



COMPILED ISO 17025 ACCREDITED PARAMETER LIST

This list is a compilation of ISO 17025 accredited parameters across the entire network of Cross Precision Measurement laboratories. Inclusion of parameters on this list does not necessarily indicate those capabilities exist at every branch however they are available throughout the network.

Please see individual accreditation scopes for specific parameters at each branch.

Category	Parameter/Equipment	Range/Frequency/Method
Acoustical Quantities	Sound Measuring Equipment - 74 to 114 dB	(125 to 4000 Hz)
Chemical	Conductivity Meters	0.77 to 100,000 μ S/cm
Chemical	pH Meters	4 pH, 7 pH, 10 pH
Chemical	Refractometers	up to 75 %Brix
Dimensional	Angle Blocks/Angle Indicators/Angle Gages/Protractor Indicators	1° to 360°
Dimensional	Angle Plates/Squares/Parallels	Up to 18 in
Dimensional	Autolevels through 360°	1 to 1.3 arsec
Dimensional	Crest Check Gages - Height and Max Truncation	Up to 8 in
Dimensional	Interim Verification of CMM-Articulated Arm	Up to 36 in
Dimensional	Bench Micrometers - Parallelism	Up to 12 in
Dimensional	Bench Micrometers - Force	Up to 80 oz
Dimensional	Bench Micrometers - Linearity	Up to 20 in
Dimensional	Bore Gages	Up to 7 in
Dimensional	Caliper Masters	Up to 20 in
Dimensional	Calipers	Up to 120 in
Dimensional	Coating Thickness Gauges - Film	Up to 65 Mils
Dimensional	Coating Thickness Gauges - Ultrasonic	Up to 65 Mils
Dimensional	Combination Squares	Up to 180°
Dimensional	Crimpers - Crimp Handle Force	Up to 100 lb
Dimensional	Crimpers - Crimp Pull Force	Up to 50 lb
Dimensional	Crimpers - Functional Diameter	(0.011 to 0.250) in
Dimensional	Cylindrical Measure - Rings, Disc, Pins, Spheres-External Diameter	Up to 20 in
Dimensional	Depth Gages	Up to 48 in

Dimensional	Dial Indicators/Test Indicators	Up to 12 in
Dimensional	Diameter/Radius/Fixture Gages - Diameter	Up to 12 in
Dimensional	Diameter/Radius/Fixture Gages - Length	Up to 25 ft
Dimensional	Diameter/Radius/Fixture Gages - Radius	Up to 12 in
Dimensional	Diameter/Radius/Fixture Gages - Angle	Up to 90°
Dimensional	Feeler Gages	Up to 1 in
Dimensional	Gage Blocks	0.05 to 20 in
Dimensional	Height Gauges	Up to 48 in
Dimensional	Interim Verification of Coordinate Measuring Machines - Volumetric Performance	1 to 11.5 in
Dimensional	Interim Verification of Coordinate Measuring Machines - X,Y,Z Linearity	Up to 36 in
Dimensional	Levels Bubble & Precision- Vial Sensitivity	Up to 10°
Dimensional	Micrometer Head	Up to 2 in
Dimensional	Micrometer Standards / Length Standards	Up to 72 in
Dimensional	Micrometers - Inside	Up to 72 in
Dimensional	Micrometers - Outside	Up to 80 in
Dimensional	Microscope - Reticle Linearity	1 to 10 mm
Dimensional	Optical Comparators - Angle	0° to 90°
Dimensional	Optical Comparators - X-Y Linearity	Up to 18 in
Dimensional	Optical Comparators - Magnification	10x to 250x
Dimensional	Pin Gages Z	Up to 1 in
Dimensional	Pin Gages ZZ	Up to 2 in
Dimensional	Plain Cylindrical Plugs/Rings/Spheres-External Diameter	Up to 20 in
Dimensional	Radius Gages	Up to 2 in
Dimensional	Snap Gauges	Up to 48 in
Dimensional	Spline/Gear Gages (Plugs-Diameter/Rings-Diameter)	Up to 8 in
Dimensional	Steel Rules	Up to 300 in (25ft)
Dimensional	Surface Plates - Grades AA, A, and B - Flatness	Up to 120 DL in
Dimensional	Surface Plates - Grades AA, A, and B - Repeatability	0.002 in
Dimensional	Tape Measures	Up to 25 ft
Dimensional	Theodolites (Through 360°)	1 to 1.3 arcsec
Dimensional	Thread Measuring Wires	(0.008 to 1.5) in
Dimensional	Thread Plugs - Major Diameter	Up to 8 in

Dimensional	Thread Plugs - Pitch Diameter	.25 to 8 mm
Dimensional	Thread Rings - Pitch Diameter	Up to 8 in
Dimensional	Universal Length Measuring Machines - Flatness and Parallelism	Up to 12 in
Dimensional	Universal Length Measuring Machines - Force	Up to 80 oz
Dimensional	Universal Length Measuring Machines - Linearity	Up to 20 in
Dimensional	Vision Systems - X-Y Linearity	Up to 18 in
Dimensional	Vision Systems - Z Axis	Up to 4 in
Dimensional Inspection	Length - X Axis	Up to 138 in
Dimensional Inspection	Length - Y Axis	Up to 138 in
Dimensional Inspection	Length - Z Axis	Up to 138 in
Dimensional Inspection	Length - Volumetric	Up to 138 in
Dimensional Inspection	Roundness Measuring	350-3000 mm
Dimensional Inspection	Surface Roughness	2 to 200 μ in
Electrical	AC Current - Generate	Up to 100 Amps *
Electrical	AC Current - Generate Clamp-On Meters	Up to 1000 Amps *
Electrical	AC Current - Measure	Up to 100 Amps *
Electrical	AC Power - Generate	Up to 500 kW *
Electrical	AC Voltage - Generate	Up to 1100 Volts *
Electrical	AC Voltage - Measure	200mV to 70 kV *
Electrical	Amplitude Modulation - 20 Hz to 100 kHz	5 to 99 % *
Electrical	Capacitance - Generate	40 pF to 110 mF
Electrical	Capacitance - Measure	1 pF to 100mF
Electrical	DC Current - Generate	Up to 100 A
Electrical	DC Current - Generate - Clamp-On Meters	Up to 1000 A
Electrical	DC Current - Measure	Up to 1000 A
Electrical	DC Power Generate	Up to 500 kW
Electrical	DC Voltage - Generate	Up to 40 kV
Electrical	DC Voltage - Measure	Up to 100 kV
Electrical	Distortion - Measure - 20Hz to 100 kHz	Up to 99.9 %
Electrical	Frequency Modulation - 250 kHz to 1.3 GHz**	100 to 400 kHz
Electrical	Inductance - Generate	100 μ H to 10 H
Electrical	Inductance - Measure	100 μ H, 1 mH to 10 H

Electrical	Insulation Resistance - Generate	10 Ω to 1 T Ω
Electrical	Oscilloscopes - DC Voltage Amplitude (1 M Ω Load)	(0 to \pm 130) V
Electrical	Oscilloscopes - DC Voltage Amplitude (50 Ω Load)	(0 to \pm 6.6) V
Electrical	Oscilloscopes - Level Sine Wave: Amplitude	50 kHz 1100 MHz
Electrical	Oscilloscopes - Level Sine Wave: Flatness (Bandwidth)	0 kHz 1100 MHz
Electrical	Oscilloscopes - Level Sine Wave: Frequency	Up to 1100 MHz
Electrical	Oscilloscopes - Square Wave Amplitude (1 M Ω at 1 kHz)	1.0 mV to 130 Vpk - pk
Electrical	Oscilloscopes - Square Wave Amplitude (50 Ω at 1 kHz)	1.0 mV to 6.6 Vpk - pk
Electrical	Oscilloscopes - Time Markers (Into a 50 Ω Load)	5 s to 2 ns
Electrical	Oscilloscopes - Rise Time - 1 kHz to 2 MHz	\leq 300 ps
Electrical	Oscilloscopes - Rise Time - 2 to 10 MHz	\leq 350 ps
Electrical	Phase Modulation -150 kHz to 1.3 GHz**	200 Hz to 20 kHz
Electrical	Relative Power - Measure (10 MHz to 1.3 GHz)	(0 to -120) dB
Electrical	Resistance - Generate	Up to 1100 M Ω
Electrical	Resistance - Measure	Up to 20 G Ω
Electrical	RF Power - Measure (100 kHz to 4.2 GHz)	(-20 to 30) dBm / 1 mW to 100 mW
Electrical	RTD - Generate Simulation (Pt 385, 100 Ω)	(-200 to 850) $^{\circ}$ C
Electrical	Thermocouples - Simulation/Measure (Type B)	(600 to 1820) $^{\circ}$ C
Electrical	Thermocouples - Simulation/Measure (Type C)	(-250 to 1000) $^{\circ}$ C
Electrical	Thermocouples - Simulation/Measure (Type E)	(-250 to 1000) $^{\circ}$ C
Electrical	Thermocouples - Simulation/Measure (Type J)	(-210 to 1200) $^{\circ}$ C
Electrical	Thermocouples - Simulation/Measure (Type K)	(-200 to 1372) $^{\circ}$ C
Electrical	Thermocouples - Simulation/Measure (Type N)	(-210 to 1300) $^{\circ}$ C
Electrical	Thermocouples - Simulation/Measure (Type R)	(-50 to 1768) $^{\circ}$ C
Electrical	Thermocouples - Simulation/Measure (Type S)	(-50 to 1768) $^{\circ}$ C
Electrical	Thermocouples - Simulation/Measure (Type T)	(-250 to 400) $^{\circ}$ C
Fluid Quantities	Viscosity Meters (Fixed Points)	35000 cP
Fluid Quantities	Viscosity Cup Kinematic Viscosity, Efflux Time)	0-1000 mm ² /s
Fluid Quantities	Gas Flow Measuring Equipment-Air & N ₂ (Laminar Flow)	0.01 to 100 slpm
Fluid Quantities	Gas Flow Measuring Equipment-Air & N ₂ (Sonic Flow)	28 to 120 slpm
Fluid Quantities	Volumetric Air flow Measure & Measuring Devices (Air Samplers)	20 to 200 lpm

Mechanical	Accelerometer	7 Hz to 10 kHz
Mechanical	Air Velocity	40 to 3000 FMP
Mechanical	Durometer Calibration (Type A, B, C, D, DO, O, OO) - Indentor Display	0 to 100 durometer units
Mechanical	Durometer Calibration (Type A, B, C, D, DO, O, OO) - Indentor Extension & Shape - Angle	25° to 40°
Mechanical	Durometer Calibration (Type A, B, C, D, DO, O, OO) - Indentor Extension & Shape - Diameter	Up to 0.105 in
Mechanical	Durometer Calibration (Type A, B, C, D, DO, O, OO) - Indentor Extension & Shape - Extension	Up to 0.105 in
Mechanical	Durometer Calibration (Type A, B, C, D, DO, O, OO) - Indentor Extension & Shape - Radius	up to 0.125 in
Mechanical	Durometer Calibration (Type A, B, C, D, DO, O, OO) - Spring Calibration - Force	Up to 45 N
Mechanical	Force - Compression or Tension	0 to 100,000 lbf
Mechanical	Force - Compression (Field Only)	0 to 500,000 lbf
Mechanical	Force - Tension And Compression-Field Only	0 to 100,000 lbf
Mechanical	Indirect Verification of Brinell Hardness Testers (HBW 10/3000/15	200 to 600 HBW
Mechanical	Indirect Verification of Rockwell Hardness Testers - HR15N	Low-Med-High
Mechanical	Indirect Verification of Rockwell Hardness Testers - HR15TW	Low-Med-High
Mechanical	Indirect Verification of Rockwell Hardness Testers - HR30N	Low-Med-High
Mechanical	Indirect Verification of Rockwell Hardness Testers - HR30TW	Low-Med-High
Mechanical	Indirect Verification of Rockwell Hardness Testers - HR45N	Low-Med-High
Mechanical	Indirect Verification of Rockwell Hardness Testers - HR45TW	Low-Med-High
Mechanical	Indirect Verification of Rockwell Hardness Testers - HRA	Low-Med-High
Mechanical	Indirect Verification of Rockwell Hardness Testers - HRBW	Low-Med-High
Mechanical	Indirect Verification of Rockwell Hardness Testers - HRC	Low-Med-High
Mechanical	Indirect Verification of Rockwell Hardness Testers - HREW	Low-Med-High
Mechanical	Indirect Verification of Knoop-Vickers Hardness Testers	10-600 HV
Mechanical	Mass - Field Check, Load Fixtures, Hangers, Package & Check Weights	Up to 70 lb
Mechanical	Mass - Fixed Points (Various)	1 mg to 50 lbs
Mechanical	Pipettes	(1 to 10,000) µL
Mechanical	Pressure - Absolute	1000 psia
Mechanical	Pressure - Barometric	0 to 60 inHg
Mechanical	Pressure - Differential	(0 to 200) inH2O
Mechanical	Pressure - Hydraulic	Up to 30,000 psig
Mechanical	Pressure - Pneumatic	-15 to 10,000 psig
Mechanical	Rotary Torque Tools - Pneumatic, DC, Pulse	(02 to 750) Nm

Mechanical	Scales and Balances	1 (mg) up to 120,000 (lb)
Mechanical	Speed (Contact) - RPM	(0.5 to 20 000) rpm
Mechanical	Speed (Non-Contact) - RPM	(0.5 to 200 000) rpm
Mechanical	Speed/RPM/Rate - Simulation	(2.5 to 200 000) rpm
Mechanical	Torque - Measuring Equipment (Wrenches)	5ozf-in to 2000 ft-lbf
Mechanical	Torque Testers / Analyzers	Up to 2000 ft-lbf
Mechanical	Totalizer Meters - Distance Meter/Yardage Meters	Up to 2000 yds
Mechanical	Vacuum	(0.01 to 30) inHg
Optical Quantities	Illuminance – Light Meters (360 to 780 nm)	0.1 to 10,000 Lux
Optical Quantities	Gloss Meter (20°, 60°, 85°)	up to 100 GU
Thermodynamics	Plate Temperature - Infrared Devices	-15 to 500 °C
Thermodynamics	Relative Humidity - Measure	(10 to 95) %RH
Thermodynamics	Temperature - Source	(-25 to 1200 °C
Thermodynamics	Temperature - Measure	(-196 to 1450) °C
Time and Frequency	Frequency - Measure	Up to 26.5 GHz
Time and Frequency	Frequency - Source	Up to 50 GHz
Time and Frequency	Photo Tachometers	.5 to 200,000 RPM
Time and Frequency	Timers and Stopwatches	1 to 86,400 s (24 Hours)
* Frequency Ranges vary by output ** Carrier Signal Frequency		
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