



ALAT UJI

Products, Solution, Services

MATERIALS TESTING MACHINE



WDW E Series



WAW E Series



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Main Application

WDW Series is a new kind of electronic universal testing machine produced by TIME-Shijin Group, which adopts the most advanced and reliable load frame structure of ball screw electric mechanical universal testing machine of the world. The driving system adopts AC servo timing system and motor from Panasonic Co. Ltd. of Japan. The PC controlling system is able to realize the close-loop control of the parameters such as loading force, specimen deformation, and crosshead stroke etc. The system realizes the screen display, online diagram drawing, testing curve changing, fold curve collation and auto analysis of test results, creation of test report. Especially, the application of the control mode can be manual control or computer programming control which makes the cyclic tests become available.



Main Technical Specifications:

Specifications	WDW-600/500	WDW-300E	WDW-200E	WDW-100E-	WDW-50E	WDW-30/20/10	WDW-5E/2E/E1
• Capacity (kN)	600/500	300	200	100	50	30/20/10	5/2/1
• Load frame Stiffness (kN/mm)	1000	600	400	300	250	80	30
• Load range	.4%-100% of the max load						2%-100%
• Accuracy of test load	≤±0.5%						
• Test Space	Single / Double test space						Single
• Precision of Ball Screws	16µm/300mm E level						
• Accuracy of deformation	<±1% within the 2%-100% full range of the extensometer (accuracy level±0.5%)						
• Crosshead stroke accuracy	0.001mm						
• Accuracy of indication value of test load	<±1% (accuracy level±0.5%)						
• Resolution of load	1/200000 of the max load force						
• Scope of deformation measure	2%-100% FN						
• Accuracy Indication of deformation	within ±1% of indication value						
• Scope of deformation measure	10mm-800mm						
• Resolution of crosshead stroke	0.001mm						
• Adjustment scope of test speed under Load control mode	uracy of test speed under Load control mode						
• Accuracy of test speed under Load control mode	Test Speed<0.05%FN/s, within the ±2% of the preset value; Test Speed≥0.05%FN/s, within the ±0.5% of the preset value						
• Adjustment Scope of deformation rate	0.005-5%FN/S						
• Accuracy of deformation rate	Test Speed<0.05%FN/s, within the ±2% of the preset value, while Test Speed≥0.05%FN/s, within the ±0.5% of the preset value						
• Adjustment scope of stroke speed	0.005mm/min-300mm/min	0.005mm/min-500mm/min					
• Accuracy of stroke speed	Test speed<0.01mm/min, within the ±1.0% of preset value, while test speed≥0.01mm/min, within the ±2% of the preset value						
• Scope of the consistent load deformation and displacement control	0.5%-100%FN/s						
• Accuracy of the consistent load deformation and displacement control	value≥10%FN, within the ±0.1% of preset value; preset value<10%FN, within the ±1% of preset value						
• Length of the test space without jaws(mm)	600	600	600	600	600	800	700
• Width of the test space(mm)	500	600	600	600	575	370	400
• Dimension(mm)	1150x770x2817	1100x770x2817	1100x770x2685	1010x750x2225	945x654x2266	686x525x1880	610x4
• Weight(kg)	2800		1100	1100	700	250	100
• Power Supply	AC380V±10%, 50/60HZ, Three-phase Five-wire					AC220V±10%, 50/60Hz	
• Power	5	5	3	1.5	1.5	0.75	0.4
• Type of machine	Floor Type						

Note: Include Training + Instalasi

Main Application

WAW Series machine, compared with a ball screw type electric mechanical bUTM, is adopting oil hydraulic power to push the piston in the oil cylinder to provide loading force. Therefore it is very suitable for making test to different metal or nonmetal materials under high toughness and hardness against extreme big loading force. By using oil pressure transducer and photoelectric encoder, the computer is timely collecting the testing parameters like loading force, stroke etc. The servo system will provide on line close loop control and constant parameters control. The test software is able to create customized testing methods and setup testing report in only a few steps. WAW series is widely used in different inspection department, engineering area, universities and institutes.



Features:

- Full computer controlled testing process
- Adopt oil-hydraulic automatic clamps which can be operated from separate control box
- Wedge tension jaw processed by advanced technology; Increase the stiffness of crosshead under high load and High intensity tests
- Powerful multifunctional control software will provide more testing methods to meet ASTM, ISO and other testing Standards
- Report Guide will create your testing report in only three steps
- Programmable testing software makes LCF testing or cyclic testing become available
- Overload protection will secure operators

Main Technical Specifications:

Specifications	WAW-300C	WAW-500C	WAW-600C	WAW-1000A	WAW-1000C	WAW-1000D	WAW-2000A
• Max. capacity (kN)	300	500	600	1000	1000	1000	2000
• Relative error of reading	≤±1%	≤±1%	≤±1%	≤±1%	≤±1%	≤±1%	≤±1%
• Measuring range	2%-100% of FS	2%-100% of FS	2%-100% of FS	2%-100% of FS	2%-100% of FS	2%-100% of FS	2%-100% of FS
• Clamping method	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic
• Round specimen clamping range (mm)	Φ10-Φ32	Φ13-Φ40	Φ13-Φ40	Φ13-Φ60	Φ12-Φ60	Φ13-Φ60	Φ15-Φ70
• Flat specimen clamping range (mm)	0-15	0-30	0-30	0-40	0-55	0-40	0-50
• Flat specimen clamping width (mm)	76	80	80	125	70	125	140
• Max. tension test space (mm)	600	600	600	780	600	600	850
• Max. compression test space (mm)	500	500	500	650 -PV	500	470	720
• Load frame dimension	1000 x 600 x 2330	1180 x 750 x 2633	1180 x 750 x 2633	1255 x 660 x 3900	1200 x 780 x 2850	1100 x 960x 2510	1510 x 1040 x 4700
• Motor power (kW)	3.8	4.1	4.1	2.3	6	2.1	9.2
• Load frame weight (kg)	2300	3000	3000	5000	4270	5000	10400
• Column clearance (mm)	530	650	650	675	650	565	900
• Compression platen size (mm)	Φ125	Φ125	Φ125	204 x 204	Φ160	204 x 204	204 x 204
• Span of bending rollers (mm)	350	600	600	1000	800	800	1000
• Width of bending rollers (mm)	140	140	140	140	140	140	140
• Allowable camber (mm)	100	100	100	150	150	150	190
• Max. piston stroke (mm)	250	250	250	250	250	250	250
• Max. piston speed (mm/min)	Approx. 70	Approx. 80	Approx. 80	Approx. 50	Approx. 50	Approx. 50	Approx. 50
• Max. crosshead speed (mm/min)	Approx. 120	Approx. 150	Approx. 150	Approx 150	Approx 150	Approx 150	Approx. 200
• Power supply	380V, 50/60Hz, 3-Phase						

Note: Include Training + Instalasi

Main Application

WEW Series machine is adopting oil hydraulic power to push the piston in the oil cylinder to provide loading force. It is very suitable for making test to different metal or nonmetal materials under high toughness and hardness against extreme big loading force. By using load transducer and photoelectric encoder, the computer is timely collecting the testing parameters like loading force, stroke etc. This machine is adopting manual control mode and computer collecting and displaying methods to process the testing parameters. The software based on Windows system is able to make automatic calculating of test results, i.e. tensile strength, up / low yield strength, Non proportional stress point etc. Report creation function makes it is very simple to make testing report in needed format. This machine is widely used in different areas and facilities.

Features:

- Full computer displayed of testing process.
- Manual loading speed will meet your appropriate testing speed.
- Adopt manual / oil-hydraulic automatic clamps which can be operated from separate control box.
- Timely control software will provide accurate record of testing process.
- Report guide will create your testing report very simply.
- Overload protection will secure operators.



Main Technical Specifications:

Specifications	WEW-300C	WEW-300D	WEW-600C	WEW-600D	WEW-1000A	WEW-1000C	WEW-1000D	WEW-2000A
• Max. capacity (kN)	300	300	600	600	1000	1000	1000	2000
• Relative error of reading	≤±1%							
• Measuring range	2%-100% of FS							
• Clamping method	Hydraulic clamping							
• Round specimen clamping range (mm)	Φ10-Φ32	Φ10-Φ32	Φ13-Φ40	Φ13-Φ40	Φ13-Φ60	Φ12-Φ60	Φ13-Φ60	Φ15-Φ70
• Flat specimen clamping range (mm)	0-15	0-15	0-30	0-30	0-40	0-55	0-40	0-50
• Flat specimen clamping width (mm)	76	80	80	80	125	70	125	140
• Max. tension test space (mm)	600	650	600	600	780	600	600	850
• Max. compression test space (mm)	500	550	500	500	650	500	470	720
• Load frame dimension	1000 x 600 x 2330	840 x 620 x 2210	1180 x 750 x 2633	1180 x 750 x 2633	1255 x 660 x 3900	1200 x 780 x 2850	1100 x 960 x 2510	1510 x 1040 x 4700
• Motor power (kW)	2.3	2.1	2.6	2.6	2.3	4.5	2.1	5.2
• Load frame weight (kg)	2300	1600	3000	3000	5000	4270	5000	10400
• Column clearance (mm)	530	520	650	650	675	650	565	900
• Compression platen size (mm)	Φ125	Φ160	Φ125	Φ125	204 x 204	Φ160	204 x 204	204 x 204
• Span of bending rollers (mm)	350	240	600	600	1000	800	800	1000
• Width of bending rollers (mm)	140	140	140	140	140	140	140	140
• Allowable camber (mm)	100	100	100	100	150	150	150	190
• Max. piston stroke (mm)	250	200	250	250	250	250	250	250
• Max. piston speed (mm/min)	Approx. 70	Approx. 70	Approx. 70	Approx. 70	Approx. 50	Approx. 50	Approx. 50	Approx. 50
• Max. crosshead speed (mm/min)	Approx. 120	Approx. 160	Approx. 150	Approx. 150	Approx 150	Approx 150	Approx 150	Approx. 150