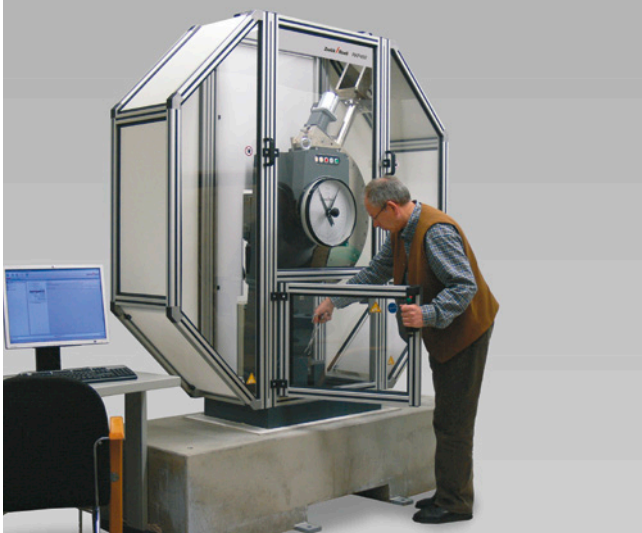


## Product Information

### Pendulum Impact Tester RKP 300



#### Range of application

- Impact and impact bending tests on metals (Charpy, Izod – not instrumented)

An operationally ready instrument includes:

- Basic instrument, with electro-magnetic pendulum release and motorized pendulum return, grout and heavy duty screw anchors, electrically monitored safety device and safety housing
- Steel armament or concrete base
- Test specific accessories such as vises, supports and anvils, pendulums and fins
- Optional accessories such as PC equipment or specimen temperature units

#### Basic instrument

The basic instrument is designed to be mechanically stiff and is made of vibration damping cast iron. It is leveled on the foundation with the aid of three leveling planes, then casted with the grout and anchored with four bolts.

#### Safety device

Zwick pendulum impact testers in size category RKP 300 satisfy the EC Machinery Directive 2006/42/EC, the EN ISO 12100 as well as the EN ISO 13849-1/2. This means that the failure of a single safety monitoring element must not pose any risk to the operator. As a result, the RKP 300 has been updated in this area, and the safety device fully complies with the requirements of national and international standards.

Important characteristics and functions of the safety device:

- It is equipped with a double safety protection system using twin, certified, independently operating control units, special safety switches and components.
- It monitors the pendulum impact tester according to its operational mode (e.g. test or set-up mode)
- It recognises incorrect operation and displays this with blinking signals on the operating keys
- It allows the pendulum to be released via a push button integrated into the door handle. The test can then be started immediately after closing the safety door. This is important for tests according to ISO 148 and ASTM E 23 on temperature conditioned specimens, which must be tested less than 5 seconds after removing them from the temperature unit.

#### Safety housing

The design of the safety housing facilitates easy handling during the testing process, changing tools, pendulums or fixtures, re-configuring different test types and maintenance and calibration. Operating components are centralized and illuminated to show the machine status and error messages, making the RKP 300 safe, simple and fast. Front door, side doors and specimen removal slot allow:

- Simple placement of the specimen
- Quick changing of the vise and the pendulum
- Easy access during maintenance, inspection and calibration
- Easy removal of specimen remains

## Product Information

### Pendulum Impact Tester RKP 300

#### Installation

According to international Standards, the base frame should be firmly anchored to the floor. This is done either with

- A steel reinforcement for the foundation. The making of the foundation is performed by the customer.
- Or with a ready-made concrete foundation with > 40 times the mass of the largest pendulum, incorporating steel reinforcement. The foundation is equipped with metal lugs for bolting to a solid cement floor.

Please pay attention to the remarks in PI 476.

#### Basic instrument

Description	Item number
RKP 300 Joule Promotion Package	<b>029866</b>
The RKP 300 Joule Promotion Package consists of the following:	
- Pendulum Impact Tester RKP 300 GE for non-instrumented tests	
- Analog and digital display for use with or without PC (USB upstream interface)	
- Safety device according to EN ISO 13849-1/2	
- TÜV-certified protective interlock circuit	
- Motorised pendulum lifting	
- Electro-magnetic pendulum release	
- Pendulum rod for pendulum head 300 Joule	
- Pendulum head 300 J for pendulum rod - for bolt-on, non-instrumented Charpy-, Izod- and Tensile Impact fins	
- Universal vise for running tests to Charpy, Izod or impact tensile tests	
A PC and a Standard or Master Test Program testXpert II are required	

#### Technical data for the basic instrument

Electrical connections: 3 x 400 V, 50 Hz, 0.5 kW; dimensions with foundation (height x width x depth): 2450 x 2000 x 1000 mm; weight without foundation approx. 700 kg; impact velocity: 5.23 m/s  
 Corresponds to following safety requirements: EC Machinery Directive 2006/42/EC, EN ISO 12100 and EN ISO 13849-1/2.  
 Test standards: ISO 148-1, DIN 50115, ASTM E 23, BS131-1, JIS Z 2242, GOST 9454-78  
 Indirect verification and acceptance with reference test piece:  
 - According to ASTM E 23 with NIST in the ranges: low (13-20 J), high (88-136 J), super high currently not available  
 - According to ISO 148-2 with ERM or ZRM specimens in the ranges: low (<20 J), mean (30-110 J), high (110-220 J) and super high (>220 J) energy

#### Environmental conditions

Description	Item number
Steel reinforcement for construction of on-site foundation	<b>940438</b>
Ready-made concrete foundation including steel reinforcement and lugs for fixing to a solid cement floor, Foundation weight: approx. 1500 kg	<b>940439</b>

#### Options

Description	Item number
Tools for different test methods (Support, anvil, ...)	<b>On request</b>
Anvils and tups in different quality depending on application's requirements (specimen material, specimen throughput)	<b>On request</b>
Temperature chambers from - 190 °C to + 180 °C	<b>On request</b>
Height adjustment for the pendulum hammer for tests with variable impact speeds	<b>On request</b>
Reference specimen for indirect commissioning of RKP instruments to ASTM E 23, EN 10045-2 (Charpy)	<b>On request</b>
Transformers for adaptation to various mains voltage conditions and leakage current reduction	<b>On request</b>