REGO-FIX

Measuring

REGO-FIX Measuring Technology

FMA – REGO-FIX ForceMaster

New pull-force tester for machine spindles

INDUSTRY 4.0

The FMA is future-proof and can be embedded seamlessly into digital production environments to optimize manufacturing processes.

VERSATILE

Only one basic device: Our clamping force tester enables quick adapter change for different machine spindles.

PROCESS RELIABILITY

With the FMA, precise measurements of the spindle clamping force are guaranteed and maximum process reliability as well as minimum downtime are made possible.

One basic device for all interfaces

IP67

Dustproof and waterproof according to IP67

Simple documentation of measured values via smartphone app

Intuitive operation of the basic device and adapters

REGO-FIX

LONG BATTERY LIFE

The ForceMaster is equipped with a powerful Li-Ion battery that lasts up to 24 hours in continuous operation.

BLUETOOTH CONNECTIVITY

The ForceMaster can be connected through Bluetooth to the accompanying mobile app, enhancing its functionality.

WELL PROTECTED

The ForceMaster and its adapters are always well protected thanks to the custom hard-shell case.

Spindle interfaces – Nominal clamping values

Type	Force [kN]	Force [lbf]
HSK 25	1.5	337
HSK 32	5	1’124
HSK 40	6.8	1’529
HSK 50	11	2’473
HSK 63	18	4’047
HSK 80	28	6’295
HSK 100	45	10’116
SK 30	6	1’349
SK 40	12	2’698
SK 50	25	5’620

Type	Force [kN]	Force [lbf]
CAT 40	12	2’698
CAT 50	25	5’620
BT 30 | BBT 30	6	1’349
BT 40 | BBT 40	12	2’698
BT 50 | BBT 50	25	5’620
Capto C3	15	3’372
Capto C4	20	4’496
Capto C5	25	5’620
Capto C6	30	6’744
Capto C8	40	8’992

FMA – REGO-FIX ForceMaster App

Download app here:

// Machine park management
Different machines can be added and the values are assigned conveniently via the app.

// Dashboard
The screen of the device can be mirrored to perform measurements remotely.

// Data management and export
The measured values can be exported as a non-editable PDF, which ensures security is guaranteed. This is especially advantageous for service staff.

// Measuring protocols
Precise measurement reports can be created directly in the app.

// Visualization
The measurement results can be tracked in clear graphs and can be analyzed.

// Equipment documentation
The calibration certificate, the operating manual and support can be accessed at any time via the app.

// Swiss made
Developed and manufactured in Switzerland.

Type	Part no.	Measuring range
FMA ForceMaster base body	7530.00000	0-100 kN / 0-22481lbf

Available adapters

Type	Part no.	Interface
FMA / HSK 25	7532.25500	HSK-A|C|E|T 25 + HSK-B|D|F 32
FMA / HSK 32	7532.32500	HSK-A|C|E|T 32 + HSK-B|D|F 40
FMA / HSK 40	7532.40500	HSK-A|C|E|T 40 + HSK-B|D|F 50
FMA / HSK 50	7532.50500	HSK-A|C|E|T 50 + HSK-B|D|F 63
FMA / HSK 63	7532.63500	HSK-A|C|E|T 63 + HSK-B|D|F 80
FMA / HSK 100	7532.00500	HSK-A|C|E|T 100 + HSK-B|D|F 125
FMA / SK 30	7832.30200	SK 30 + SK+ 30
FMA / SK 40	7832.40200	SK 40 + SK+ 40
FMA / SK 50	7832.50200	SK 50 | SK+ 50

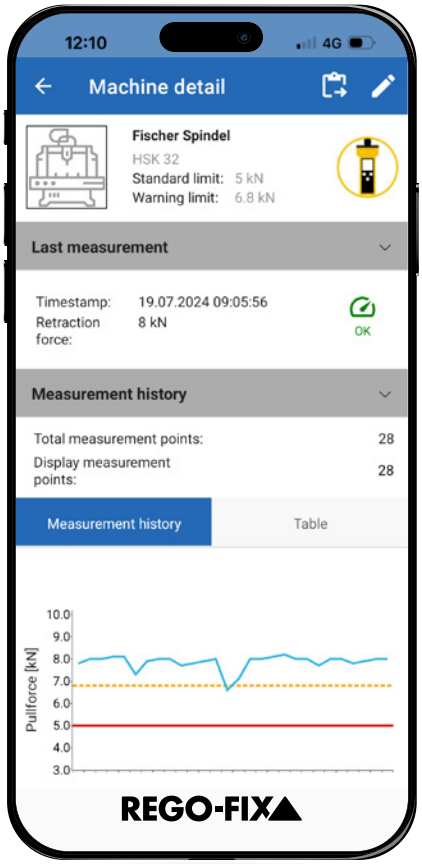
Type	Part no.	Interface
FMA / BT 30*	7832.30100	BT 30 | BT+ 30
FMA / BT 40	7832.40100	BT 40 | BT+ 40
FMA / BT 50	7832.50100	BT 50 | BT+ 50
FMA / CAT 40	7832.40300	CAT 40 | CAT+ 40
FMA / CAT 50	7832.50300	CAT 50 | CAT+ 50
FMA / C4	7832.04400	C4 (Capto)
FMA / C5	7832.05400	C5 (Capto)
FMA / C6	7832.06400	C6 (Capto)
FMA / C8	7832.08400	C8 (Capto)

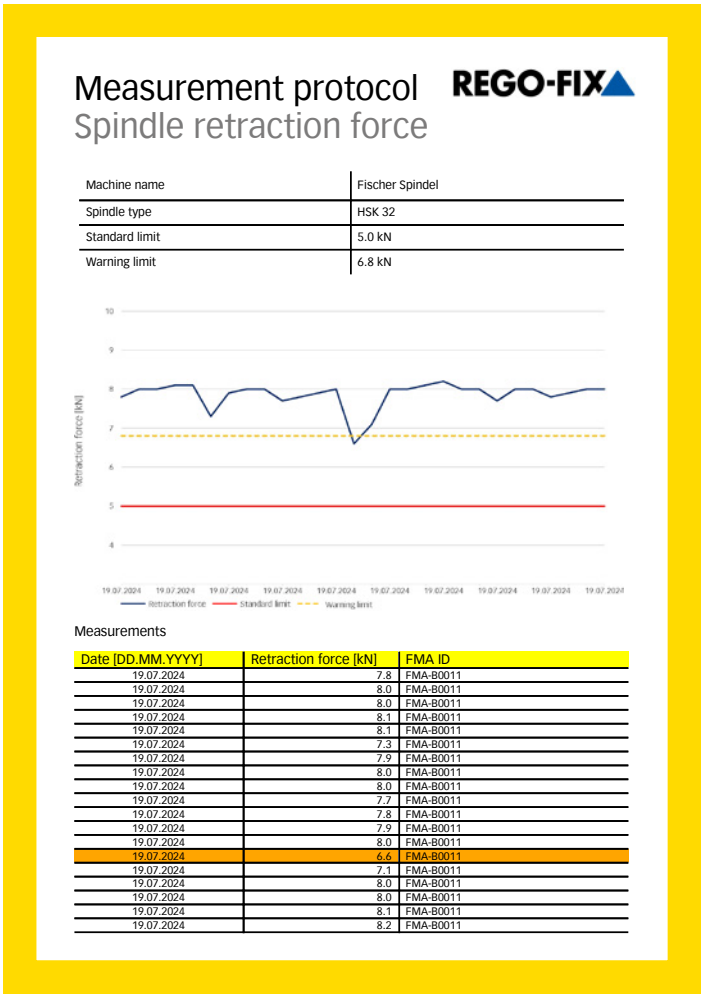
**for automatic tool change*

Data export measurement report

// **Measurement values as PDF export**
Measurement values can be exported as non-editable PDFs to ensure the authenticity of the data.

// **Measurement values as Excel export**
Or as .csv file, allowing you to incorporate your measurement values into existing spreadsheets for processing.

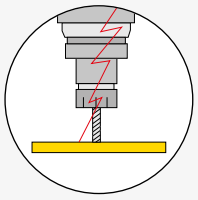




Your benefits

No additional costs for the app

Easy to use



Early detection of spindle damage

REGO-FIX MasterBar spindle test arbor

Increased process reliability thanks to regular spindle controls.

ST / MBA

CAT / MBA

BT+ / MBA

HSK-A / MBA

HSK-EZ / MBA
ATC-E / MBA

PRECISE

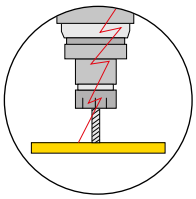
An intact tool spindle is the basis for precision. Runout errors of the tool spindle lead to vibrations, poor surface quality, increased tool wear and even tool breakage.

PROCESS SAFE

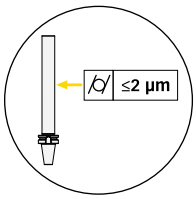
Periodic inspection of the tool spindle minimizes the risk of spindle damage and has a positive effect on process reliability.

MasterBar

The test arbor is used to check and align the tool spindle. Each MasterBar comes with an individual inspection certificate.

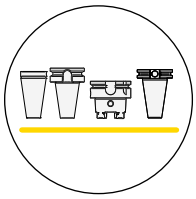


Avoid spindle errors thanks to regular inspection



Cylindricity of the test arbor ≤2 µm

QR-Code and serial number on removable ring



Various interfaces, manufacturer-independent

The packaging of two foam inserts allows horizontal as well as vertical storage and prevents deformation of the test arbor.

		Dimensions [mm]	
Type	**Part No.**	**Ø Diameter**	**Length A**
MasterBar			
ST 40 / MBA 40 × 330*	7550.40000	40	330
ST 50 / MBA 40 × 320*	7550.50000	40	320
CAT 40 / MBA 40 × 340	7553.40000	40	340
BT+ 30 / MBA 32 × 235**	7551.30600	32	235
BT+ 40 / MBA 40 × 340**	7551.40600	40	340
HSK-A 50 / MBA 32 × 240	7555.50000	32	240
HSK-A 63 / MBA 40 × 350	7555.63000	40	350
HSK-A 100 / MBA 40 × 349	7555.00000	40	349
HSK-E 20 / MBA 15 × 090***	7556.20400	15	90
HSK-E 25 / MBA 20 × 175***	7556.25400	20	175
HSK-E 32 / MBA 24 × 180	7556.32400	24	180
HSK-E 40 / MBA 24 × 180	7556.40400	24	180
HSK-EZ 15 / ATC-E 15 / MBA 10 × 070***	7556.15900	10	70

*ST stands for Steep Taper, usable for SK/CAT + BT with appropriate pull stud.

**BT+ is compatible with BT spindles.

***For dimensional reasons without removable ring, serial number on flange.

REGO-FIX Magnetic Indicator Base with fine adjustment for dial gauges

USER-FRIENDLY

Easy and exact positioning due to the fixation of the joints via a handle. The magnetic base provides a stable basis for the articulated stand.

FLEXIBLE

The dovetail mount and the clamping diameter (Ø 8mm or 3/8") offer the highest flexibility for mounting dial gauges or dial test indicators.

MAGNETIC INDICATOR BASE

The articulated stand is ideal for use in the production or quality control, where precise measurements must be made. The simple operation allows fast and accurate alignment of the dial indicator.

Made in Switzerland

Maintenance free

Holding force of the Articulated arm >5kg

Holding force of the magnetic base 800N

Type	Part No.	Description	Operating range
Magnetic Indicator Base			
MIB 287	7561.00000	Magnetic Indicator Base with fine adjustment Metric	287 mm
MIB 11"	7561.00100	Magnetic Indicator Base with fine adjustment Inch	11"

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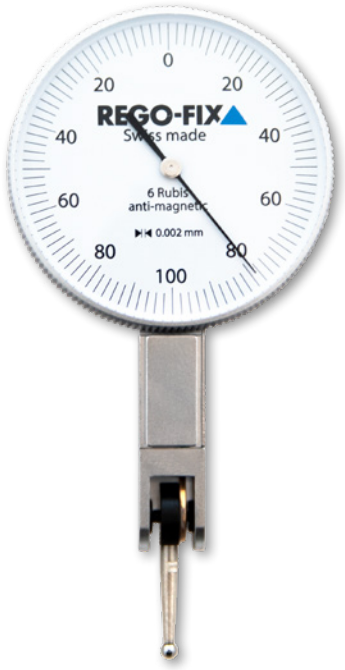
Improved measuring accuracy with the REGO-FIX µ-touch Dial Test Indicator



OVERVIEW

The large dial with Ø 37mm as well as a scale of 2 µm can be read easily and accurately. Clamping possibility by dovetail guides or clamping shank Ø 8mm.

PRECISE

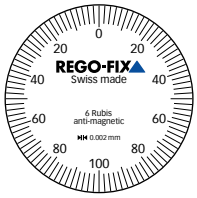
With a repeatability of 1 µm and an overall deviation of max. 3.5 µm, the REGO-FIX dial test indicator is the perfect measuring tool for precise measurements.

µ-TOUCH DIAL TEST INDICATOR

Dial test indicators are used to check tolerances, align machine tools and to check workpieces for deviations.

Made in Switzerland

Clockwork with ruby bearings



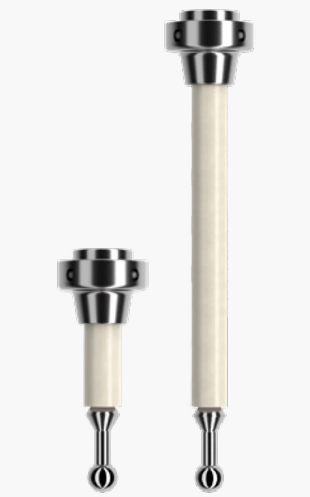
2 µm scale and
0.2 mm measuring range

Rotatable dial,
for zero setting of the scale

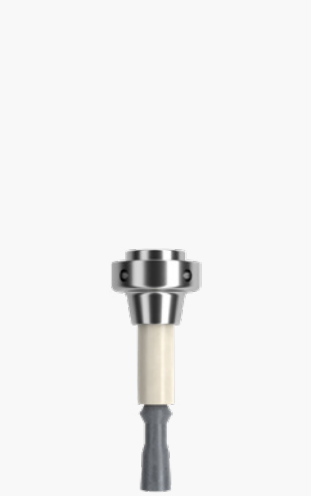
Type	Part No.	Description	Probe insert Ø / L
µ-touch Dial Test Indicator			
DTI 0.002	7565.00200	µ-touch dial test indicator, 0.002 mm scale	Ø 2 / L 12.5 mm

Shorter setup time and higher precision with the REGO-FIX 3D-EdgeMaster

Available in metric and inch versions.



Ceramic probe insert, available in a short or long version.



The new TE EMA cone is the solution for tool measurement on lathes without an integrated measurement system.

Delivered in high quality hard case.

SIMPLE

The large and clear dial facilitates the reading of the scale. The adjustment of the runout is easy and comfortable.

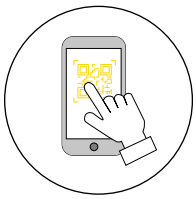
ROBUST

Due to the stable construction, the 3D-EdgeMaster is dust- and waterproof according to IP 67. The mechanism is protected by the predetermined breaking point in the probe insert.

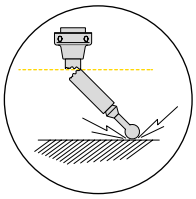
3D-EdgeMaster

The 3D edgefinder is used for fast and precise probing of the reference edges, setting of the zero point and for measuring. The repeat accuracy is ≤ 0.01 mm.

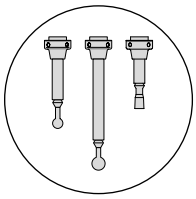
Dial and shank are available in metric and inch versions



Product information and inspection certifi cate are digitally available



Probe insert with ceramic breaking point



Short and long probe inserts available

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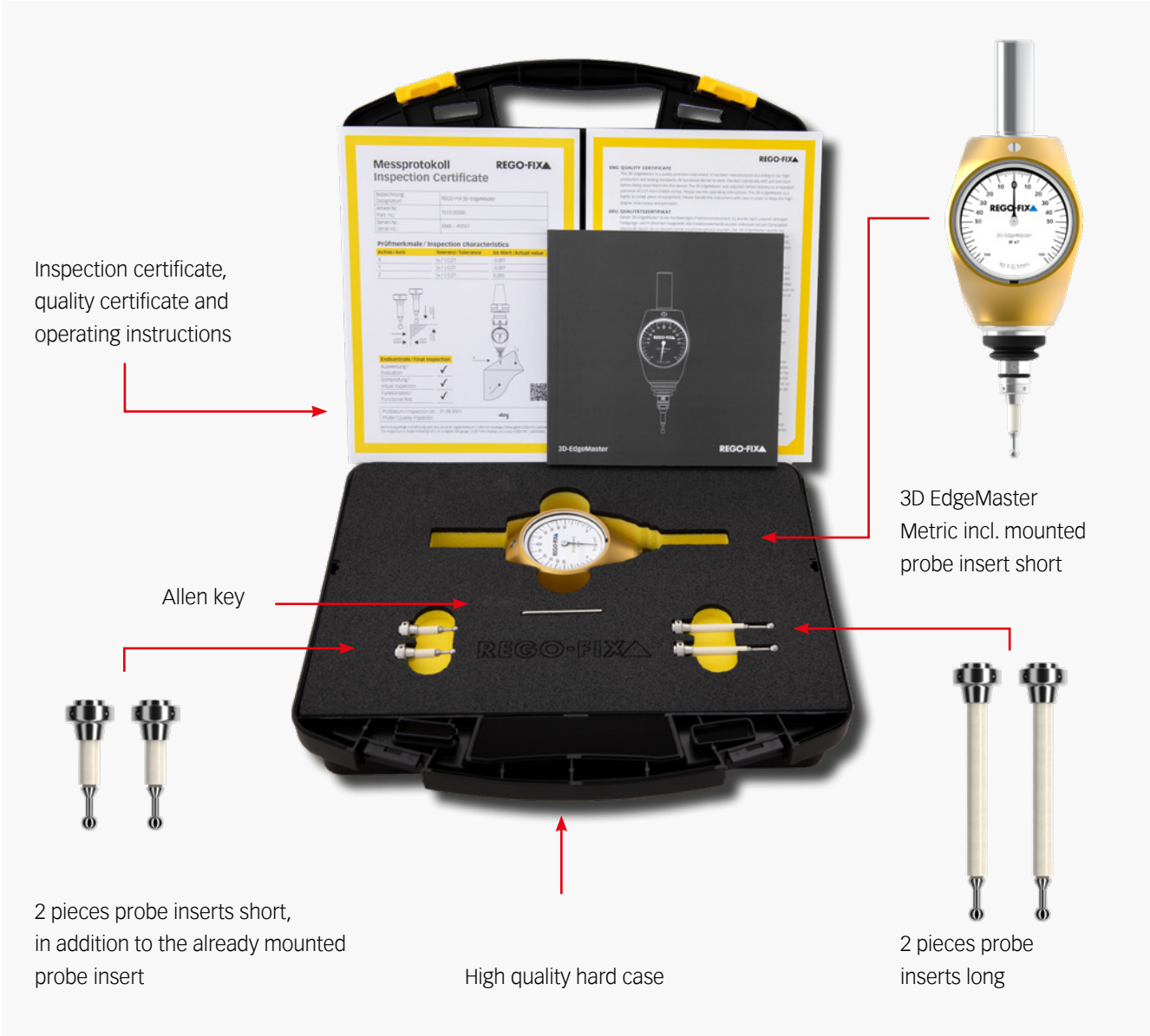
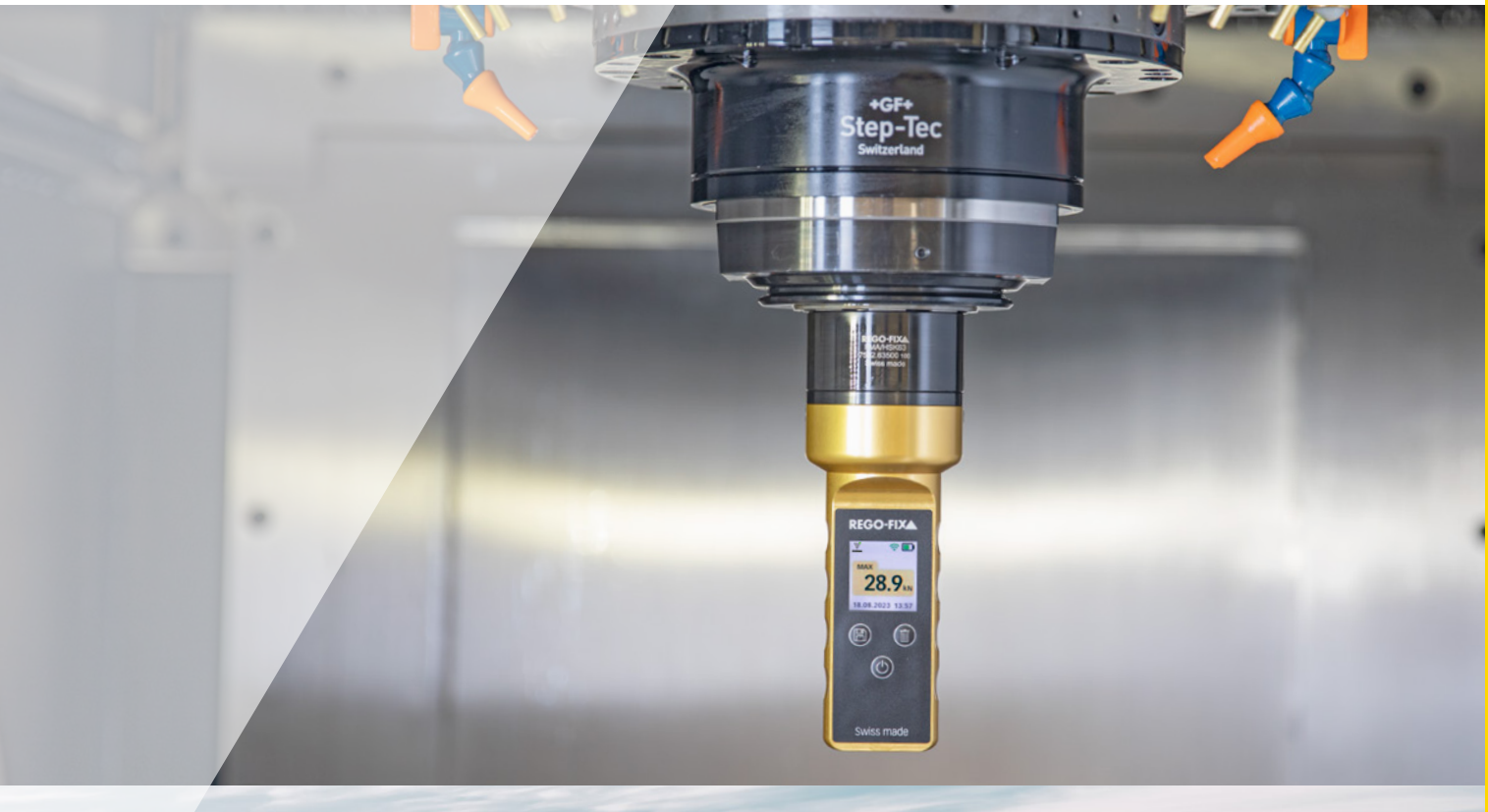
The Set 3D-EdgeMaster includes:



Type	Part No.	Description	Sizes Ø / L
3D-EdgeMaster			
SET 3D EMA-Metric	7510.00005	3D edge finder Metric, 2 short + 2 long probe inserts	Ø 16 mm
3D EMA-Metric	7510.00000	3D edge finder Metric + probe insert short	Ø 16 mm
SET 3D EMA-Inch	7510.00105	3D edge finder Inch, 2 short + 2 long probe inserts	Ø 5/8"
3D EMA-Inch	7510.00100	3D edge finder Inch + probe insert short	Ø 5/8"
TE EMA-Short	7515.00000	Probe insert short for 3D EMA	Ø 4 / L 31 mm
TE EMA-Long	7515.00300	Probe insert long for 3D EMA	Ø 6 / L 56.5 mm
TE EMA-Cone	7515.00800	Probe insert cone for 3D EMA (for lathes)	Ø 4.16 / L 31 mm



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