

## **FULLY COMPUTERIZED HYDRAULIC SPRING LOAD TESTING MACHINES (Software Controlled)**

### **RSTM SERIES**



- Fully computerized for Compression Deflection testing
- Cycle testing of helical springs of WAP7 and WAG9 locomotives
- NI-USA/Germany/Hungary Interface card
- Suitable for comp. & tension
- HBM-German load cell
- Italian stroke sensor
- Deflection Sensor Gefran (Italy)
- Lab view software
- Variable loading speed
- NI-USA/Germany interface
- Ethernet facility
- Latest Original Intel Computer with 19" LED Monitor with HDMI connection, Deskjet Printer and UPS
- GPDS High speed signal conditioner
- Traceability to N.P.L. Delhi
- Countrywide Service Support
- CE Marked electrical components

### **DESCRIPTION –**

RSTM Series fully computerized Hydraulic Spring Load Testing Machine made with heavy duty Press Frame assembly with Steel plate (IS 2062), neat and clean welding joints. Our Spring load testing machines are highly accurate, reliable cost effective, low maintenance machines with user friendly windows based Lab View software with high quality Interface card and Ethernet facility.

The machines comprises of a rigid steel with Ball screw based, computer controlled linear actuator. The actuator is provided with guide to avoid radial movement contamination. Linear actuator is interfaced with software to perform testing as per user defined parameters.



### The unit is complete with the following -

Hydraulic cylinder (Double mounted flange mounted)

Hydraulic Power pack unit with suitable capacity branded CROMPTON OR KIRLOSKAR Motor to work on 3 Phase supply with dual pumping system for van pump pressure and for ram speed gear pump. The unit is complete with oil tank, Oil filter cum air breather, return line filter, Direction control valve, Temperature meter with thermostat, Pressure control switch, connecting hose and steel tube etc.

Structural steel section scissors type hydraulically operated working table with manual dual speed hydraulic hand pump and single action hydraulic cylinder.

Load Indicator

Branded PC System, 19" LED Monitor, software, Printer and UPS along with Data cables and other standard accessories

### Safety Features –

Auto shut down in case of overloading, heating protection device for hydraulic oil , Limit switch (upper and lower) for movement of Ram

Low and High voltage protection

Auto stop in case of single phase

ON/OFF switch

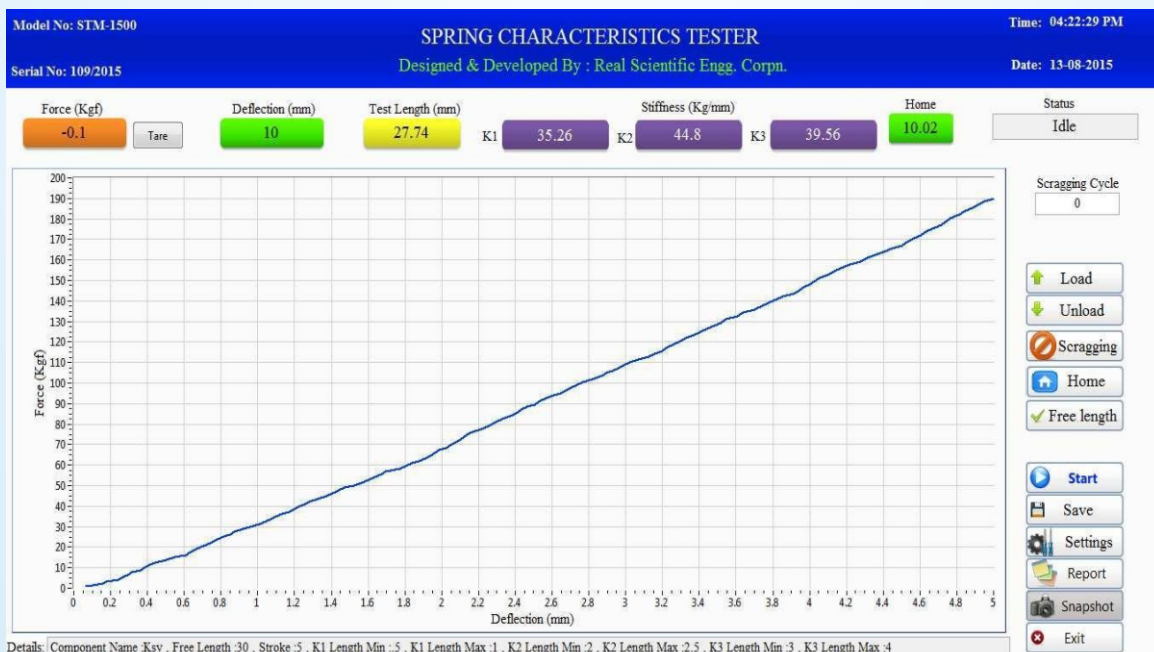
Load and deflection indicator with length measuring device with digital linear scale fitted with RAM for UP and DOWN measurement and digital read out mounted on top of control box for easy view while operation

CE marked branded MCB, voltmeter, Emergency stop switch, Overload Indicator, Ampere Meter, Electric Fuse, Contractors, relay and other electronic peripherals.

IS /BS marked branded electric wirings

Control box with locking arrangement

Safety guard made form thick M.S sheet and fitted with all protection for any type of ejection or breakage of spring during operation.





## TECHNICAL DESCRIPTION

Models	RSTM-1000	RSTM-5000	RSTM-20000
Loading Capacity	1000 kgf	5000 kg	20000 kg
Measuring range	10-1000kgf	50-5000kgf	200 to 20000kgf
Sensitivity	0.01kgf	0.05kgf	0.1kgf
Overall accuracy	± 0.5% from 5% to 100% of measuring range		
Deflection sensor/sensitivity	± 1000 mm / 0.01 mm	±10000 mm/ 0.01 mm	± 20000 mm/ 0.01 mm
Working Height (Day light) mm	600-630	600-630	1000-1030
Working area (mm)	500 x 500	600 x 600	750 x 470
Working capacity of Double action Hydraulic cylinder	1000 kgf	5000 kgf	20000 kgf
Working stroke	300-350mm	450-500mm	750-800 mm
Pressure (maximum)	150 bar	150bar	150 bar
Hydraulic Power pack unit working pressure (maximum)	200 bar	200bar	200 Bar
Oil tank capacity	100ltrs	150ltrs	200 litres
Motor (H.P) – CROMPTON/ KIRLOSKAR	1 HP	5 HP	20 HP
Dimensions (W X D X H)	980 x 800 x 1700	1050 x 600 x 1900	1170 x 410 2000
Weight (approx.)	1260 kgs	1375 kgs	1657 kgs

### Computer System and software

Intel Pentium latest processor, 4 GB RAM/ 1 TB HDD combo drive with 19" TFT /LED Monitor with HDMI connection, Original compatible Window with licensed antivirus , Logitech or any other reputed brand keyboard, Mouse, 650 VA UPS. Labview based customized user friendly software to transfer Data recording and user can analyze test data in tabular form or can transfer to XLS format. Both tabular and graphical form is available for customer's convenience.

### Display

Display of all parameters on computer monitor i.e. Force, Deflection, Spring rate, Hysteresis Force Vs deflection graph, Component no., Part name, Date & Time etc

### Data Recording

Available for each & every spring tested on machine Data can be stored w.r.t. BATCH # or DATE Data for any of the spring can be analyzed just by clicking on the date in recording.



### **Testing Mode**

Fully automatic, just feed the load or deflection limits. Machine will automatically load the component, display test results and return back to original position.

### **Standard Accessories**

Pair of compression platens, Pair of hooks and works calibration certificate With Traceability to N.P.L., New Delhi

### **Data Recording**

Available for each & every spring tested on machine Data can be stored w.r.t. BATCH # or DATE Data for any of the spring can be analyzed just by clicking on the date in recording

**Power supply** - 415 V, 3 Phase, 50 Hz