

# Series 1100 Universal Testing Machine

ATS Series 1100 Universal Testing Machines (UTMs) provide an affordable solution to precision tension, compression, shear, and flexure tests. With a diverse selection of models available, the UTMs in this series can accommodate a wide variety of test specimens and are used in a diverse range of testing applications, from production to quality control and high end research.

The Series 1101, Series 1105, and Series 1110 are benchtop models with 1,000 lb., 5,000 lb., and 10,000 lb. respective capacities. The Series 1120, Series 1130, and Series 1160 are floor models with 20,000 lb., 30,000 lb., and 60,000 lb. respective capacities. Each model features a durable, two column design for additional testing stability. A large testing area allows for a variety of sample sizes, and dual screws provide improved accuracy. Series 1100 Universal Testing Machines have been designed with a simple, yet highly accurate user interface, allowing for user friendly training and operation.



## Features

- Durable, long lasting testing equipment with intuitive, user friendly software and cost effective pricing.
- 7-inch touch screen HMI display, mounted on an articulated, adjustable arm.
- Full line of optional accessories available for a multitude of different applications.
- Large testing area accommodates a variety of specimens.
- Independent chrome-plated guide rods provide crosshead guidance.
- Manually adjustable limit switches.
- System features include up/down jog buttons, return to zero, peak load/displacement recall, and jog/high speed inputs.
- Safety features include an emergency stop system, overtravel limits, and automatic break detection.
- Our customers have access to our skilled service team, who are trained and able to assist with calibration, technical support, or other service issues.
- ATS has decades of experience building custom testing equipment. We welcome any inquiries on how we can design a custom test setup for your application.

## Optional Accessories

A variety of accessories are available to provide extended testing capabilities. These include:

- Furnaces
- Extensometers
- Additional Load Cells
- Compression Platens
- Pneumatic Grips
- Bend Test Fixtures
- Screw Action Grips
- Standard Wedge Grips
- Heating and Cooling Chambers
- Data Acquisition Package
- Extended Crosshead Travel and Vertical Clearance

## A/Data Solutions

### *Data Acquisition Package*

Our optional data acquisition package is one of our featured accessories, and provides the most convenient way to store all of your test data. With its user friendly LabVIEW interface, A/Data gives users the ability to customize test details, monitor test progress, easily collect data, generate test reports, and perform a basic analysis of test results. The accessibility and convenience that our A/Data Solutions Package provides makes it a must have accessory for anyone that needs to save their test data for future access and analysis.

## Product Specifications

<b>Standard Dimensions</b>	Series 1101: 25 in. W x 17 in. D x 59 in. H Series 1105: 32 in. W x 24 in. D x 73 in. H Series 1110: 32 in. W X 26 in. D x 62 in. H	Series 1120: 40 in. W x 30 in. D x 91 in. H Series 1130: 45 in. W x 32 in. D x 91 in. H Series 1160: 55 in. W x 48 in. D x 113 in. H
<b>Load Frame Capacity</b>	Series 1101: 1,000 lbf. (4.4 kN) Series 1105: 5,000 lbf. (22.2 kN) Series 1110: 10,000 lbf. (44.4 kN)	Series 1120: 22,480 lbf. (100 kN) Series 1130: 33,720 lbf. (150 kN) Series 1160: 67,440 lbf. (300 kN)
<b>Frame Type</b>	Dual screw, bench top or floor standing available	
<b>Horizontal Clearance</b>	Series 1101: 14 in. (356 mm) Series 1105: 20 in. (508 mm) Series 1110: 22 in. (558 mm)	Series 1120: 24 in. (610 mm) Series 1130: 26 in. (660.4 mm) Series 1160: 28 in. (711 mm)
<b>Vertical Clearance</b>	42 in. (1,067 mm) standard, excluding grips or fixtures	
<b>Crosshead Travel</b>	36 in. (914 mm) standard	
<b>Speed Range</b>	0.002 - 20.00 in/min (0.05 - 500 mm/min)	
<b>Load Weighing Accuracy</b>	± 1% of indicated load per ASTM E4	
<b>Load Cells Available</b>	Up to 60,000 lbs	
<b>Power Requirements</b>	115/230 VAC, 1 or 3 Phase, 50/60 Hz, 15 A	

*Product specifications subject to change without notice.*