

Fretting Test Bench BigFret

Expert Testing with an Eye for Detail



ON THE TRAIL OF TRIBOOXIDATION

The BigFret test bench enables the high-precision investigation of tribochemical reactions in frictional contact (fretting corrosion / fretting).

MEASUREMENT = ANALYTICS

The directly integrated industrial camera control system allows detailed interval documentation of the operation of the upper and lower specimen.

REALITY OPTIMALLY REPRODUCED

Flexible adjustment options for the test parameters ensure precise simulation of real operating conditions.

BigFret

Contact geometry	Plane-on-Plane, Ball-on-Plane, Cross-Cylinder, Cylinder on Plane, Larger Sphericals on Plane Adapter for aligning flat contacts included
Form of motion	Sliding, oscillation
Stroke & Frequency	10 - 600 µm; 0.01 - 50 Hz
Load range	Basic version 50 - 2,500 N
Temperature range	Room temperature - 120 °C
Sensor technology	Frictional force, displacement / stroke, temperature (top and bottom sample), online image monitoring
Weight range	Approx. 95 to 120 kg
Dimensions	1600 mm x 800 mm x 800 mm (H x W x D)
Electrical connection	230 V; 16 A; 50/60 Hz
Measuring frequency	Up to 20 kS/s
Options	Extended load range Online wear measurement Contact resistance (for metal samples) Structure-borne noise & ultra-fine displacement measurement

