



Model		WDW-S1/2/5	WDW-0.5/1/5/10/20	WDW-25/30	WDW-50/100	WDW-200/250/300	WDW-500/600	WDW-1000
Max. load	kN	1/2/5	0.5/1/5/10/20	25/30	50/100	200/250/300	500/600	1000
	kgf	100/200/500	50/100/500/1,000/2,000	2,500/3,000	5,000/10,000	20,000/25,000/30,000	50,000/60,000	100,000
Load measuring range		0.4%(1/250) ~100%(1/1)FS; 0.2%(1/500) ~100%(1/1)FS (option)						
Load accuracy		±0.5% Class 0.5 (better than ASTM E4, ISO 7500-1, EN 10002-2, BS1610, DIN51221)						
Deformation measuring range		0.4%(1/250) ~100%(1/1)FS;						
Deformation accuracy		±0.5% Class 0.5 (better than ASTM E83, ISO 9513, BS 3846, EN 10002-4)						
Position resolution		0.025 μm						
Position accuracy		±0.2 mm or 0.1 of displacement (whichever is geater)						
Crosshead moving speed (mm/min)		0.001-500/0.005-1000 (option)				0.001-250/0.001-500 (option)		0.001-250
Crosshead moving speed accuracy		±0.5 of set speed (zero or constant load)						
Vertical test space (mm) ¹⁾		990	1270	1330	1450	1500		2260
Total crosshead travel (mm)		900	1180	1230	1350	1400		1960
Column spacing (mm)		/	420	500	570	590	650	600x400
Max. tensile space (mm) ²⁾		560	750	640	650	500		1000
Max. compression space (mm) ³⁾		740	990	1070	1050			800
Tensile jaw for round specimen (mm)		/ ⁴⁾	Ø4~Ø14	Ø4~Ø20		Ø8~Ø32	Ø12~Ø40	Ø20~Ø60
Tensile jaw for flat specimen (mm)		0~8	0~14	0~21		0~27	0~30	0~40
Width x height of jaw (mm)		40 x 60	35 x 55	40 x 55		50 x 75	70 x 90	110 x 110
Compression platen diameter (mm)		Ø50	Ø100					Ø150
Bending fixture span (mm)		/ ⁵⁾	10-240	20-320	20-400	30-420	30-450	50-500
Length of bending roller (mm)		/	70		100	140		160
Diameter of bending roller (mm)		/	Ø10	Ø20		Ø30		Ø50
Hight of bending supporter (mm)		/	55	90		100		180
Power supply		1 phase, 220V/110V, 50Hz/60Hz				3 phase, 380V/220V, 50Hz/60Hz		
Power (kW)		0.4		0.7	0.8/1.5	2/3	5	28
Dimension (mm) ⁶⁾		385x550x1415	780x500x1737	840x600x1944	970x630x2070	1100x730x2390	1210x880x2560	1420x870x3590
Weight (kg)		55	140	230	700	1500	2400	5000
Shipping dimension		1600x900x500	1930x900x700	2120x1160x1050	2240x1450x1000	2650x1250x1100	3150x1500x1250	4200x1800x1100

Note: ¹⁾ Vertical test space means the distance from bottom surface of moving crosshead to top surface of lower working table, which can be referred when adding other fixtures;

²⁾ Max. Tensile space means the tensile distance when equipping with standard tensile grip;

³⁾ Max. Compression space means compression distance when equipping with standard platens;

⁴⁾ Single column machine equips with screw action parallel grip for flat specimens;

⁵⁾ Bending fixture is not included in standard supply, it can be specially offered;

⁶⁾ Frames with other dimensions (extra height or width) & capacities can be offered upon request.

Appearance and specifications are subject to change without prior notice.

JB-A Automatic Type Pendulum Impact Testing Machine

Applied Standard:

ASTM E23, ASTM E1820, ASTM E2298, ISO 148, EN10045, GB/T 3808, GB/T 229, JJG145, JJG 609



Application:

JB-450/750A Automatic type pendulum impact testing machine is used to determine the impact resistance of metal materials under dynamic load and capable of doing a large number of impact tests continuously. It can display the impact absorbed energy, impact toughness, rotation angle of the pendulum, all the testing report can be printed out. JB-450/750A can be equipped with fully automated sample feeding system, which greatly improve the test efficiency, and reduce labor intensity; cryogenic cooling device is available for low temperature impact testing, the minimum temperature is down to -196°C. It is essential quality control equipments for metal material manufacturer and QC department, and also a necessary instrument of research institutes for new materials research.

Specifications:

- Maximum energy: 450/750J
- Angle of striking: $150^{\circ} \pm 1^{\circ}$
- Velocity of striking: 5.24m/s
- Anvil span: 40mm
- Radius of curvature of supports: $R1 \sim 1.5\text{mm}$
- Radius of striker: $R2/R8\text{mm}$
- Angle of striking tip: 30°
- Thickness of striker: 16mm
- Specimen dimension: $55\text{mm} \times 10\text{mm} \times 10/7.5/5\text{mm}$
- Load frame dimension: $2100 \times 830 \times 2100\text{mm}$
- Weight: 900kg



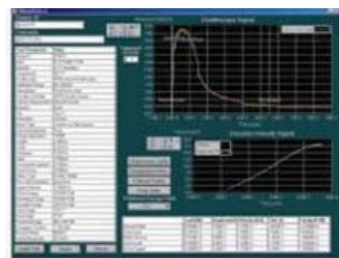
JB-A Automatic Type Pendulum Impact Testing Machine

Application:

DWTT series drop weight impact testing system is suitable for drop weight tear test of various kinds of ferrites, especially for the test of DWTT for pipeline steel as ASTM-E 436, API-RP 5L3, ASTM-E 208 and DIN EN 10274. DWTT integrates mechanical, electrical, and automatic control technology, achieving full automation of feeding, hammer lifting, impact, and fracture specimen collection etc; The load frame is with a four-column design, features in stable support structure, rigid, dual sliding rails; it equipped with a positioning mechanism, anti-dumping mechanism, safety mechanism, hydraulic buffer devices and security guard net. The impact energy is determined by the lifting height and configuration of different dead weight. It is essential quality control equipment for pipeline manufacturers, steel mills, iron and steel enterprises, and is also widely used for research institutes.

- Buffer device is equipped to avoid the second impact, and absorb the residual energy after breaking the specimen to protect the weight and anvil from destroying. The installation of safety mechanism, buffer device, and security guard net will effectively secure the testing machine and its operation, thus extending the service life.

- Configuration of the specimen-feeding system, anti-second impact device, and specimen centering mechanism will guarantee a quick, accurate and reliable test.



Model	DWTT-20000	DWTT-30000	DWTT-40000	DWTT-50000	DWTT-80000	DWTT-100000
Max. impact energy (J)	20,000	30,000	40,000	50,000	80,000	100,000
Max. lifting height (mm)	3,000	2,800	2,500	2,000	3,000	3,000
Max. impact velocity (m/s)	7.6	7.4	7	7	7.5	7.5
Curvature radius of weight (mm)	RS25	RS25	RS25.4 $\pm$ 2.5	RS25	RS25	RS25
Curvature radius of anvil (mm)	RS25	RS25	RS14.3 $\pm$ 1.59	R15.5	R15	R15.5
Hardness of weight and anvil	$\geq$ HRC58	$\geq$ HRC58	$\geq$ HRC58-65	$\geq$ HRC58-65	$\geq$ HRC58-65	$\geq$ HRC58-65
Distance between support (mm)	254	254	254	254	254	254
Centering deviation of specimen (mm)	$\leq \pm 1$	$\leq \pm 1$	$\leq \pm 1$	$\leq \pm 1$	$\leq \pm 1$	$\leq \pm 1$
Indicating deviation of lifting height (mm)	$\leq \pm 1$	$\leq \pm 1$	$\leq \pm 1$	$\leq \pm 1$	$\leq \pm 1$	$\leq \pm 1$
Height of the load frame (mm)	5,500	5,500	5,700	5,700	6,800	7,000

JB-(C/D) Common Type Metallic Pendulum Impact Testing Machine



Application:

JB-(C/D) common type metallic pendulum impact testing machine is the basic model for impact testing machine. It is used to determine the impact resistance of metal materials under dynamic load and capable of doing a large number of impact tests continuously. The display method for the models is different, respectively there are analog, digital and computer display. For the later two models, it can display the impact absorbed energy, impact toughness, rotation angle of the pendulum, all the testing report can be printed out. It is essential quality control equipments for metal material manufacturer and QC department, and also a necessary instrument of research institutes for new materials research.



Model	JB-300/300D/300C	JB-500/500D/500C	JB-800/800D/800C
Max. impact energy (J)	300	500	800
Impact velocity (m/s)	5.2	5.4	5.9
Raised angle (°)	150		
Anvil span (mm)	40		
Round angle of jaws (mm)	R1-1.5		
Round angle of striking edge (mm)	R2-2.5/R8		
Size of specimen (mm)	10 x 10 x 55		
Power supply	3phs, 380V, 50Hz or 220V, 60Hz		
Dimensions (mm)	2124x600x1340	2144x736x1390	2450x1200x 2455
Net weight (kg)	450	650	2300

JB-(C/D) Non-metallic Materials Pendulum Impact Testing Machine

Application:

JB-(C/D) series non-metallic materials pendulum impact testing machine is to determine the impact toughness of plastic, glass steel, plastic pipe, strong nylon, china, clay rock and anti-electric materials. It can do Charpy, Izod, tensile impact, Charpy & Izod, Charpy & Izod & tensile impact test by different anvils and pendulums as the standards of ISO179/180, ASTM D256, JB8761 and ISO9854 etc. Pendulum can carry out the full range of impact tests. A complete range of fully interchangeable hammers and vises allow the operator to perform Charpy, Izod and Tensile impact test at different impact velocities and energies.

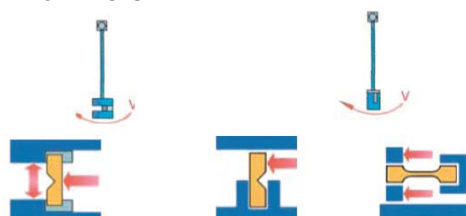
Specifications:

Span of the Charpy Anvil: 40mm, 60mm, 70mm & 95mm

Pre-elevation angle: 160°

Model	Type	Display	Energy(J)	Impact speed(m/s)
JB-I 2.75	Izod	Dial	1, 2.75	3.5
JB-I 5.5			1, 2.75, 5.5	3.5
JB-I 22			2.5, 11, 22	3.5
JB-I 2.75D	Izod	Digital	1, 2.75	3.5
JB-I 5.5D			1, 2.75, 5.5	3.5
JB-I 22D			5.5, 11, 22	3.5
JB-5	Charpy	Dial	1, 2, 4, 5	2.9
JB-25			7.5, 15, 25	3.8
JB-25Z			1, 2, 4, 5/7.5, 15, 25	2.9/3.8
JB-50			7.5, 15, 25, 50	3.8
JB-5D	Charpy	Digital	1, 2, 4, 5	2.9
JB-25D			7.5, 15, 25	3.8
JB-25ZD			1, 2, 4, 5/7.5, 15, 25	2.9/3.8
JB-50D			7.5, 15, 25, 50	3.8
JB-IC5	Izod	Dial	1, 2.75	3.5
	Charpy		1, 2, 4, 5	2.9
JB-IC2522	Izod	Dial	5.5, 11, 22	3.5
	Charpy		7.5, 15, 25	3.8
JB-IC25(D)	Izod	Digital	1, 2.75, 5.5, 11, 22	3.5
	Charpy		1, 2, 4, 5/7.5, 15, 25	3.8
JB-IT50(D)	Izod	Digital	1, 2.75, 5.5, 11, 22	3.5
	Charpy		1, 2, 4, 5/7.5, 15, 25, 50	2.9/3.8
	Tensile		15J	

Hammers:



DWC Series Temperature Chamber for Impact Specimen



Model	DWC-30	DWC-60	DWC-80	DWC-100
Temperature range (°C)	Room to -30	Room to -60	Room to -80	Room to -100
Accuracy (°C)	≤±0.5			
Effective working space (mm)	120x120x80			
Specimen dimension (mm)	10x10x50			
Specimen quantity (mm)	More than 60 pcs.			
Cooling media	Alcohol or other			
Power supply (kW)	1.0	1.5	1.5	2.0
Dimension (mm)	800x510x480	800x510x750	800x510x480	1200x700x800

Notes: Room temperature down to -150°C/-196°C cooled by liquid nitrogen can be specially ordered according to user's requirement

DWCT Temperature Chamber for Impact Specimen In Drop Weight Testing

Temperature range	Room to -80°C
Temperature control accuracy	± 2°C
Temperature fluctuation	± 0.5°C
Size of chamber	600x400x200mm
Specimen quantity	18 pcs
Cooling method	Multiple compressors for cooling.
Cooling medium	Absolute alcohol or others



TE-UV2 Manual / Hydraulic Notch Cutter for Impact Specimen

	V type	U type
Notch type	2mm	2mm
Size of specimen	10×10 (7.5 or 5) ×55mm	
Travel of cutting knife	340mm	
Cutting speed	2.5m/min(hydraulic type)	
Dimension	400x350x700 mm	600x500x1200 mm
Weight	100 kg	200 kg



Non metallic 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 prepare the required samples.

- Max. travel: 25mm.
- Max. thickness of punching: 2mm.



Model QK-20 Notch Sampling Machine

Specimen prepared by QK-20 Notch Sampling Machine confirms to ISO179, ISO180, GB/T1403, GB/T1483, GB/T8814 requirements on non-metallic specimen preparation;

- Dimensions of the cutters:
- A: 45°C±1°C R0.25
- B: 45°C±1°C R1
- C: 2±0.2



Model ZQK-20 Automatic Notch Sampling Machine



Application:

It is special sampling equipment for automatically preparing notch for non-metallic specimen such as plastic & rubber, and composite etc which can be done impact test by using Charpy, Izod impact testing machine. It is designed according to the requirements of standards such as ISO179, GB/T1043, GB/T1843 etc. it features sample structure, convenient operation etc.

- Milling cutter length: 60mm
- Milling cutter spindle rotary speed: 460rpm Motor power: 180W
- Dimensions of the cutter:
 - ▶ A: 45 °C ± 1 °C R0.25 ± 0.05
 - ▶ B: 45 °C ± 1 °C R1± 0.05
 - ▶ C: 2 ± 0.2
 - ▶ D: 0.8± 01
- Outside dimension: 400×350×500mm



Hydraulic Servo Control Compression Testing Machine (Dual Column) TYE-D Series

Application:

This series compression testing machine is mainly designed for compression test of building material items, such as concrete cube, cement specimen, paver materials and related component, etc. With new design idea and advanced technology, this series have more advantages in appearance, operation & applications. It is ideal test equipment for quality control at industry & mineral enterprises, educational teaching in high schools, and technology searching at scientific institutes.



Applicable specimen size:

Extensive ranges for Cubic sample: 100mm, 150mm, 200mm and more; Rectangular sample: 400x200x200mm, 400x200x400mm etc; Cylindrical sample dia.150x300mm, dia.100x200mm, dia. 200x400mm or others as per customer required.

Remark: test space & compression platen can be custom-ized according to specified specimen size.



Model	TYE-1000/2000D	TYE-3000D
Max. Load (kN)	1000/2000	3000
Load measuring range	2-100% of F.S.	
Load accuracy	±1.0%	
Constant loading rate	1-50kN/s (can be adjusted)	1-99kN/s (can be adjusted)
Displacement reading error	0.01mm(can be customized)	
Test space adjusting mode	By dual action actuator	
Upper compression platen (mm)	Φ220	Φ300
Lower compression platen (mm)	Φ220	Φ300
Distance between two platens (mm)	315/505	505
Distance between columns (mm)	275/385	420
Actuator stroke (mm)	250	
Max. Moving speed of piston	100mm/min	
Power supply	1-phase, 220V, 0.75kW	3-phase, 380V, 2.2kW
Overall dimension of load frame & hydraulic power pack (mm)	620x630x1740 600x600x1030	700x 700x185 0 600x760x1430
Weight	1800kg	2800kg

SCT Series Servo Control Drainpipe Compression Testing Machine



Application:

The cement pipe compression testing machine is designed for the radial compression test of drainpipe and other cement pipes which accords with "Test method of concrete and ferroconcrete drainpipe", concrete and ferroconcrete drainpipe". It is also suitable for the compression test of other metal and non-metal material. This testing machine consists of load frame, oil source, computer and servo unit. The structure is compact and it is very easy to operate.

Load frame:

The load frame has dual columns with top actuator. The base of the load frame is made of steel plate and it is convenient to take in and off the specimen (drainpipe and other concrete pipe). The oil power source is with constant servo with flow 4.1L/min, 26Mpa. The servo valve is Moog or Atos. Load is measured by load cell. The deformation can be measured through two digital dial indicators



Model	SCT-100	SCT-200	SCT-500	SCT-600	SCT-700
Max. Load (kN)	100	200	500	600	700
Load measuring range (kN)	2-100	4-200	10-500	12-600	14-700
Load measuring method	Load cell				
Precision grade	±1%				
Test space (mm)	1000		2000		
Upper platen size(mm)	1000×100x120 (with rubber base plate of 25-30mm, Shore hardness is 45-60)		2000×120 ×30, (with rubber base plate of 25-30mm, Shore hardness is 45-60)		
Lower platen size(mm)	1000×60x30 (With 2 wooden supporting beam, each dimension 1100x60x80mm. The net space between two beams is 1/12 of the diameter of pipe)		2000x(130-300)x150 (With 2 wooden supporting beam, each dimension 1100x60x80mm. The net space between two beams is 1/12 of the diameter of pipe)		
Compression platens for concrete(mm)	Ø230		Ø230		
Piston Stoke (mm)	200		200		
Space between two Columns (mm)	1200		2200		
Load speed(mm/min)	0.5-100		≥50		
Power	3 phases, 380V, 50Hz				
Dimensions(mm)	1400x350x1950		2770x800x4300		
Weight (kg)	Approx. 1800		Approx. 4500		

YAW-G3000 Computer Servo Control Testing Machine for Rock Stiffness

Application:

This testing machine is used for compression static and fatigue test for concrete & rock material under different control parameters. The test includes compression, shearing test, fatigue test, three-point bending testing & fatigue test. Meanwhile, it can also realize the automatic control, measuring, data processing; curve analyzing, result displaying and test report printing in the process of various tests. This system can do full process test under stress-strain.

Specifications:

- Max. Load capacity : 3000KN
- Measuring range : 60-3000KN
- Load Accuracy: ±0.5% (Under the condition of less than 1000kN loading, it adopts pressure transducer mounted on oil cylinder used for measuring oil pressure); ±1% (Under the condition of more than 1000kN loading, it adopts load transducer mounted under compression plate used for measuring test load)
- Max. load speed: 400mm/min.
- Displacement resolution: 0. 01mm
- Deformation accuracy: 0.0001 (Adopting Japanese imported differential transformer)
- Max. Stroke of piston: 200mm
- Size of compression plate: φ300mm

