High-frequency pulsator HFP 5100

Technical data

- Max. static load: +/- 100 kN
- Max. dynamic load: 100 kN (+/- 50 kN)
- Max. elastic test strain: > +/- 2mm
- Frequency range (sample dependent) 35 300 Hz
- Quick grips and grip set for round and flat samples with diameters from 2.5 to 30 mm and thicknesses from 0.2 to 20 mm
- Measurement and control electronics with control computer (Prog.:TestXpert)
- Customized measuring and control SAFD evaluation software for statistical evaluation of endurance and fatigue tests in high cycle fatigue and in the transition zone to long life fatigue)
- Graphic presentations in S/N graphs and probability networks and calculations of failure and survival probability by use of various statistical analysis methods and distribution laws

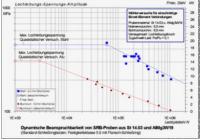
Areas of use / application

• Dynamic tests to determine endurance of mechanically /thermally/ combined joined samples / components (e.g. steel, light metals, ceramics, plastics) in tension, compression, pulsating and fluctuating load areas and mechanical breakage tests



High frequency pulsator in production engineering lab during high cycle fatigue tests







Retaining ring bolt connections (left - unit, right - stressed sample)

<u>Example of application:</u> proof of required connection resilience through S/N lines of steel and aluminum samples for mechanically joined components from vehicle production



