Clamping force tester

Clamping force tester for clamping devices with two jaws

Hand in hand for tomorrow

Universally applicable clamping force tester for stationary clamping devices

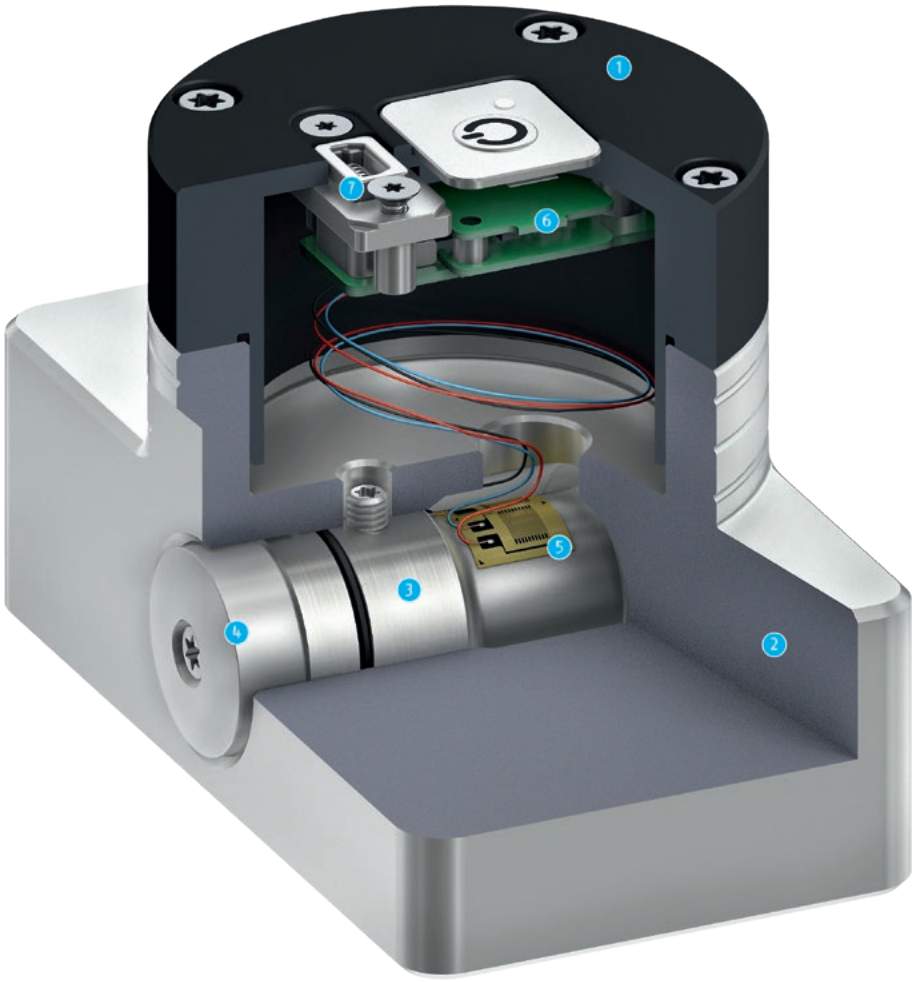
The universally applicable clamping force tester IFT SST is specifically designed to ensure maximum process reliability and cost-efficiency in the daily operation of stationary clamping devices. It is suitable for measuring 2-jaw clamping force blocks or vises, regardless of the manufacturer. The clamping distance for the measuring head is 55 mm. Data evaluation is performed wirelessly via an app on an industrial tablet PC or alternatively via the subsequent export to other end devices. An integrated database enables access to stored measured values, which can be saved on a machine-specific basis. The battery service life of the measuring head is more than 90 minutes; the charging time is below three minutes.

Advantages – Your benefits

- **Universally applicable**
  Manufacturer-independent for 2-jaw clamping force blocks or vises
- **Wireless data transfer via app to an industrial tablet and export to other end devices**
  Quick and easy data evaluation without troublesome cables
- **Direct display of the clamping force progression in the app**
  No further external devices required
- **Integrated database in the app**
  Clamping force history can be called up quickly and easily at any time
- **Extremely fast transmission of measured values**
  High-resolution and extremely accurate clamping force progressions
- **Long battery service life of the measuring head**
  No constant recharing required
- **Loading duration of the measuring head below three minutes**
  The measuring head is quickly ready for use even after a longer period of non-use

Function measuring head IFT SST

The clamping force tester IFT SST allows the measurement of clamping forces on clamping force blocks and vises with two chuck jaws. By means of a precise force transducer in the measuring head, the mechanical forces that occur are converted into an electric signal and amplified by the integrated electronics. The electric signals are then transmitted from the measuring head to an industrial tablet computer.



1. **Electronics housing**
   Robust protection of sensitive electronics
2. **Hardened and extremely rigid base body**
   For precise measuring results
3. **Force transducer**
   For absorption of mechanical forces from the clamping device
4. **Hardened clamping supports**
   For universal use
5. **High-resolution strain gauge**
   For converting the mechanical force into an electric signal
6. **Integrated electronics**
   For amplification, evaluation and transfer of electric signals
7. **Mini USB connection**
   For rapid and simple loading of the measuring head in less than three minutes

Case contents IFT SST set

The IFT SST clamping force tester is delivered in a convenient yet robust case. The case contains all of the necessary tools for conducting clamping force measurements on the machine.

1. **Industrial tablet computer**
   With intuitive user interface and integrated database, where the measured values can be stored based on the relevant machine and clamping device
2. **Measuring head**
   For determining the clamping force of clamping devices with two jaws
3. **USB charging adapter (worldwide)**
   For universal charging of the tablet PC as well as the measuring head, no matter where on this earth it is located
4. **USB charging cable**
   Available as USB mini and USB type-C version, for charging the tablet PC and clamping head
5. **Case**
   In a convenient and robust design

Intuitive User Interface

A particularly user-friendly operator interface enables all users to operate the clamping force tester intuitively. Depending on the application, the app offers an optionally adapted interface.

1. **Selection of clamping device**
2. **Selection of clamping force measurement**
3. **Current clamping force**
4. **Current temperature**
5. **Clamping force profile**
6. **Start/stop recording**
7. **Save data**

Display clamping device history

The integrated database allows access to stored measured values. Each clamping device is stored in a machine-related way. This allows the measured values to be visualized at any time via the app.
Advantage: The history of the clamping device can be viewed directly and without additional equipment. The course of the clamping force provides information on the maintenance condition of the clamping device.

1. **Selection of clamping device**
2. **Selection of history**
3. **Display of date and time of the clamping force measurement**
4. **Display of the actuation pressure**
5. **Export data**
6. **Delete entry**

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Scope of delivery

Industrial tablet computer including app, measuring head, intermediate pieces for clamping distance 55 mm, spare screws, Torx tool key, USB charger (worldwide), USB charging cable, calibration certificate, operating manual

Technical data

Description	ID	Weight [kg]
IFT SST Set	1475766	4

Tablet technical data

Description		
Display size		10"
Operating system		Android
Charger connection		USB Typ C
Operating temperature	[°C]	0 – 40
Protection class		IP67
Transmission/receiving frequency	[GHz]	2,4
Data exchange		Micro SD; USB Typ C

Technical data measuring head

Description		
Capacity		approx. 1.5 h @ 100% d.c.
Charging process	[Minutes]	< 3
Charger connection		USB mini
Range of measurement, total clamping force	[kN]	0 – 120 kN
Range of measurement, clamping force per jaw	[kN]	0 – 60
Measured value transmission rate	[ms]	500
Operating temperature	[°C]	0 – 40
Protection class		IP67
Transmitting frequency	[GHz]	2,4
Distance tablet/measuring head	m	10

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