



The first name in materials testing

MP1500

Closed Loop Melt Flow Indexer



The new model MP1500 is a closed loop system. The load is applied by a motor and ball screw system with a PID control feedback, there are no dead weights.



Model MP1500

Tinius Olsen is proud to introduce the latest addition to its polymer testing line, the MP1500 Closed Loop Melt Flow Tester. The tester features the latest in melt flow measurement technology which works with closed loop where load is applied by a motor and ball screw system with a PID control feedback, there are no dead weights. The robust design that incorporates quality materials and components ensures that our reputation for superior system performance, ease of use, and longevity is maintained. Test machines become complete, powerful test systems with the addition of Tinius Olsen's Horizon Data Analysis software.

FEATURES AND BENEFITS

- Conformance to ISO 1133, ASTM D1238
- Weightless force application range: 0.325-21.6kg
- Capable to perform MFR & MVR in accordance with procedure A, B, C, D
- 7.1" LCD touchscreen display
- Three-zone band heater
- Sturdy base with four leveling feet and two rigid columns are the strengths in support of longevity
- Optional automatic cleaning function
- Adjustable display mount for optimal viewing angle and right & left hand swappable
- Large mirror with ergonomic viewing angle
- Built-in, automatic material purge functionality
- Pneumatic cut-off and die release, standard

INTERFACE OPTIONS

This unit features a userfriendly color touch-screen LCD display. Operators can configure the options available for the machine and program user settings (language, units, alarms, etc). Individual test protocols can be set and stored for rapid recall when needed. and can be used to control the machine by itself or in conjunction with Tinius Olsen's Horizon software





Specifications

Frame specifications		
Part #		
Test loads	kg	0.325-21.6
Table mounting	Yes	
Test zones	One	
Number of columns	Two	
Column material	Aluminium	
Column finish	Anodized	
Column color	Natural	
Base material	Aluminium	
Base finish	Pre-primed, top powder coat paint	
Base color	TO Cool Grey Web # E6 30 27	
Crosshead material	Steel	
Crosshead finish	Pre-primed, top powder coat paint	
Crosshead color	TO Green Web # 00 4C 45	
Feet material	Aluminium	
Feet finish	Anodized	
Feet color		
Maximum crosshead travel	mm	500
	in	20
Height	mm	1016
	in	40
Width	mm	511
	in	20
Depth	mm	511
	in	20
Weight	kg	49
	lb	108
Force protection system	Yes, digital	
Displacement protection system	Yes, mechanical and user programmable	
Ball screw type	High precision low backlash	
Ball screw cover/protection	Yes	
Crosshead drive system	DC servo motor	
Pneumatic air distribution	4mm OD hose with pushfit coupling, rated to 100psi maximum	
Noise at full crosshead speed 2m radius	18db	

NOTE – Software required for materials tests

Frame specifications		
CONTROLLER SPECIFICATIONS		
Max data processing rate	168MHz	
Data acquisition rate at PC	50Hz	
External PC connection	USB	
User interface connectivity	Horizon & USB Drive for data transfer	
FORCE MEASUREMENT		
Force measuring device type	45kg / 440N / 99lbf	
Resolution	1 part in 8388608	
Accuracy	±0.2% of applied force	
Range	0.2-100%	
Calibration standard	ISO 7500-1 & 1133; ASTM E4 & D1238	
Internal sampling rate	1000Hz	
STANDARDS		
ISO	1133, 7500-1	
ASTM	D1238, E4	
TEMPERATURE		
Range	up to 400°C	
Accuracy	±0.1°C	
POSITION CONTROL		
Test Speed	mm/min	0.0001-1,500
	in/min	0.000004-60
Resolution	µm	0.1
	in	0.000004
Accuracy	±0.05% of indicated speed	
POWER REQUIREMENTS		
Supply voltage options	115/230V	
Frequency	50/60Hz	
Power	500W ±10%	
ATMOSPHERIC REQUIREMENTS		
Operating temperature	5-40°C (41-104°F)	
Operating humidity	10-90% non-condensing wet bulb method	
Storage temperature	-10-45°C (14-113°F)	
Storage humidity	10-90% non-condensing wet bulb method	

Tinius Olsen



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