

# High-Precision & Versatile Universal Testing Machines

Models from 3kN to 200 kN

Boundless configurations.  
Budget-friendly.  
Built in Germany.

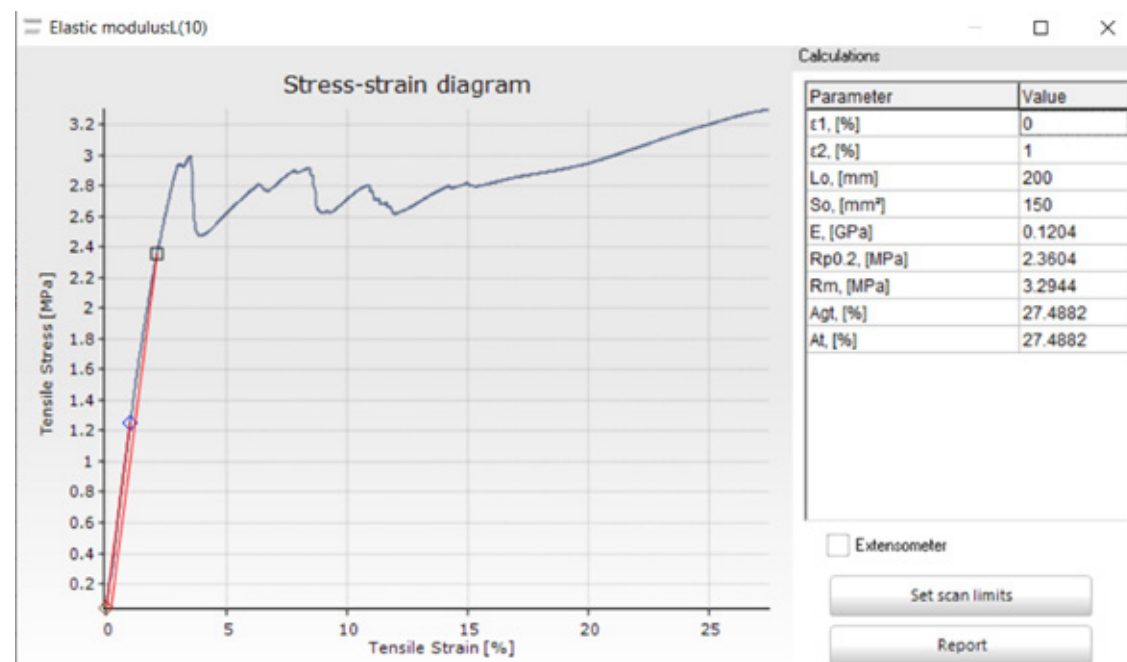
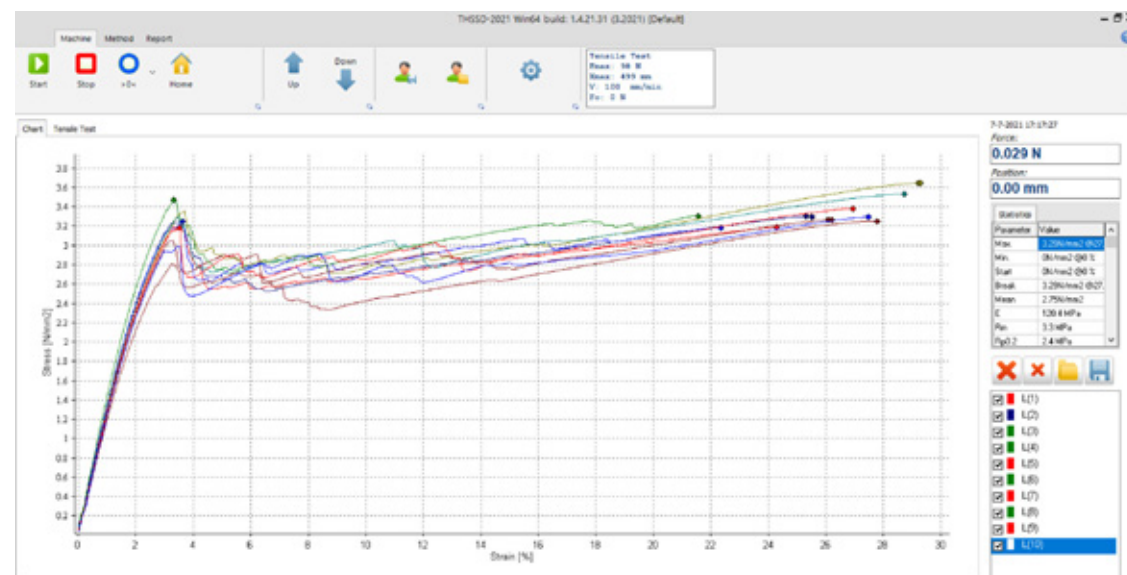
[amlinstruments.co.uk](http://amlinstruments.co.uk)

 **aml**  
INSTRUMENTS

# Perform thousands of different material tests

Our tensile testers are capable of performing thousands of different tests on different materials and structures (depending on the configurations and fixtures). These include bending, compression strength, peel strength, shear stress, tensile stress, and other mechanical properties of materials such as adhesives, metals, packaging, plastics, and textiles.

These machines promise high precision tensile testing, a fast response speed, and comprehensive and convenient data processing, helping manufacturers and researchers expand the scope of their material testing possibilities.



## Benefits

- Made in Germany to the highest standards while being favourably priced.
- Powerful and easy-to-use software for use in research and development and quality control applications.
- Comprehensive and impressive range of machines from space-saving 'Single Column Machines' to large 200kN models.
- Fantastic versatility for different testing conditions, from low capacity simple tests up to the most demanding of mechanical testing requirements.
- Can be used standalone or with a computer — all measuring data can be transferred to a PC using a USB connection.
- Two year warranty (extendable to three years).
- Aluminium and stainless steel construction with high mechanical stiffness.
- Cross-head speed as standard 0.025 — 700mm, greater range possible as an option.





# Powerful and easy to use software

## Dynamic Data & Accurate Testing Results Analysis

- Large real-time numeric displays
- Live Load, Peak Load, Live Stress and Peak Stress
- Position, Position Rate, Peak Position, Live Strain, and Peak Strain
- Modulus calculations
- Yield calculations
- Monotonic and cyclitic test profiles
- Comprehensive analysis and calculations
- Multiple specimen geometries and dimensions
- Export reports / results to PDF, Excel, or as a text file
- Grade 0.5 load cells to all international standards including ISO 7500-1. ASTM E4, and JISB7721
- Position resolution 0.001mm
- Guaranteed resolution with a standard load cell +100, 000 parts 50 Hz
- Higher speed/resolution available as an option

## Options

- Customised machine sizes and capabilities.
- External extensometer and channel.
- Finance / lease options available (subject to a successful application).
- Installation and training available.
- LabView API and custom test programs.
- Load cells 2N to 200 kN.
- Over 3000 different grips and fixtures available.

## Types of Test

- Tensile
- Compression
- Bend, 3 point & 4 point
- Cyclitic
- Constant Force
- Friction (COF)
- Peel
- Shear

# Take the strain out of tensile testing.

# Specifications

In addition to standard machine sizes, we can offer machine sizes to your bespoke requirements.

Specifications	Z3 X500	Z3 X1200	Z5 X500	Z5 X1200	Z10 X700	Z10 X1200	Z20 X700	Z20 X1200
Max Force	3	3	5	5	10	10	20	20
Max Speed	700	700	700	700	600	600	1600	1600
Min Speed	1	1	1	1	1	1	0.03	0.03
Smallest Distance	66	66	66	66	200	200	209	209
Adapter Size	15.9	15.9	15.9	15.9	15.9	15.9	31.8	31.8
Motor	50	50	90	90	170	170	800	800
Voltage	220/110	220/110	220/110	220/110	220/110	220/110	380	380
Motor Type	DC Maxon	DC Maxon	DC Maxon	DC Maxon	DC Maxon	DC Maxon	AC Servo Stober	AC Servo Stober
Crosshead Ext.	500	1200	500	1200	700	700	700	1200
Weight	36	37	55	56	88	88	235	260
Dimensions	1036mm	1677mm	1036mm	1677mm	1226	1726	1317	1837
H x W x D	390mm	390mm	390mm	390mm	640	640	1071	1071
	300mm	300mm	300mm	300mm	240	240	433	433
Packing Dimensions	1150mm	1800mm	1150mm	1800mm	1315mm	1976mm	1900mm	1900mm
H x W x D	500mm	500mm	500mm	500mm	740mm	740mm	1200mm	1200mm
	400mm	400mm	400mm	400mm	400mm	400mm	800mm	800mm

Specifications	Z50 X700	Z50 X1200	Z100 X700	Z100 X1200	Z150 X1200	Z200 X1200
Max Force	50	50	100	100	150	200
Max Speed	1600	1600	600	600	400	400
Min Speed	0.03	0.03	0.02	0.02	0.02	0.01
Smallest Distance	209	209	228	228	228	228
Adapter Size	31.8	31.8	40	12	40/12	40/12
Motor	1600	1600	2400	2400	2900	3500
Voltage	380	380	380	380	380	380
Motor Type	AC Servo Stober	AC Servo Stober	AC Servo Stober	Ac Servo Stober	AC Servo Stober	AC Servo Stober
Crosshead Extension	700	1200	1200	1200	1200	1200
Weight	245	270	420	420	460	600
Dimensions	1317mm	1837mm	1450mm	2050mm	2050mm	2050mm
H x W x D	1071mm	1071mm	1090mm	1090mm	1090mm	1090mm
	433mm	433mm	590mm	590mm	590mm	590mm
Packing Dimensions	1900mm	1900mm	1600mm	1600mm	1600mm	1600mm
H x W x D	1200mm	1200mm	1200mm	1200mm	1200mm	1200mm
	800mm	800mm	800mm	800mm	800mm	800mm



#### Our Values

**Accountable**



**Collaborative**



**Dynamic**



**Focused**



**Responsive**



# AML Instruments

# Measuring Success

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