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Quality control machines

Industry & Packaging

MULTITEST-I

MOTORIZED TRACTION/ COMPRESSION BENCH COMPUTER-CONTROLLED

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COMPUTER-CONTROLLED MOTORIZED TRACTION/ COMPRESSION BENCH

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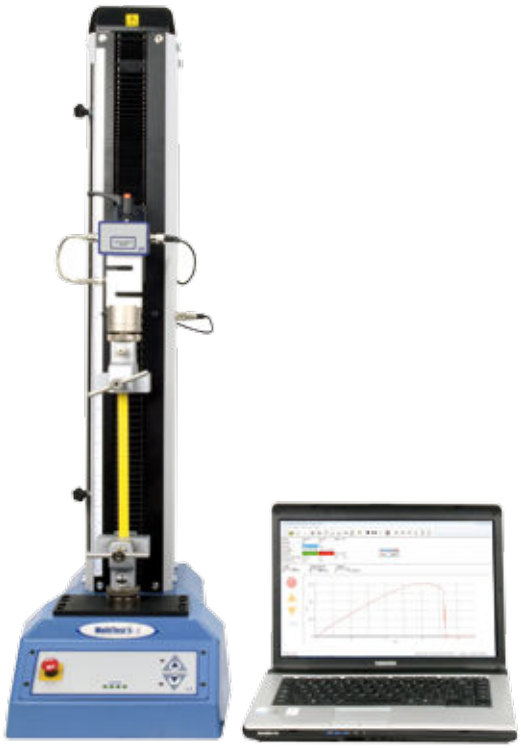

FUNCTION

The multitest-i tensile and compression tester is driven by software installed on a computer.The MultiTest-i tensile and compression tester is driven by software installed on a computer. It offers both consistency and reliability using key test parameters such as force, displacement and velocity.
MultiTest single-column test stands are the ideal solution for measuring forces up to 5MultiTest single-column test stands are the ideal solution for measuring forces up to 5 kN (1100 lbf) on a wide variety of components made from almost any material, both during normal operation and when they are pulled/ pushed to the point of intentional failure or break.

- Full range from 2 N to 50 000 N, single or double column
- Acquisition of 1000 data per second
- Interchangeable Plug & Play force cells
- Auxiliary input to receive the electrical signal from a contact: Open / Closed
- Control panel with emergency stop button and splashproof

TECHNICAL INFORMATION

Digital reading force / length / speed	yes
Communication with the test bench	Via RS232 port or USB port (converter supplied)
Required features	100 Mb available HD, CD-ROM plus available RS232/USB port
Operating system	Windows ® 2000 / XP / Vista, 7, 8 & 10
Data acquisition speed	Choice of 1000 Hz, 500 Hz, 100 Hz, 50 Hz and 10 Hz
Secondary input	Event input (switch), digital controls I/O ports
Data output	LPT1 (printer port), RS232 port port (directly or via USB / Network in ASC II format) ASC II (Export, SPC package etc...)


Friction


Bending strength


Rigidity


Compression


Torsion


Traction

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FEATURES

	0,5 kN	1 kN	2,5 kN	5 kN	10 kN	25 kN	50 kN
Capacity N	500	1000	2500	5000	10000	25000	50000
kgf	50	100	250	500	1000	2500	5000
lbf	110	220	550	1100	2200	5500	11000
Number of columns		1	1	1	2	2	2
Speed mm/min	1 - 1000	1 - 1000	1 - 1000*	1 -500	1 - 1000	1 - 1000**	1 -400***
in/min	(0.04 - 40)	(0.04 - 40)	(0.04 - 40)	(0.04 - 20)	(0.04 - 40)	(0.04 - 40)	(0.04 - 15)
accuracy of the speed of the crossbar	±0.2% of the indicated speed						
Speed range No. of tests/cycle	-	-	-	-	400 mm (15.7")	400 mm (15.7")	420 mm (16.5")
Distance between the columns†	67 mm (2.6")	67 mm (2.6")	67 mm (2.6")	95 mm (3.7")	-	-	-
Max. base/ sensor axis††	1359 mm (53.5")	1159 mm (45.6")	590 mm (23.2")	710 mm (28.0")	1140 mm (44.9")	1140 mm (44.9")	1330 mm (52.4")
Total height	1710 mm (67.3")	1510 mm (59.4")	941 mm (37")	1082 mm (42.6")	1500 mm (59.1")	1500 mm (59.1")	1931 mm (76")
Total width	290 mm (11.4")	290 mm (11.4")	290 mm (11.4")	328 mm (12.9")	826 mm (32.5")	826 mm (32.5")	864 mm (34")
Total depth	414 mm (16.3")	414 mm (16.3")	414 mm (16.3")	526 mm (20.7")	542 mm (21.3")	542 mm (21.3")	572 mm (22.5")
Total weight	38 kg (84 lbs)	36 kg (79 lbs)	22 kg (49 lbs)	38 kg (84 lbs)	140 kg (309 lbs)	140 kg (309 lbs)	285 kg (628 lbs)
Maximum power required	120 watts	200 watts	250 watts	150 watts	450 watts	450 watts	450 watts
Voltage	230 V AC 50 Hz or 110 V AC 60 Hz						
Force measurement							
Available sensor capacity N	2 to 50000 (14 models)						
kgf	0.2 to 5000 (14 models)						
lbf	0.45 to 11000 (14 models)						
Measuring accuracy of the force sensor	±0.1% of the full scale for load cells from 2 to 25 kN ±0.2% of the full scale for load cells from 5000 to 50 kN						
Measuring resolution of the force sensor	1:6500						

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Displacement							
Working stroke††	1200 mm (47.3")	1000 mm (39.4")	500 mm (19.7")	590 mm (23.2")	950 mm (37.4")	950 mm (37.4")	1100 mm (43.3")
Positional accuracy for a stroke of 300 mm	±130 µm (±0.005")				±100 µm (±0.004")		
Display resolution	±0.01 mm (±0.0004")						
Software							
Digital force/ length/speed reading	Yes						
Communication with the test bench	Via RS232 port or USB port (converter supplied)						
Required features	100 Mb available HD, CD-ROM plus available RS232/USB port						
Operating system	Windows® 2000/XP/Vista, 7, 8 & 10						
Data acquisition speed	Choice of 1000 Hz, 500 Hz, 100 Hz, 50 Hz and 10 Hz						
Secondary input	Event input (switch), digital controls I/O ports						
Data output	LPT1 (printer port), RS232 port (directly or via USB/network converter in ASCII format) ASCII (Export, SPC package etc...)						

* 2.5 kN - above 2 kN, the maximum recommended speed is 750 mm/min (30 in/min)
** 25 kN - above 10 kN, the maximum recommended speed is 500 mm/min (20 in/min)
*** 50 kN - above 25 kN, maximum recommended speed is 250 mm/min (10 in/min) † Measurement at sensor axis †† Measurement without sensor or accessory

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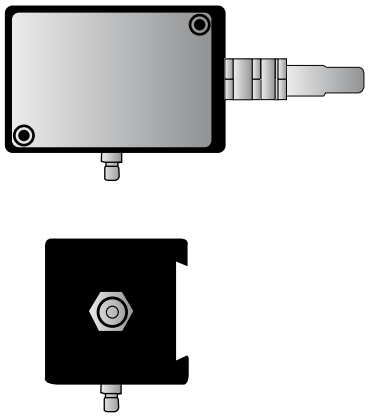
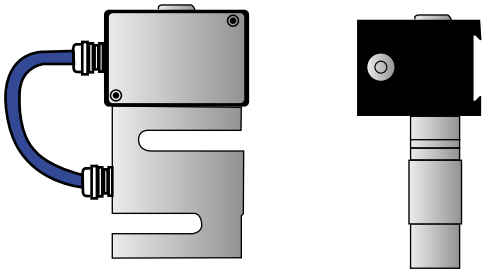
FORCE CELLS

TYPE	CAPACITY	DEPTH in mm	WIDTH in mm	HEIGHT in mm	ACCURACY (% of full scale)	THREAD
ILC	2 N	46,5	72	48	0,1%	#10-32UNF
ILC	5 N	46,5	72	48	0,1%	#10-32UNF
ILC	10 N	46,5	72	48	0,1%	#10-32UNF
ILC	25 N	46,5	72	48	0,1%	#10-32UNF
ILC	50 N	46,5	72	48	0,1%	#10-32UNF
ILC	100 N	46,5	72	48	0,1%	#10-32UNF
ILC	250 N	46,5	72	48	0,1%	#10-32UNF
ILC	500 N	46,5	72	48	0,1%	#10-32UNF
ILC-S	100 N	13	51	64	0,1%	#10-32UNF
ILC-S	200 N	13	51	64	0,1%	M6*1
ILC-S	500 N	19	51	76	0,1%	M6*1
ILC-S	1000 N	19	51	76	0,1%	M10*1,5
ILC-S	2500 N	25	51	76	0,1%	M12*1,75
ILC-S	5000 N	25	51	76	0,2%	M12*1,75

ILC



ILC-S



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EMPEROR SOFTWARE

The Emperor software is designed to work with Traction/ Compression benches. It is suitable for use in the laboratory or factory.
It integrates 2 modes of operation:

- A Console mode, which allows you to create simple programs and control the device with a minimum of buttons. Several pre-recorded tests are available. This mode is suitable for factory use.
- A programmed test mode, more complete to push the capabilities of the traction benches even further.

Create

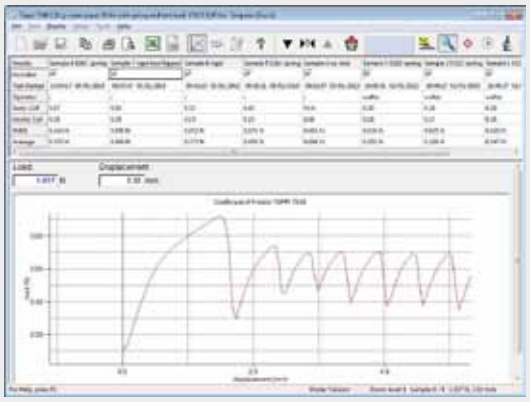
- Intuitive user interface
- Construction of step-by-step test routines
- One-click selection of preferred test procedures

Test

- Real time graph
- Display of measured and calculated values
- Clear and precise indication of conformity (Pass/Fail)

Reports

- Standard and customizable models
- Print results in Adobe PDF format
- Export of the results to an Excel document and SPC



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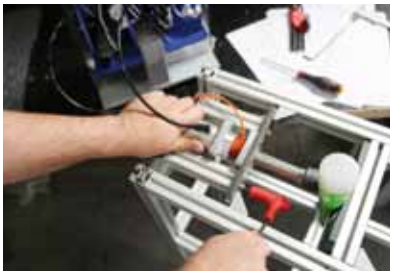
for your packaging quality controls

Calibration and annual maintenance
on site or in laboratory are proposed. ACRN has a metrology laboratory.

Implementation of tests, choice of materials, state of the art, work on repeatability
we can advise you according to your needs (technology, budget, ergonomics).

Leak test and dynamometry
we put at your disposal our competences and our equipment of test of tightness and dynamometry equipment for packaging

Major manufacturers have trusted us for many years

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