

รายชื่อเครื่องมือวัดที่ได้รับการรับรอง ISO/IEC 17025 : American Association for Laboratory Accreditation (A2LA) "U.S.A." ซึ่งได้รับการรับรองจากสถาบัน ILAC

Electrical & Chemical	
Description	Range
Digital multimeter / Panel meter	All range
Clamp meter	0 to 1,500 A
Watt-hour meter (1 & 3 phase)	0 to 66 kW
AC Power meter (1 & 3 phase)	0 to 66 kW
Power meter (V, Ω, A, Hz, Watt)	All range
Resistance meter / Decade box	0 to 1 TΩ
Multifunction / Process calibrator	All range
Withstanding voltage / Current cut-off	All range
High volt tester / Hipot tester / Oil tester	DC : 100 kV / AC : 70 kV
Insulation tester / Harmonic tester	0 to 1 TΩ
Frequency signal generator	0 to 225 MHz
Frequency counter	0 to 6 GHz
RF Power / Audio / AM-FM Modulation	0 to 6 GHz
Stop watch / Timer	All range
Oscilloscope	All range
Tacho / Counter metere	All range
pH meter	1.67 to 11.72 pH
Conductivity meter	84 to 12,880 μS/cm
Centrifuge	0 to 15,000 rpm
Viscometer / Ford cup	100 to 10,000 mPa.s
Refractometer / Refractive index	10 to 60 % Brix
UV/Vis spectrophotometer	All range
Gas detector (O <sup>2</sup> / CH <sub>4</sub> )	2 to 21 cmol/mol, 50%
Sound level meter	94, 114 dB
Anemometer	0 to 25 m/s
Lux meter	0 to 4,000 Lux
UV meter (UVA,B,C) / Solar radiometer	0 to 200 mW/cm <sup>2</sup>
Optical power / Laser Power Meter	0 to 100 W

Mass & Balance	
Description	Range
Electronic balance	0 to 2,000 kg
Machine balance	0 to 2,000 kg
Weighing indicator	0 to 2,000 kg
Indicating scale	0 to 2,000 kg
Platform scale	0 to 2,000 kg
Mechanical balance	0 to 2,000 kg
Moisture balance	0 to 1 kg
Standard weight / Steel weight	50 mg to 20 kg
Burettes / Pipettes / Micro pipette	10 μl to 100 ml
Volumetric flask / Cylinder / Beaker	5 ml to 2,000 ml

Temperature & Humidity	
Description	Range
Thermocouple sensor	-80 to 1,200 °C
RTD & PRT sensor	-80 to 650 °C
Digital thermometer with sensor	-80 to 1,200 °C
Temperature controller with sensor	-80 to 1,200 °C
Temperature recorder	-80 to 1,200 °C
Glass tube thermometer	-30 to 200 °C
Dial thermometer	-30 to 600 °C
Standard thermometer	-80 to 1,200 °C
Digital thermo-hygrometer (-30 to 60 °C)	20 to 95 % R.H.
Thermo-hygrometer (-30 to 60 °C)	20 to 95 % R.H.
Thermo-hygrograph (-30 to 60 °C)	20 to 95 % R.H.
Data logger	All range
Water / Oil bath	-40 to 250 °C
Autoclave	110 to 135 °C
Hot air oven	30 to 250 °C
Incubator	20 to 100 °C
Freezer	-80 to 0 °C
Refrigerator	0 to 10 °C
Furnace	200 to 1,200 °C
Temperature chamber	-80 to 1,200 °C
Humidity chamber	20 to 95 % R.H.
Dry block calibrator	-80 to 1,200 °C
Micro bath calibrator	-80 to 250 °C
Temperature calibrator	All range
Infrared thermometer	-35 to 255 °C
Temperature transmitter	-80 to 1,200 °C
Heat block / COD Reactor	25 to 250 °C
Temperature mapping	-30 to 60 °C

Torque & Force	
Description	Range
Universal testing machine (UTM)	0 to 50 Ton (500 kN)
Load cell / Force sensor	0 to 50 Ton (500 kN)
Force gauge / Tension & Tensile	0 to 200 kg
Screw torque driver / Air torque	0 to 1,500 N.m.
Torque wrench / Setting torque	0 to 1,500 N.m.
Torque tester / Torque calibrator	0 to 1,500 N.m.
Durometer (A, B, C, D, O, DO, OO, M)	All range
Vickers / Knoop hardness tester	All range
Rockwell / Brinell hardness tester	All range
(HRA, HRB, HRC, HBW, HV1/5/10)	All range

Dimension	
Description	Range
Coordination measuring machine (CMM)	0 to 1000 mm
Universal length machine (ULM)	0 to 600 mm
Microscope / Video microscope	0 to 300 mm
Profile projector	0 to 300 mm
Micrometer head / Dial gague tester	0 to 50 mm
Optical flat / Optical parallel	0 to 60 mm
Spheres / Precision Balls	0 to 100 mm
Gauge blocks	0.05 to 600 mm
Vernier caliper (outside, inside, depth)	0 to 600 mm
Micrometer (outside, inside, depth)	0 to 600 mm
Rod setting micrometer	0 to 600 mm
Dial gauge / Digimatic indicator	0 to 50 mm
Dial thickness / Dial test indicator	0 to 10 mm
Pin gauge / Plug gauge / 3-Wires	0.1 to 250 mm
Steel ruler / Steel tape / Textile tape	0 to 50 m
Plain plug / Plain ring gauge	0.1 to 250 mm
Thread plug / Thread ring gauge	1 to 100 mm
Thickness plate / Standard coating	0 to 5 mm
Coating thickness gauge	0 to 1.5 mm
Ultrasonic thickness gauge	0 to 400 mm
Precision Level / Inclinator gauge	0 to 1 mm/m
Bevel Protractor / Radius gauge	0 to 360 °
Feeler gauge	0 to 5 mm
Bore gauge	0 to 50 mm
Grind gauge	0 to 100 μm
Height gauge	0 to 600 mm
Glass scale	0 to 300 mm
Jig fixture	0 to 300 mm

Pressure & Vaccum	
Description	Range
Pressure calibrator (CMC = 0.01 % F.S.)	-0.95 to 1,500 bar
Pressure gauge	-0.95 to 1,500 bar
Vacuum gauge	-0.95 to 0 bar
Absolute gauge	-0.95 to 1,500 bar
Perani vacuum gauge	-0.95 to 2 bar
Manometer / Barometer	-0.95 to 10 bar
Pressure indicator	-0.95 to 1,500 bar
Pressure Switch	-0.95 to 1,500 bar
Pressure transmitter	-0.95 to 1,500 bar
Control valve / Safety valve	-0.95 to 1,500 bar