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 incorporates quality materials and components to ensure 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 downtime.
- 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.



Familiar handheld interface that is tethered to the machine. With its larger, tactile, sealed keypad, this interface is ideal for operators who 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.

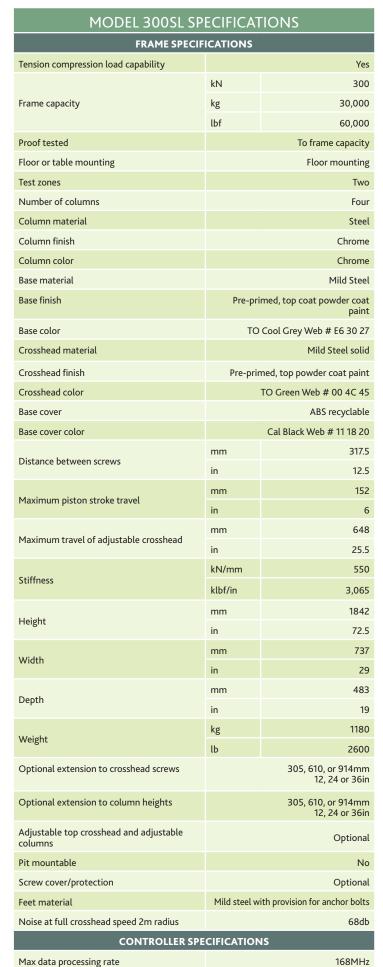
Wireless handheld interface that is connected to the machine by a Bluetooth link. The interface features an Android-based operating platform and can be used to control the machine by itself or in conjunction with Tinius Olsen's Horizon software



OPTIONS AND ACCESSORIES

- Crossheads can be closed/semi-open/or fully open for easier specimen loading and unloading.
- 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 gage and/or LVDT technologies.
- Columns can be extended by up to 914mm/36in 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.
 - 1 Supplied at the time of order





Data acquisition rate at PC



MODEL 300SL SPECIFICATIONS			
Number of instrument device connections – external	Four		
Number of instrument device connections – internal	Three		
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	One part in 8,388,608		
Accuracy	+/- 0.2% of applied force across load range		
Range	0.2-100%		
Calibration standard	+/- 0.5% per ISO 7500-1 ASTM E4		
Internal sampling rate 1000Hz			
EXTENSION MEASUREMENT			
Resolution		0.1µm	
Accuracy	+/-10μm		
Range	+/- 217m		
Calibration standard	ISO 9513, ASTM E83		
Internal sampling rate	2.73kHz		
POSITION CONTROL			
Test speed	mm/min	0.001-76	
rest speed	in/min	0.00004-3	
Resolution	μm	0.1	
	in	0.000004	
Accuracy	μm	+/- 10	
Crosshead positioning speed	mm/min	500	
	in/min	20	
Resolution	μm in	0.000004	
Accuracy	μm	+/- 10	
Home function	μιιι	Yes	
POWER REQUIREMENTS			
Supply voltage options 208-500V			
Frequency		50/60Hz	
ATMOSPHERIC REQUIREMENTS			
Operating temperature		10-40°C	
Operating humidity		10-90% non-condensing	
Storage temperature	10-69°C		
Storage humidity	10-90% non-condensing		
CONSOLE DIMENSIONS			
	mm	750	
Width	in	29.5	
Depth	mm	699	
	in	27.5	
	mm	865	
Height	in	34	
	liters	66	
Oil reservoir volume			

US gal

1000Hz