

Single Column
Type

Material Testing Instruments

STA Series



AND ...Clearly a Better Value
A&D Company, Limited

Single Column Type

Material Testing Instruments

STA Series is an advanced multi-purpose tester with the ability to test a wide range of products, materials and operating conditions. More than fifteen different types of tests may be performed with the STA unit.

Tests Include	
• Tensile tests	• Tearing tests
• Compression tests	• Adhesion tests
• Bending tests	• Sticking tests
• Cycle tests	• Pull-out tests
• Cycle tests with momentary stop	• Burst tests
• Shearing tests	• Hysteresis tests
• Peeling tests	• Stress-relaxation tests
	• Creep tests

Impressive Capability

- Compact and lightweight, with a single-column loading frame that allows considerable flexibility of placement.
- High performance and improved operation at a lower purchase price and lower operating costs.
- Assured repeatability of tests results :
 - (1) Solid frame construction
 - (2) Exclusive ball screw crosshead control
 - (3) High precision load cell
 - (4) Digital closed loop control
- Extensive Windows oriented data logging and recording capability (Option).



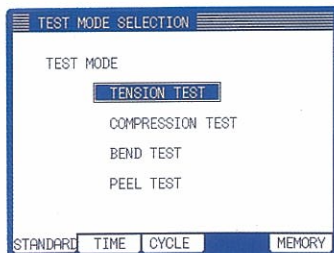
Control Unit

LCD Display panel

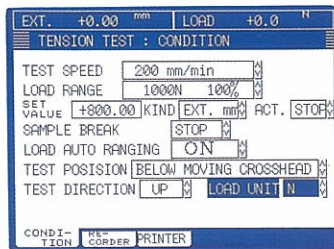
- Large LCD Display with back-light.
- Drop down menu allows quick and easy access to operational settings and instructions.



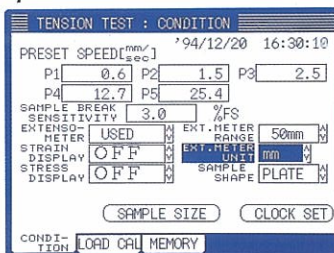
Menu



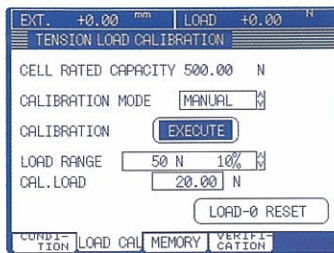
Test Parameters



Special



Calibration



Crosshead Control

Large manual crosshead positioning knob and touch switches allow the operator to easily set the crosshead travel.

START Switch

Serial operation of the test start is carried out automatically.

RETURN Switch

Rapidly returns the crosshead to its original pre-set position. It includes an automatic slow-down function to provide precise positioning.

UP ▲, DOWN ▼ Switches

Allows adjustment of the crosshead fine positioning.

Manual Adjustment Knob

Allows fine positioning of the crosshead after use of UP ▲, DOWN ▼ switches.

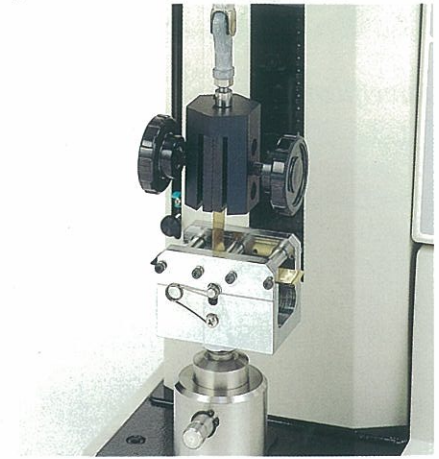
Extends Strength Testing Applications (Option)

The STA Series is designed to accommodate various kinds of testing devices.

Compression testing jig



90° peeling for printed circuit board



Jaw for rubber



Jaw for paper



Air jaw

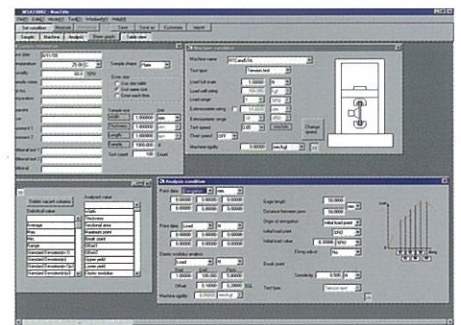


*It is important that the user advise A&D of his exact requirements to ensure proper operation.

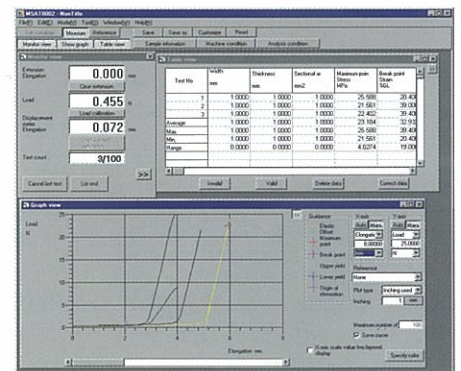
Meta Test-Pro Material Testing Software

Meta Test-Pro provides users specific Test Modules with visual conditions settings. These modules allow you to process the data taken by any material testing instruments to meet their testing machine and analysis needs. Test results can be stored in the data base, provided as part of Data Base Plus, regardless of the type of test. This makes it easier to search for the results based on the parameters provided for each material tested. When using the optional I/O box, you can process data taken by other manufacturers' testing instruments.

Set Test Parameters



Test Progress Display



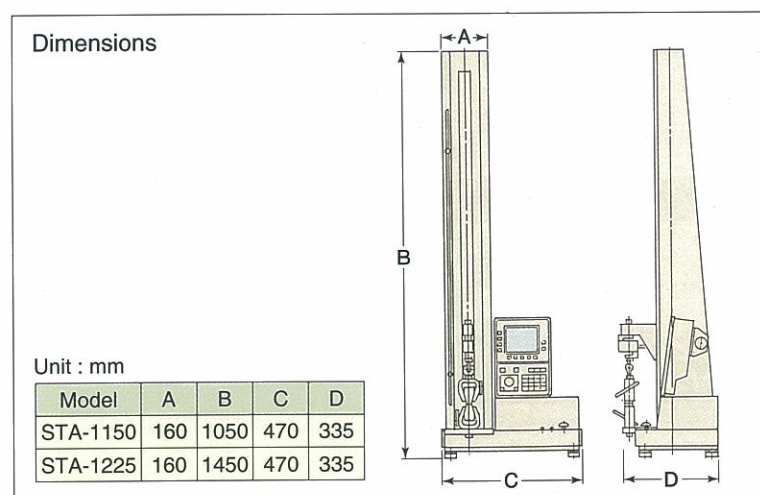
STA Series

Material Testing Instruments

Specifications

Model	STA-1225	STA-1150
Loading System	Closed loop micro-computer controlled digital servo	
Max.Loading Capacity	2.5kN (250kgf)	500N (50kgf)
Effective Stroke *1 (mm)	850	550
Crosshead Speed *2 (mm/min.)	0.5~1000 (14 speeds)	0.5~500 (13 speeds)
Crosshead Random Speed	Set with 0.1 mm pitch. Up to 6 settings can be stored.	
Crosshead Speed Accuracy *3	±0.1%	
Return Speed (mm/min.)	1000, 500	500, 100
Crosshead Manual Operation	Position the crosshead first using UP▲, DOWN▼ switches and use manual button to adjust fine position.	
Moving Crosshead Position Display (mm)	5 digital display (resolution : 0.01)	
Elongation Display used with Extensometer	5 digital display (Possible to display Extension), Unit : mm, %GL, %FS	
Load Display	5 digital display (with floating decimal point and peak-hold functions), Unit : gf, kgf, N, gf/mm ² , kgf/mm ² , N/mm ²	
Measurement Accuracy *4	±1% of indicated value or 0.2% of full scale whichever is greater.	
Load Range	1, 2, 4, 10, 20, 40, 100% (7 steps) provided with auto-ranging function	
Load Calibration	1) Auto-zeroing, 2) Auto-spanning, 3) load cell discrimination	
Over Load Safety Function	Provided	
Sample Break Detection	Provided	
Stroke Safety Device	Upper/Lower limiters	
Cycle Test	<ul style="list-style-type: none"> •Upper/Lower limit points: select from either the crosshead position or load •Possible to set momentary stop time at each upper/lower limit. 	
Standard Load Cell and Jaws		
Load Cells (SI unit)	US-2.5KN	US-500N
Universal Joints	J-UF-2.5KN	J-UF1-1KN
Jaws	J-JCM-2.5KN : Wedge action	J-JFM1-1KN : Screw action
General		
Dimensions (W × H × D mm)	470 × 1450 × 335	470 × 1050 × 335
Weight (kg)	55	44
Power Source	AC100V 1P 50/60Hz with 2P plug	
Consumption Voltage	350VA	150VA
Environmental Conditions	Temperature : 5~40°C, Humidity : 20~80%RH	

*1) : Installed with standard load cell and jaw. *2) : Speed system is 1, 2, 3, and 5. *3) : Zero or constant load. *4) : This accuracy is at load ranges 100%~10%.



All specifications are subject to change without notice.

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