

WAW Series Servo Hydraulic Universal Testing Machine

Main Applications:

WAW Series machine, compared with a ball screw type electric mechanical UTM, 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.



GRIP JAW TYPE

Optional "open" (C type) or "semi open" (Y type) type grip jaw. Suitable for different test intensity.

UPPER CROSSHEAD

Upper crosshead position can be adjusted according to the length of test samples.

AUTO HYDRAULIC GRIP

Independence wedge action hydraulic grip, firmly hold the samples. Secure the safety and reliability during tensile tests.

LOWER CROSSHEAD

Lower crosshead is driven by motor and gear to make it move up and down to preset gripping distance.

TEST SPACE

Adopts double test space; use upper test space to make tensile tests, use lower test space to make compression tests.

OIL CYLINDER

Refined high precise oil cylinder secure the stability of load and accuracy of test results.

ELECTRIC CABINET

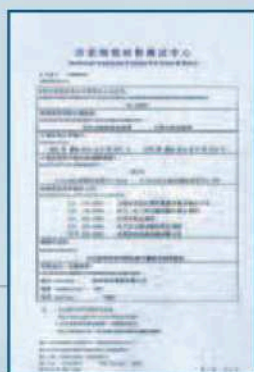
Electromagnetic proof cabinet, improve the reliability and stability of the whole electric system.

TIME-SHIJIN Controller

Plug In ready to use PCI control card, suits all kinds of personal computer and main board. Full digital measure and control circuit provided with Load, displacement & deformation different measuring channel. Close loop control by simply software configuration.



WAW-1000C



CALIBRATION REPORT FROM NACIS FOR WAW SERIES TESTING SYSTEM

WAW Series Servo Hydraulic Universal Testing Machine

Features:

Full computer controlled of 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.

Programable testing software makes LCF testing or cyclic testing become available.

Overload protection will secure operators.



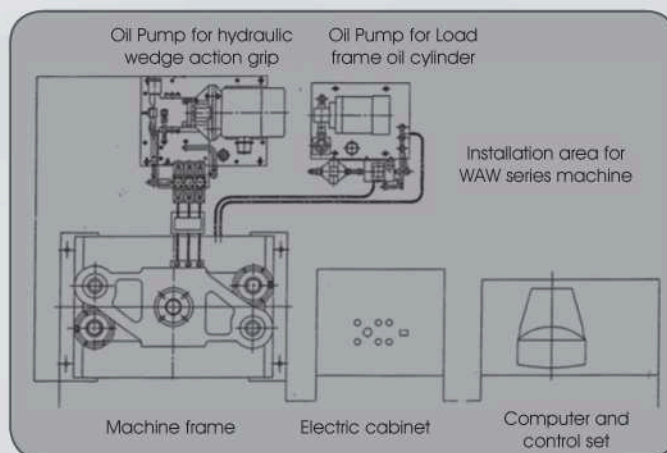
WAW-50A/100A



WAW-1000A



WAW-2000A



Main Technical Specifications:

Specification	WAW-100A	WAW-100C	WAW-300C	WAW-300A	WAW-500C	WAW-500C	WAW-600A	WAW-1000C	WAW-1000A	WAW-2000A
Load range	2%-100%FN ,no rank or Simulation ranks, Optional resolution: 1/1000 or 1/2000 (EDC controller) or 1/2000000									
Piston stroke (mm)	250	150	250	300	250	300	300	250	250	250
Measure of stroke (mm)	0.01									
Test space (include piston stroke) (mm)	Tension	600	580	600	900	600	600	600	600	850
	Compression	355	500	550	300	800	300	540	650	720
Overall dimension (mm)	2560 X 2200 X 2760	2560 X 2200 X 2040	2600 X 2200 X 2350	2600 X 2000 X 2987	27160 X 2200 X 2633	27160 X 2200 X 3290	2600 X 2000 X 3290	3020 X 2200 X 3070	3020 X 2000 X 4000	3280 X 2200 X 4700
Distance between columns (mm)	Tension	395	435	530	590	650	580	760	675	900
	Compression	255			380		370		490	690
Load frame net Weight (kg)	1250	1500	2300	2200	3000	3000	2900	6800	5000	10400
Max load (kN)	100	100	300	300	500	600	600	1000	1000	2000
Accuracy of test load	± 1%									
Attenuation of deformation amplifier	1,2,5,10									
Max gripped width of flat specimen (mm)	70	70	70	70	80	80	80	70	125	140
Gripped thickness of flat specimen (mm)	0-15	0-15	0-15	0-15	0-30	0-30	0-30	0-55	0-40	0-50
Gripped dia of round specimen (mm)	Φ6-Φ22	Φ6-Φ22	Φ10-Φ32	Φ10-Φ32	Φ13-Φ40	Φ13-Φ40	Φ13-Φ40	Φ12-Φ60	Φ13-Φ60	Φ10-Φ70
Dimension of compression plates (mm)	Φ125	Φ125	Φ130	Φ120	204X204	Φ120	204X204	204X204	204X204	204X204
Span of bending support (mm)	600	350	350	100-1000	600	600	1000	100-800	1000	800
Length of the bending roller (mm)	100	100	140	140	140	140	140	140	140	140
Max bending flexibility (mm)	80	80	100	100	100	100	100	150	150	190
Dimension of specimen for shear (special order)	10	10	10	10	10	10	10			
Power of the pump motor (kw)	1.5	3	3	3	3	3	3	3	3	7
Device of measuring deformation	Electronic Extensometer									
Relative error of deformation measuring	± 0.5% or ± 1%									
Crosshead adjust structure (Means of transmission)	Common motor worm gear drive	Disc motor worm gear drive	Common motor worm gear drive	Disc motor worm gear drive	Common motor worm gear drive	Disc motor worm gear drive	Common motor worm gear drive	Disc motor worm gear drive	Common motor worm gear drive	Common motor worm gear drive
	Software overload protection and mechanical limit switch									
Safety protection	2%-5%									
Overload protection rate	TIME SHIJIN software									
Software	600X400X960									
Dimension of load frame (include piston stroke) (mm)	610 X 700 X 2750	760 X 500 X 2040	900 X 600 X 2350	1250 X 560 X 2987	1100 X 1200 X 2633	1100 X 1200 X 2633	1255 X 660 X 3290	1320 X 800 X 3070	1255 X 866 X 4000	1510 X 1040 X 4700
Dimension of control cabinet (mm)	≥ 70 (or control by the software)									
Speed of stroke (mm/min)	≥ 50 (or control by the software)									