



## AUTOMATIC DIRECT/RESIDUAL SHEAR TEST MACHINE

Standard : ASTM D3080, BS 1377-7, AASHTO T236, NF P094 071-1/2

### Shear Testing Machines

The Automatic Direct/residual Shear Test Machine is a sophisticated geotechnical testing instrument designed to measure the residual shear strength of soils and other granular materials. This advanced device is essential for evaluating the long-term stability of slopes, embankments and foundations, particularly in landslide-prone areas or critical infrastructure projects. The control panel features an LCD screen and a 16-key membrane keypad for manual settings and operation. The large liquid crystal display ensures clear visibility, while the intuitive keypad allows for easy adjustments.

#### Features:

- 1) **Digital Control & Display** - Features a user-friendly digital interface with an LCD or touchscreen display for real-time monitoring and adjustments.
- 2) **High Precision Sensors** - Equipped with high-accuracy load cells and displacement sensors for precise shear force measurement.
- 3) **Automated Testing** - Supports programmable test parameters, allowing automated test cycles for consistency and efficiency.
- 4) **Robust Construction** - Made from durable materials to ensure long-term stability and minimal maintenance.

#### Technical Specifications :

<b>Model Number</b>	<b>NL 5052 X / 005N</b>
Max. Shear Capacity	5000 N
Resolution	1 N
Adjustable Shear Speed	0.00001 to 9.99999 mm/min
Max. Shear Travel	25 mm
V.Load Beam Ratio	11:1,10:1,9:1
Approx. Dimension	1300 (L) x 400 (W) x 1250 (H) mm
Power Supply	220~240 V, 1 pH, 50 / 60 Hz, 0.5 Hp
Approx. Weight	165 kg

**Unit Consists Of :**

Model Number	Parts Description	Qty
NL 5052 X / 005 – P001	60 X 60 mm Complete Shear Box Assemblies Unit	1set
NL 5052 X / 005 – P002	5kn Load Sensor Unit	1no
NL 5052 X / 005 – P003	12.7 x 0.001 mm Digital Displacement Gauge c/w COM Cable (for Vertical Displacement)	1no
NL DT – 3DP	25 x 0.001 mm Digital Displacement Gauge c/w COM Cable (for Horizontal Displacement)	1no
NL 5052 X / 005 – P006	Hollow Punch & Tamper for 60x60 mm specimen	1no
NL 5044 X / 001 – A001	50 kg Set Of Weight	1set

\*1 Copy of Manual Instruction

**Optional Accessories :**

Model Number	Parts Description
NL 5052 X / 005 – A001	100 x 100 mm Complete Shear Box Unit
NL 5052 X / 005 – A002	Hollow Punch & Tamper for 100 x 100 mm Specimen
TT 6ST – PBU	Portable Bench Unit
TT 6ST – PC1	Desktop Computer Unit c/w Operation Software

**Software Featured:-**

- 1) **Data Management** - Record, save and retrieve test data for future reference.
- 2) **Real-Time Monitoring** - View live data with dynamic plotting for instant analysis.
- 3) **Calibration & Settings** - Adjust and calibrate machine parameters for precise testing.
- 4) **Remote Control** - Operate the machine directly from a laptop for enhanced convenience.
- 5) **Specimen Tracking** - Input detailed sample information for easy identification and traceability.
- 6) **Advanced Parameter Display** - Access additional metrics (e.g., stress values, graphs) not shown on the machine's built-in display.



**Desktop Computer Unit**