Global Source
EQUIP TO INNOVATE

Force Measurement

DFC / DFG
Digital ForceGauge Series

- **2 Models, Advanced DFC & Basic DFG**
- **20-2500N Range available**
- **Excellent Force Measurement Accuracy and Repeatability**
- **Very good overview with bar graph and peak value display**
- **Includes tolerance check**
- **Includes statistics over stored values**

Gauge Comparison	DFC	DFG
Measurement Accuracy	+/-0.1% FS	+/-0.2% FS
Machine Control Technology	Yes	No
Safe Overload Rating	200%	200%
Tare Capacity	10%	10%
Display Resolution	10,000:1	5000:1
Peak Capture Rate (Hz)	25kHz	10kHz
Data Sampling Rate (Hz)	25kHz	10kHz
Cast Aluminium Housing	Yes	Yes
Certificate of Calibration- NIST traceable	Yes	Yes

MTL / MTH
Manual Test-Stands

- **3 Models, Lever & Handwheel**
- **Solid Material, flexible and easy to use**

Feature	MTL-110	MTL-330	MTH-550
Load Capacity	110 lbf/500N	330 lbf1500N	550 lbf/2500N
Column Height	500mm	760mm	760mm
Crosshead Travel (Stroke)	150mm	100mm	100mm
Lever/Handwheel Rotation	76mm per revolution	76mm per revolution	0.76mm per revolution
Locking Stop	Yes	Yes	Yes
Vertical Test Format	Standard	Standard	Standard
Optional Horizontal Format	Legs for Horizontal	Legs for Horizontal	Legs for Horizontal
Bench Mounting	Yes	Yes	Yes
Test Adapter Threads	M6, #10-32UNF	M6	M10
Throat Distance	150mm	100mm	100mm

FMM / FMMx
Motorized Test-Stands

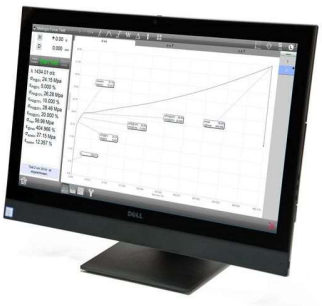
- **6 Models, 2 length / 3 capacities**
- **Easy to use with many features and options**
- **Excellent Force Measurement Accuracy and Repeatability**

	FMM 110/110x	FMM 330/330x	FMM 550/550x
Capacity	500 N	1500 N	2500 N
Crosshead travel	500/760mm	500/760mm	500/760mm
Min speed	0,05mm/min	0,05mm/min	0,05mm/min
Max speed	1000mm/min	1000mm/min	1000mm/min
Speed accuracy (full scale)	< 0,1%	< 0,1%	< 0,1%
Position accuracy	< 0,02 mm	< 0,02 mm	< 0,02 mm
Throat	100mm	100mm	100mm

Force Software packages & Accessories
Loadcells; AIO-Controller PC; Grips & Mounting-Plates

- **Broad variety of BLC - Loadcells**
- **Excellent, easy to use Software Packages (L1 / L2 for all force measuring applications based on Touch-Panel-PC.**
- **Grips for Tension/Compression/Hold/Shear/Break and many more tests available**

Loadcell		AIO Controller PC	Grips & Testing Fixtures
BLC-2	10N	Dell AIO Series	Clevis
BLC-5	20N	Touchscreen	Hook
BLC-10	50N	Windows 10	Chisel
BLC-20	100N	Keyboard & Mouse	Flat
BLC-50	250N		Notch
BLC-100	500N		Point
BLC-200	1000N		Rod
BLC-500	2500N		

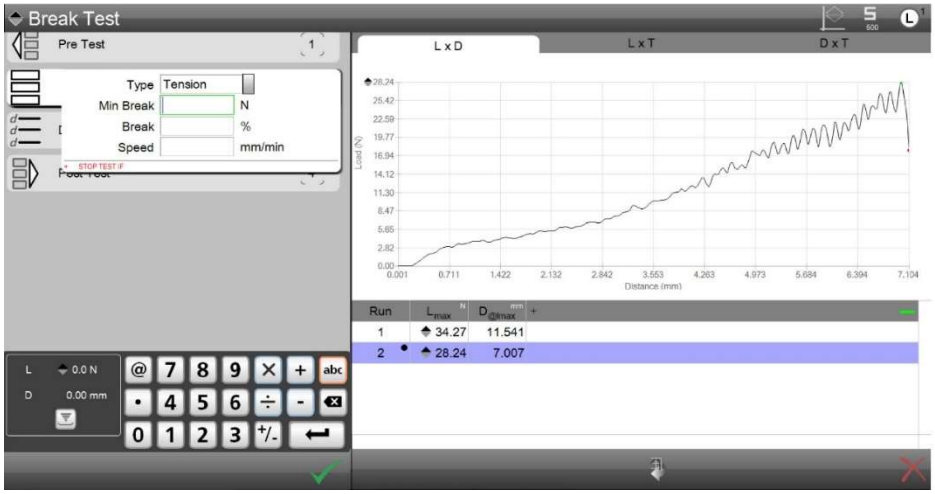


L1 & L2 Software packages

- Fill-in-the-Blank Test Method
- In situ production, oriented force measurement testing systems
- Simple user interface for “non-technical operators”
  - Tablet-based user interface
  - Windows Operating System

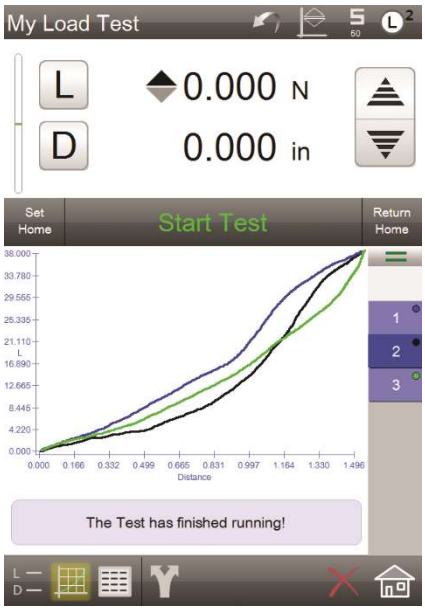
L1 Software Package

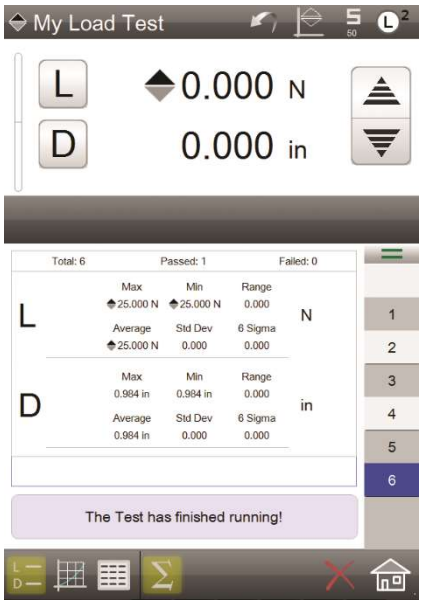
Load Limit Test
Distance Limit Test
Break Limit Test
Cycle Limit Test
- Duration
- Count
- Loop
Hold Limit Test
Coefficient of Friction Test
Tolerance check
Graphical curve comparison
Integrated statistics



L2 Software Package

High Volume Production Testing
Basic Measurements as in L1
Modular test builder
- Max Loads
- MaxDistance
- Breaks
– Limits

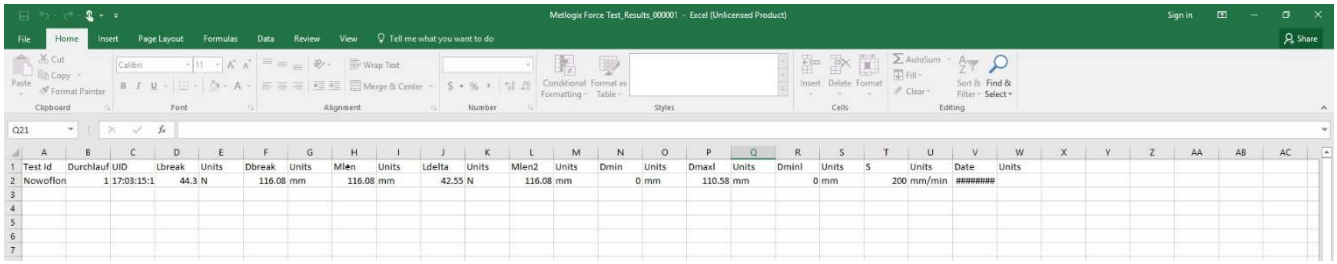




Results & Data

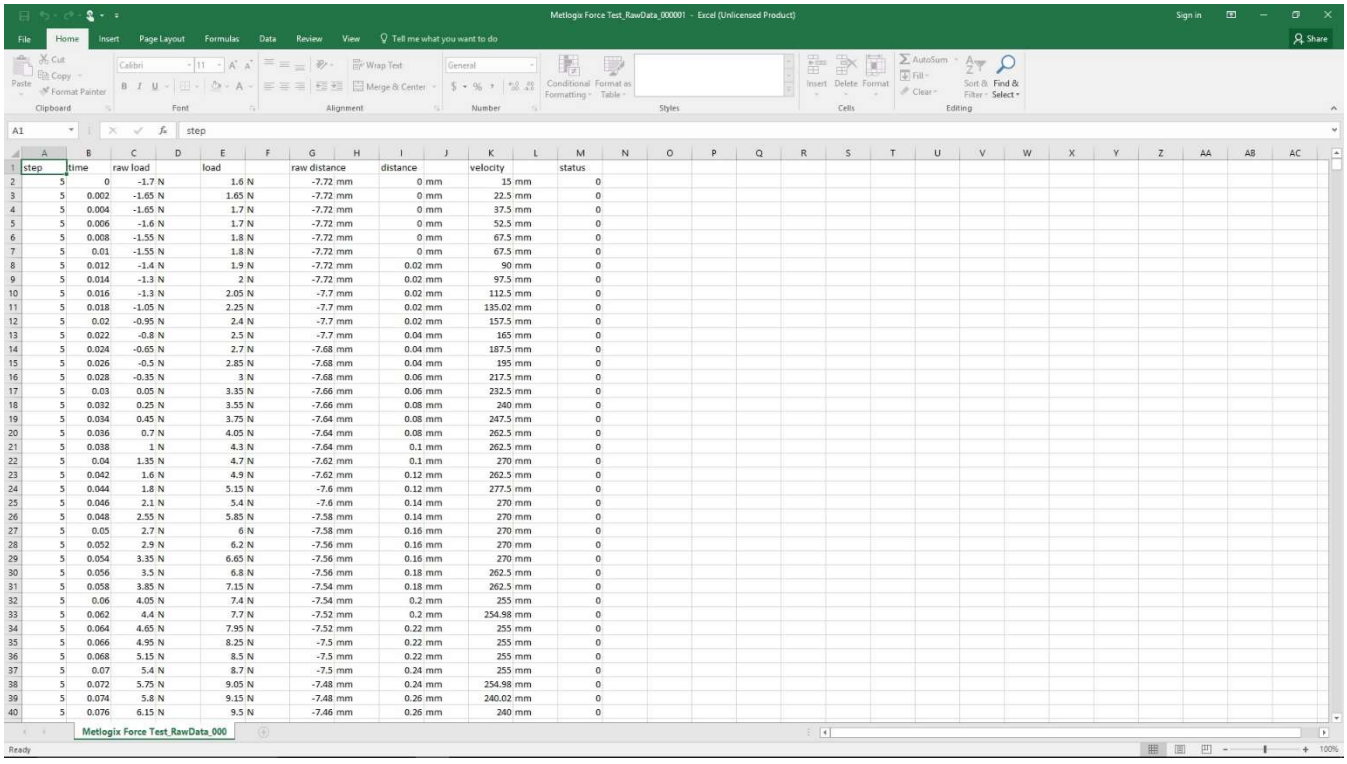
- **Excel Based Data Results**
- **Requested & Raw Data available**
- **Data to be saved anywhere in your Network or database**

Requested Data / Results



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
1	Test Id	Durchlauf	UID	Lbreak	Units	Dbreak	Units	Mlen	Units	Ldelta	Units	Mlen2	Units	Dmin	Units	Dmaxl	Units	Dminl	Units	S	Units	Date	Units
2	Nowoflon	1	17:03:15:1	44.3	N	116.08	mm	116.08	mm	42.55	N	116.08	mm	0	mm	110.58	mm	0	mm	200	mm/min	########	

Raw Data / Results



	A	B	C	D	E	F	G	H	I	J	K	L	M
1	step	time	raw load		load		raw distance		distance		velocity		status
2	5	0	-1.7	N	1.6	N	-7.72	mm	0	mm	15	mm	0
3	5	0.002	-1.65	N	1.65	N	-7.72	mm	0	mm	22.5	mm	0
4	5	0.004	-1.65	N	1.7	N	-7.72	mm	0	mm	37.5	mm	0
5	5	0.006	-1.6	N	1.7	N	-7.72	mm	0	mm	52.5	mm	0
6	5	0.008	-1.55	N	1.8	N	-7.72	mm	0	mm	67.5	mm	0
7	5	0.01	-1.55	N	1.8	N	-7.72	mm	0	mm	67.5	mm	0
8	5	0.012	-1.4	N	1.9	N	-7.72	mm	0.02	mm	90	mm	0
9	5	0.014	-1.3	N	2	N	-7.72	mm	0.02	mm	97.5	mm	0
10	5	0.016	-1.3	N	2.05	N	-7.7	mm	0.02	mm	112.5	mm	0
11	5	0.018	-1.05	N	2.25	N	-7.7	mm	0.02	mm	135.02	mm	0
12	5	0.02	-0.95	N	2.4	N	-7.7	mm	0.02	mm	157.5	mm	0
13	5	0.022	-0.8	N	2.5	N	-7.7	mm	0.04	mm	165	mm	0
14	5	0.024	-0.65	N	2.7	N	-7.68	mm	0.04	mm	187.5	mm	0
15	5	0.026	-0.5	N	2.85	N	-7.68	mm	0.04	mm	195	mm	0
16	5	0.028	-0.35	N	3	N	-7.68	mm	0.06	mm	217.5	mm	0
17	5	0.03	0.05	N	3.35	N	-7.66	mm	0.06	mm	232.5	mm	0
18	5	0.032	0.25	N	3.55	N	-7.66	mm	0.08	mm	240	mm	0
19	5	0.034	0.45	N	3.75	N	-7.64	mm	0.08	mm	247.5	mm	0
20	5	0.036	0.7	N	4.05	N	-7.64	mm	0.08	mm	262.5	mm	0
21	5	0.038	1	N	4.3	N	-7.64	mm	0.1	mm	262.5	mm	0
22	5	0.04	1.35	N	4.7	N	-7.62	mm	0.1	mm	270	mm	0
23	5	0.042	1.6	N	4.9	N	-7.62	mm	0.12	mm	262.5	mm	0
24	5	0.044	1.8	N	5.15	N	-7.6	mm	0.12	mm	277.5	mm	0
25	5	0.046	2.1	N	5.4	N	-7.6	mm	0.14	mm	270	mm	0
26	5	0.048	2.55	N	5.85	N	-7.58	mm	0.14	mm	270	mm	0
27	5	0.05	2.7	N	6	N	-7.58	mm	0.16	mm	270	mm	0
28	5	0.052	2.9	N	6.2	N	-7.56	mm	0.16	mm	270	mm	0
29	5	0.054	3.35	N	6.65	N	-7.56	mm	0.16	mm	270	mm	0
30	5	0.056	3.5	N	6.8	N	-7.56	mm	0.18	mm	262.5	mm	0
31	5	0.058	3.85	N	7.15	N	-7.54	mm	0.18	mm	262.5	mm	0
32	5	0.06	4.05	N	7.4	N	-7.54	mm	0.2	mm	255	mm	0
33	5	0.062	4.4	N	7.7	N	-7.52	mm	0.2	mm	254.98	mm	0
34	5	0.064	4.65	N	7.95	N	-7.52	mm	0.22	mm	255	mm	0
35	5	0.066	4.95	N	8.25	N	-7.5	mm	0.22	mm	255	mm	0
36	5	0.068	5.15	N	8.5	N	-7.5	mm	0.22	mm	255	mm	0
37	5	0.07	5.4	N	8.7	N	-7.5	mm	0.24	mm	255	mm	0
38	5	0.072	5.75	N	9.05	N	-7.48	mm	0.24	mm	254.98	mm	0
39	5	0.074	5.8	N	9.15	N	-7.48	mm	0.26	mm	240.02	mm	0
40	5	0.076	6.15	N	9.5	N	-7.46	mm	0.26	mm	240	mm	0