

TRIBOscratch®

scratch and linear tester

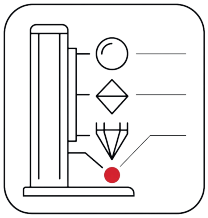
THREE TESTERS. ONE PLATFORM.

LINEAR TESTER · SCRATCH TESTER · TRIBOMETER

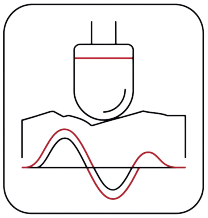
The TRIBOscratch unites scratch testing, wear analysis and tribology in a single system. The combination of electronic load control and highly dynamic servo drive enables precise, reproducible and standard-compliant testing for research, development and quality control.

- **Three test modes on one platform** – linear test, scratch test and tribology
- **Electronic load control** for precise and reproducible results
- Friction force and friction coefficient measurement (optional)
- Designed for **ISO-, ASTM- and OEM-compliant testing.**
- Highly dynamic **servo drive** up to **1500 mm/s**
- **Standardized** and **custom** test tips
- **Swiss Made**

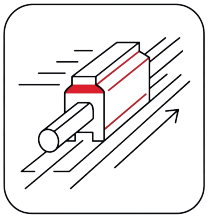
TECHNICAL HIGHLIGHTS



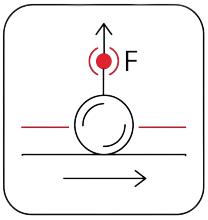
Three Test Methods. One Platform.
Combines linear, scratch and tribo tests in one platform. The system replaces multiple single devices and covers a wide range of surface characterization tasks.



Active Load Control
The electronically controlled force application compensates sample geometry variations in real-time, ensuring constant measurements.



Highly Dynamic Drive
A linear servomotor enables high-precision test speeds up to 1500 mm/s on a 200 x 200 mm workspace.



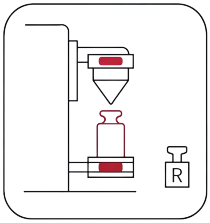
Integrated Tribometry
Continuous friction force measurement at a 90° angle to the running direction turns the device into a full linear tribometer.



Versatile Test Tips
The system supports standard and special tips, from spheres and Rockwell tips to compatible industrial OEM-specific test geometries.

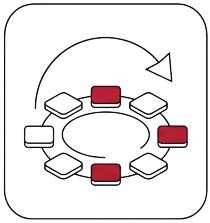
This technical data sheet is written according to the current state of knowledge. Nevertheless, no liability can be derived from it. Furthermore, the descriptions herein are non-binding and do not constitute guaranteed product properties.

ONE DEVICE, MANY POSSIBILITIES



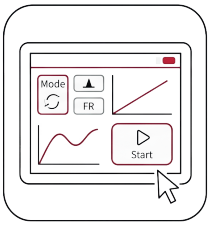
Automatic Calibration

A dedicated calibration load cell guarantees reproducible loads at any time without manual user intervention.



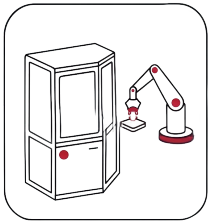
Fast Sample Change

Application-specific clamping systems and mounts enable extremely fast, simple and exactly repeatable sample mounting.



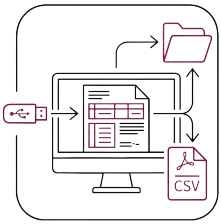
Intuitive Operation

The integrated touchscreen provides intuitive operation with dedicated menus for each test mode. Custom test routines can be implemented for specific applications.



Production Testing

Thanks to the enclosed test chamber and fully automated test sequences, the system integrates directly into production lines.



Export and Reporting

Measurement data can be easily exported in CSV format. The PC software also offers tailored templates for report generation.

TECHNICAL DATA



- **Scratch resistance & critical load:** ISO 1518, ASTM D7027
- **Polymers & plastics:** ISO 19252
- **Cross-cut test:** ISO 2409, ASTM D3359 (with suitable adapter)
- **OEM & Company Test Methods:** Compatible test geometries for Bosch, BMW, VW, Sikkens, IHD, van Laar, Clemen, Oesterle

Parameter	Triboscratch
Workspace (X x Y)	200 × 200 mm
Z-clearance	100 mm
Drive system	Linear servomotor
Test speed	up to 1500 mm/s
Normal load (Standard)	1 – 100 N
Normal load (Optional)	0.5 - 50N
Load control	Electronic, with active feedback
Friction force measurement	Optional, ±25 N
Friction coefficient	Optional, continuous recording
Test tips	Spheres, Rockwell, Bosch pins, custom
Calibration	Automatic
Operation	Integrated touchscreen
Power supply	110 - 230 V AC, 50/60 Hz
Dimensions (L x W x H)	73 × 43 × 85 cm
Weight	82.5 kg

Experience TRIBOscratch - book an appointment now.

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Product & demo video