

Product Information

Pendulum impact tester RKP 450



Range of application

Pendulum impact testers RKP 450 are designed:

- For determination of the impact energy to Charpy up to 450 J (DIN 50115, ASTM E 23, EN 10045)
- For determination of the impact energy to IZOD (BS 131- part 1, ASTM E 23)
- For impact tensile tests
- For tests to Brugger

Features/advantages

- Three different models of the basic device are available
- Avoidance of interfering vibrations by
 - stiff construction and
 - one-piece fin welding construction
- Easy exchange of fin, supports and abutments because of tight fitting
- Pendulum arrangement to EN 10045 and ASTM E-23
- Ergonomic single-column construction allows easy access to the specimen
- Low-friction pendulum bearings
- Same pendulum hammer for Charpy, IZOD, Brugger and impact tensile tests
- The U profile of the hammer and the single-column floor type construction allow component tests

- Especially suited for fast test runs (< 5 sec) and tests to ASTM E 23 on temperature treated specimen, especially cold specimen (- 40 °C)
- Expansibility and unproblematic retrofitting of all additional equipment

The basic device includes:

- Analogue round display inclusive of drag-pointer and scales for immediate display of the used impact energy in Joule and graduation $\pm 150^\circ$ for official checks of the pendulum impact tester
- Pendulum hammer 300 Joule (Without fin), hammer mass approx. 22 kg
- Abutment and support bracket (Without abutments and supports)
- Electromagnetic pendulum fin release
- Centring pliers for Charpy specimen
- Heavy duty dowel for anchoring the foundation (Not necessary if ordering the steel reinforcement)
- 50 kg non-contracting grouting mortar for grouting the pendulum impact tester's base plate

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Technical data of the basic device	
Impact energy	up to 450 Joule
Impact velocity	5.23 m/s
Angle of deflection	150°
Pendulum length	748.6 mm
Electric supply	3 x 400 V, 50/60 Hz, 0.5 kW
Dimensions (without protection device) W x D x H	1820 x 1050 x 1880 mm
Weight approx.	600 kg

Basic models

Beschreibung	Order item
Pendulum impact tester RKP 450 A with analogue display	RA342038201
Pendulum impact tester RKP 450 Z with Zwick electronics and digital / analogue displays	RA342038205
Pendulum impact tester RKP 450 IWI with analogue display, equipped for instrumented tests - A PC from the Zwick program and a standard or master test program <i>testXpert</i> ® are necessary for use with this device.	RA342038204

Required basic units

Description	Order item
Automatic motorised lifting device	RA342038004
Protection device according to VGB 5 including electro-magnetic door locking system and automatic release of pendulum when closing the door. Dimensions (with RKP 450) W x D x H 1900 x 1050 x 2000 mm, Weight approx. 100 kg	RA342038005
Steel reinforcement for foundation or	RA342038006
Ready-made concrete base with steel reinforcement and clips for (Removable) fixing to the floor	RA343003507
<i>testXpert</i> ® Standard or Master test program for instrumented or non-instrumented tests, due to the application resp. the requirements	on request

Pendulum hammer (pendulum hammer 300 J is included in basis device) and extra load

Description	Order item
Additional pendulum hammer 150 Joule, hammer mass approx. 11 kg	RA342038002
Extra load for pendulum hammer 300 Joule for increasing the impact energy up to 450 Joule	RA342038008

Also available:

- Supplementary units for tests to Charpy: Interchangeable fins (also instrumented), supports and abutments, centring specimen holders
- Supplementary units for tests to IZOD: Height adjustment of the pendulum hammer or release device for achieving different speeds, equipment for impact flexure tests to IZOD, interchangeable fins (also instrumented), clamping devices
- Supplementary units for impact tensile tests: different equipments and fins (also instrumented)
- Supplementary units for tests to Brugger: Screw-down specimen clamps, screw-down tensioning shells and instrumented fin
- Supplementary units for wedge impact tests according to ISO 11343
- Reference specimen
- Refrigerating device TV 742, optional heating device, ...