

JB E Series

CHARPY IMPACT TESTER

Rev. 04-2023-EN



Product information

The Charpy Pendulum allows to perform impact tests to measure the energy absorbed by a specimen of standardized shape and size to analyze the material's notch toughness. Wide use in different sectors: production control in the industry, certification of materials by accredited test laboratories, research and development of new technologies in universities and research centers.



Construction features

The machine consists of a monolithic base and an oscillating arm with a ram of suitable weight and dimension, whose construction parameters ensure perfect correspondence to regulatory requirements.

The motorized lifting system of the arm with automatic locking system is supplied to the whole range and guarantees the rapid repositioning of the hammer in the test position for the next test. A safety electromagnetic braking system locks the arm mechanism when the door is open.

The angular measurement is carried out by an encoder connected to the latest generation microprocessor that manages the motion, testing and safety features.

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All models are equipped with safety cage and front access door with safety interlock. The plinth is a highly recommended optional accessory that meets the regulatory requirements for the effectiveness of rigidity and sizing of the floor on which the machine is fixed.

Testing XE / R Acquisition System

JB-E series pendulums are equipped with a Windows 11 computer, with a 10.1" touch screen panel. The TestingXE / R Acquisition System allows to acquire, record and transmit test data. The database can be shared over a network (intranet) and the software can be used simultaneously on different PCs, allowing the display and processing of test data from different workstations, with automatic and advanced functions for loading data and exporting results according to requests, in conformity to Industry 4.0 guidelines.

Main Reference Standards

ASTM E23	Standard Test Methods for Notched Bar Impact Testing of Metallic Materials.
ASTM A370	Standard Test Methods and Definitions for Mechanical Testing of Steel Products.
ISO/TC 138/SC 5	General properties of pipes, fittings and valves of plastic materials and their accessories -- Test methods and basic specifications.
UNI EN ISO 148-1	Metallic materials - Charpy pendulum impact test- Part 1: Test method for determining the resilience at room temperature and low temperature
UNI EN ISO 9016	Destructive tests on welds in metallic materials — Impact tests — Test specimen location, notch orientation and examination

Technical Features

Model	JB300E	JB450E	JB750E
Maximum available energy	300J	450J	750J
Readout system	Software TestingXE/R – Embedded 10.1 "Touch Screen computer (Windows 11)		
Resolution	0.1 J		
Overall Dimensions	2240 x 550 x 2150 mm		
Total weight	600 kg	750 kg	1150 kg
Power supply	0.75 kW 230 VAC / 50 Hz / Single phase		
PC interface	TCP/IP network		

Models

M03300S01	300J Computerized Charpy Pendulum.
M03500S01	450J Computerized Charpy Pendulum.
M03700S01	750J Computerized Charpy Pendulum.

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Optional accessories

A variety of additional accessories are available such as accessories for low temperature testing.

- P03300101** Plinth for fixing Charpy Pendulums.
- V03010101** Charpy specimen centering pliers.
- V03010201** Dewar 2.0 lt jar.
- V03010401** Tablet machine for the preparation of samples at low temperatures.
- V03010501** Digital thermometer complete with probe.



Knife edges and Anvils



Dewar Container



CO2 box



Digital thermometer



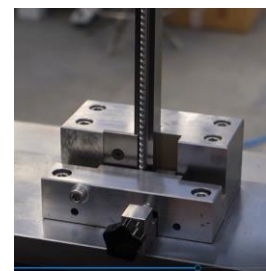
Automatic cooling unit



Concrete Plinth



Broacing system



**Broach knife
KV / KCU**

