	500
Force measurement accuracy Precison class	Class 0.5 from 1% of load cell capacity / Class 1 from 0.2 % of load cell capacity as EN ISO 7500-1	Class 0.5 from 1% of load cell capacity / Class 1 from 0.2 % of load cell capacity as EN ISO 7500-1
Displacement measurement accuracy	± 5 µm	± 5 µm
Testing speed accuracy	(+/-) 0,1%	(+/-) 0,1%
Calculated resolution (for example in tensile / compression direction)	24 bits	24 bits
Data acquisition rate, internal	10 kHz	10 kHz
Data Acquisition Rate at the PC	1 kHz	1 kHz
Controller /Cycle Time	1 kHz	1 kHz
Power supply	Three Phase Voltage: 480 VAC +/- 10%; 50 to 60 Hz. Power supply must be free of spikes	Three Phase Voltage: 480 VAC +/- 10%; 50 to 60 Hz. Power supply must be free of spikes
Operating Temperature	(+10 to + 38 °C)	(+10 to + 38 °C)
Storage Temperature	(-40 + 66 °C)	(-40 + 66 °C)
Humidity Range	(+10 + 90 %)	(+10 + 90 %)
Interface for PC	Ethernet	Ethernet
Drive System	AC Servo motor Brushless	AC Servo motor Brushless
Noise level at maximum test speed (dBA)	<75	<75

AURA TENSILE

BREAKING LOAD, ELONGATION AND BENDING CLASS 0.5 TESTS

AURA TENSILE	600 kN
Force kN	600
Number of guide columns	4
Number of ball screw	2
Height (cm)	300
Width (cm)	148
Depth (cm)	118
Weight (kg)	3800
Vertical Test space (without Grips) [mm]	1650
Horizontal Test space	835
Testing speed Range min max (mm/min)	0,005 - 334
Position control resolution	± 1 µm
Frame axiale stiffness (kN/mm)	850
Force measurement accuracy	Class 0.5 from 1% of load cell capacity
Precison class	/ Class 1 from 0.2 % of load cell capacity as EN ISO 7500-1
Displacement measurement accuracy	± 5 µm
Testing speed accuracy	(+/-) 0,1%
Calculated resolution (for example in tensile / compression direction)	24 bits
Data acquisition rate, internal	10 kHz
Data Acquisition Rate at the PC	1 kHz
Controller /Cycle Time	1 kHz
Power supply	Three Phase Voltage: 480 VAC +/- 10%; 50 to 60 Hz. Power supply must be free of spikes
Operating Temperature	(+10 to + 38 °C)
Storage Temperature	(-40 + 66 °C)
Humidity Range	(+10 + 90 %)
Interface for PC	Ethernet
Drive System	AC Servo motor Brushless
Noise level at maximum test speed (dBA)	<75