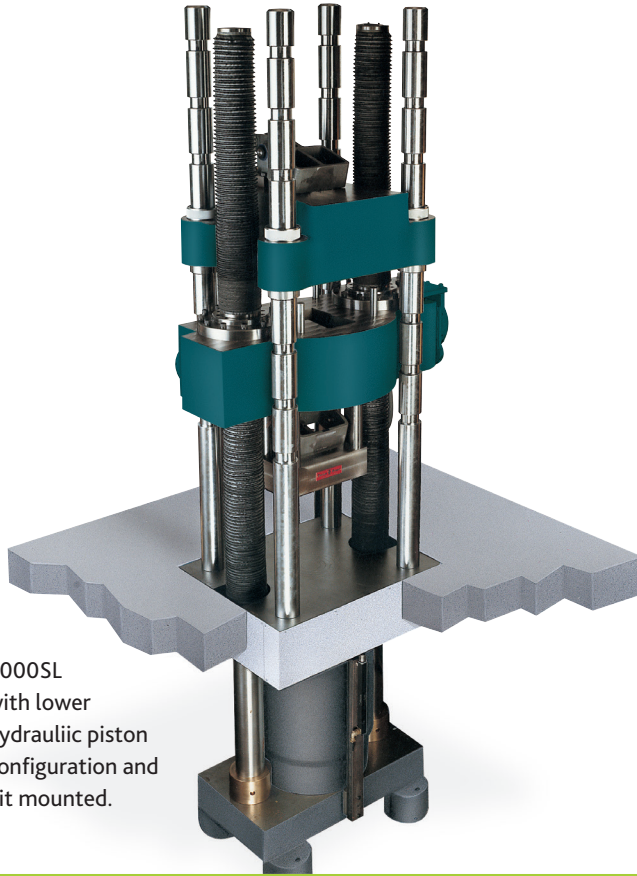


MODEL 3000SL

Hydraulic Materials Testing Machine



3000SL with lower hydraulic piston configuration and pit mounted.

The Model 3000SL is designed for tension, compression, flexure and shear strength testing on materials, assemblies and Components. The robust design, quality materials and precision engineering ensures a testing capability, even at full load, day in day.

Features and benefits

- Suitable for tension, compression, transverse, shear and other tests to a maximum force of 3000kN / 600,000lb.
- Four column rugged design underpins the frame stiffness and power.
- The unique friction-free piston operation gives exacting control of movement be it under constant speed, stress or strain.
- Two types of frame hydraulic piston configuration; standard lower in base or upper above testing area.
- Optional user interfaces are available in support of test productivity; Tethered handheld, wireless and/or virtual through the test, control and reporting software.

OPTIONS

- In-head pocket grips to accommodate flat or round tensile specimens.
- External grips and fixtures.
- Standard or extended height columns.
- Standard or extended height crosshead movement for positioning.
- Base unit above or below ground (pit mounted).
- Standard or L shape workstation configuration.

ACCESSORIES

- Full range of precision extensometers and deflectometers using video, laser, encoder, strain gauge and/or LVDT technologies.
- Furnaces and environmental chambers for tests at high or low temperatures
- Safety enclosures with interlocks to protect operators from violent specimen breaks.
- Tinius Olsen's Horizon control, analysis and reporting software on a single PC station and/or a PC station in network deployment.

Customer Speak

"My 3000SL testing machine is more than reliable, it is built to never ever go wrong. it is an all-powerful testing machine, pure power, tensile at full capacity day in day out."



3000SL with upper hydraulic piston configuration.

Specifications



MODEL 3000SL SPECIFICATIONS

FRAME SPECIFICATIONS

Tension compression load capability	Yes	
Frame capacity	kN	3000
	kg	300,000
	lbf	600,000
Proof tested	To frame capacity	
Floor or table mounting	Floor mounting	
Test zones	Two	
Number of columns	Four	
Column material	Mild Steel	
Column finish	Chrome	
Column color	Chrome	
Base material	Mild Steel	
Base finish	Pre-primed, top coat powder coat paint	
Base color	TO Cool Grey Web # E6 30 27	
Crosshead material	Mild Steel solid	
Crosshead finish	Pre-primed, top powder coat paint	
Crosshead color	TO Green Web # 00 4C 45	
Base cover	ABS recyclable	
Base cover color	Cal Black Web # 11 18 20	
Distance between screws	mm	660
	in	26
Maximum piston stroke travel	mm	229
	in	9
Maximum travel of adjustable crosshead	mm	Frame configuration dependent
	in	
Stiffness	kN/mm	1700
	klbf/in	9500
Height	mm	2692
	in	106
Width	mm	1092
	in	43
Depth	mm	863
	in	34
Weight	kg	6500
	lb	14,330
Optional extension to crosshead screws	Optional, based on frame configuration	
Optional extension to column heights	Optional, based on frame configuration	
Adjustable top crosshead and adjustable columns	No	
Pit mountable	Optional, based on frame configuration	
Screw cover/protection	Standard	
Feet material	Mild steel with provision for anchor bolts	
Noise at full crosshead speed 2m radius	68db	
CONTROLLER SPECIFICATIONS		
Maximum data processing rate	168MHz	
Data acquisition rate at PC	1000Hz	

MODEL 3000SL 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
	in/min	0.00004-3
Resolution	µm	0.1
	in	0.000004
Accuracy	µm	+/- 10
Crosshead positioning speed	mm/min	305
	in/min	12
Resolution	µm	0.1
	in	0.000004
Accuracy	µm	+/- 10
Home function	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		
Width	mm	915
	in	36
Depth	mm	788
	in	31
Height	mm	1016
	in	40
Oil reservoir volume	liters	113
	US gal	30