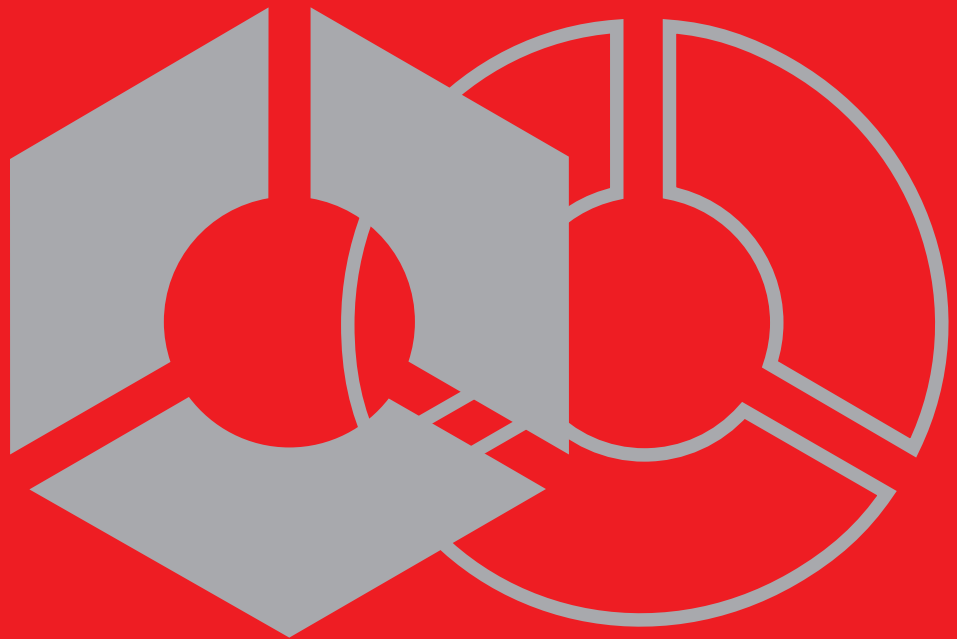


TESTit


HAINBUCH

CATALOGUE
2019



■ **Utilis AG, Precision Tools**

Kreuzlingerstrasse 22, CH-8555 Müllheim, Switzerland
Phone +41 52 762 62 62, Fax +41 52 762 62 00
info@utilis.com, www.utilis.com

TESTit

Safe processes through clamping force measurement



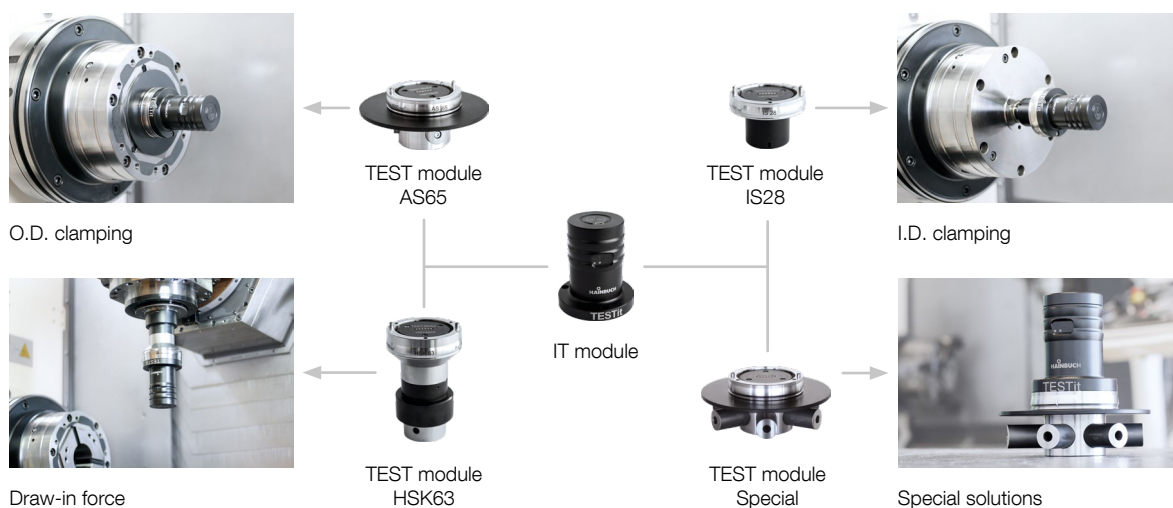
TEST AND MEASUREMENT TECHNOLOGY

TESTit clamping force measuring device

A regular check of the clamping force and draw-in force is imperative for a safe, precise, and productive process. These days no one can afford to manufacture with »theoretical clamping forces/draw-in forces«. Not to mention the fact that DIN EN 1550 requires that static clamping force measurements be carried out at regular intervals. The TESTit clamping force gauge measures and records the clamping force for O.D. clamping and I.D. clamping and even the draw-in force of hollow tapered shank locations. TESTit consists of two parts: The basic unit, which is the IT module, and the measuring units, which are the TEST modules. You only need the IT module once – regardless of whether you want to measure the clamping force at O.D. clamping or I.D. clamping or the draw-in force. It is so-to-speak the basis. Depending on the measurement application, there are different TEST modules that you can easily connect to the IT module via plug & play. Even special design TEST modules fit on the IT module. All aspects have been carefully considered! With TESTit you do not leave clamping force and draw-in force up to chance; you do prevent workpiece deformation and reduce scrap.

Key advantages

- Clamping force measurement for O.D. and I.D. clamping
- Draw-in force measurement of hollow tapered shanks
- Two units, connected with plug & play: IT module – the basic unit, TEST module – add on for various measurement applications
- Can be used rotating [under RPM] and for stationary applications
- Software for visualization and archiving



TEST AND MEASUREMENT TECHNOLOGY

TESTit clamping force measuring device

TESTit variants

	O.D. clamping 1	O.D. clamping 2 & 3	I.D. clamping	Draw-in force hollow tapered shanks
				
Sizes	AS18	AS32, AS65, AS65-4	IS28, IS50, IS70	HSK40, HSK50, HSK63, HSK100
Description	Clamping force measurement for O.D. clamping devices with round and smooth clamping surface	Clamping force measurement for O.D. clamping devices with smooth clamping surface	Clamping force measurement for I.D. clamping devices with round and smooth clamping surface	Draw-in force measurement in the hollow tapered shank tool location
Use	<ul style="list-style-type: none"> ■ Clamping heads and collets ■ 3-jaw chucks 	<ul style="list-style-type: none"> ■ For O.D. clamping 2: Clamping heads and collets / 3-jaw chucks / 2-jaw chucks / vises / centric vises ■ For O.D. clamping 3: 4-jaw chucks / 2x2 chucks / 2-jaw chucks / vises / centric vises 	<ul style="list-style-type: none"> ■ Segmented clamping bushings 	<ul style="list-style-type: none"> ■ Hollow tapered shanks
Applications	Multi spindle	Machining center, lathe	Machining center, lathe	Machining center

Order overview IT module

Product	Variant	In stock	Order no.
IT module	Without display device	✓	10014934
	With display device	✓	10014933

Please note:

IT module and TEST module are available separately.

System requirements software: Operating system Windows 10, version 1709 or higher.

Scope of delivery without display device

- IT module [basic unit], battery operating time approx. 8 h
- Measurement and archiving software [USB-Stick]
- Bluetooth® stick
- Storage case

Scope of delivery with display device

- IT module [basic unit], battery operating time approx. 8 h
- Tablet with 10 inch display
- Measurement and archiving software
- Storage case

TESTit software

- 3 options for visualizing the measured results; bar graph, speedometer or line diagram [force / RPM diagram]
- Archive the results as .pdf or .csv file
- Bluetooth® connection for the TESTit devices



TEST AND MEASUREMENT TECHNOLOGY

TESTit clamping force measuring device

TESTit for O.D. clamping in detail

Designation	
<ul style="list-style-type: none"> 1 TEST module [measuring unit] 2 IT module [basic unit] 3 Measuring segments [3 x 120° displaceable for O.D. clamping 1/2, 2 x 180° displaceable for 2-jaw measuring for O.D. clamping 2/3 and 4 x 90° displaceable for O.D. clamping 3] 4 USB-outlet for charging of the battery 5 Marking for positioning 6 Chuck with standard clamping head [smooth bore] 	

TESTit for I.D. clamping in detail

Designation	
<ul style="list-style-type: none"> 1 TEST module [measuring unit] 2 IT module [basic unit] 3 Measuring segments [3 x 120° offset] 4 USB-outlet for charging of the battery 5 Marking for positioning 6 Mandrel with standard segmented clamping bushing [smooth clamping surface] 	

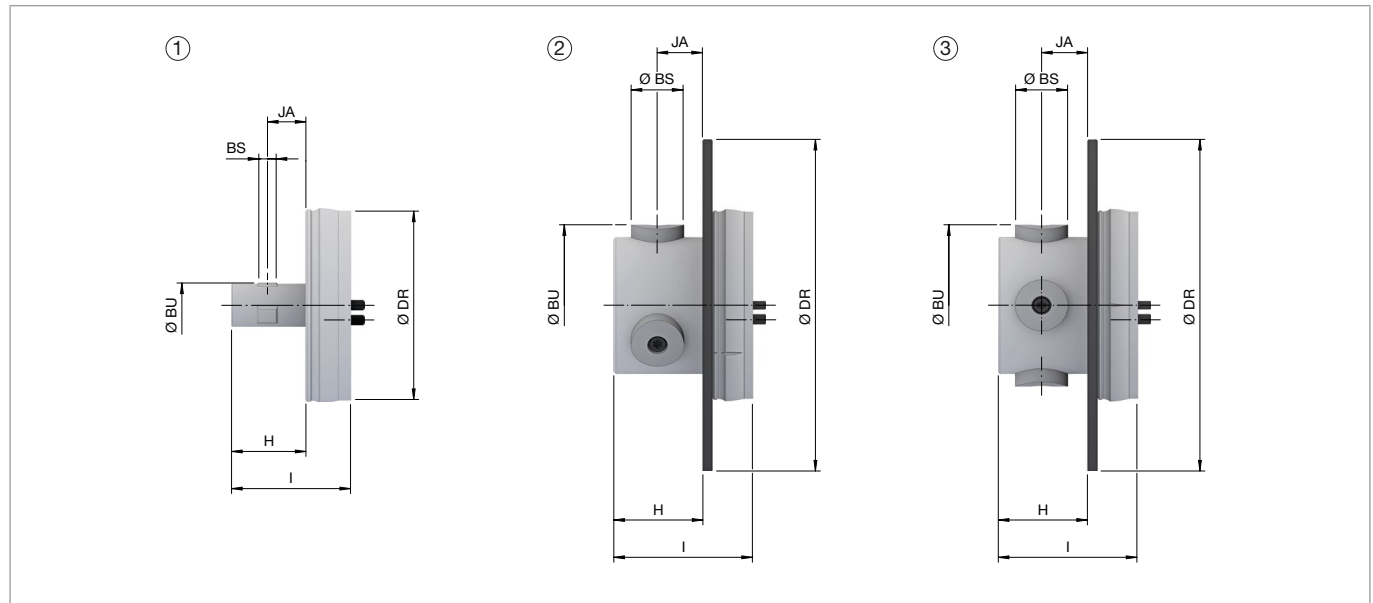
TESTit for draw-in force of hollow tapered shanks in detail

Designation	
<ul style="list-style-type: none"> 1 TEST module [measuring unit] 2 IT module [basic unit] 3 Measuring element 4 USB-outlet for charging of the battery 5 Turret spindle with hollow tapered shank 	

TEST AND MEASUREMENT TECHNOLOGY

TESTit clamping force measuring device

TEST modules for O.D. clamping. Technical data



Size		AS18	AS32	AS65	AS65-4
Clamping Ø [mm]	BU	18	32	65	
Type		1	2		3
Measuring range attribute [4 measuring points] [kN]					0 – 150
Measuring range attribute [3 measuring points] [kN]		0 – 75	0 – 140	0 – 225	
Measuring range centric [2 measuring points] [kN]			0 – 90	0 – 150	
Measurement accuracy of the final value ± [%]		≤ 3			
RPM n max. [1/min.]		10000	8000	6000	
Total length [mm]	I		48		56
Outer Ø [mm]	DR	76		134	
Length [mm]	H	30	28	36	
Length 2 [mm]	BS	7	14	21	
Distance [mm]	JA	15,5	14,5	18,5	
In stock		✓	✓	✓	✓
Order no.		10014843	10014845	10014846	10014847

Scope of delivery

- TEST module incl. one set of measuring bolts in the specified clamping diameter [except for AS18]
- Service Pass
- Storage case

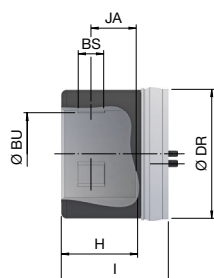
Plug gauge

Product	Figure	Suitable for	Clamping Ø [mm]	Application	In stock	Order no.
Plug gauge		AS32	32	For 2-point clamping force measurement	✓	10015181
			42	For 3-point clamping force measurement	✓	10015184
			52		-	10015185
			65		-	10015187
		AS65	80	For 3-point and 2-point clamping force measurement	✓	10015188
			100		✓	10015190
			120		-	10015191
			120		✓	10015193
		AS65-4	65	For 4-point and 2-point clamping force measurement	✓	10015195
			120		✓	10015197
					✓	10015198

TEST AND MEASUREMENT TECHNOLOGY

TESTit clamping force measuring device

TEST modules for I.D. clamping. Technical data

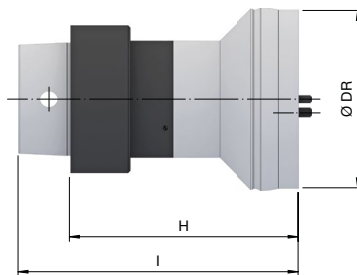


Size		IS28	IS50	IS70
Clamping Ø [mm]	BU	28	50	70
Measuring range attribute [3 measuring points] [kN]		0 – 100	0 – 200	0 – 240
Measurement accuracy of the final value ± [%]		≤ 5		
RPM n max. [1/min.]		7000		
Total length [mm]	I	53	63	68
Outer Ø [mm]	DR	76	95,5	95,5
Length [mm]	H	35	45	50
Length 2 [mm]	BS	15	19	19
Distance [mm]	JA	21,5	27,5	30,5
In stock		✓	✓	✓
Order no.		10014840	10014841	10014842

Scope of delivery

- TEST module
- Service Pass
- Storage case

TEST module for draw-in force of hollow tapered shanks. Technical data



Size		HSK40	HSK50	HSK63	HSK100
Max. measuring range axial [kN]		0 – 20		0 – 50	0 – 90
Measurement accuracy of the final value ± [%]		≤ 3			
Total length [mm]	I	105	115,5	120	188,5
Outer Ø [mm]	DR	76	76	98	100
Length [mm]	H	91	98	138,5	138,5
In stock		-	-	✓	-
Order no.		10015203	10015204	10014848	10015205

Scope of delivery

- TEST module
- Service Pass
- Storage case