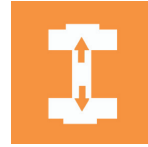


MODEL 600SL HYDRAULIC MATERIALS TESTING MACHINE



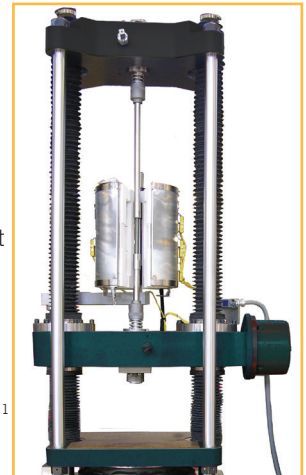
The model 600SL is designed for tension, compression, flexure and shear strength testing on materials and assemblies. The robust design that incorporates quality materials and components ensures that our reputation for superior system performance, ease of use, and longevity is maintained.

FEATURES AND BENEFITS

- Suitable for tension, compression, transverse, shear and other tests to a maximum force of 600kN / 120,000lbf
- 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 familiar tethered handheld controller running with a pc based virtual machine control application, or a wireless Bluetooth interface.

OPTIONS AND ACCESSORIES

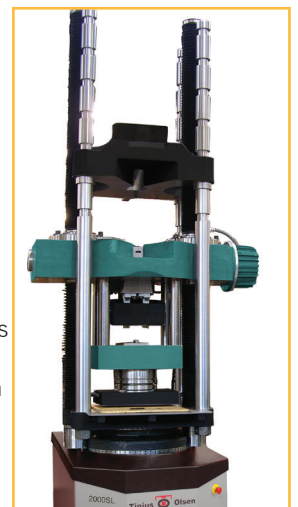
- Crossheads can be closed / semi open / or fully open for easier specimen loading and unloading. ¹
- Columns can be extended by up to 914mm / 36 inches to increase test area size. ¹
- Top crosshead can be made adjustable and columns can be notched to allow the adjustable top crosshead to be repositioned for more comfortable working heights. ¹
- 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
- Furnaces and environmental chambers can be installed for tests at high or low temperatures.
- Safety enclosures with interlocks can be installed to protect operators from violent specimen breaks.
- 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 600SL Specifications

FRAME SPECIFICATIONS

| | | |
|---|--|---------|
| Tension Compression load capability | Yes | |
| Frame capacity | kN | 600 |
| | kg | 60,000 |
| | lbf | 120,000 |
| 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 | Pachyderm Grey, Fine, # 7E 80 7F | |
| Crosshead material | Mild Steel solid | |
| Croshead 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 | 457 |
| | in | 18 |
| Maximum piston stroke travel | mm | 152 |
| | in | 6 |
| Maximum travel of adjustable crosshead | mm | 825 |
| | in | 32.5 |
| Stiffness | kN/mm | 560 |
| | klbf/in | 9,500 |
| Height | mm | 1956 |
| | in | 77 |
| Width | mm | 762 |
| | in | 30 |
| Depth | mm | 635 |
| | in | 25 |
| Weight | kg | 2132 |
| | lb | 4700 |
| Optional extensions to crosshead screws | 305, 610, or 914mm 12, 24 or 36 in | |
| Optional extensions to columns | 305, 610, or 914mm 12, 24 or 36 in | |
| Adjustable top crosshead and adjustable columns | Optional | |
| Pit mountable | Optional | |
| 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 600SL 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 | 305 |
| | in/min | 12 |
| 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 |