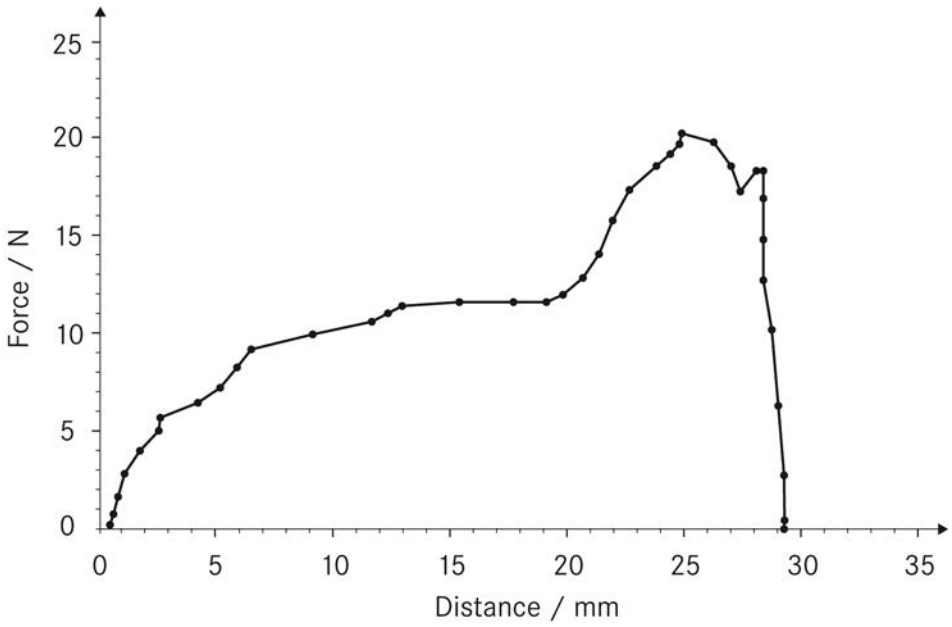


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Force-displacement analysis software for testing of materials

Features

- AFH FD or LD software is designed for all applications that require the measurement of forces, depending on the displacement. Typically these are force progression graphs in penetration tests or pullout tests
- The program simultaneously requests the measurements from a force measuring device, e.g. SAUTER FH, as well as a length measuring device, e.g. 1 SAUTER LB resp. LD
- The measurements from both instruments are transferred continuously to the PC, synchronised by the AFH FD resp. LD software and exported in the form of a graphic, as well as free data format for simple processing in Microsoft Excel®
- The software AFH FD resp. LD is compatible with all instruments of series SAUTER FC, FH, FL
- These measuring instruments are usually used with SAUTER test stands, in particular those from the SAUTER TVM-N and TVS, range. However, it is also possible to use them with mechanical testing machines
- Further analysis functions:
  - Extent of the test object
  - Tensile and compressive force
  - Endurance testing
  - Archiving the recorded data
- 2 Scope of supply SAUTER AFH FD resp. AFH LD:
  - AFH FD resp. LD software on DVD
  - User manual
  - Interface cable RS-232 for FH (FH-A01)
  - Interface cable RS-232 for FL (FL-A04)
  - Interface cable USB for FL (FL-A01)
  - Interface cable RS-232 for LB (LB-A01)
- Compatible with the following operating systems: Microsoft Windows 7/8.1/10
- 3 Order example for a complete test system:
  - FH 5K. (Digital force gauge)
  - LB 300-2. (Digital length measuring device)
  - AFH FD (Force-distance evaluation software)
  - TVM 5000N230N.* (Test stand)
  - LB-A02* (Mounting LB on test stands)
  - 2× AFH 12 (RS-232/USB adapter)
  - AC 04* (Test object holder)
  - 963-163* (Force calibration)
  - 961-150* (Length calibration)

* not necessarily required for operating the AFH FD software

SAUTER AFH LD

- Force-displacement software (like AFH FD), but only in combination with a lenght measuring device of SAUTER LD series

Technical data

- Data recording rate max. 3 Hz (specially in combination with SAUTER FH and SAUTER LB)
- Data recording rate max. 25 Hz (in combination with SAUTER LD, depending on the measuring instrument)
- Cable length of PC connection cable (RS-232) approx. 1,5 m

Accessories

- **Interface cable RS-232**
  for SAUTER FH: SAUTER FH-A01
  for SAUTER LB: SAUTER LB-A01
- **RS-232/USB adapter,** to connect peripheral devices with USB connection, SAUTER AFH 12
- **RS-232/PC-Verbindungskabel** to connect models from the SAUTER FC range to a PC, SAUTER FC-A01

STANDARD

1 DAY

Model SAUTER	
AFH FD	
AFH LD NEW	

NEW New model

SAUTER GmbH · c/o KERN & SOHN GmbH · Ziegelei 1 · 72336 Balingen · Germany · Tel. + 49-[0]7433-9933-0 · Fax + 49-[0]7433-9933-149 · **www.sauter.eu**

SAUTER Pictograms:



Adjusting program (CAL):
For quick setting of the balance's accuracy. External adjusting weight required.



Calibration block:
standard for adjusting or correcting the measuring device.



Peak hold function:
capturing a peak value within a measuring process.



Scan mode:
continuous capture and display of measurements.



Push and Pull:
the measuring device can capture tension and compression forces.



Length measurement:
captures the geometric dimensions of a test object or the movement during a test process.



Focus function:
increases the measuring accuracy of a device within a defined measuring range.



Internal memory:
to save measurements in the device memory.



Data interface RS-232:
bidirectional, for connection of printer and PC.



Data interface USB:
To connect the balance to a printer, PC or other peripheral devices.



Data interface Infrared:
To transfer data from the balance to a printer, PC or other peripheral devices.



Control outputs (optocoupler, digital I/O):
to connect relays, signal lamps, valves, etc.



Analogue interface:
to connect a suitable peripheral device for analogue processing of the measurements.



Statistics:
using the saved values, the device calculates statistical data, such as average value, standard deviation etc.



PC Software:
to transfer the measurements from the device to a PC.



Printer:
a printer can be connected to the device to print out the measurements.



GLP/ISO record keeping:
of measurements with date, time and serial number. Only with SAUTER printers.



Measuring units:
Weighing units can be switched to e.g. non-metric at the touch of a key. Please refer to website for more details.



Measuring with tolerance range (limit-setting function):
Upper and lower limiting can be programmed individually. The process is supported by an audible or visual signal, see the relevant model



ZERO:
Resets the display to "0".



Battery operation:
Ready for battery operation. The battery type is specified for each device.



Rechargeable battery pack:
rechargeable set.



Mains adapter:
230V/50Hz in standard version for EU. On request GB, AUS or USA version available.



Power supply:
Integrated, 230V/50Hz in EU. More standards e.g. GB, AUS or USA on request.



Motorised drive:
The mechanical movement is carried out by a electric motor.



Motorised drive:
The mechanical movement is carried out by a synchronous motor (stepper).



Fast-Move:
the total length of travel can be covered by a single lever movement.



DAkkS calibration possible:
The time required for DAkkS calibration is shown in days in the pictogram.



Factory calibration:
The time required for factory calibration is specified in the pictogram.



Package shipment:
The time required for internal shipping preparations is shown in days in the pictogram.



Pallet shipment:
The time required for internal shipping preparations is shown in days in the pictogram.

Your SAUTER specialist dealer: