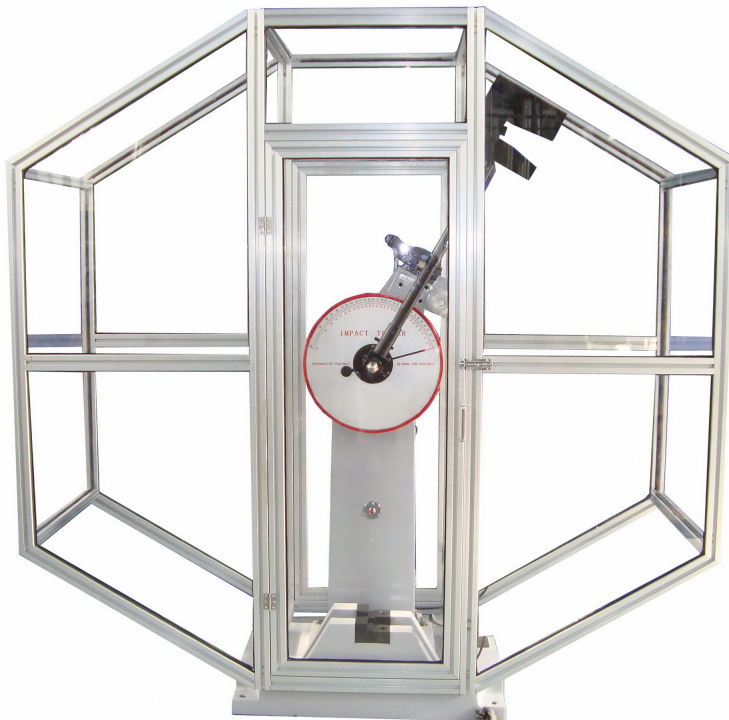




JB Series Semi-automatic Pendulum Impact Testing Machine

Application:

JB series impact testing machines are used to determine the impact toughness of metal materials under dynamic load. The pendulum of the machine can be raised or released automatically. They are designed according to the international standards ISO148 and ASTM E23. They have the features of easy operation, high efficiency, safe and reliable. The machines are especially suitable for laboratory, metallurgy industry, machinery production, steel plant and other fields.



Specifications:

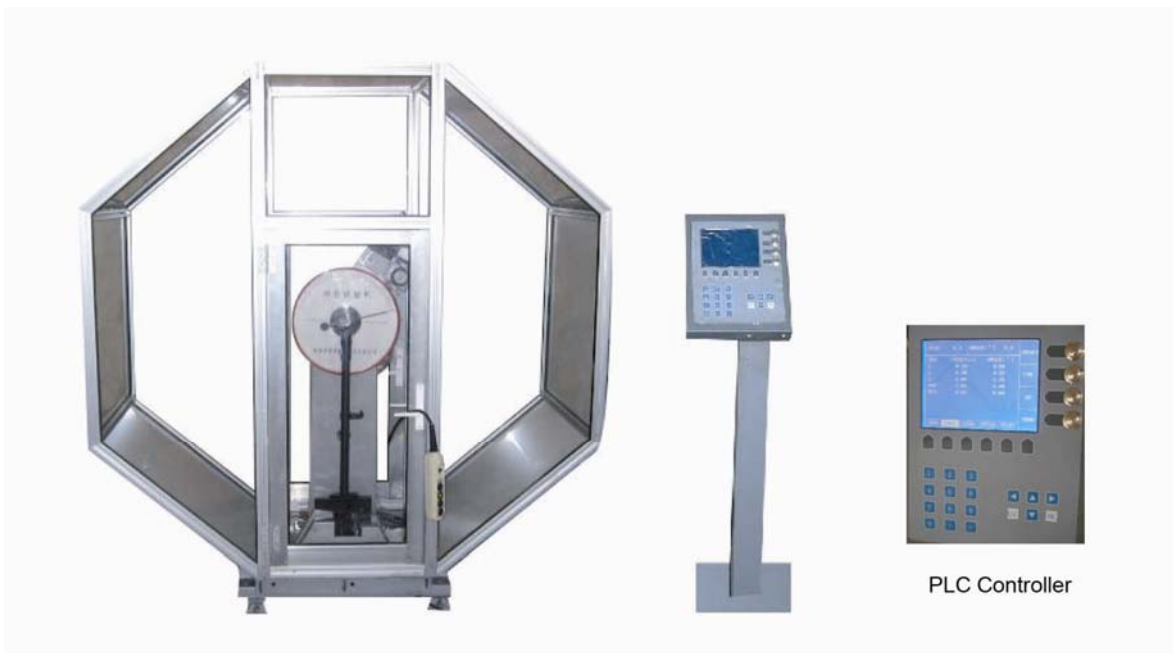
Specifications	JB-300B	JB-500B	JB-800B
Max. impact energy (J)	300	500	800
Impact velocity (m/s)	5.2	5.4	5.9
Raised angle (°)	150		
Standard span (mm)	40		
Round angle of jaws (mm)	R1-1.5		
Round angle of striking edge (mm)	R2-2.5		
Size of specimen (mm)	10 x 10 x 55		
Power supply	3phs, 380V, 50Hz or 220V,60Hz		
Dimensions (mm)	2124 x 600 x 1340	2144 x 736 x 1390	2450 x 1200 x 2455
Net Weight (kg)	450	650	2300



JBS Series Digital Display Pendulum Impact Tester

Application:

JBS series digital display pendulum impact testing machine are mainly used to determine the anti-impact capability of metal materials under dynamic load. They are the best testing equipments for many metal material manufactories, quality inspection departments and universities. The results will be displayed on both digital screen and dial gauge. JBS series impact testers can use pendulum's residual impact energy to achieve the re-raising of pendulum, so as to save energy. The results can be printed out, be applicable for mass testing departments. JBS impact testers are strictly designed according to the standards ASTM E23, ISO148-1983 and GB/T3038-2002, GB/229-1994.

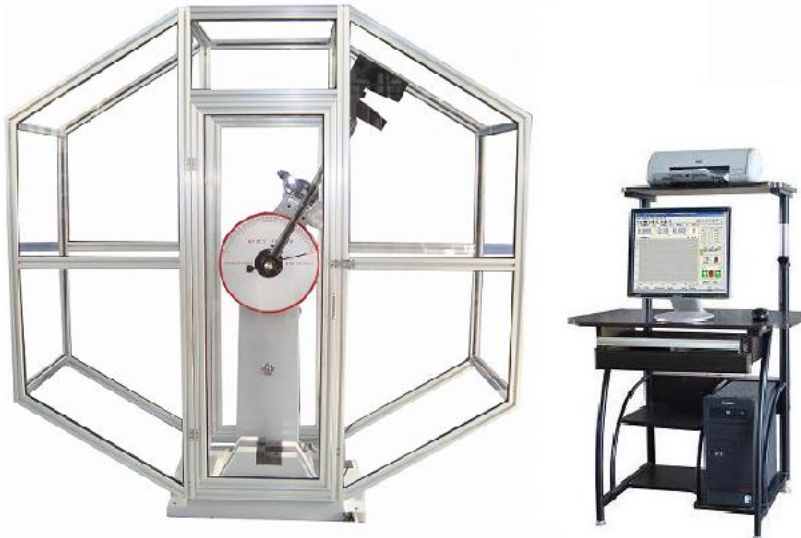


Specifications:

Specifications	JBS-300	JBS-500	JBS-800
Max. impact energy (J)	300	500	800
Impact velocity (m/s)	5.2	5.4	5.9
Raised angle (°)	150		
Standard span (mm)	40		
Round angle of jaws (mm)	R1-1.5		
Round angle of striking edge (mm)	R2-2.5		
Size of specimen (mm)	10 x 10 x 55		
Power supply	3phs, 380V, 50Hz,		
Dimensions (mm)	2124 x 600 x 1340	2144 x 736 x 1390	2450 x 1200 x 2455
Net Weight (kG)	450	650	2300
Display	LCD screen		

**JBW Series Computer Screen Monitor Pendulum Impact Tester****Application:**

JBW series computer monitor pendulum impact testing machine are strictly designed according to the international standards ISO148 and ASTM E23. There are mainly used to determine the anti-impact capability of metal materials under dynamic load. Carry out the functions of zero clearing and automatic return, capturing the value of lost impact energy and pendulum cycle by means of setting up with computer program, and the results can be monitored, stored and printed out. Control box or computer program control is alternative operating method. JBW series impact testers are adopted by many institutes and high-tech enterprises.

**Specifications:**

Specifications	JBW-300	JBW-500	JBW-800
Impact energy (J)	300	250, 500	500, 800
Impact velocity (m/s)	5.2	5.4	5.9
Raised angle	150°		
Standard span (mm)	40		
Round angle of jaws (mm)	R1-1.5		
Round angle of striking edge (mm)	R2-2.5		
Size of specimen (mm)	10 x 10 x 55		
Power supply	3phs, 380V, 50Hz or 220V, 60Hz		
Dimensions (mm)	2124 x 600 x 1340	2144 x 736 x 1390	2450 x 1200 x 2455
Net Weight (kg)	450	650	2300
Display	Computer screen		

Software of JBW series

Functions:

- Windows platform, screen display, operating by mouse;
- The software displays two ranges of Impact Energy after calibration;
- Recording test result of Min, Max, Mean, Standard Deviation of batch test;
- Also calculate the results of Impact Energy, Impact Toughness Etc.;
- Test result can be automatic calculated. Can automatically measure the swing period of 100 times;
- Support multi language if needed;
- Support test report into Microsoft Word 2000 and Excel 2000 or higher version.



	Batch	Number	Toughness	Energy	Standard	TestDate	Operator	Material	Temperat	Comment	Style	Deep	Area	Length	Width	Height
1	000	a-01	0	0.7	DIN	2006/06/05	Lin	Iron	25	Good	V	2	100	50	10	10
2	000	a-02	0	0.7	DIN	2006/06/05	Lin	Iron	25	Good	V	2	100	50	10	10
3	000	a-03	0	0.7	DIN	2006/06/05	Lin	Iron	25	Good	V	2	100	50	10	10
4	000	a-04	0	0.7	DIN	2006/06/05	Lin	Iron	25	Good	V	2	100	50	10	10
5	000	a-05	0	0.7	DIN	2006/06/05	Lin	Iron	25	Good	V	2	100	50	10	10
6	000	a-06	0	0.7	DIN	2006/06/05	Lin	Iron	25	Good	V	2	100	50	10	10
7	000	a-07	0	0.46	DIN	2006/06/05	Lin	Iron	25	Good	V	2	100	50	10	10
8	000	a-08	0	0.7	DIN	2006/06/05	Lin	Iron	25	Good	V	2	100	50	10	10
9	000	a-09	0	0.7	DIN	2006/06/05	Lin	Iron	25	Good	V	2	100	50	10	10
10	000	a-10	0	0.46	DIN	2006/06/05	Lin	Iron	25	Good	V	2	100	50	10	10
Min			0	0.5												
Max			0	0.7												
Mean			0	0.65												
Std.Deviation			0	0.101												

Batch test



Multi-language



DT Series Drop Weight Impact Testing Machine

Application:

DT Series drop weight impact testing machine are suitable for drop weight tear test to various kinds of ferrites, especially for the test of DWTT to pipeline steel as ASTM E436 and API 5L. Equipped with different weights and anvils, it can do other types of impact tests according to customers' special request.

Features

- Adjusting impact energy by adjusting the lifting height and the numbers of the weights.
- The buffer is equipped to absorb the residual energy after breaking the specimen to protect the weight and anvil from destroying. Also install the safe outfit, such as safety net, safe pin for maintenance and hanger locking.
- Equipped with the specimen-carrying outfit, anti-falling of outfit for the specimen, centering outfit to guarantee quick, accurate and reliable tests.



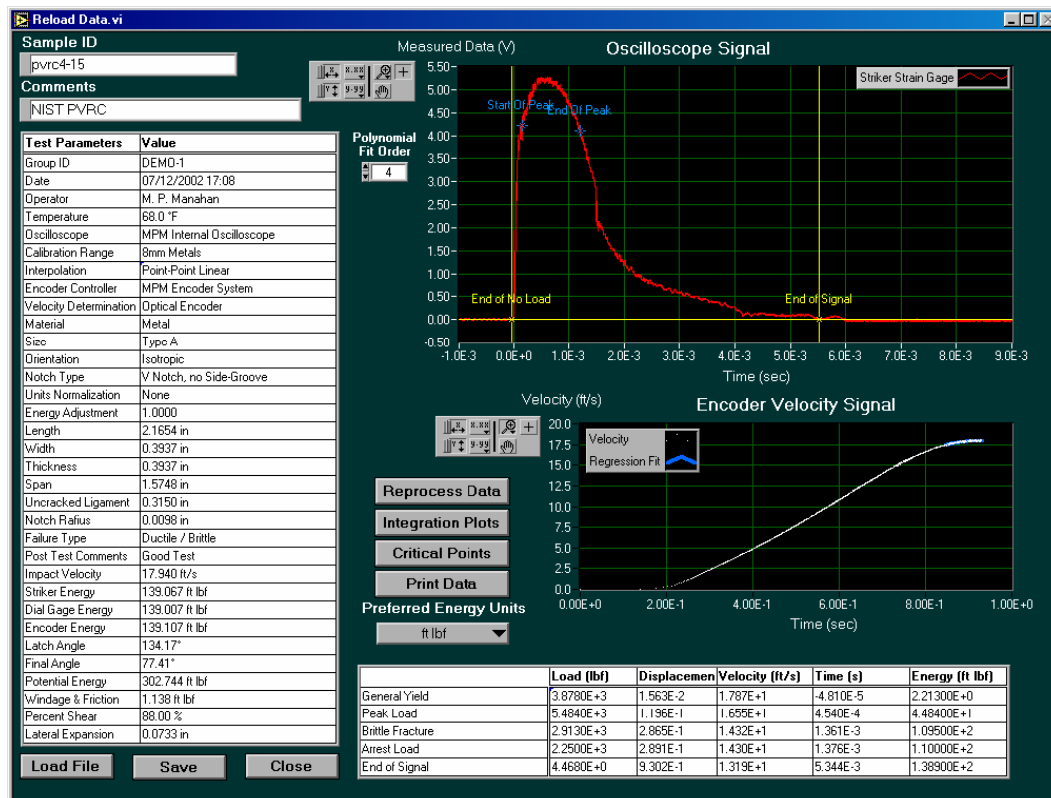
Specifications:

Model	DT-20000	DT-30000	DT-40000	DT-50000	DT-80000
Max. Energy (J)	20000	30000	40000	50000	80000
Max. Lifting height (mm)	3000	2800	2500	2500	3000
Max. Impact velocity (m/s)	7.6	7.4	7	7	7.5
Curvature radius of weight (mm)	R25	R25	R25	R25	R25
Curvature radius of anvil	R25	R25	R25	R25	R25
Hardness of weight and anvil	≥HRC58	≥HRC58	HRC5-65	HRC58-65	HRC58-65
Distance between supports (mm)	254	254	254	254	254
Centering deviation of specimen (mm)	≤±1	≤±1	≤±1	≤±1	≤±1
Indicating deviation of lifting height (mm)	≤±1	≤±1	≤±1	≤±1	≤±1
Height of the load frame (mm)	5500	5500	5700	5700	6800
Weight (kg)	5800	5900	9000	15000	18000

Instrumented Impact Testing System

Instrumented Impact System Includes:

- Data acquisition/control (DAC) computer/flat panel monitor/keyboard/and mouse
- Strain gage amplifier inside DAC computer
- High speed 12 bit data acquisition board inside DAC computer which allows any number of data points per test up to 1,000,000 (50,000 points are adequate for most tests)
- Remote balance and shunt calibration of striker from the DAC front panel
- Site license for Windows XP based ImpactTM v 5.0 data acquisition and analysis software
- Users manual and online computer help
- Data acquisition computer with 12 bit fast acquisition board, encoder board, encoder hardware, and strain gage amplifier. The amplifier provides auto-balance, amplifier range selection, and shunt calibration for periodic calibration checking. The amplifier is capable of a wide range of amplification settings for the research environment needs.



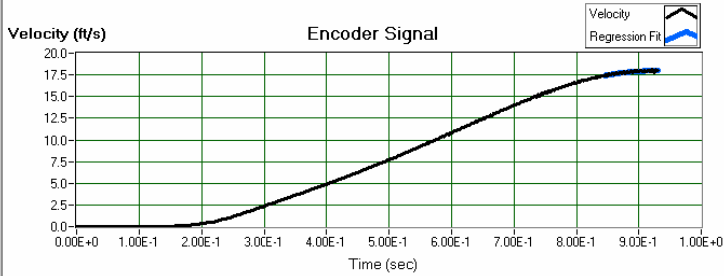
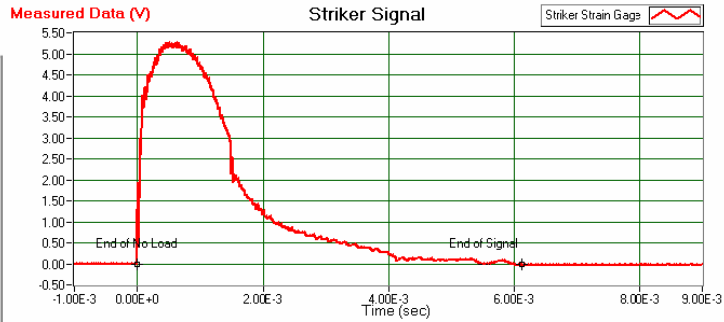
Data acquisition screen for test conducted on a pendulum impact machine. The voltage-time data are displayed along with the test parameters.



Sample ID
pvrc4-15
Comments
NIST PVRC

Impact™ V4.3 Summary Report

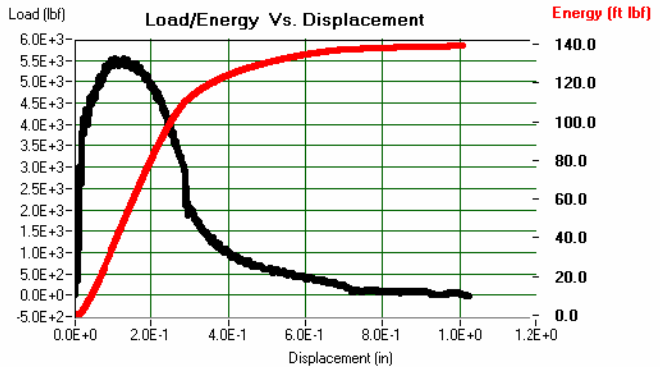
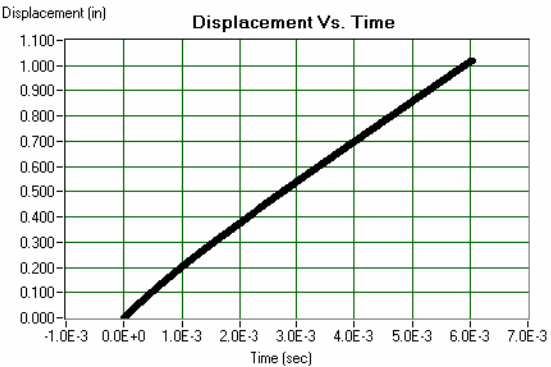
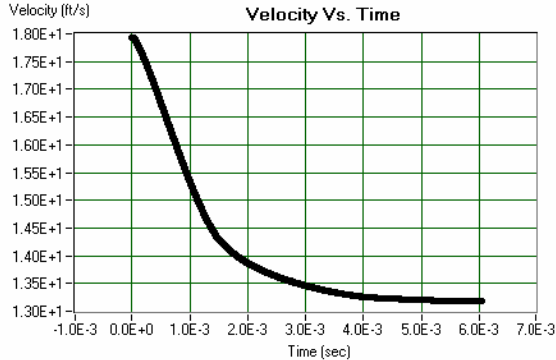
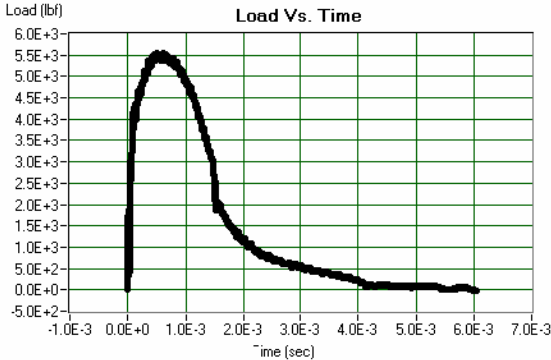
Test Parameters	Value
Group ID	DEMO-1
Date	07/12/2002 17:08
Operator	M. P. Manahan
Temperature	68.0 °F
Oscilloscope	MPM Internal Oscilloscope
Striker Name	8mm Metals
Interpolation Method	Point-Point Linear
Encoder Controller	MPM Encoder System
Velocity Determination	Optical Encoder
Material	Metal
Size	Type A
Orientation	Isotropic
Notch Type	V Notch, no Side-Groove
Units Normalization	None
Energy Adjustment	1.0000
Length	2.1654 in
Width	0.3937 in
Thickness	0.3937 in
Span	1.5748 in
Uncracked Ligament	0.3150 in
Notch Radius	0.0098 in
Failure Type	Ductile / Brittle
Post Test Comments	Good Test
Impact Velocity	17.940 ft/s
Striker Energy	139.052 ft lbf
Dial Gage Energy	139.007 ft lbf
Encoder Energy	139.107 ft lbf
Latch Angle	134.17°
Final Angle	77.41°
Potential Energy	302.744 ft lbf
Windage & Friction	1.138 ft lbf
Percent Shear	88.00 %
Lateral Expansion	0.0733 in



	Load (lbf)	Displacement (in)	Velocity (ft/s)	Time (s)	Energy (ft lbf)
General Yield	3.8050E+3	1.563E-2	1.787E+1	6.790E-5	2.21300E+0
Peak Load	5.4770E+3	1.186E-1	1.657E+1	5.650E-4	4.43900E+1
Brittle Fracture	2.8590E+3	2.873E-1	1.432E+1	1.482E-3	1.09700E+2
Arrest Load	2.1030E+3	2.896E-1	1.430E+1	1.495E-3	1.10100E+2
End of Signal	0.0000E+0	1.021E+0	1.391E+1	6.036E-3	1.39067E+2

Group ID
DEMO-1
Sample ID
pvrc4-15
Instrumented Total Energy ft lbf

Impact™ V4.3 Integration Plots



Instrumented Impact Testing Striker (One of the striker is with the machine)

- 8.0mm radius instrumented striker, ASTM E 23
- 2.0mm radius instrumented striker, ISO183

**Impact Tester of Non-metal material****Application:**

This non-metal material impact testing machine is to determine the impact toughness of plastic, glass steel, plastic pipe, strong nylon, china, clay rock, anti-electric materials.

They can do Charpy, Izod, tensile impact, Charpy & Izod, Charpy & Izod & tensile impact tester by different anvils and pendulums as the standards of ASTM D 256-90 Meth. A, ASTM D 256-97 Meth.B, ASTM D 256-97, ASTM D 6110-97, ASTM D 5942-96 ASTM D 1822, ASTM D 4812, DIN 53753, DIN 53453, DIN 51222, DIN 53448, ISO 180, ISO 179, ISO 8256, BS 2782 Part.3 Meth. 350, BS 2782 Part. 3 Meth. 359. BS 7413, AFNOR T51-111, UNI 6323, UNI 6062, GB/T1043, GB1843.

Pendulum can carry out the full range of impact tests. A complete full range of fully interchangeable hammers and vises allows the operator to perform Charpy, Izod and Tensile impact test at different impact velocities and energies.

Specifications:

Span of the grips for Charpy: 40mm, 60mm

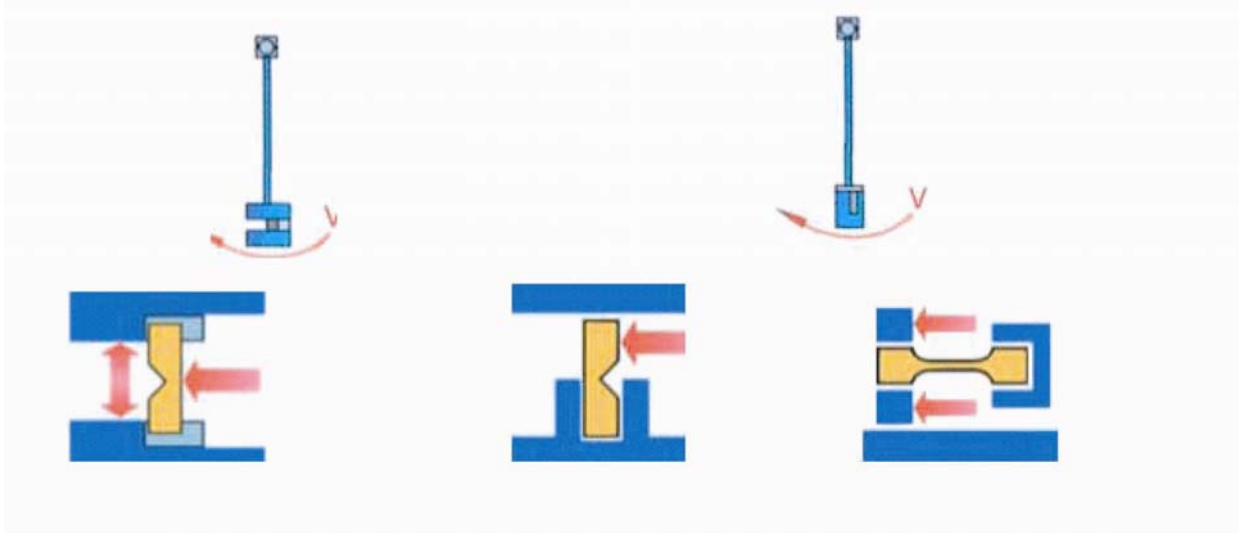
Pre-elevation: 160°

Model	Type	Display	Energy(J)	Impact speed(m/s)
TEXC-2.75	Izod	Dial	1, 2.75	3.5
TEXC-5.5			1, 2.75, 5.5	3.5
TEXC-22			5.5, 11, 22	3.5
TEXC-2.75D	Izod	Digital	1, 2.75	3.5
TEXC-5.5D			1, 2.75, 5.5	3.5
TEXC-22D			5.5, 11, 22	3.5
TEJC-5	Charpy	Dial	0.5, 1, 2, 4, 5	2.9
TEJC-25			7.5, 15, 25	3.8
TEJC-25Z			0.5, 1, 2, 4, 4/7.5, 15, 25	2.9/3.8
TEJC-50			7.5, 15, 25, 50	3.8
TEJC-5D	Charpy	Digital	0.5, 1, 2, 4, 5	2.9
TEJC-25D			7.5, 15, 25	3.8
TEXJC-25ZD			0.5, 1, 2, 4, 4/7.5, 15, 25	2.9/3.8
TEJC-50D			7.5, 15, 25, 50	3.8
TEXJC-5	Charpy/ Izod	Dial	(Izod)1, 2.75 (Charpy)0.5 , 1, 2, 4, 5	3.5/2.9
TEXJC-2522(D)	Charpy/ Izod	Dial (Digital)	(Izod)1, 2.75, 5.5, 11, 22, (Charpy)0.5 , 1, 2, 4, 5/7.5, 15, 25	3.5
			(Charpy)0.5 , 1, 2, 4, 5/7.5, 15, 25, 50	2.9/3.8
TEXJC-50	Tensile Impact Tester	Dial (Digital)	15, 25, 50 (150°)	3.8



Hammers:

All hammers pass exhaustive checking and calibration procedures such as Weight at 90°, Period of swing, Impact length, Vertically at rest, Potential energy, Windage and friction loss, Reduced length, A series of dimensional measures.



Digital panel



View of Charpy, Izod and Tensile Impact



Low Temperature Bath for Impact Specimen

Applications:

The device is designed according to Charpy Notch Impact Test Method for Metal Material, and adopt compressor cooling technology, which made up of two sections (Low temperature grade and high temperature grade). It utilizes the heat balance principle and cycle stirring method to realize the constant temperature cooling to impact specimen with the reliable performance.



Specifications:

	DWC-30	DWC-60	DWC-70	DWC-80
Temperature range (°C)	Room to -30	Room to -60	Room to -70	Room to -80
Accuracy (°C)	≤±0.5			
Effective working space (mm)	120×120×80			
Specimen quantity (mm)	More than 60 pcs Specimen dimension: 10×10×55			
Cooling media	Alcohol or others			
Power supply (kw)	1.0	1.5	1.5	2.0
Dimensions (mm)	800×510×480	800×510×750	800×510×480	1200×700×800



TE-UV2 Electric Special Cutting Machine for Notch of Impact Specimen

Applications:

This machine is designed for providing the specimens used in the impact testing tasks.

The machine cut notch which according to the “V” ASTM E23, ISO148 standards, “U” DIN 50115 and ISO83 standards “Charpy Notch Testing Method for Metal Material” on the specimen for only one time. At the same time, it has advantage of high precision, long life, low noise and concise appearance etc.



Specification:

- Notch type: V type: 2mm
- Notch type: U type: 2mm
- Size of Specimen: 10mm×10 (7.5 or 5)mm ×55mm
- Travel of cutting knife: 340mm
- Cutting speed: 2.5m/Min
- Dim: 600mm×500mm×1200mm
- Power supply: 380V/50Hz or 240V/60Hz
- Weight: 150kg



Model CTS-50 Projector

Applications:

Model CTS-50 is a kind of special projector, which amplifies and projects the U or V-shaped profiles of the measured parts to the screen to check their profiles and shapes with high accuracy utilizing the optical projection method. It is widely used to check the U and V-shaped notch impact specimen with the features of easy operation, simple structure, direct inspection and high effectiveness.

Specifications:

- Screen diameter: 180mm
- Working table: Square shape 110×125mm Round shape 90mm
- Glass diameter of working table: 70mm
- Working table travel(Length×width×height):±10×10 ±12mm
- Rotating range of round working table: 0-360 degree
- Magnifications: 50X
- Objective magnification: 2.5X
- Eye-field diameter: 3.8mm
- Working distance: 22.89mm
- Light source: tungsten lamp 12v 100W
- Dimensions: 515×224×603mm
- Weight: Approx. 20kG



CTS-50

Specimen Preparation Equipment

Model CPJ-25 Sheet-punching Machine

- This machine is used for machining test samples, such as nonmetallic soft sheets and thin films. Using various kinds of standard cut-off knives, it can accurately and swiftly work out required samples.
- Max. travel: 25mm
- Max. Thickness of punching: 2mm



Model ZHY-W Universal Sampling Machine

- This machine is used for machining the standard samples of nonmetallic materials such as plastic and organic glass etc, which are used in the tests of board impact, tension, compression and thermal energy etc. It can mill notches & curves, and can cut & mill the flats.
- Max. cutting length: 300mm
- Max. cutting thickness: 15mm
- Max. length of milling flat: 300mm
- Specs of milling cutter (grinding wheel used of cutting: 200×32×2mm
- Cutting length used for milling notch: 60mm





- Specs cutter used for milling flat: 30×12×30mm

Model QK-20 Notch Sampling Machine

Dimensions of the cutter

A: 45°C±1°C R0.25

B: 45°C±1°C R1

C: 2±0.2



Model ZZY-25 Automatic Dumbbell Sampling Machine

This machine can be used to machine dumbbell samples and special grips.



Model ZQK-20 Automatic Notch Sampling Machine

Dimensions of the cutter

A: 45°C±1°C R0.25

B: 45°C±1°C R1

C: 2±0.2

