NEXTGEN MATERIAL TESTING

YOUR QUALITY TESTING CHOICE

# NG-SHM Class C – 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

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## Description

The NG-SHM Class C series is designed to provide a solution for your high-force mechanical testing of a diverse range of materials covering many different industries. Class C has been designed specifically with a longer jaw face for tensile testing of steel wire.

**Force Capacity:** 600kN (134885.36 lbf), 1000kN (224808.94 lbf)

**Load Frame Configuration:** 6 column, servo-controlled hydraulic

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

**Typical Specimens:** Fasteners, rebar, chain, welds, castings, stranded steel wire

## Load Frame

- Specifically designed with a longer jaw face for tensile testing of stranded steel wire
- 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.

# NG-SHM Class C - Servo Hydraulic Testing Machine Technical Specifications

| Servo-Hydraulic Universal Testing Machine | | |
|---|---|---|
| **Model** | SHM605 | SHM106 |
| **Class** | Class C | |
| **Capacity** | 600kN (134885.36 lbf) | 1000kN (224808.94 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 - 140 | 0 - 100 |
| **Force Loading Speed** | 0.02% - 2% FS /s | |
| **Column Number** | 6 | 6 |
| **Column Spacing (test space width) (cm)** | 41 | 43 |
| **Maximum Tension Space(cm)** | 110 | 110 |

| Servo-Hydraulic Universal Testing Machine | | |
|---|---|---|
| **Maximum Compression Space (cm)** | 95 | 95 |
| **Diameter of Round Specimens (mm)** | Ø9 - Ø18 | Ø9 - Ø18 |
| **Diameter of Threaded Steel (mm)** | Ø10 - Ø30 | Ø10 - Ø45 |
| **Thickness of Flat Specimens (mm)** | 2 - 20 | 2 - 40 |
| **Compression Platens (cm)** | ?15 | 20 x 20 |
| **Actuator (piston) Stroke (cm)** | 25 | 25 |
| **Frame Dimensions (l x w x h) (cm)** | 94 x 65 x 294 | 102 x 67 x 305 |
| **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)** | 6 | 6 |
| **Frame Weight** | 6613.868 lbs / 3000 kg | 11023.11 lbs / 5000 kg |

**GET A QUOTE**

**NORTH AMERICA (CORPORATE HEADQUARTERS):** 170-422 Richards St., Vancouver, BC, V6B 2Z4 Canada
**CALIFORNIA:** 3503 Jack Northrop Ave., Suite # AF937, Hawthorne, CA 90250
Toll Free:+1 (888) 332-3582 | Fax: +1 905 247-0555 | www.nextgentest.com