Product information BASALT-S2

Pin-on-Disc Tribometer

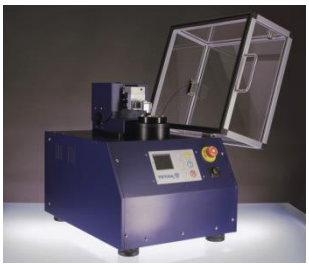
Tribology in a nutshell.

www.tetra-ilmenau.de

SENSORIK

BASALT-S2 – Tribology in a nutshell

Tribology is the science and engineering of interacting material surfaces in relative motion. A Tribometer is an instrument for characterizing friction, wear, scratch resistance and influences of certain lubrication and environmental conditions to the tribological system behavior.
BASALT-S2 is a research instrument for a high-resolution view in local and temporal dimension of tribomechanics.

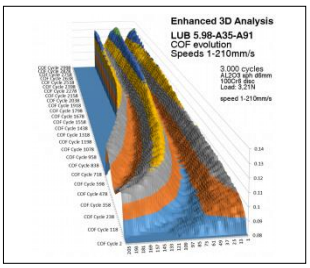


Precision measurement

- Nominal force (load) up to 10 N
- Dynamic force control
- Tangential force (friction) ±10 N
- Temperature and humidity
- Force resolution 1 mN

Relative motion

- Dynamic rotation and oscillation
- Low vertical and radial run-out
- Track speed 1 mm/s … 1.3 m/s
- Easy clamping of specimen discs up to Ø60 mm



Advanced Data Mining

- Data acquisition rate 1 kHz
- Measure data streaming to PC
- Jitter <1 µs
- Advanced recording rules
- Exportable ASCII files for analysis

Benefits

Reproducible Measurement

Enhanced Information Depth

Intuitive Operation

Exceptional Cost-Benefit-Ratio

Fast Service

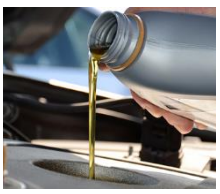
Certified Quality
ISO 9001:2008
„Made in Germany“

Application

- Metals, ceramics and glass
- Polymers and elastomers
- Textile, wood and paper
- Composite materials
- Thin films (CVD, PVD, optical …)
- Coatings (i.e. lacquer, PTFE …)
- Mineral oils and greases
- Biogenic and solid lubricants
- Surface-Microstructures
- Semiconductors and Electronics (passivation, metallization, MEMS)
- Medicine technologies and pharmacy
- Consumer Goods
- and many more …





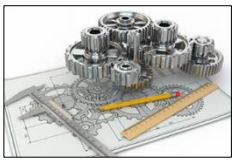


Users

Small and medium-sized enterprise

Highest precision
Compact device

Always one step ahead.



Contract research lab

Automate recurring tasks
Fast return on invest

Always one step ahead.

Practical Know how Transfer

Fast familiarization
Robust design

Advanced Data Mining

Large data handling and enhanced

School and University

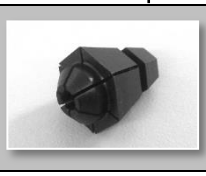
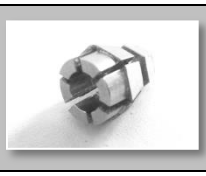
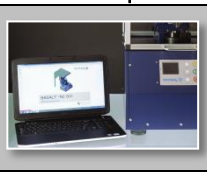
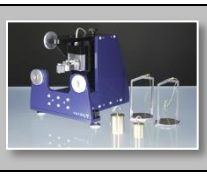
Industrial research lab

Portfolio

Delivery includes

- Device with rotation table
- 2D-force-sensor F_N10 N | ±F_T10 N
- 1x Ø6 mm ball holder
- 1x Disc holder (Ø20 – 50 mm)
- Software Installer with e-Manual (USB)
- Start Specimen Set (Steel Ball/ Steel Disc)
- Cables and printed manual

Optional Accessories

Specimen holders		Environment	Data Acquisition	Calibration
				
Ball holders Ø3-10mm 1/8“ – 1/2	**Pin holders** Ø3-10mm 1/8“ – 1/2	**Insulation Cover** Temp. /Humidity - Sensors & Gas Inlets	**Workstations** Desktop/Notebook Pre-installed Software	**Calibration Tool** Calibrating 2D-force-sensor with weight set
				
Face chuck for irregular specimen shapes	**Lubrication cup** for lubricated experiments			

Application consultancy and sales

TETRA GmbH
Dipl.-Ing. Udo Haupt

sales@tetra-ilmenau.de

Tel: +49 (3677) 8659-11

International partners for consultancy, sales and service

Western Europe	*China and Taiwan*	*United States*
www.falex.eu	www.winwintec.com	www.compass-instruments.com
Dr. Dirk Drees	Leon Zhu	James P. Hepp
office@falex.eu	china@winwintec.com	heppjp@compass-instruments.com
+32 16 407965 tel +32 16 405128 fax	+ 86 10 6266 7685 tel + 86 10 6266 7685 fax	+1 630 556 4835 tel +1 630 556 3679 fax
Falex Tribology Wingepark 23B B-3110 Rotselaar Belgium	WinWinTec Bejing Office Room 220, Block 2B Gui Gu Liang Cheng,No.1 Nong Da South Road Haidian District Beijing 100084 China	Compass Instruments 1020 Airpark Drive Sugar Grove, IL 60554 United States of America

Contact

TETRA Gesellschaft für Sensorik, Robotik und Automation mbH

info@tetra-ilmenau.de

Gewerbepark „Am Wald“ 4

98693 Ilmenau - Germany

Tel: +49 (3677) 8659-0, www.tetra-ilmenau.de