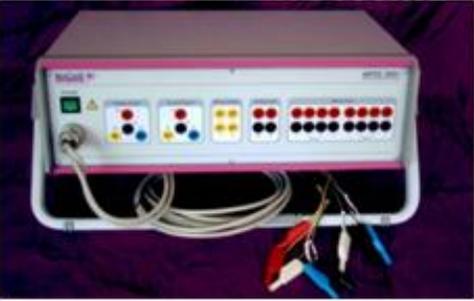


Calibration

Name of the Equipment Make	Features
<p>Multi Product Calibrator</p> <p>Multi Product Calibrator Fluke 5520 with 8.5 Digit Multi Meter Fluke</p> 	<p>DC Voltage: Range 0 to $\pm 1020V$; Accuracy: ± 12 ppm of setting</p> <p>DC Current: Range 0 to $\pm 20.5 A$; Accuracy: ± 100 ppm of setting</p> <p>Resistance: Range 0 to $1100M\Omega$ Accuracy: ± 28 ppm of setting</p> <p>DC Power Range: 10.9 mW to 20.5 kW Accuracy $\pm 0.023\%$ of setting</p> <p>AC Voltage : Range 1mv to 1020V; Accuracy: ± 120 ppm of setting (10 Hz to 500 kHz, Sine)</p> <p>DC Current, Range 29mA to 20.5 A; Accuracy: $\pm 0.06\%$ of setting (10 Hz to 30 kHz, Sine)</p> <p>Capacitance Range 0.19 nF to 110 mF Accuracy: $\pm 0.25\%$ of setting</p> <p>Frequency Range: 0.01 Hz to 2.0 MHz Accuracy ± 25 ppm of setting</p> <p>AC Power Range: 10.9 mW to 20.5 kW 45-65 Hz, PF=1 Accuracy $\pm 0.08\%$ of setting</p> <p>Thermocouple Source and Measure Range $-250^{\circ}C$ to $+2316^{\circ}C$ (11 types) Accuracy $\pm 0.14^{\circ}C$ of setting</p> <p>RTD Source Range: $-200^{\circ}C$ to $+630^{\circ}C$ (8 types) Accuracy $\pm 0.03^{\circ}C$ of setting</p>
<p>Multi Product Calibrator Fluke 5500</p> 	<p>Thermocouple Source and Measure Range $-250^{\circ}C$ to $+2316^{\circ}C$ (11 types) Accuracy $\pm 0.14^{\circ}C$ of setting</p> <p>RTD Source Range: $-200^{\circ}C$ to $+630^{\circ}C$ (8 types) Accuracy $\pm 0.03^{\circ}C$ of setting</p>
<p>7.5/6.5 Digital Multi Meter Keithley Hewlett Packard</p> 	<p>Multi range, Accuracy: 0.001 fs To calibrate AC/DC Voltage, AC/DC Current, Resistance, Capacitance</p>
<p>Standard Resistors</p>	
<p>Decade Resistance Standard , Vaiseshika Guildline. Canada</p> 	<p>Range 0.1 Ohm to 1000 M Ohm</p>

<p>Programmable DC voltage / Current Source</p>	
<p>YOKOGAWA Class 0.2 Portable Test Meter CALSTAT-400 HEG</p>	<p>Voltage Range 0-30mV Accuracy 0.018%, Current Range 0-100mA Accuracy 0.02%</p>
<p>Programmable AC Source</p>	
<p>Chroma</p>  <p>Kocos</p> 	<p>To generate simulated AC Power to test the 3 phase loads(3kVA each phase and also single phase load upto 9kVA</p> <ul style="list-style-type: none"> • AC+DC output mode for voltage DC offset simulation • Programmable output impedance for IEC 61000-3-3 • IEC 61000-4-11, IEC 61000-4-14, IEC 61000-4-28 voltage dips and frequency variation simulation • Harmonics, interharmonics waveform synthesizer for IEC 61000-4-13 testing • Power line disturbance simulation capability • Programmable voltage and current limit settings • Comprehensive measurement capability, including current harmonics • High output current crest factor, ideal for inrush current testing • Turn on, turn off phase angle control • TTL signal which indicates output transient • Optional analog programmable interface • 3 units combined to 3-phase power output (Model 61501~61505) • Easy use graphic user interface: softpanel (Option) • Softpanel for IEC regulation test <p>Capable of delivering power output up to 9KVA by implementing Master-slave parallel operation</p>

Mechanical

The center has the following equipment to calibrate the parameters such as pressure, length, linear dimensions, height, thickness, mass, force, speed, etc.,

Name of the Equipment	Make	Features & Application
Electronic Balances	Sartorius	<ul style="list-style-type: none"> ➤ Range: 200g, Accuracy: 0.01mg ➤ To calibrate weights
	Shimadzu	<ul style="list-style-type: none"> ➤ Range: 1.2kg, Accuracy: 0.01g ➤ To calibrate weights
	ORION	<ul style="list-style-type: none"> ➤ Range: 6 Kg, Accuracy: 1gm ➤ To calibrate weights
	ATCO	<ul style="list-style-type: none"> ➤ Range: 60Kg, Accuracy: 1gm ➤ To calibrate weights
S.S. Laboratory Weights	Weigh India	<ul style="list-style-type: none"> ➤ Range: 1mg-200g, Accuracy: E2 Class ➤ To calibrate Balances
Digital Vernier Calipers	Mitutoyo,	<ul style="list-style-type: none"> ➤ Range: 0-300mm, Accuracy: 0.01mm ➤ For Linear Measurements
		<ul style="list-style-type: none"> ➤ Range: 0-450mm, Accuracy: 0.01mm ➤ For Linear Measurements
Digimatic Micrometer	Mitutoyo,	<ul style="list-style-type: none"> ➤ Range: 0-25mm, Accuracy: 0.001mm ➤ For Linear Measurements
Dial Thickness gauge	BAKER	<ul style="list-style-type: none"> ➤ Range: 0-10mm, Accuracy: 0.001mm ➤ For Linear Measurements
Slip Gauges	Micronix	<ul style="list-style-type: none"> ➤ Range: 0.5-100mm, Accuracy: 0.1μ ➤ For Linear Measurements
Caliper Checker	Micronix	<ul style="list-style-type: none"> ➤ Range: 0-670mm, Accuracy: 5μ m ➤ For Linear Measurements
Combination Length bar set	P.V.E.,	<ul style="list-style-type: none"> ➤ Range: 1800mm, Accuracy: 0.005mm ➤ For Linear Measurements
Dead weight Tester	DH-BUDENBERG,	<ul style="list-style-type: none"> ➤ Range: 0-1200kg/cm² ➤ Accuracy: 0.025%FSD ➤ To calibrate precision pressure gauges, digital pressure indicators
Portable Documenting Pressure Calibrator	Druck 610	<ul style="list-style-type: none"> ➤ Range: 0-700bar, ➤ Accuracy: 0.025% of FS ➤ Appl: To calibrate pressure gauges, digital pressure indicators
Digital Pressure Indicator	Druck 601	Range: 0-20 bar, Accuracy: ±0.05% of FS Appl: To calibrate pressure gauges, digital pressure indicators
Stroboscope	Monarch /NOV Strobe DB plus	Range: 14000fpm Accuracy: ±0.5 fpm To calibrate Speed generating Equipments
Digital Hand-held Tachometer	Line-Seike	Range: 19,999 rpm, Accuracy: 1 rpm To calibrate Speed generating Equipments

Combinational length bar test



Electronic weighing Balance



DPI 610 pressure calibrator



Budenberg Dead weight tester



Slip Gauge



Pressure calibrator



TEMPERATURE & ANALYTICAL

The center has the following equipment to calibrate the parameters such as temperature sensor, transmitters, humidity, spectro photometers etc.

Name of the Equipment	Make	Features & Application
Temperature Calibrators To calibrate sensors, Instruments, Sources, Field Calibrators	Documenting process calibrator Fluke 701	Range: Multi range, Accuracy: 0.05% of reading +0.005%fs
	Dry Block Calibrator ISOTECH, PEGASUS 1200	Range: Ambient to 1200°C, Accuracy: 0.001°C
	S type TC ISOTECH 1600NCJ	Range: 0 to 1760°C, Accuracy: 0.20%
	Dry Block Calibrator DRUCK, DBC 650	Range: 50 to 650°C, Accuracy: 0.5°C
	Liquid Calibration bath with thermo regulator Techne, TU 20D	Range: -30 °C to Ambient Accuracy: set point accuracy ±1°C
Holmium Oxide wavelength standard	NIST, USA, SRM/2034	Range: 290 - 740nm, Accuracy: Standard reference material To calibrate spectrophotometers
STD Buffer PH Solution	MERCK	Range: PH4.01, PH7.00, PH9.00, Accuracy: Standard reference material To calibrate pH meters
Conductivity STD Solutions	MERCK	Range: 1.41mS/cm ³ , 111mS/cm ³ , 12.8mS/cm ³ Accuracy: Standard reference material To calibrate Conductivity meters

Temperature bath



Precision thermometer

