



### Digital Force Gauge Series DFC / DFG

- 2 Models: DFG Basic and DFC Advanced Unit
- Measuring Range max. 10N up to max. 2500N
- Excellent Accuracy and Repeatability
- 2 programmable Soft Keys
- very good overview with bar graph and peak value display
- includes tolerance check and statistics
- color display

	DFC	DFG
Measurement Accuracy (full scale)	+/-0.1%	+/-0.2%
CNC machine control for force stand	Yes	No
Safe Overload Rating	200%	200%
Grip/Tare Capacity (full scale)	10%	10%
Display Resolution	10.000:1	5.000:1
Data Sampling Rate (Hz)	8kHz	8kHz
Cast Aluminium Housing	Yes	Yes
Digital I/O	2	-
Bluetooth data transfer	Yes	No
Result memory	99	50

### MTL / MTH

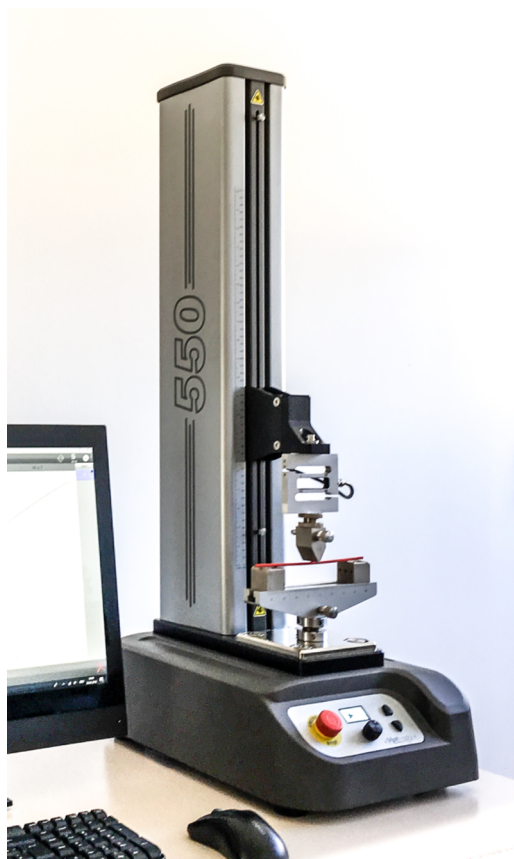
#### Manual Test stands for DFC / DFG

- 3 Models: quick action lever or hand wheel
- Solid stand, flexible and easy use
- big choice of grips available

	MTL-110	MTL-330	MTL-550
Load capacity	500 N	1500 N	2000 N
Column height	500 mm	760 mm	760 mm
Crosshead travel	150 mm	150 mm	100 mm
Travel per lever/handwheel rotation	76 mm	76 mm	0,76 mm
Horizontal test format	Option	Option	Option
Bench mounting	Yes	Yes	Yes
Grip adaptor thread	M6	M10	M10
Throat distance	150 mm	100 mm	100 mm



Shown with optional accessories



## CNC Test stand (Universal force tester) FMM / FMM-X

- Standard and long Version
- Excellent accuracy and repeatability
- Practical integrated safety provisions
- Perfect for shop floor, incoming goods and laboratory

	FMM 110/110x	FMM 550/550x
Load capacity	500 N	2500 N
Crosshead travel	500/760mm	500/760mm
Minimum speed	0,05mm/min	0,05mm/min
Maximum speed	1000mm/min	1000mm/min
Speed accuracy (full scale)	< 0,1%	< 0,1%
Position accuracy	< 0,02 mm	< 0,02 mm
Throat distance	100mm	100mm

## Force test software and accessories Load cells, Controller, Grips und more

### Wide range of load cells with high accuracy

Load cells		Controller	Grips and fixtures
BLC-2	10 N	PC	Clevis adaptors
BLC-5	20 N	Windows 10 ®	Compression plates
BLC-10	50 N	Incl. Keyboard and Mouse	Chisels
BLC-20	100 N		Vise grips
BLC-50	250 N		Hooks
BLC-100	500 N		Peel test grips
BLC-200	1000 N		And many more...
BLC-500	2500 N		

- Clear arranged easy to use test software, with Touch Screen concept
- Big choice of grips and fixtures for standard and individual tests

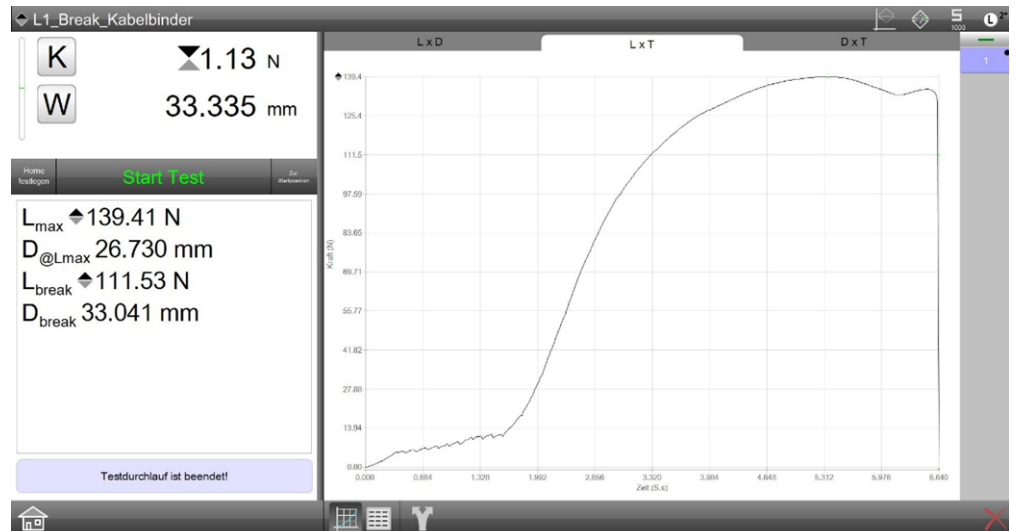


# Test software

- **L1: templates for ease set up of the tests, perfect for universal test routines**
  - **L1 includes springs test routines including automated pre-conditioning**
- **L2plus: test configurator gives ultimate freedom for the test procedure, result evaluation directly on the graph**
- **L3: material test software, including all benefits of test procedure freedom**
- **Innovative user interface for fluent handling at low training effort**
  - **easy use**
  - **Windows operating system**
  - **Also ideal for use at shop floor, incoming - and outgoing goods**

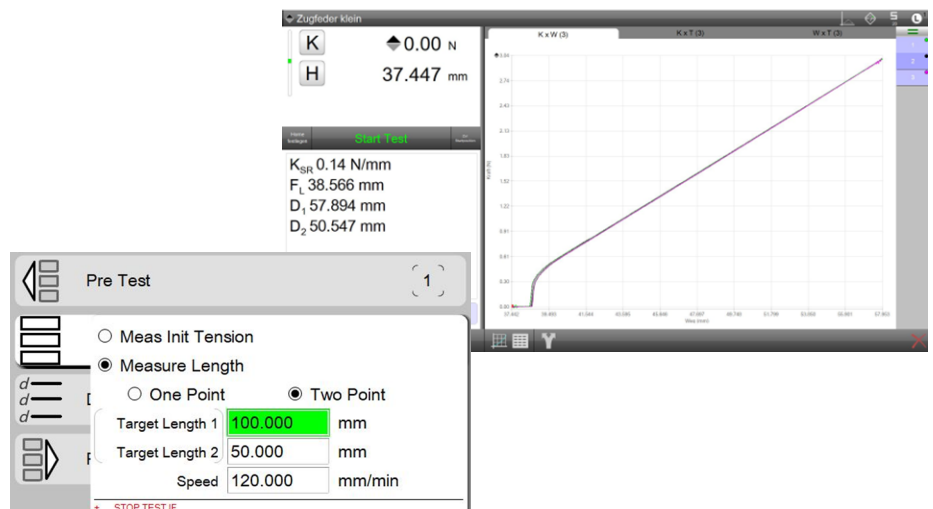
## L1 test software

load test  
 distance test  
 break test  
 cycle test  
 - by time  
 - by counts  
 creep test  
 tolerance check included  
 graphical result curve comparison  
 integrated statistics



## Testing springs

both: compression and tension springs  
 spring rate  
 free length  
 pretension  
 preconditioning



## Data export

- Sending data to transfer file for Excel® and other evaluation programs
- Export of results and raw data, manually or automated during test routine
- Target directory selectable

## Export of test results

Metlogix Force Test\_RawData\_00001 - Excel (Unlicensed Product)

Sign in

Share

FileHomeInsertPage LayoutFormulasDataReviewViewTell me what you want to do

CutCopy

Paste

Font Painter

Clipboard

Calibri11

B

I

U

A

Color

Font Color

Text Color

Align Left

Align Center

Align Right

Justify

Wrap Text

Number

Percentage

Decimals

Conditional Formatting

Table

Insert

Delete

Format

AutoSum

Sort & Filter

Find & Select

Q21

12345678

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W

X

Y

Z

AA

AB

AC

Test Id

Durchlauf

UID

Lbreak

Units

Dbreak

Units

Mlen

Units

Ldelta

Units

Mlen2

Units

Dmin

Units

Dmaxl

Units

Dminl

Units

S

Units

Date

Units

1

Novofon

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

2000000000000000

## Export of raw data for further detailed processing

step	time	raw load	load	raw distance	distance	velocity	status
0	0	-1.7 N	1.6 N	-7.72 mm	0 mm	15 mm	0
0.002	0.002	-1.65 N	1.65 N	-7.72 mm	0 mm	22.5 mm	0
0.004	0.004	-1.65 N	1.7 N	-7.72 mm	0 mm	37.5 mm	0
0.006	0.006	-1.6 N	1.7 N	-7.72 mm	0 mm	52.5 mm	0
0.008	0.008	-1.55 N	1.8 N	-7.72 mm	0 mm	67.5 mm	0
0.01	0.01	-1.55 N	1.8 N	-7.72 mm	0 mm	67.5 mm	0
0.012	0.012	-1.4 N	1.9 N	-7.72 mm	0.02 mm	90 mm	0
0.014	0.014	-1.3 N	2 N	-7.72 mm	0.02 mm	97.5 mm	0
0.016	0.016	-1.3 N	2.05 N	-7.7 mm	0.02 mm	112.5 mm	0
0.018	0.018	-1.05 N	2.25 N	-7.7 mm	0.02 mm	135.02 mm	0
0.02	0.02	-0.95 N	2.4 N	-7.7 mm	0.02 mm	157.5 mm	0
0.022	0.022	-0.8 N	2.5 N	-7.7 mm	0.04 mm	165 mm	0
0.024	0.024	-0.65 N	2.7 N	-7.68 mm	0.04 mm	187.5 mm	0
0.026	0.026	-0.5 N	2.85 N	-7.68 mm	0.04 mm	195 mm	0
0.028	0.028	-0.35 N	3 N	-7.68 mm	0.06 mm	217.5 mm	0
0.03	0.03	0.05 N	3.35 N	-7.66 mm	0.06 mm	232.5 mm	0
0.032	0.032	0.25 N	3.55 N	-7.66 mm	0.08 mm	240 mm	0
0.034	0.034	0.45 N	3.75 N	-7.64 mm	0.08 mm	247.5 mm	0
0.036	0.036	0.7 N	4.05 N	-7.64 mm	0.08 mm	262.5 mm	0
0.038	0.038	1 N	4.3 N	-7.64 mm	0.1 mm	262.5 mm	0
0.04	0.04	1.35 N	4.7 N	-7.62 mm	0.1 mm	270 mm	0
0.042	0.042	1.6 N	4.9 N	-7.62 mm	0.12 mm	262.5 mm	0
0.044	0.044	1.8 N	5.15 N	-7.6 mm	0.12 mm	277.5 mm	0
0.046	0.046	2.1 N	5.4 N	-7.6 mm	0.14 mm	270 mm	0
0.048	0.048	2.55 N	5.85 N	-7.58 mm	0.14 mm	270 mm	0
0.05	0.05	2.7 N	6 N	-7.58 mm	0.16 mm	270 mm	0
0.052	0.052	2.9 N	6.2 N	-7.56 mm	0.16 mm	270 mm	0
0.054	0.054	3.35 N	6.65 N	-7.56 mm	0.16 mm	270 mm	0
0.056	0.056	3.5 N	6.8 N	-7.56 mm	0.18 mm	262.5 mm	0
0.058	0.058	3.85 N	7.15 N	-7.54 mm	0.18 mm	262.5 mm	0
0.06	0.06	4.05 N	7.4 N	-7.54 mm	0.2 mm	255 mm	0
0.062	0.062	4.4 N	7.7 N	-7.52 mm	0.2 mm	254.98 mm	0
0.064	0.064	4.65 N	7.95 N	-7.52 mm	0.22 mm	255 mm	0
0.066	0.066	4.95 N	8.25 N	-7.5 mm	0.22 mm	255 mm	0
0.068	0.068	5.15 N	8.5 N	-7.5 mm	0.22 mm	255 mm	0
0.07	0.07	5.4 N	8.7 N	-7.5 mm	0.24 mm	255 mm	0
0.072	0.072	5.75 N	9.05 N	-7.48 mm	0.24 mm	254.98 mm	0
0.074	0.074	5.8 N	9.15 N	-7.48 mm	0.26 mm	240.02 mm	0
0.076	0.076	6.15 N	9.5 N	-7.46 mm	0.26 mm	240 mm	0