Sl No.	Category	Instrument	Purpose
1	Linear Measurement	Vernier Caliper	Measures internal, external dimensions, and depth
2	Linear Measurement	Outside Micrometer	Measures external diameter/thickness with high precision
3	Linear Measurement	Inside Micrometer	Measures internal diameters
4	Linear Measurement	Depth Micrometer	Measures depth of slots, holes, and recesses
5	Linear Measurement	Steel Rule	Basic tool for length measurement
6	Linear Measurement	Height Gauge	Measures and marks vertical dimensions
7	Linear Measurement	Depth Gauge	Measures depth of holes or grooves
8	Linear Measurement	Digital Caliper	Electronic measurement of length and depth
9	Angle Measurement	Protractor	Measures basic angles
10	Angle Measurement	Bevel Protractor	Measures angles precisely
11	Angle Measurement	Sine Bar	Used with slip gauges for accurate angle measurement
12	Angle Measurement	Clinometer	Measures slope or tilt angles
13	Surface & Alignment	Dial Indicator	Checks runout, roundness, and alignment
14	Surface & Alignment	Test Indicator	Measures small displacement or surface irregularity
15	Surface & Alignment	Surface Plate	Provides reference flatness for inspection
16	Surface & Alignment	Feeler Gauge	Measures small gaps and clearances
17	Surface & Alignment	Straight Edge	Checks flatness and straightness
18	Precision Standards	Gauge Blocks (Slip Gauges)	Calibration and standard reference
19	Precision Standards	Ring Gauge	Checks external diameter of shafts
20	Precision Standards	Plug Gauge	Checks internal diameter of holes
21	Precision Standards	Snap Gauge	Quick checking of external dimensions
22	Precision Standards	Thread Gauge	Checks screw thread pitch and form
23	Workshop Tools	Combination Square	Used for layout marking, angle checking
24	Workshop Tools	Try Square	Checks squareness
25	Workshop Tools	Caliper (Divider/Inside/Outside)	Transfers and measures distances
26	Workshop Tools	Marking Gauge	Scribes lines parallel to edges
27	Advanced Instruments	CMM (Coordinate Measuring Machine)	3D dimensional inspection
28	Advanced Instruments	Profile Projector (Optical Comparator)	Inspects profile shapes and dimensions
29	Advanced Instruments	Laser Scanner	3D surface and shape measurement
30	Advanced Instruments	Bore Gauge	Measures internal diameter of holes
31	Electrical	Multimeter	Measures voltage, current, resistance
32	Electrical	Oscilloscope	Analyzes waveforms of electrical signals
33	Electrical	Wattmeter	Measures electrical power
34	Electrical	Clamp Meter	Measures current without breaking circuit
35	Electrical	LCR Meter	Measures inductance, capacitance, resistance
36	Thermal & Fluid	Thermometer	Measures temperature
37	Thermal & Fluid	Pyrometer	Measures high temperatures (furnaces, kilns)
38	Thermal & Fluid	Pressure Gauge	Measures fluid pressure
39	Thermal & Fluid	Vacuum Gauge	Measures low pressures/vacuum
40	Thermal & Fluid	Flowmeter	Measures flow rate of fluids
41	Thermal & Fluid	Anemometer	Measures wind/air velocity
42	Miscellaneous	Hardness Tester	Measures hardness of materials
43	Miscellaneous	Tachometer	Measures rotational speed (RPM)
44	Miscellaneous	Vibration Meter	Measures vibration levels
45	Miscellaneous	Ultrasonic Thickness Gauge	Measures material thickness using ultrasound
46	Miscellaneous	Lux Meter	Measures illumination levels
47	Miscellaneous	Sound Level Meter	Measures noise levels (dB)