

Precision Redefined through Innovation...



ABOUT US

MGM Engineering Corporation entered the Gauge Manufacturing Industry in 1970 as a Tier 1 supplier to the Indian Defense Sector. By 1980, it expanded into manufacturing gauge handles, establishing a key niche.

In just five years, MGM became a leading OEM supplier in India, with a production capacity of over 500,000 handles annually across five product lines, solidifying its position as a top industry supplier.

With over 50 years of expertise, MGM has become a trusted Techno-Commercial supplier of gauge handles.

In 2014, MGM launched its Professional Engineering (PE) division, focusing on gauging products.

Backed by modern manufacturing capabilities and skilled personnel, MGM consistently delivers high-quality products to meet client expectations.

PE Products:

- » **Standard & Special Gauges:** Plain Plug, Reversible Pin, Width, and Snap Gauges in Steel and Carbide
- » **Indicating Gauges:** Dial Snap Gauges, Dial Comparator Stands, Thread Depth Gauges, Dial Air Gauge Units, and Electronic Instruments
- » **Air Gauges** in hardened steel, chrome-plated, and carbide.
- » **Pneumo Electronic Instruments** (IoT-enabled).
- » **Special & Customized Gauges**, multi-gauging systems, and multi-bore checking systems.

HALF BRIDGE LVDT PROBE

± 2MM DISPLACEMENT

“GaugePro” electronic probes leverage Swiss precision technology to achieve superior measurement accuracy and quality, with resolution capabilities down to 0.1 μm and a measurement range of $\pm 2\text{mm}$.

Built upon extensive expertise in probe manufacturing, these instruments employ advanced strain gauge technology with temperature compensation to deliver consistent performance, even in demanding industrial settings where temperatures fluctuate between 15-40°C. The standard probe is constructed with a precision-ground carbide-chrome body ($\text{\O} 8\text{-h}6\text{x}80\text{L}$) and guided by pre-loaded double-row ball bearings with less than 0.5 μm radial play, while an integrated tapered roller bearing system effectively prevents probe head distortion. This sophisticated bearing configuration, combined with a spring-loaded measuring shaft and non-rotating tip design, ensures reliable measurement repeatability of $\leq 0.1 \mu\text{m}$ across various applications. The probe's housing provides robust protection against coolants and debris, making it ideal for in-process measurement applications in manufacturing environments.



NEW
PRODUCT

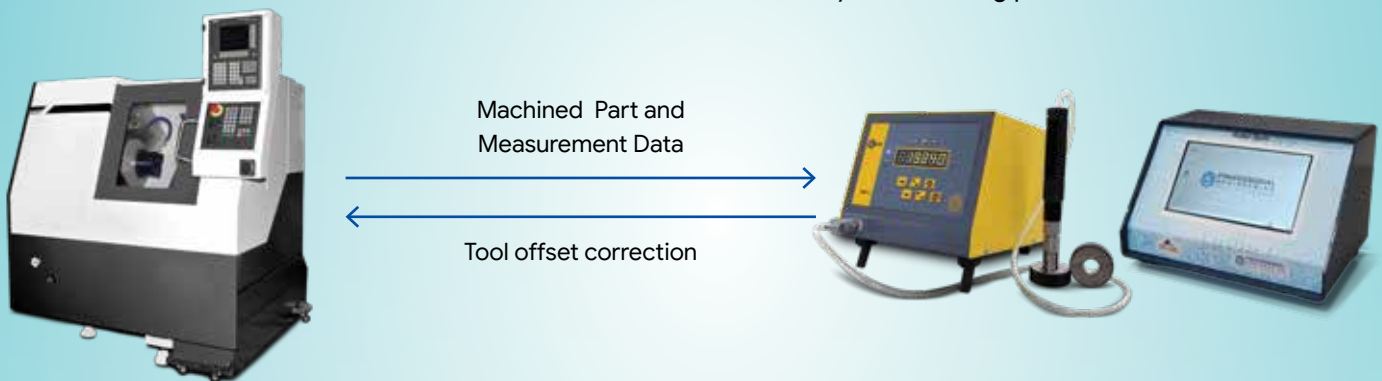


Enhance Precision, Boost Productivity and Optimize Efficiency

AutoSync

For automated wear offset corrections for CNC machines

This advanced solution seamlessly integrates with CNC operations to guarantee top-notch quality and efficiency in machining processes.



FEATURES

- » Captures the measurement from the digital gauge for automatic wear offset correction.
- » Automated tool wear offset correction ensures flawless production dimensions,
- » Facilitates continuous operation without manual intervention.
- » Identifies the component falling out of acceptable dimensional limits.
- » Measurement data can be stored and shared for the audit and traceability purpose.
- » Auto-calculates and adjusts tool-wear offsets.
- » Auto-Sync eliminates manual errors in the tool wear-offset compensation process.
- » Reduces time spent on manual corrections, no need for supervisor intervention and thus increasing operational throughput.
- » Very easy to operate.
- » Available for 1 Tool-2 tools or 2 machines.
- » It can be installed with current digital gauge or PE can provide solution with **INTEGRATED** instrument.
- » Relay output facility available.

PRECITOUCH

PRECITOUCH P2



- » 7"/10" high resolution capacitive touch screen display – input control at the touch of a finger, suitable for Axial Electronic Probes, Two Channels
- » Digital and/or Analog display for operator convenience
- » Least count 0.1 μ m, 0.5 μ m, 1 μ m, Range: \pm 0.035mm with Accuracy \pm 1% of FSD
- » Absolute or Comparative measurement
- » Tolerance limit setting - Accept, Reject & Rework status LED lamps
- » Low air pressure warning signal on display with In-built air regulator for precise air pressure
- » Compatible with wide range of Air gauges (Suitable for Jet dia. 1.0, 1.6 & 2.07mm)
- » Air saving facility
- » Potential free external relay output
- » Real Time Data Storage
- » Metric conversion
- » Auto Calibration and ID/OD Recognition
- » Password protection to avoid misuse of Data/information
- » 'Run Chart' for last 25 readings
- » USB module for easy data output
- » Robust and aesthetically designed
- » User friendly operation

Preci-Touch 1.2/1.4/1.6

- » 7"/10" high resolution capacitive touch screen – input control at the touch of a finger
- » Piezo based Pneumo- Electronic readout
- » 1.2 with Two / 1.4 with Four / 1.6 with Six Inputs
- » Digital and/or Analog display for operator convenience
- » Least count 0.1 μ m, 0.5 μ m, 1 μ m, Range: \pm 0.035mm with Accuracy \pm 1% of FSD
- » Absolute or Comparative measurement
- » Tolerance limit setting - Accept, Reject & Rework status LED lamps
- » Air saving facility
- » Potential free external relay output
- » Low air pressure warning signal on display with In-built air regulator for precise air pressure
- » Compatible with wide range of Air gauges (Suitable for Jet dia. 1.0, 1.6 & 2.07mm)
- » Real Time Data Storage
- » Inch and Metric conversion
- » Auto Calibration and ID/OD Recognition
- » Password protection to avoid misuse of Data/information
- » 'Run Chart' for last 25 readings
- » USB module for easy data output
- » Robust and aesthetically designed
- » User friendly operation

PRECITOUCH 1.2



PRECITOUCH 1.4



PRECITOUCH 1.6





PRECI TOUCH 4.4

- » 7"/10" high resolution capacitive touch screen display – input control at the touch of a finger
- » Digital and/or Analog display for operator convenience
- » Least count 0.1µm, 0.5µm, 1µm, Range: +/-0.035mm with Accuracy ±1% of FSD
- » Absolute or Comparative measurement
- » Tolerance limit setting - Accept, Reject & Rework status LED lamps
- » Compatible with wide range of Air gauges (Suitable for Jet dia. 1.0, 1.6 & 2.07mm)
- » Potential free external relay output
- » Real Time Data Storage
- » Password protection to avoid misuse of Data/information
- » 'Run Chart' for last 25 readings
- » USB module for easy data output
- » Robust and aesthetically designed
- » User friendly operation



PRECI TOUCH 6.6

- » 7"/10" high resolution capacitive touch screen display – input control at the touch of a finger
- » Digital and/or Analog display for operator convenience
- » Least count 0.1µm, 0.5µm, 1µm, Range: +/-0.035mm with Accuracy ±1% of FSD
- » Absolute or Comparative measurement
- » Tolerance limit setting - Accept, Reject & Rework status LED lamps
- » Compatible with wide range of Air gauges (Suitable for Jet dia. 1.0, 1.6 & 2.07mm)
- » Potential free external relay output
- » Real Time Data Storage
- » Password protection to avoid misuse of Data/information
- » 'Run Chart' for last 25 readings
- » USB module for easy data output
- » Robust and aesthetically designed
- » User friendly operation

ELECTRONIC INSTRUMENT

E-GAGE

- » The Single Channel Pneumo- Electronic readout
- » 7 segment Tri-Colour display with Piezo Electronic Pressure Sensor
- » Range: $\pm 0.035\text{mm}$ with $\pm 1\%$ FSD Accuracy
- » Switchable Least Count: $0.5\mu\text{m}$ & $1\mu\text{m}$
- » Tolerance limit setting - Accept, Reject & Rework status LED lamps
- » Compatible with wide range of Air gauges (Suitable for Jet dia. 1.0, 1.6 & 2.07mm)
- » Data saving module up to 75K readings storage capacity and RS-232 serial port for Data out put. Potential free external relay output
- » Absolute and Comparative measurement mode
- » Built in Precision Pressure air regulator
- » Ethernet connectivity to a local area network (Optional)
- » Air saving facility



MUX

- » 1.2/ 1.4 Mux – the Multi - plexer unit Pneumo- Electronic readout
- » Same as E-Gauge above but having Mutli connectivity option
- » 2 Gauges can be connected displaying one result at a time
- » 1.2 MUX with two inputs
- » 1.4 MUX with four inputs
- » Tolerance limit setting - Accept, Reject & Rework status LED lamps
- » Metric conversion
- » Auto Calibration and Data saving
- » Password protection
- » 8X2 LCD display for fixture selection



ELECTRONIC DISPLAY UNIT

- » 7 segment Tri-Colour 6 digit display
- » Inch and Metric conversion
- » Absolute and Comparative measurement mode
- » Least Count $0.1\mu\text{m}$ / $0.5\mu\text{m}$ / $1\mu\text{m}$
- » Auto calibration and zero
- » Static and Dynamic (Max./ Min./Average, TIR & Current) measurement
- » RS-232 serial port
- » Potential free external relay output
- » Model selection facility
- » Potential free external relay output
- » Data saving module up to 75K readings storage capacity
- » Ethernet connectivity to a local area network (Optional)



SPECIAL GAUGES

ELITE METIOR (SHAFT MULTIGUAGING)



- » 10" high resolution capacitive touch screen display
- » Piezo based Pneumo- Electronic readout indicating 6 Parameter with separate results or suitable for Axial Probe
- » Output: RS-232 serial port
- » Least count 0.5 μ m, 1 μ m, Range: \pm 0.035mm with Accuracy \pm 1% of FSD
- » Absolute or Comparative measurement
- » Tolerance limit setting - Accept, Reject & Rework status LED lamps
- » Low air pressure warning signal on display with Inbuilt air regulator for precise air pressure
- » Compatible with wide range of Air gauges (Suitable for Jet dia. 1.0, 1.6 & 2.07mm)
- » Air saving facility
- » Potential free external relay output
- » Real Time Data Storage
- » SPC Charts - X-Bar - R chart, Run-chart, Histogram, Individual readings, Pareto, Pie-Chart
- » Data can be exported in Excel and pdf format

MULTIBORE SEQUENTIAL BORE CHECKING GAUGES

- » SPC Charts - X-Bar - R chart, Run-chart, Histogram, Individual readings, Pareto, Pie-Chart
- » Sequential with interlock & non sequential checking
- » Mastering / Calibration Screen has Password Protected Features
- » Data can be exported in Text, Excel and pdf format
- » 100 % air saving



CUSTOMISED PC BASE MULTI GAUGING SYSTEM

We manufacture multi gauging stations as per customers requirement for checking multiple diameter (ID/OD), with taper, ovality, thickness, width, height, runout, length, flatness, squareness, etc.

MULTIGUAGING FIXTURE FOR GREAVES HOUSING



- » Piezo based Pneumo- Electronic readout indicating 8 Parameter with separate results or suitable for Axial Probe
- » 100% Air saving facility with all essential accessories
- » Job traceability provided
- » If job is ok then only marking is done else marking machine is not on
- » Data can be exported in Excel
- » Password Protection
- » User friendly operation

CONROD MULTIGUAGING SYSTEM



Parameters

- » Big end diameter
- » Small end diameter
- » Center distance
- » Bend
- » Twist

MULTIGUAGING FIXTURE FOR SHAFT

Parameters

- » Multiple diameters
- » Runout of diameters
- » Taper

