

## **ATST**

# Automatic Torsion Spring Tester

Pictured with

**Extended Bed** 

Option

The ATST is a motorized torque / angle tester that is available in five force ranges: 25, 100, 200, 500 and 1,300 in-lb. Using a closed loop servo drive, the ATST is capable of fast, quiet testing. The solid steel base and aluminum frame are rugged and durable for accurate, repeatable and reproducible results in many different testing environments.

LARSON SYSTEMS INC

#### Standard Features:

- Full color LCD touch screen FLASH interface
- Integrated Windows 7
- Up to 1,300 in-lb capacity
- Up to 24" test bed
- Whisper Servo drive for fast, quiet testing
- Smart interchangeable torque cartridges (choose from 5)
- · Built-in deflection compensation
- Virtually unlimited data / program storage
- On-screen and remote abort / cycle controls
- NIST traceable digital calibration

### **Connectivity Features:**

- Ethernet port for network data and program management
- USB for easy printing / software updates
- RS 232
- · Automation interface
- Remote support / diagnostic cabability via the internet

#### Safety Features:

- Easy access to emergency stop button
- On-screen test abort button
- · Fully interlocked enclosure with polycarbonate shield
- Mechanical overload stops
- · Software torque limits



ATST - Torque Specifications				
Part No.	Capacity	Resolution		
		0-20% FS	20-100% FS	
025-0000-0475-02	25 in-lb	0.002 in-lb	0.02 in-lb	
	288 kg-mm	0.02 kg-mm	0.2 kg-mm	
	2,825 N-mm	0.2 N-mm	2 N-mm	
025-0000-0378-05	100 in-lb	0.005 in-lb	0.05 in-lb	
	1,152 kg-mm	0.05 kg-mm	0.5 kg-mm	
	11,299 N-mm	0.5 N-mm	5 N-mm	
025-0000-0378-06	200 in-lb	0.01 in-lb	0.1 in-lb	
	2,304 kg-mm	0.1 kg-mm	1 kg-mm	
	22,597 N-mm	1 N-mm	10 N-mm	
025-0000-0378-07	500 in-lb	0.05 in-lb	0.5 in-lb	
	5,761 kg-mm	0.5 kg-mm	5 kg-mm	
	56,493 N-mm	5 N-mm	50 N-mm	
025-0000-0378-08	1,300 in-lb	0.1 in-lb	1 in-lb	
	14,978 kg-mm	1 kg-mm	10 kg-mm	
	146.9 N-m	10 N-mm	100 N-mm	
Accuracy = ± Full Scale Resolution x 2				

ATST - Angle Specifications						
Range	Resolution		Accuracy	Deflection		
	100,000°	>100,000°	(±)	Compensation (5% - 95% FS)		
1.000.000°	0.1°	1.0°	0.2° / 3.600°	< 0.2°		



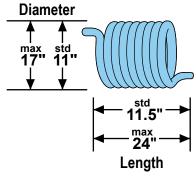
**Absolute Zeroing** 



**Universal Tooling** 



**Custom Tooling** 



**Absolute Zeroing** 

Take the guesswork out of testing with LSI's revolutionary absolute zeroing technique. Used with custom interchangeable tooling, this technique improves repeatability of setups and results during testing. Parts are then measured against the nominal dimensions according to the drawing or specifications, not to a relative point requiring intuition and guesswork.

### **Optional Universal Tooling**

With the universal tooling supplied by LSI, you can test many parts with no special fittings. This is great for unique or one-time job runs with a minimum of setup time.

#### **Optional Custom Interchangeable Tooling**

Using our custom interchangeable tooling technique, you can machine tooling blanks to fit specific applications or send the information to us and we will do the work for you.

#### **Rapid Changeovers**

Both custom and universal tooling is designed to be changed in seconds... YES! In just seconds, you can go from one setup to the next, maintaining your repeatability and reproducibility. Setups within  $\pm~0.1$  degree.



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