Nencki spring test press NST

Nencki
Spring test press NST

Nencki spring test presses have been developed especially for the railway industry and are used in maintenance workshops and manufacturers of bogies and springs. They are robust and reliable even under the toughest conditions. The computer-controlled machine allows individual test programs and the results and parameters can be stored.

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Spring testing

For tough railway conditions

Axial and transversal

A good sprung suspension is crucial for the perfect function of a bogie. Both axial (vertical) and transversal (lateral) spring stiffness can be determined with the Nencki spring test press NST. The determination of a spring bowing and the corresponding alignment when fitted to the bogie prevent the increase of lateral forces under load. The running performance and derailing factors are thereby considerably improved.

Transversal stiffness and bowing tests

The Nencki spring test press NST is equipped with a cross table wich allows to measure the bowing in x and y-direction and determine the bowing angle of a coil spring. Thanks to the transversal hydraulic cylinder a lateral load up to 20 kN can be applied in order to carry out the transversal stiffness test. Format tools for different spring dimensions can be exchanged within a very short time.

Customer specific and traceable

The spring test press NST can be updated for tests of metallastic and leaf springs. After finishing the test procedure the measured results can be printed and will be stored in the test database. Data can be traced selective at any time. Thanks to the open data base structure and interface, the results can be integrated into superior systems.

Technical data

Test load application and accuracy
Axial test load: up to 200 kN
Axial stroke: 800 mm
Transversal test load (push, pull)*: up to 20 kN
Transversal stroke (lateral)*: ± 50 mm
Accuracy of load application: 0.5% of load,
min. ± 100 N
Accuracy of linear measuring x, y, z: ± 0.1 mm

Test results / Parameters
Reference length of spring: mm
Axial stiffness: kN/mm
Force-way-diagram: Units kN and mm
* Transversal stiffness: kN/mm
* Transversal displacement in x and y: mm
* Bowing force: kN
* Bowing angle: degree

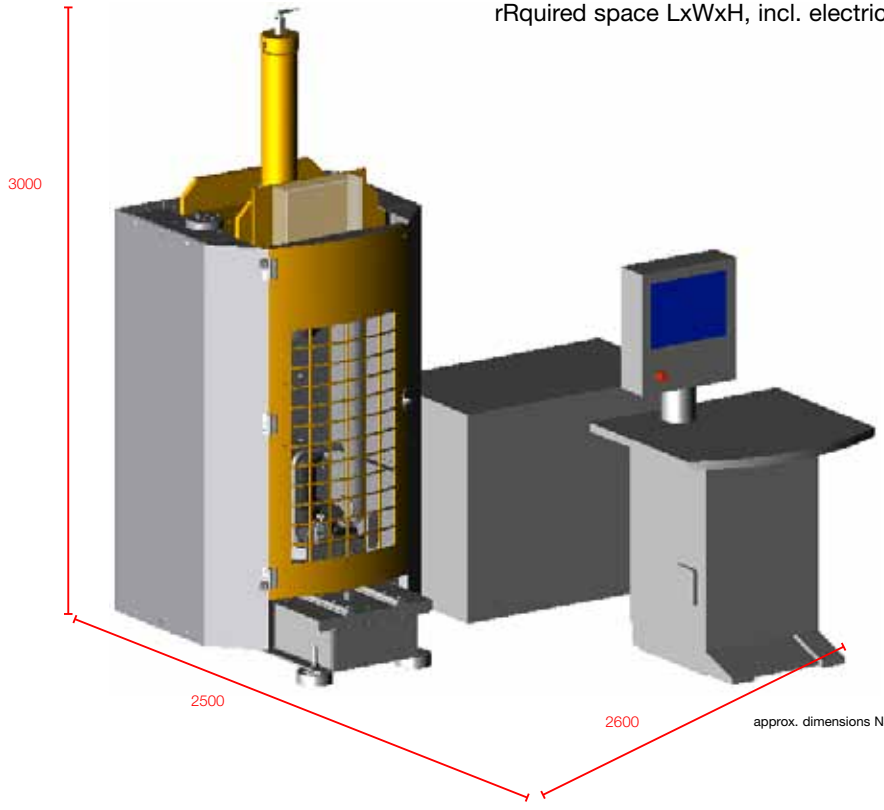
* Optional functions

Coil springs
Max. length: 800 mm, more on request
Max. outer diameter: 480 mm
Min. inner diameter: 60 mm
Test according to EN13298

Leaf springs
Max. length: 1400 mm
Max. height H: 300 mm
Test according to EN14200

Metallastic springs
(approx. dimensions)
Maximum L x W: 300 x 300 mm
Minimum L x W: 100 x 100 mm

Consumption and space
Electric supply: 3 x 400 V,
N + PE, ± 5%, 50 Hz (others on request)
Motor power: 5.5 kW approx.
Weight incl. electric cabinet and hydraulics: 3000 kg approx.
rRquired space LxWxH, incl. electric cabinet: 2,6 x 2,5 x 3 m



approx. dimensions NST in mm




Railway technology **Plant technology** **Vehicle technology** **Manufacturing** **Service**

Nencki Ltd. offers a comprehensive customer and spare parts service in Switzerland but also through international representatives.

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