NEXTGEN MATERIAL TESTING

YOUR QUALITY TESTING CHOICE

NG-SHM Class B – Servo Hydraulic Testing Machine

Standards: ISO 7500-1, ASTM E4

- ULTIMATE USER-FRIENDLINESS
- LEADING DEPENDABILITY AND RELIABILITY
- STRICT COMPLIANCE WITH INDUSTRY STANDARDS
- STOCKED CONSUMABLES AND SPARES
- TRUSTED AFTER SALES TECHNICAL SUPPORT
- LIFETIME PRODUCT SUPPORT ADVANTAGE

GET A QUOTE

Description

The NG-SHM Class B series is designed to provide a solution for your high-force mechanical testing of a diverse range of materials covering many different industries. Class B has been designed around the application of testing fasteners, rebar, chains, welds and castings and uses a "worm wheel" driven cross head to adjust the test space.

Force Capacity: 300kN (67442.68 lbf), 600kN (134885.36 lbf), 1000kN (224808.94 lbf), 3000kN (674426.82 lbf)

Load Frame Configuration: 6 column, servo-controlled hydraulic

Test Space: Dual zone (tension on top, compression on bottom)

Load Frame

- Lead screw driven crosshead to adjust the test space
- Durable 6-column load frame design incorporates 3-position crosshead, adjustable specimen positioning, precision guide columns, thick crosshead and a base beam minimizes the load frames stored energy while producing reliable, stable, accurate loads, strain and modulus values.

- Ergonomically designed load frames ensure safety, reduce operator fatigue, and provide the highest level of flexibility.
- Standard Dual Zone Test Space for reducing setup time
- "Quick Return" hydraulic valve for higher throughput
- Automatic limit checking for crosshead position, overload, over temperature, over voltage, etc.
- The system can return automatically, the oil cylinder can return to the original position manually or automatically after finishing testing
- Positive specimen holding is ensured by the wedge action hydraulic operated grips
- Encoder mounted on the seat is for position measurement of the crosshead to provide higher accuracy
- Servo valve provides high stability and reliability

Load Cell

- Uses strain gauge load cell technology to measure the force being applied to your specimen. The load cell is located in the lower grip and is used to directly measure tensile force.
- Precise load cell measures and captures sensitively tension and compression force, high accuracy load measurement resolution reaches 1/350000.
- Quality load cell ensures high precision and repeatability.

Technical Specifications

Model	SHM305	SHM605	SHM106	SHM306
Class	Class B			
Capacity	300kN (67442.68 lbf)	600kN (134885.36 lbf)	1000kN (224808.94 lbf)	3000kN (674426.82 lbf)
Calibration accuracy	Class 1 / Class 0.5			
Force range	1% - 100%FS			
Force accuracy	Better than ±1%/±0.5%			
Extension Range	1% - 100%FS			
Extension Accuracy	Better than ±1%/±0.5%			
Extension Resolution	1/350000 of max extension			
Actuator (piston) speed (mm/min)	0 - 180	0 - 140	0 - 90	0 - 80
Force Loading Speed	0.02% - 2% FS /s			
Column Number	4	6	6	6
Column Spacing (test space width) (cm)	40.5	43	43	95
Maximum Tension Space (cm)	53	75	80	120
Maximum Compression Space (cm)	50	60	70	100
Diameter of Round Specimens (mm)	?10 - ?32	?10 - ?40	?15 - ?60	?30 - ?110
Diameter of Threaded Steel (mm)	?10 - ?32	?10 - ?36	?10 - ?40	-
Thickness of Flat Specimens (mm)	2 - 25	2 - 30	2 - 40	10 - 100
Compression Platens (cm)	?12	?15	20 x 20	?28
Actuator (piston) Stroke (cm)	15	20	25	30
Frame Dimensions (l x w x h) (cm)	94 x 61 x 200	112 x 77 x 260	125 x 92 x 280	132 x 95 x 400
Hydraulic Power Unit Dimensions (l x w x h) (cm)	45.5" x 24" x 35.5" / 115 x 60 x 90 cm			
Power Consumption (kW)	5	6	8	6.5
Frame Weight (kg)	4409.24 lbs / 2000 kg	6613.86 lbs / 3000 kg	11023.11 lbs / 5000 kg	24250.84 lbs / 11000 kg