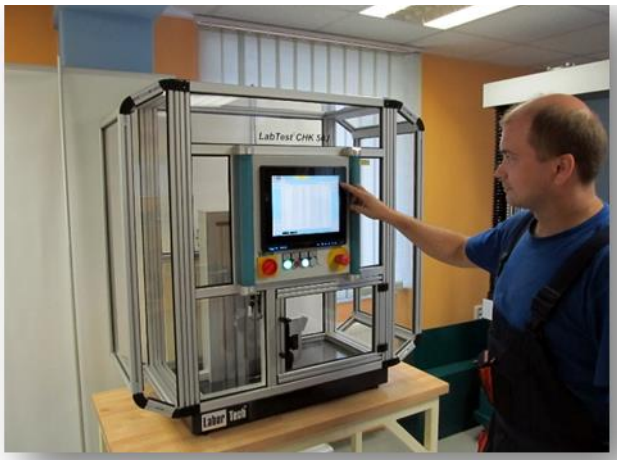
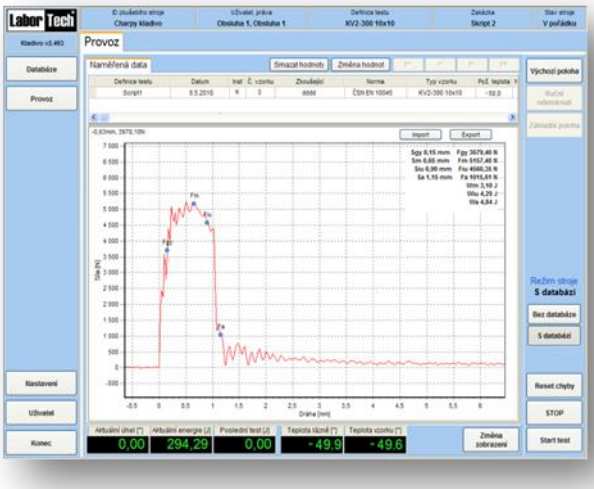
Product information

Pendulum Impact Tester LabTest ® CHK 50J-I





Description and use of equipment

Charpy pendulums type LabTest CHK 50J-I are used to control production quality, input and output checks of materials and products in testing rooms and laboratories. On CHK impact pendulums, Charpy, Izod, Dynstat, Brugger and tensile strength tests can be performed according to EN, ASTM, ISO DIN standards.

Instrumented Charpy pendulums are used to determine work, energy, strength and deformation according to EN ISO 14556. Energy consumption occurs when the specimen rod is broken. For an instrumentalized Charpy pendulum, the work is calculated from the magnitude of the impact force, depending on the deflection of the test body, where the area under the flexural force curve determines the work used at the fracture of the test body. The instrumented Charpy pendulum allows to evaluate: force values such as Fgy (maximum macroplastic deformation), Fm (maximum force), Fiu (force at the moment of crack initiation), Fa (crack stop force), deflection values Sgy, Sm, Siu, Sa the values of the impact work: Wm, Wiu, Wa, Wt.

Basic machine set

- Very rigid foundation with 4 leveling holes
- Automatic arm lift with electronic brake
- Documentation for the construction of a concrete base
- Protective safety cover made of profile sections and polycarbonate
- Digital control unit with integrated touchscreen LCD monitor and PC with high speed card - 12 MHz
- Intuitive ImpactTest - I software
- Higher resolution incremental sensor for accurate angle measurement
- A tunnel for automatic specimen extraction

Features and Functions

- Very solid construction of the machine
- High safety according to EN 954-1, Category 3
- Running safety control during hammer impact
- Detection of operating errors and theirs display in the program
- Allows hammer to start by pushing the button and immediately after closing the door in 0,5 second, which allows for breaking a specimen in 5 seconds after removing it from a cooling bath
- Centrally located control components provide easy operation and testing
- Easy exchange of anvils and supports for specimens
- Digital operating control with touch screen LCD monitor
- Automatic arm brake
- Automatic arm lift in 5 seconds
- High speed testing
- Fast and precise sample centering
- Protective cover for completely safe operation
- High machine frame rigidity and shock resistance
- Extremely accurate rotary sensor
- Option of the data output via USB or Ethernet interface
- Ergonomic design
- Device meets all the necessary safety requirements like DIN 51 333, EN ISO 13489 and other European standards

Software IMPACTTest-I description

Our new ImpactTest - I test test software was developed in a modular way to meet all set criteria for instrumental impact tests. This software module, coupled with a high-speed card, is capable of handling input data at up to 12MHz. Our ImpactTest - Contains the parameters that are required to determine the quantities required by an instrumental test by Fa, Fgy, Fm, Fbf, g, ho, KV, m, s, sm, sbf, st, Wm, Wt Impact and Impact Strength, which supports the CSN, DIN, EN, ISO, ASTM, GOST standards and other industry standard test methods. Part of the program is machine control, test record, database of measured values and subsequent data filtering. The program uses MS Windows 7 and higher. The application is designed not only for classic PC and LCD monitors but also for industrial systems that are controlled by touch LCD monitors.

Software IMPACTTest-I features

- Simple, inductive and powerful
- Intuitive operation via touchscreen LCD
- Rapid and rational testing
- Modification of item names
- Modification of measured instrumentation values
- Evaluation of the tensile instrumentation test
- Editable types of samples and test standards
- Digital display of all current values
- Change the display between graphs and measured results
- Choose to change the graph display between force, path and time
- Automatic temperature evaluation
- Export data to CSV or MY SQL and MS SQL
- Export of graphical waveforms to CSV - individual samples
- Data transfer from the temperature chamber, thermometer etc.
- Automatic temperature evaluation before testing according to EN ISO 148-1 and ASTM E23.
- Storing measured data in a database with the possibility of filtering
- Extensive calibration mode
- Calibration of individual instrument blades EN and ASTM
- Dynamic linearization for ASTM testing
- Linearization of the course of the tool blades
- Multi-language version (Czech, English, Polish, Russian, etc.
- Print a PDF report
- Recording multiple curves, zooming with ZOOM - detecting coordinates for individual samples, etc.

Accessories

- Replaceable cutting edges and supports
- Interchangeable hammers for Charpy 0.5J test; 1J; 2J; 4J; 5J 15J; 25J; 50J
- Removable hammers for Izod test 2,75J; 5.5J; 11J; 22J
- Pneumatic centering device
- Temperature and cooling chambers
- Sample trays according to EN ISO 148-1
- **BLUE RUNNER** robotic system with automatic sampling
- **BLUE EYE** high-speed cameras
- Optical inspection of specimen dimensions **OptoLab55**
- **VRE**- notch for creating V and U sample notches
- Thermometer
- Calibration by reference samples according to EN ISO 148-1 ASTM E23 (NIST)
- Self-centering tongs

Technical data	Units	LabTest CHK50J-I
Maximum operating range	J	50
Resolution scale division on the P(	J	0,1
Error resolution	J	+/- 0,05
Impact speed	m/s	3,8
Test speed	sample/s	<15
Temperature of environment	°C	10-35
Humidity of environment	%	20-70
Weight	kg	90
Machine dimensions HxWxD without a table	mm	1070x1106x670
Voltage	V	230V 50/60 Hz
Power input	VA	200

Manufacturer:

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