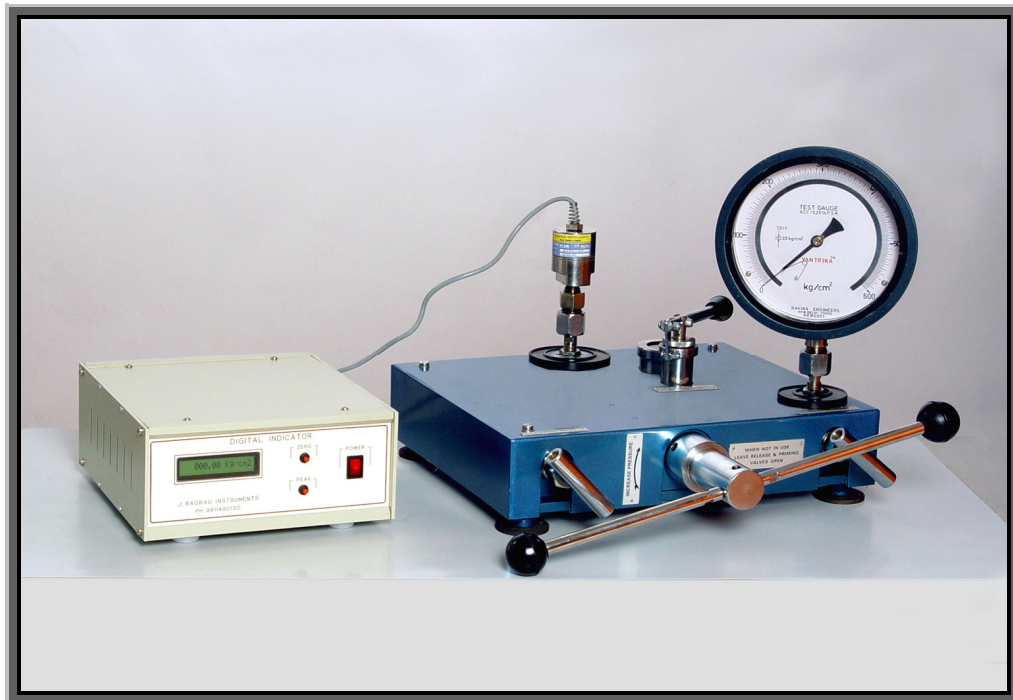


DIGITAL PRESSURE CALIBRATION SYSTEM



Specifications

Capacity	100, 250, 400 & 600 Kg/cm ²
Resolution	0.02, 0.05, 0.1, & 0.2 Kg/cm ²
Type	Digital.
Display	16X1 LCD With backlight
Accuracy	± 0.1%
Pressure Source	Hydraulic Screw pump.
Calibration	Calibrated from Regional Testing Center (NR) New Delhi. Govt. of India
Sensor Make	Measurement Specialties UK
Power	220 VAC±10% @50Hz
Accessories	5 Adopter 1/8", 1/4", 3/8", 1/2", BSP & M20x1.5 A set of "O" rings, a set of spanners
Warranty	1 Year

J.RAGRAU INSTRUMENTS

23-B, LIG Flat, Madhuban Enclave, Near Madipur Metro Station, New Delhi-110 063

Phone : 011-25211186 Mobile 9811490150

Email- depak_vermal@yahoo.com

Website : www.jragrau.com



DIGITAL SPRING TESTER

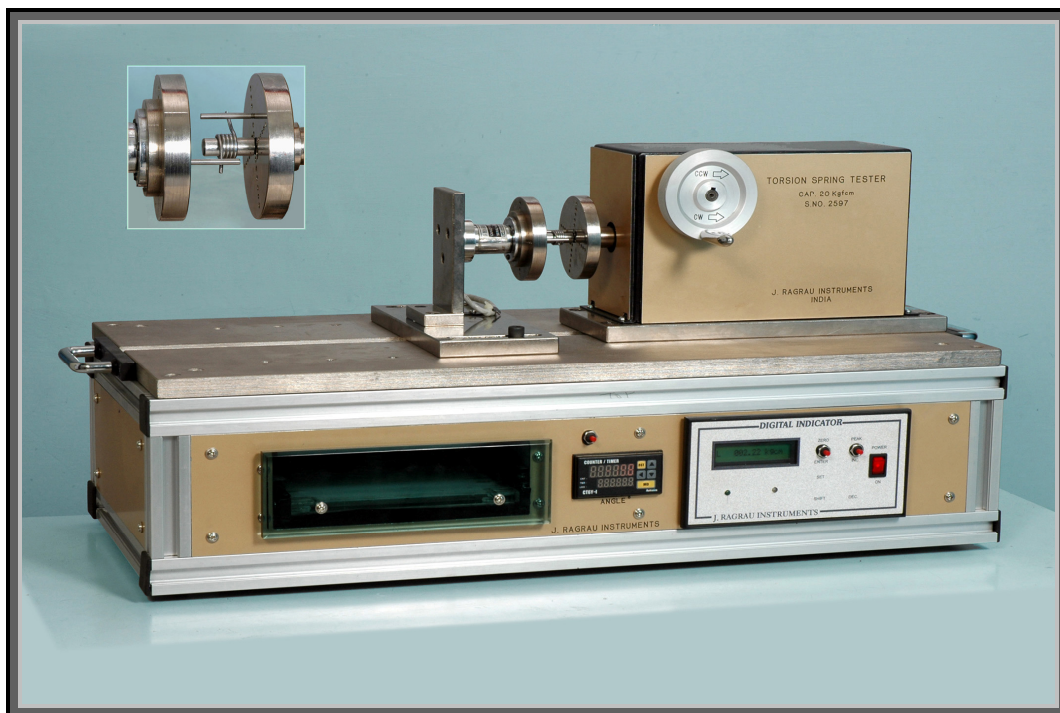
Type	Universal, (Compression & Tension mode)
Capacity	10, 50, 100, 200, 500 & 1000 Newton
Max. Deflection	200 mm
Uncertainty	$\pm 0.5\%$ of the reading (1% in Universal model)
Resolution	1/10000 & 0.01 mm
Measuring units	Newton, Kgf & Lbf
Display	Force & Deflection
Features	Zero, Peak
Force applying	thru rotating wheel
Accessories	Compression pads & Tension Hooks
Calibration	From NABL approved LAB.
Warranty	24 months form the date of installation at your site

J. RAGRAU INSTRUMENTS

Flat # 23B, Madhuban Enclave, Near Madipur Metro Station, New Delhi - 110063

Phone 011-25211186, Mobile 9811490150

Email- depak_verma1@yahoo.com / dv@jragrau.com



DIGITAL TORSION SPRING TESTER

Type	Universal, CW & CCW
Capacity	20, 50, 100, 500 & 1000 Kgcm
Max. Deflection	1800°
Accuracy	± 0.5% of the reading (1% in Universal model)
Resolution	1/10000 & 0.1°
Display	Force & Deflection
Features	Zero, Peak
Torque applying	thru rotating wheel
Power	220 VAC @ 50Hz ± 10 %

J. RAGRAU INSTRUMENTS

23-B, LIG Flat, Madhuban Enclave, Near Madipur Metro Station, New Delhi-110 063

Phone: 011-25211186, Mobile 9811490150

Email - depak_verma1@yahoo.com

Website : www.jragrau.in



Key Torque Measuring System

Specifications

Capacity	30 Kgf cm
Sensors	Strain Gauge Based.
Resolution	0.01 Kgf cm
Accuracy	$\pm 1\%$ of the reading
Display	5 digit Micro controller based 16x1 LCD with backlit
Feature	Zero, Peak,
Power required	230VAC @ 50 Hz $\pm 10\%$
Enclosure	Powder coated aluminum body
Calibration	we will provide manufacturer calibration certificate along with NPL traceability. (If NPL calibration required, the charges will be extra)
Warranty	24 months from the date of delivery

#####

J.RAGRAU INSTRUMENTS

23-B, LIG Flat, Madhuban Enclave, Near Madipur Metro Station, New Delhi-110 063

Phone : 011-25211186 Mobile 9811490150

Email- depak_vermal@yahoo.com , Website : www.jragrau.com

Length Calibration System as per IS 12592: 2002



Specifications

Model	LCS - 1000
Range	1000 mm
Resolution	0.01 mm
Accuracy	+/- 0.1% of FSO
Calibration	NPL Calibrated
Type	Ball Screw based
Drive	Motorized
Feature	Provision for winding tape & Steel Scale calibration
Computer Interface	RS232
Operating voltage	230 VAC +/- 10% @50+/-5 Hz
Warranty	18 months from the date of installation

#####

J. RAGRAU INSTRUMENTS

23-B, LIG Flat, Madhuban Enclave, Near Madipur Metro Station, New Delhi-110 063

Phone: 011-25211186, Mobile 9811490150

Email- depak_verma1@yahoo.com

Website: www.jragrau.com



Specification of Tensile Tester

Model	JRI-TT
Type	Digital
Capacity	50,100, 250, 500, 1000, 2000 & 5000 Kg
Resolution	1/10000 of the capacity
Accuracy	$\pm 0.5\%$ of test value (at 10-100%)
Elongation	1000mm
Least count	0.1mm
Display	16X2 lines LCD with back light
Feature	zero, peak, over load & over travel safety
Indication	peak value of force v/s elongation
Traverse speed	50-500 mm/min., variable with variable speed drive (Optional)
Control	UP, DOWN & STOP
Grip separation	min. 25mm Max. 800 mm
Power	440VAC $\pm 10\%$, 50Hz
Attachment	01 set of grip
Over load safety	machine will be automatically cut off at 95% of the machine capacity.

J.RAGRAU INSTRUMENTS

23-B, LIG Flat, Madhuban Enclave, Near Madipur Metro Station, New Delhi-110 063

Phone: 011-25211186 , Mobile 9811490150

Email - depak_verma1@yahoo.com

Website : www.jragrau.in



Specifications : As per IS:6789-2018

Capacity	1-1000 & 2-2000 Nm
Sensors	3 nos. (10 /100 & 1000 Nm) (20 Nm / 200 Nm / 2000 Nm)
Least Count	0.001 / 0.01 / 0.1 Nm
Measuring Units	Nm
Uncertainty	$\pm 0.5\%$ of the reading
Display	5 digit Micro controller based LED
Feature	Zero, Peak, First peak, Over Load Buzzer and Time
Power required	230VAC @ 50 Hz + 10%
Enclosure	Powder coated aluminum body
Accessories	Adapters 1/8" – 3/4" 5 Nos.
Torque applying Mechanism	Through VFD control motor for digital, dial & click type Torque wrench, manual screw driver verification
Calibration	NPL calibrated all sensors with display unit
Warranty	Mentioned in quotation

Detail Specification :

Electronic Torque Wrench Calibration System consist of 3 channel **Digital Torque Indicator**, with 3 nos. **Torque Sensor and Torque Wrench Testing Rig mounted on table**. It is ideal for checking calibration of Torque Wrenches.

01 Manual Torque Wrench Calibration System

01 Set

Model No. : TCW-2000

Capacity : 2000 Nm

Supplied along with Calibration Certificate from NABL Lab. / National Physical Laboratory.

Time measurement from 80% to 100% of the torque set as per standard **IS/ISO/6789-2018**

Make : J.RAGRAU INSTRUMENTS

Suitable to calibrate :

Click Type Torque Wrenches

Dial & Digital Torque Wrenches

02 Torque Sensor

- Model : 20/200 & 2000 Nm
- Range :
 - 0 - 20 Nm
 - 0 - 200 Nm
 - 0 - 2000 Nm
- Accuracy: $\pm 1\%$ of the reading
(From 20 to 100 % of the rated capacity)
Specification of the sensor is given below.

ACCURACY (MAX ERRORS)

Non Linearity $\pm 0.1\%$ of rated output
Hysteresis..... 0.25% of rated output
Reproducibility..... 0.2% of rated output
Non – Repeatability..... 0.1% of rated output
Zero Return..... $\pm 0.04\%$ of rated output

ENVIRONMENTAL :

Compensated Temperature Range.. $-10\text{ }^{\circ}\text{C}$ to $+40\text{ }^{\circ}\text{C}$
Operating Temperature Range..... $-20\text{ }^{\circ}\text{C}$ to $+60\text{ }^{\circ}\text{C}$
Effect of temperature on output..... $\pm 0.005\%$ of rated output/ $^{\circ}\text{C}$
Effect of temperature on zero..... $\pm 0.005\%$ of rated output / $^{\circ}\text{C}$

ELECTRICAL :

Rated output (Sensitivity)..... 2 mV/V \pm 10% of rated output
Zero Balance..... \pm 2% of rated output
Bridge resistance..... 350 Ohms- nominal
Recommended Excitation Voltage... ..10 VDC
Maximum Excitation Voltage.....15 VDC
Insulation Resistance1000 Mega ohms or more

MECHANICAL :

Safe Overload..... 150% of rated output
Safe side Load..... 30% of rated output
Ultimate overload..... 300 of rated output
Cable length.....4 Meters
Twist angle 0.2 ° at rated capacity
Material, Finish & construction..... Alloy steel, Electro less plated & powder coating
Environmental Protection IP 50

DESCRIPTION

QTY

Digital Display Unit

01 no.

Model No : SI 2000
Table Top5 digits Character display for Load with peak
hold facility. Overload Indication
Units- force- Nm, kgfm & lbfin
RS232 Computer Interface.
Auto-Sensor Channel Detection up to 3 sensors
To use with above Sensor.

Resolution

2000Nm 0000.1Nm
200Nm 000.01Nm
20Nm 000.001Nm

Power Supply :

230Volts +/-10%, 50 Hz A.C. mains.

Built in timer with 0.01 sec resolution to measure time as per IS/ISO/6789 – 20180
According to new standard requirement torque applied using torque wrench should be in the
range of 0.5secs to 4 seconds from 80% to 100% of the torque set.

Torque Wrench Testing Rig**01**

Capacity : 2000Nm
Ideal for checking torque wrenches,.
Provided with L plate to hold the Square tube with
sliding adopter to adjust the length as per Torque
Wrench size, and also provided with clamp for height
adjustment of Torque Wrench during testing.
Provided with Gearbox, motor etc.

Rigid Table**01**

To mount the Torque Wrench Testing Rig,
Provided with storage facility to house the spare sensors & other Tools

J. RAGRAU INSTRUMENTS

23-B, LIG Flats, Madhuban Enclave, (Near Madipur Metro Station) New Delhi - 110063.

Phone : 011 - 25211186 , Mob. 9811490150

Email : jragrau@gmail.com, Website : www.jragrau.com



Torque Measuring System

Specifications

Capacity	1Nm
Sensors	Strain Gauge Based.
Resolution	0.01 Kgf cm
Accuracy	$\pm 1\%$ of the reading
Display	5 digit Micro controller based LED DISPLAY
Feature	Zero, Peak,
Power required	230VAC @ 50 Hz $\pm 10\%$
Enclosure	Powder coated aluminum body
Calibration	we will provide manufacturer calibration certificate along with NPL traceability. (If NPL calibration required, the charges will be extra)
Warranty	12 months from the date of delivery

#####

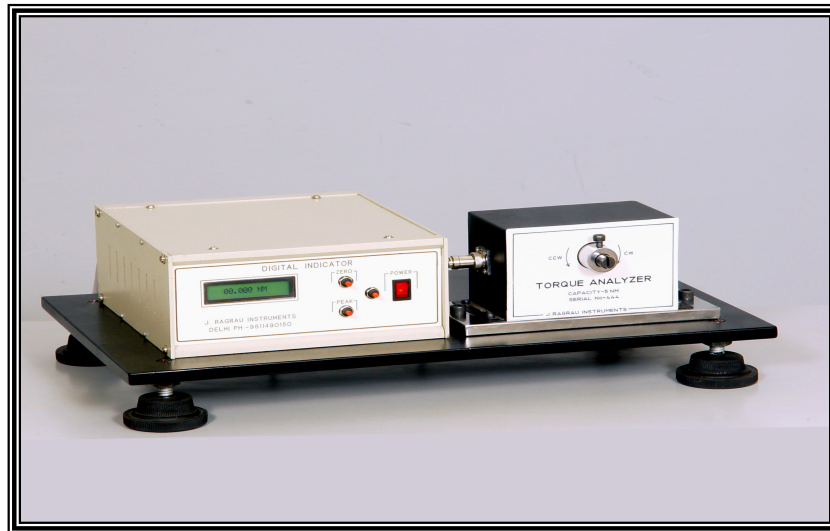
J. RAGRAU INSTRUMENTS

23-B, LIG Flat, Madhuban Enclave, Near Madipur Metro Station, New Delhi-110 063

Phone : 011-25211186 Mobile 9811490150

Email- depak_verma1@yahoo.com , Website : www.jragrau.com

Zip Lock Torque Measuring System



Specifications

Capacity	10, 20, 50, 100 Kgf cm
Sensors	Strain Gauge Based.
Resolution	1/1000
Accuracy	$\pm 1\%$ of the reading
Display	5 digit Micro controller based 16x1 LCD with backlit
Feature	Zero, Peak,
Power required	230VAC @ 50 Hz $\pm 10\%$
Enclosure	Powder coated aluminum body
Calibration	we will provide manufacturer calibration certificate along with NPL traceability. (If NPL calibration required, the charges will be extra)
Warranty	12 months from the date of delivery

#####

J. RAGRAU INSTRUMENTS

23-B, LIG Flat, Madhuban Enclave, Near Madipur Metro Station, New Delhi-110 063

Phone: 011-25211186, Mobile 9811490150

Email - depak_vermal@yahoo.com

Website: www.jragrau.in

Torque Verification System



J.RAGRAU INSTRUMENTS offers low cost, high accuracy Torque wrench verification system the instruments are easy to operate user friendly. These are available in various ranges up to 2000 Nm

Specifications

Capacity	5, 10, 50, 100, 250, 500, N cm
Sensors	10, 50, 100, 250, 500, 1000, & 2000 Nm
Resolution	Strain Gauge Based.
Accuracy	1/10,000
Display	$\pm 1\%$ of the reading (at 10% - 100%)
Feature	5 digit Micro controller based 16x1 LCD with backlit
Power required	Zero, Peak
Enclosure	230VAC @ 50 Hz $\pm 10\%$
Calibration	Powder coated aluminum body
Warranty	we will provide manufacturer calibration certificate along with NPL tracability. (If NPL calibration required, the charges will be extra)
Torque applying Mechanism	12 months from the date of commissioning through a rotating wheel (Optional)

#####

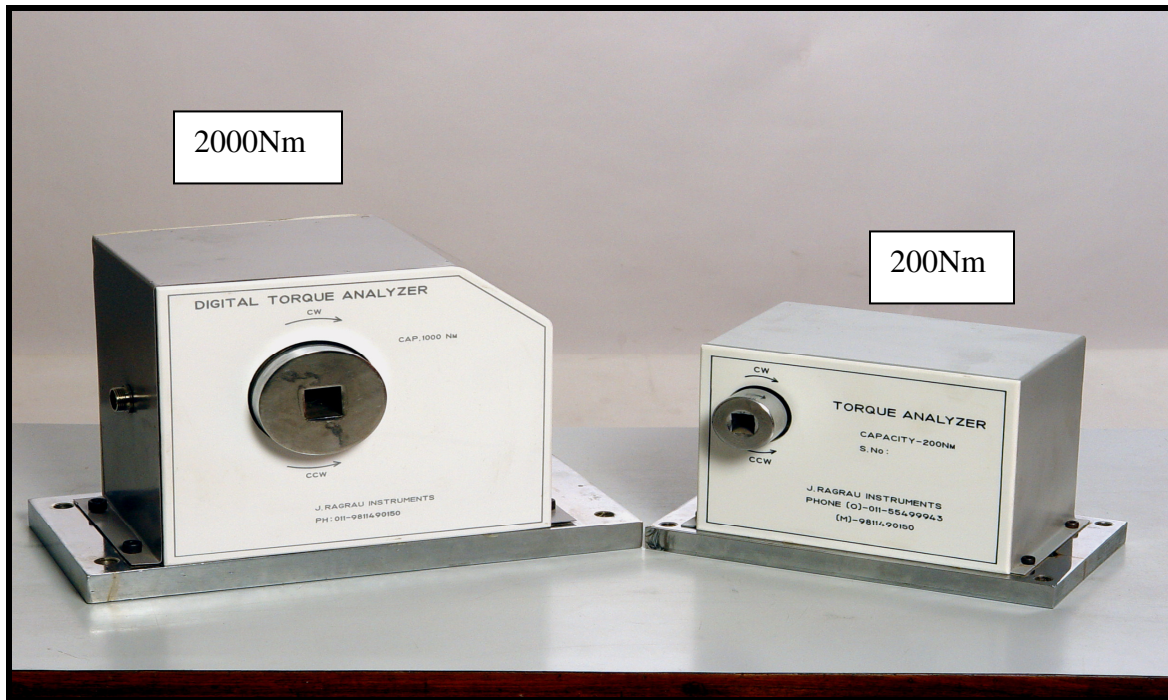
J.RAGRAU INSTRUMENTS

23-B, LIG Flat, Madhuban Enclave, Near Madipur Metro Station, New Delhi-110 063

Phone: 011-25211186 Mobile 9811490150

Email- depak_vermal@yahoo.com

Website: www.jragrau.com



Specifications

Capacity	20-200 N-m 200-200N-m
Resolution	0.02 N-m 0.2 N-m
Sensors	Strain Gauge Based.
Sensitivity	2mV/ V
Uncertainty	$\pm 0.5\%$
Calibration	we will supply the material with NPL calibration report
Warranty	18 months from the date of supply

#####

J.RAGRAU INSTRUMENTS

23-B, LIG Flat, Madhuban Enclave, Near Madipur Metro Station, New Delhi-110 063

Phone: 011-25211186 Mobile 9811490150

Email- depak_verma1@yahoo.com

Website: www.jragrau.com