

LR150k

Materials Testing Machine

The LR150K twin column materials testing system provides a complete solution for testing applications with capacities up to 150kN (33000 lbf). Tension and compression testing with cycling to load and extension limits are standard features. Load and extension are displayed on a highly legible LCD display, selectable in a variety of units. Multi-lingual instructions are displayed in a sequential menu driven format, allowing set-up and operation to be achieved rapidly and efficiently. A dedicated microprocessor controlled, closed loop servo drive ensures accurate speed, load rate, constant load and strain rate control. A crosshead speed range of 0.01mm/min to 250mm/min is available and is monitored more than 20,000 times per second. A working test space between columns of 620mm (24in) combined with a total crosshead displacement of 1200mm (47in) can accommodate a wide variety of samples and materials for accurate and consistent testing.

The LR150K can be further enhanced with Lloyd Instruments state of the art materials test and data analysis software NEXYGEN™ thanks to a built in RS232 interface, allowing full PC integration. The system is ideal for use in production, quality control, educational and research environments.

FEATURES

- Simple to set-up, operate and maintain
- High accuracy load measurement
- Rapid data acquisition
- Extension resolution better than 0.1 microns
- Exceeds national and international standards
- Constant load and strain rate control
- Large testing area
- Multi lingual, Multi unit display options
- Full PC integration
- Wide selection of load cells, grips, jigs and accessories

SPECIFICATIONS

Force Range:	150kN (33000lbf)
Crosshead Speed:	0.01 to 255 mm/min 0.0004 to 10 inches/min
Speed Accuracy:	< 0.1% at steady state
Stroke:	0.1 to 1100mm 0.05 to 43 inches
Load Resolution:	< 0.005% of load cell used (max)
Extension Resolution:	< 0.1 microns
Sampling Rate:	100Hz
Extensometer Inputs:	+10V dc analogue input Strain gauge input optional
Data Outputs:	Digital - RS232 Analogue - 10Vdc max
Measuring System:	Exceeds the requirements of BS EN ISO 7500: 1999. Class 0.5, ASTM E4, DIN 51221.
Analysis Software:	NEXYGEN™ Data Analysis Software (optional)
Supply Voltage:	115/230Vac ± 10% 50 - 60Hz
Weight:	1000kg (2205lb)
Operating Temp:	5° to 35°C (40°F to 95°F)
Warranty:	1 year



SPECIFICATION
SS-MT-6215-0101
January 2001

INTERNET
www.ametek.com
www.chatillon.com
www.lloyd-instruments.co.uk

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ORDERING INFORMATION

Model	Part No.	Description
LR150K	01/2262	Twin column, Floor mounted Materials Testing System

LR150K DIMENSIONS

Crosshead Width	620mm	24.0in
Column Depth	216mm	8.5in
Maximum Workspace	1454mm	57.0in
Machine Height	2508mm	98.5in
Base Height	700mm	27.5in
Machine Width	1210mm	48.0in
Machine Depth	733mm	29.0in
Console Width	330mm	13.0in
Console Depth	60mm	2.5in
Console Height	340mm	13.5in



All machines are capable of testing in tension, compression, flexure, friction, tear, peel, and adhesion modes - plus many more.

STANDARD ACCESSORIES

LOADCELLS:

Main Loadcell, One of either

100 kN (22000 lbf)
150 kN (33000 lbf)

Additional Loadcells

50 N (11 lbf)
100 N (22 lbf)
1000 N (220 lbf)
5000 N (1100 lbf)
10 kN (2200 lbf)
30 kN (6600 lbf)

ITEM

MODEL

HLC-100K-A1 01/2457
HLC-150K-A1 01/2458

HLC-0050-A1 01/2936
HLC-0100-A1 01/2413
HLC-1000-A1 01/2412
HLC-5000-A1 01/2944
HLC-10K-A1 01/2411
HLC-30K-A1 01/2978

EXTENSOMETERS:

Non contacting extensometer (115V) with stand LASERSCAN L1 01/2940
Non contacting extensometer (230V) with stand LASERSCAN LR 01/2932
Extensometer punch (applies 2mm (0.08 inch) targets) TTOXP/2 01/1159
Extensometer punch (applies 4mm (0.16 inch) targets) TTOXP/4 01/1156
Long travel extensometer without stand EXL750 LR 01/2247
Extensometer stand for EXL750 Ext Stand C 01/2261
High resolution Extensometer with stand EXH750 LR 01/2474

Strain Gauge Extensometers (NOTE Extensometer kit 01/1966 is NOT required)

Gauge Length 10mm (0.40 in) max elongation 10% STGA/10/10L 01/2793
Gauge Length 10mm (0.40 in) max elongation 50% STGA/10/50L 01/2960
Gauge Length 25mm (0.98 in) max elongation 5% STGA/25/5L 01/2956
Gauge Length 25mm (0.98 in) max elongation 10% STGA/25/10L 01/2794
Gauge Length 25mm (0.98 in) max elongation 25% STGA/25/25L 01/2795
Gauge Length 25mm (0.98 in) max elongation 50% STGA/25/50L 01/2796
Gauge Length 25mm (0.98 in) max elongation 100% STGA/25/100L 01/2797
Gauge Length 50mm (1.97 in) max elongation 5% STGA/50/5L 01/2958
Gauge Length 50mm (1.97 in) max elongation 25% STGA/50/25L 01/2798
Gauge Length 50mm (1.97 in) max elongation 50% STGA/50/50L 01/2799
Gauge Length 50mm (1.97 in) max elongation 100% STGA/50/100L 01/2800
Gauge Length 80mm (3.15 in) max elongation 10% STGA/80/10L 01/2801
Gauge Length 80mm (3.15 in) max elongation 25% STGA/80/25L 01/2802

SOFTWARE:

NEXYGEN™ 4.0 Software Package 40/0658
NEXYGEN™ Upgrade to Version 4.0 40/0658/NR
ONDIO Application Builder (Use With NEXYGEN) 40/0683
NEXYGEN/ONDIO Software Suite 40/0695
NEXYGEN/ONDIO Upgrade 40/0695/U

GRIPS & FIXTURES:

All grips up to a capacity of 300 kN (66000 lbf) can be fitted.

AMETEK®

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ISO 9001
Manufacturer