

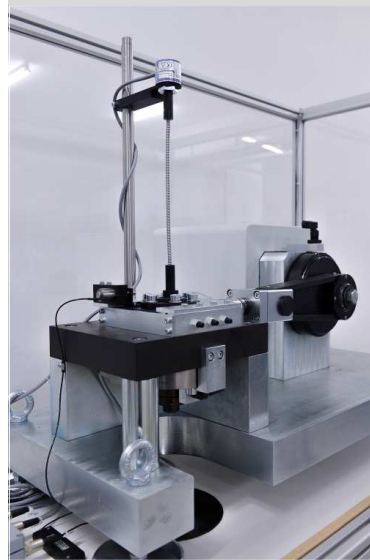
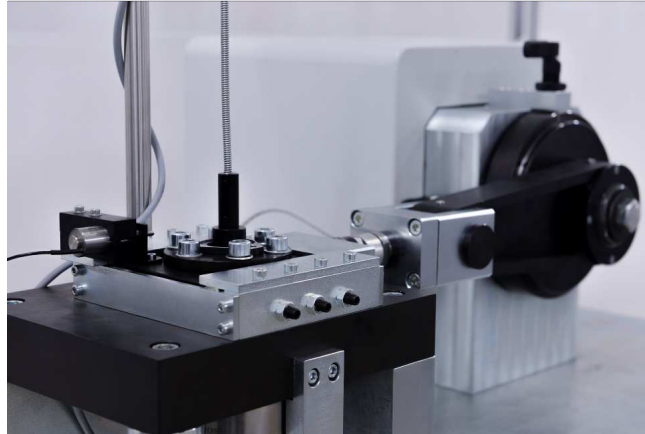
Test

Vibration testing machines by Test

The comprehensive quality inspection of screws, bolts and nuts also includes the vibration testing according to "Junker". For that **Test** has developed vibration testing machines, that are used for dynamic testing of the loosening properties of fasteners under lateral loading. The components to be tested are screwed into the sensor of the machine under a defined clamping force and are then exposed to a dynamic lateral load with constant or variable frequency. The thus determined (clamping) force / time diagram and the determined number of cycles provide information on the loosening behaviour of bolted connections under dynamic lateral load.



Combined with the software **TestWinner®** our customers receive optimum efficiency and flexibility, as well as an immediate statement about loosening angle, clamping force, lateral force and lateral path amplitude. Optionally, the tightening torque can also be recorded at the beginning of the test phase.



Vibration testing machines by **Test** permit, among other things, the inspection of bolted connections in accordance to DIN 65151.

Technical designs...

Model...	208.50kN	208.100kN	208.200kN	208.400kN
Screw dimensions	M3...M8	M4...M14	M8...M16	M12...M24
Sensor clamp force	1...50 kN	2...100 kN	4...200 kN	8...400 kN
Sensor shear force	0.2...10 kN	0.5...25 kN	0.5...25 kN	1...50 kN
Release angle sensor (optional)	360° ± 0.25°	360° ± 0.25°	360° ± 0.25°	360° ± 0.25°
Transversal stroke	± 1 mm fixed	± 0...2 mm variable	± 0...2 mm variable	± 0...2 mm variable
Frequency shear force	0...30 Hz variable	0...30 Hz variable	0...30 Hz variable	0...30 Hz variable
Accuracy class	0.5	0.5	0.5	0.5
Measurement uncertainty force	≤ 0.5 % of indicated value	≤ 0.5 % of indicated value	≤ 0.5 % of indicated value	≤ 0.5 % of indicated value
Measurement uncertainty stroke	≤ 1 % of indicated value	≤ 1 % of indicated value	≤ 1 % of indicated value	≤ 1 % of indicated value
Combined error	≤ 1 % of indicated value	≤ 1 % of indicated value	≤ 1 % of indicated value	≤ 1 % of indicated value
Supply voltage	230 V / 1P+N+PE	400 V / 3P+N+PE	400 V / 3P+N+PE	400 V / 3P+N+PE
Working table	Optional	yes	yes	yes
Electrics / Electronics	Desktop case	Substructure cabinet	Substructure cabinet	Substructure cabinet
Safety device	yes	yes	yes	yes
EC- Certifi cate of Conformity	yes	yes	yes	yes

Parameters: Axial force, shear force amplitude, shearing distance amplitude effective, count of cycles, release angle (optional)

Test



Tensile testing machines up to 600 kN



Friction testing machines

Friction coefficient analysis, from sizes M2 to M80



Testing machines for fixing elements
For compressive, tensile and bendings tests



Manual friction
test bench



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Test

We care for quality



Vibration testing machines
for bolted connections