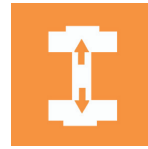


MODEL 300SL HYDRAULIC MATERIALS TESTING MACHINE



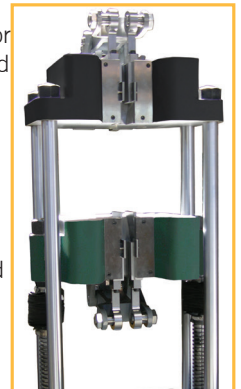
The model 300SL is designed for tension, compression, flexure and shear strength testing on materials and assemblies. The robust design that incorporates quality materials and components ensures that our reputation for superior system performance, ease of use, and longevity is maintained.

FEATURES AND BENEFITS

- Suitable for tension, compression, transverse, shear and other tests to a maximum force of 300kN / 60,000lbf
- Four column rugged design allows larger samples to be tested
- Friction-free piston operation allows smooth, controlled operation and minimal down-time.
- Different system control options are available, from a handheld wireless Bluetooth interface, or a tethered handheld interface running with a virtual machine interface application on a connected pc.

OPTIONS AND ACCESSORIES

- Crossheads can be closed / semi open / or fully open for easier specimen loading and unloading. ¹
- In-head pocket grips can be supplied to accommodate flat or round tensile specimens.
- External grips and fixtures can be easily mounted securely.
- Full range of precision extensometers and deflectometers are available using video, laser, encoder, strain gauge and/or LVDT technologies
- Columns can be extended by up to 914mm / 36 inches to increase test area size. ¹ Note - screw extensions require holes in the floor.
- Top crosshead can be made adjustable and columns can be notched to allow the adjustable top crosshead to be repositioned for more comfortable working heights. ¹
- Safety enclosures with interlocks can be installed to protect operators from violent specimen breaks.
- Furnaces and environmental chambers can be installed for tests at high or low temperatures.
- Tinius Olsen's Horizon software can be connected to the tester by the operator.



Wireless handheld interface which is connected to the machine by a Bluetooth link. This interface features an Android based operating platform and can be used to control the machine by itself or in conjunction with Tinius Olsen's Horizon software.

Familiar handheld interface which is tethered to the machine. With its larger, tactile, sealed keypad, this interface is ideal for operators whose use gloves to load and unload specimens and prefer a push button keypad. It requires virtual machine control software running on a connected pc to operate the basic machine functions and report basic numerical test data.



- ¹Supplied at the time of order

SPECIFICATIONS



Model 300SL Specifications		
FRAME SPECIFICATIONS		
Tension Compression load capability	Yes	
Frame capacity	kN	300
	kg	30,000
	lbf	60,000
Proof tested	To frame capacity	
Floor or table mounting	Floor mounting	
Test zones	2	
Number of columns	4	
Column material	Steel	
Column finish	Chrome	
Column colour	Chrome	
Base material	Mild Steel	
Base finish	Pre primed, top coat powder coat paint	
Base colour	TO Cool Grey Web # E6 30 27	
Crosshead material	Mild Steel solid	
Crosshead finish	Pre primed, top powder coat paint	
Crosshead colour	TO Green Web # 00 4C 45	
Base cover	ABS recyclable	
Base cover colour	Cal Black Web # 11 18 20	
Distance between screws	mm	317.5
	in	12.5
Maximum piston stroke travel	mm	152
	in	6
Maximum travel of adjustable cross-head	mm	648
	in	25.5
Stiffness	kN/mm	550
	kLbf/in	3,065
Height	mm	1842
	in	72.5
Width	mm	737
	in	29
Depth	mm	483
	in	19
Weight	kg	1180
	lb	2,600
Optional extension to crosshead screws	305, 610, or 914mm 12, 24 or 36 in	
Optional extension to column heights	305, 610, or 914mm 12, 24 or 36 in	
Adjustable top crosshead and adjustable columns	Optional	
Pit mountable		
Screw cover/protection	Optional	
Feet material	Mild steel with provision for anchor bolts	
Noise at full crosshead speed 2m radius	68db	
CONTROLLER SPECIFICATIONS		
Max data processing rate	168 MHz	
Data acquisition rate at PC	1000 Hz	

Model 300SL Specifications		
Number of instrument device connections - external	4	
Number of instrument device connections - internal	3	
Bluetooth enabled	v4.0 with A2DP, LE, EDR	
External PC connection	USB	
User interface connectivity	TO HMC, Proterm, Horizon	
FORCE MEASUREMENT		
Force measurement device	Pressure transducer	
Resolution	1 part in 8388608	
Accuracy	+/-0.2% of applied force across load range	
Range	0.2% to 100%	
Calibration standard	+/- 0.5% per ISO 7500-1 ASTM E4	
Internal sampling rate	1000Hz	
EXTENSION MEASUREMENT		
Resolution	0.1um	
Accuracy	+/-10um	
Range	+/- 217m	
Calibration standard	ISO 9513, ASTM E83	
Internal sampling rate	2.73kHz	
POSITION CONTROL		
Test Speed	mm/min	0.001 to 76
	in/min	0.00004 to 3
Resolution	um	0.1
	in	0.000004
Accuracy	um	+/- 10
Crosshead positioning speed	mm/min	500
	in/min	20
Resolution	um	0.1
	in	0.000004
Accuracy	um	+/- 10
Home function	Yes	
POWER REQUIREMENTS		
Supply voltage options	208 - 500V	
Frequency	50/60Hz	
ATMOSPHERIC REQUIREMENTS		
Operating temperature	10 to 40 °C	
Operating humidity	10% to 90% non condensing	
Storage temperature	10 to 69 °C	
Storage humidity	10% to 90% non condensing	
CONSOLE DIMENSIONS		
Width	mm	750
	in	29.5
Depth	mm	699
	in	27.5
Height	mm	865
	in	34
Oil Reservoir Volume	liters	66
	US gal	15