



IFT

Clamping Force Tester

Superior Clamping and Gripping



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General information

Versatile clamping force tester

The versatile clamping force tester IFT is specially designed to ensure maximum process reliability and efficiency of lathe chucks in daily operations. It can be used on 2-, 3- and 6-jaw chucks at up to 6,000 rpm regardless of the chuck manufacturer, and at a maximum clamping force of 90 kN per jaw. Using adjustable measuring extensions, it is possible to vary the clamping diameter between 72 mm, 96 mm and 136 mm.

Static or dynamic measuring

Data evaluated is carried out via wireless data transfer via app to an industrial tablet computer or on other end devices. The battery run time of the measuring head is more than 90 minutes; the charging time is below 3 minutes. The clamping force tester can be used for static measurement as well as for determining the loss of clamping force under speed. Furthermore it can be used for individual adjustment of the required initial clamping force for the respective machining operation.

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Product Features

The new SCHUNK IFT distinguishes itself by

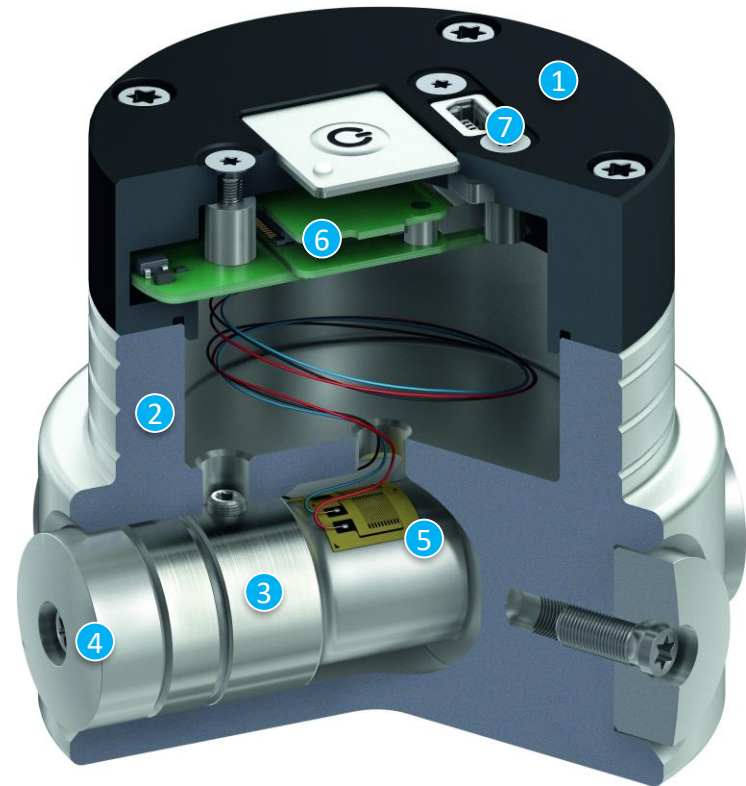
- Applicable for 2, 3 or 6-jaw chucks
- Static and dynamic measurement
- Max clamping force of 90 kN per jaw
- Dynamic measurement up to 6.000 min⁻¹
- An integrated data bank for monitoring of the chuck history
- Wireless data transfer to an industrial tablet computer
- Long battery run time of the measuring head
- Charging time of the measuring head below 3 minutes



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Cutaway view

- ① Electronics housing
- ② Hardened and extremely rigid base body
- ③ Force transducer
- ④ Adjustable clamping extension
- ⑤ High-resolution strain gauge
- ⑥ Integrated electronics
- ⑦ Mini-USB-connection

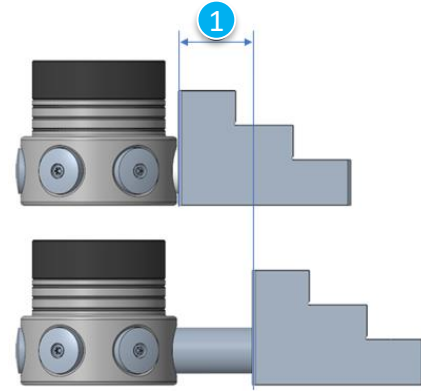


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Function of IFT



Large clamping range



- 1 Large clamping range due to extensions

Intuitive user interface



- 1 Values
- 2 Clamping force-RPM-Diagram

Display of the chuck history



- 1 Maschine number
- 2 Chuck name
- 3 Chuck history

IFT Set

Technical data (ID: 1404235)

Technical data Tablet

Description	Tablet	
Display size	8"	
System software	Android	
Charge connection	USB micro	
Operating temperature	[°C]	0 – 40
Protection class	IP67	
Sending-/Receiving frequency	[GHz]	2.4
Data exchange	MicroSD; USB micro	

Technical data Measuring Head

Description	Measuring Head	
Power supply	Internal energy storage	
Energy storage capacity	approx. 1.5 h @ 100% d.c.	
Charge time	[min]	< 3
Charge connection	USB mini	
Number of jaws	2, 3 and 6 jaws	
Force measuring range	[kN]	0 – 180 (2 jaws) 0 – 270 (3 jaws) 0 – 540 (6 jaws)
Accuracy force measurement	[% fsr]	< 3
Speed measurement	[min ⁻¹]	approx. 200 – 6000
Accuracy speed measurement	[% fsr]	< 1
Clamping range	[mm]	∅ 72/∅ 96/∅ 136
Value transmitting rate	[ms]	500
Operating temperature	[°C]	0 – 40
Sending frequency	[GHz]	2.4

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