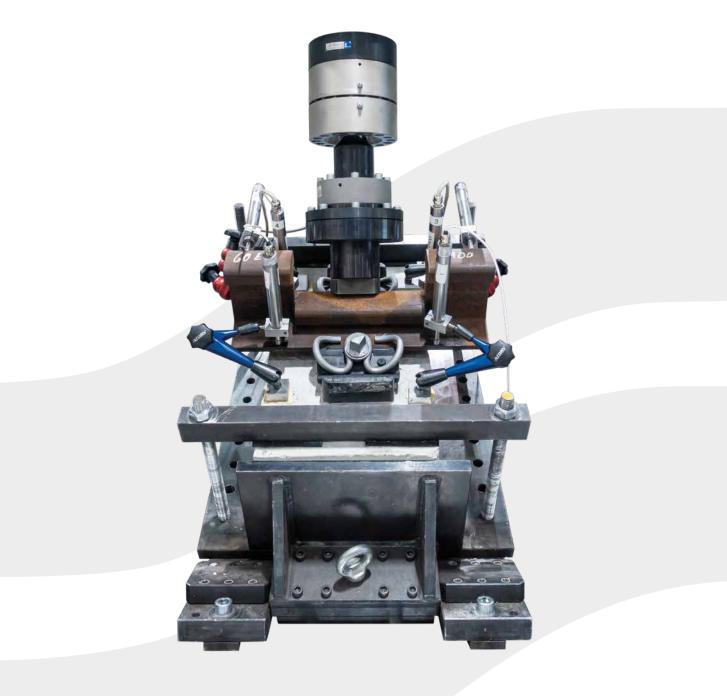


Schwihag Test-Center

Certified test center for testing procedures and material examinations (metallography, mechanical tests, plastic analyses as well as dimensional and crack tests)



As a service to customers, Schwihag AG offers to perform tests in accordance with the common requirements of railroad superstructures or individually tailored to the customer's needs. In Schwihag AG's in-house test center, components for switch and track fastenings can be tested for their static and dynamic load capacity and biaxial, static and dynamic tests can be carried out. The maximum vertical test load is 250 kN and the maximum horizontal test load is 100 kN.

The components can be tested biaxially in horizontal position or uniaxially in inclined test and among others rail fastening systems for track and switches, hollow sleepers, closures as well as rolling devices

(e.g. according to EN13481, EN13146, ISO22074, AREMA and national approval guidelines).



Schwihag AG also offers mobile measurements in the track and in the switch to determine the behavior of rail fastening components under a wide range of operating loads.

Schwihag's fixture construction enables the manufacture of customer-specific adapters and test fixtures that ensure optimum positional adjustment and clamping of the components to be tested during the tests.

Fatigue tests



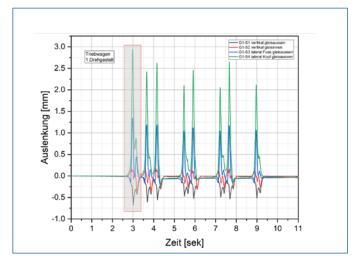
Special fastening systems for switches, crossings & guide rails

Fastening systems for steel sleepers

Mobile system for measurements in the track



Track measurements under operating conditions

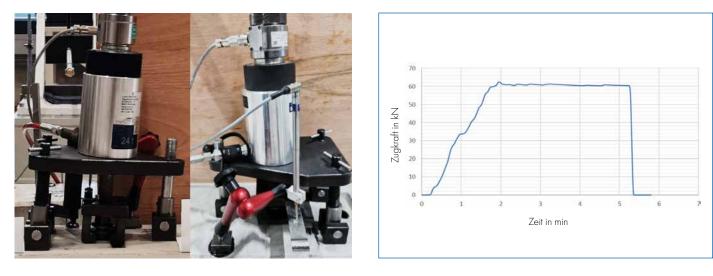






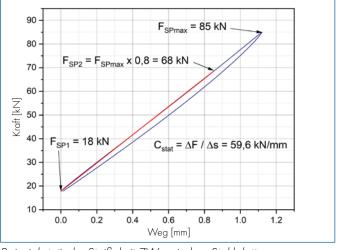


Dowel pullout tests



Rail pad stiffness testing

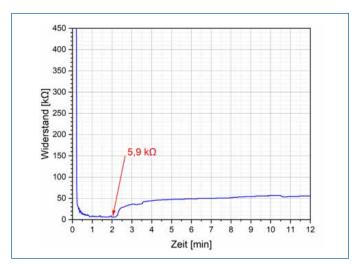




Beispiel statische Steifigkeit ZW zwischen Stahlplatten

Electrical resistance test







Test center equipment (selection)



Gom 3D measurement system

In addition to the static and dynamic test methods, the following material tests can be carried out tests can be carried out:

- Optical 3D measurement of components
- Hardness testing
- Testing of tensile/compressive strength
- Microsection preparation and microstructure analysis (optical microscopy)
- Polymer investigations (melting point, heat of fusion, glass transition point)



Gom 3D object scanner: digitization of components



Zwick Z-250 tensile testing machine with max. 250 kN.





References (selection)









SIEMENS



SWITZERLAND SCHWIHAG AG KONSTANZERSTRASSE 70-72 8274 TÄGERWILEN GERMANY SCHWIHAG GMBH AM OSTERGRABEN 5 04435 RADEFELD uk **Schwihag uk ltd.** UNIT 30, COULMAN ROAD INDUSTRIAL ESTATE

THORNE, DONCASTER DN8 5JU

USA SCHWIHAG TST INC. 4000 MAIN STREET 64030 GRANDVIEW MO

ЛО

Version 2024-01 - 17

www.schwihag.com info@schwihag.com