

# **211** | Strograph AE Elastomer Model AE2

Fully-Automatic Tensile Testing Machine for rubber &TPE



Specimen tray

### **APPLICATION**

Strograph AE, a fully automatic tensile tester, is designed to conduct tests on rubbers and flexible plastics. The sample tray and sample feeding system are developed by employing unprecedented ideas and focusing on its small footprint design. The tester comprises sample storing unit, and thickness measuring unit, sample feeding and measuring unit, non-contact extensor meter, sample removing and data processing units. Once samples are mounted on the tray in the storing unit, the designated processes are automatically continuously implemented to perform tensile tests under the set testing conditions. The test data is transferred to the PC, allowing the user to save or print it out.

#### FEATURES

- Allowing the user to mount samples on the pullout sample tray,
- Enabling the user to mount samples on the test complete tray during tests,
- Making it possible for the user to interrupt to set samples even during tests,
- Shortening a test time duration with the high-speed return of the cross head, and,
- Availability of extensometer (following with a CCD camera), tray capable of mounting 50 shelves (up to 300 pcs of samples), and sample holder preventing samples from getting stuck to linear gauge's indenter.

# **SPECIFICATIONS**

Main unit				
Maximum capacity	Below 700N			
Tensile speed	0.5 to 500mm/min. (19 steps)			
Return speed	Max. 1500mm/min.			
Speed accuracy	±0.5%			
Effective stroke	Approx. 650mm (Approx. 850mm optional)			
Stroke display	0.00-9999mm			
Stroke limiter	Upper and lower limiter (the combination of electric and mechanical limiter)			
Lead screw	Ball screw, mono career			
Motor	Servo motor			
Measurement unit				
Load cell	Max. 500N or 1kN (select either)			
Load range	Range-less (Equivalent with x1 to x100)			
Load display	Digital			
Resolution	1/200,000 or 1/250,000 of the load cell capacity			
Accuracy	±1.0% (In the range 1/1 to 1/500 of load cell capacity)			
Zeroing	Automatic			
Sag correction	Automatic			
Pneumatic chuck				
Face size	1kN: W30 x H24mm			
	500N: W30 x H20mm			
Air supply	0.5MPa			
Thickness measurement section				
Thickness measurement	Digital type			
gauge				
Resolution	1/100mm			
Accuracy	±2/100mm			
Measurement points	3 points, within the gauge length			
Measurement anvil	Ø5mm, 44g			
Extensometer				
Method	Contact type (non-contact type is an optional)			
Gauge length	20 or 25mm			
Tracking speed	Max. 500mm/min			
Effective stroke	Approx. 500mm			
Specimen tray				
Number of specimens	Max. 120 specimens (n=6 x 20 trays)			
Type of tray	Select either when ordering.			
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	■ JIS K 6251, type 3 and 5 dumbbell			
	■ JIS K 6252, select either of crescent or angle specimen (20 pcs each)			
Specimen feeder	Capable of feeding specimen to open tray during tests			
Data processing unit				
Configuration	Personal computer, LCD monitor, Ink-jet printer, PC rack, Data processing software			
Setting parameters	Date, Operator, Temperature, Humidity, Test condition, Lot, Grade			
Data processing	Cross-section area, Modulus(5 points), Max stress, Max elongation, Average value			
parameters	and standard variation			
parameters	Tana sanada vanadon			

Utilities				
Power supply	Single-phase, 50/60Hz, AC100V, app.5A			
Compressed air supply	0.5MPa, Approx. flow rate: app.40L/min (clean air)			
Dimensions	Main unit: Approx. W800 x D760 x H2240mm Net weight: app.200Kg			
	PC rack H: Approx. W650 x D610 x H1350mm			
	PC rack L: Approx. W600 x D600 x H1265mm			
Related standards	ISO 527-3, JIS Z 1702			

## **OPTIONS**

Name	Model	Description
Non-contact (CCD) extensometer	AE-CCD	1. Tracking method: CCD tracking
		2. Resolution: 0.1mm
		3. Accuracy :0.2mm or 1%, either larger
		4. Power source: AC100V 50/60Hz 2A
50 shelves tray	AE-50	Tray to set 300 pcs of samples at one time
Thickness measurement section	SP	Measuring mechanism with samples held on the
specimen support		sample tray to prevent the samples on the linear
		gauge from contacting on the measurement anvil.

Specifications are subject to change without notice.



TOYO SEIKI SEISAKU-SHO, LTD.

5-15-4, Takinogawa, Kita-ku, Tokyo 114-8557, Japan Tel:+81-3-3916-8183 Fax:+81-3-3916-8173 www.toyoseiki.co.jp

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