

Testing Equipment for Greases

Roll Stability Tester

RST-T200-P4
ASTM D 1831 / MIL-G-10924

During this test the lubricating grease is undergone to stress similar to that in the ball bearings. Further tests (i.e. cone penetration) reveal changes in the shear stability of the lubricating grease and allow an assessment of its durability.

Features:

Designed for long test runs at temperatures up to 200 °C
High accuracy digital temperature controller
Easy-to-use digital timer with two presets allows unattended operation
Low noise operation
Uniform heat distribution provided by aluminium fan and shielded heaters
Protection against overheating.

Technical data:

Rotary speed: 165 rpm
Test temperature: up to 200° C
Voltage: 220 V / 240 V, 50 Hz (different on request)
Power: 1,8 kW
Dimensions: 700 x 730 x 690 mm (W x H x D)
Weight: approx. 70 kg



Included accessories:

4 nickel-plated test cylinders with end caps and seals
4 test rollers (5 kg +/- 50 g)
Tool for closing and opening the cylinders

Optional:

Adjustable rotation speed of cylinders (100 – 200 rpm),
test cylinders and rollers made of stainless steel.

Low Temperature Torque Tester LT3

The Low Temperature Torque Tester LT3 is used to determine the resistance caused by the grease in an axially loaded ball-bearing at temperatures down to -73°C in accordance with IP186/93. The tests are running under standard axial loads 50 N in the range of torques 0 - 2000 N * mm.

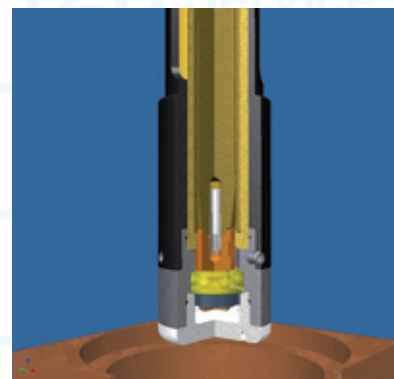
As compared against the conventional devices the Low Temperature Torque Tester LT3 includes several improvements, as electronically controlled high precision direct drive, sophisticated torque sensor with high accuracy, semi automatic operation with electronic data acquisition and closed loop cooling jacket.

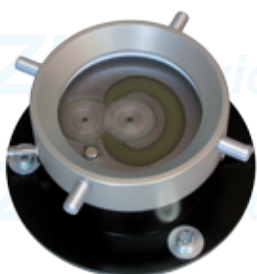
The tester includes an apparatus with the drive and measuring unit, cooling jacket for hook-up with existing cooling device, stand - alone controller unit with PLC and touch panel, PC Software for data acquisition and analysis. The housing suited for different bearing sizes, re-use of existing cooling devices and tailor-made solutions are available optionally.



Technical data:

Test temperature: down to -73°C (depending on external cooling device)
Axial load: 50N (standard)
Range: 0-2000 N * mm (other ranges on request)
Voltage: 1 x230V~
Power: 0,4 kW
Dimensions: 500 x 1400 x 700mm (W x H x D)
Dimensions of controller: 500 x 300 x 500mm (W x H x D)
Weight: approx. 75 kg (12,5 kg)





Grease Worker

(after Klein)

This test method is used to determine the shear stability of lubricating greases for ball and plain bearings. A small horizontal gear type pump is operated in short circuit to work the grease. During the test changes of the test sample can be monitored. Afterwards changes in the consistency of the lubricant can be analyzed.

Features:

- Requires only 40 g of grease for testing
- Changes of the grease can easily be monitored through transparent top
- Grease temperature is monitored and displayed
- Assessment of grease quality is possible after very short time (approx. 90 min)
- Good reproducibility
- Temperature can be reduced by cooling Overheating protection

Technical data:

Test speed:	1550 rpm
Test temperature:	up to 70°C
Voltage:	3 x 400 V, 50 Hz (60 Hz)
Power consumption:	400 W
Dimensions:	410 x 500 x 410 mm (B x H x T)
Weight:	approx. 30 kg

Supplied accessories:

- Backup top with magnetic safety contact
- Wire hook for disassembly

Hydraulic Grease Press HGP - 51813

DIN 51813

Features:

- Easy to operate
- Low noise operation
- Different sample volumes and sieves available

Technical data:

Operating pressure:	up to 150 bar (2175 psi)
Test load at piston:	60 – 70 kN
Sample volume:	0,5 kg (more on request)
Voltage:	230 V (other on request)
Power consumption:	0,4 kW
Dimensions:	490x 1150x 380mm (W x H x D)
Weight:	ca. 70 kg

Supplied accessories

- Wrench (size 41)
- 10 x support sieves
- 10 x sieves (25 µm)
- 2 x PTFE-holder

Options

- Tailor made solutions available
- Special version of this test apparatus is also suitable for analyzing the filterability of grease

