



# TOOL=A=THON

v26.2 JULY 1- OCT 1 2026



**"We learned a lot about ourselves and capabilities once we started using the Aberlink CMMs... now we produce better parts..."**

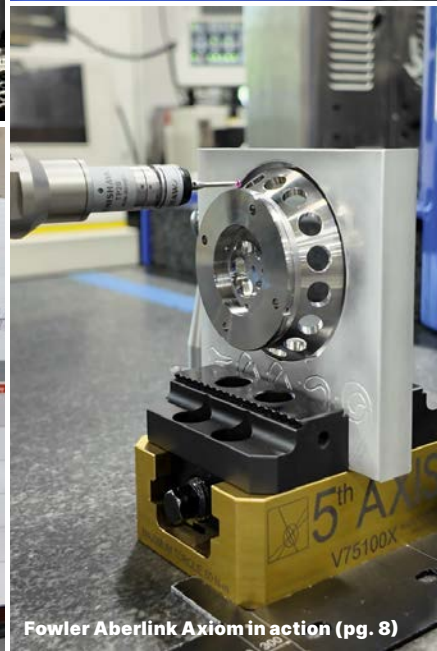
John Fiore  
Dale Engineering



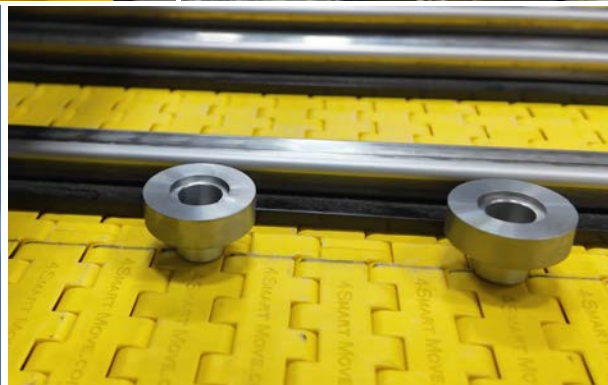
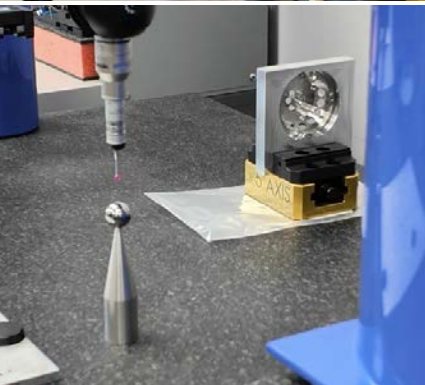
Aberlink3D Software runs on all four of their CMMs



Fowler Sylvac HI\_CAL Height Gage (pg. 26)



Fowler Aberlink Axiom in action (pg. 8)



# From Old School to Lights-Out

When John Fiore started on the milling floor at Dale Engineering in Bedford, MA, he had no experience. Sixteen years later, he's the estimator at a shop running 16+ robots, much of it lights out, 24/7. Back then, the routine was simple: pull a part, clean it, measure it, figure out what to do next, start again.

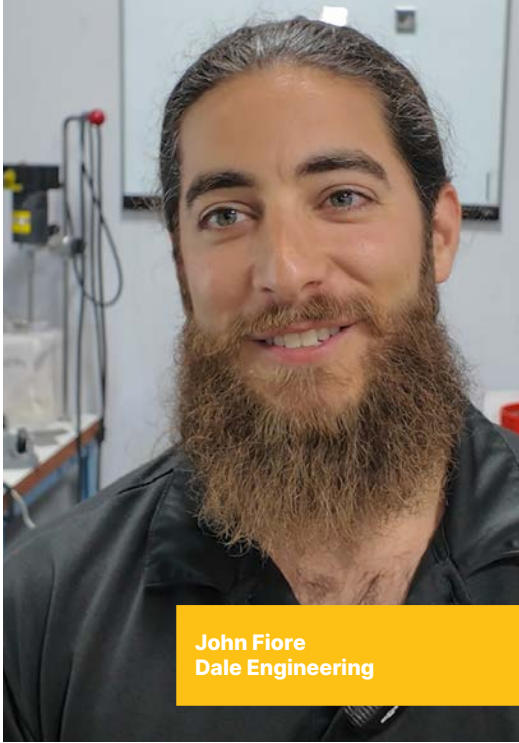
"Back in the day, I'd have to measure every part," John recalls. True positions, tight-tolerance apertures, three-datum callouts on parts for scanning electron microscopes. This is precision you simply can't verify by hand. "There's no way to check that. You need something much more sophisticated."

Automated CMM (Coordinate Measuring Machine) measurement changed everything. Now a fixture holds 20 or 30 parts, runs overnight, and the data is waiting in the morning: exactly what passed, what failed, every dimension. With the probe instead of hand tools, there's no surface scratching. No guesswork. Just green or red, pass or fail with accuracy and detail impossible to achieve manually.

What surprised John most wasn't the speed. It was who could run it. "We have a few programmers, but everybody in the shop can use the CMMs." They take their part, walk over to the CMM, select the program, load the fixture, let it run.

The goal is simple: keep the machines running as close to 24/7 as possible.

What's next for Dale Engineering? More automation, including their inspection processes. Over the last 8 years, their adoption of robots and automation has allowed them to handle 12x the part volume while tripling their staff. John notes many think robots eliminate jobs. At Dale Engineering, they've used automation to increase throughput, tackle more complex parts, and consistently deliver for customers all while growing the team.



**John Fiore**  
Dale Engineering



# Measur3D Manual CMM

**A step up from Height Gages and Hand Tools**

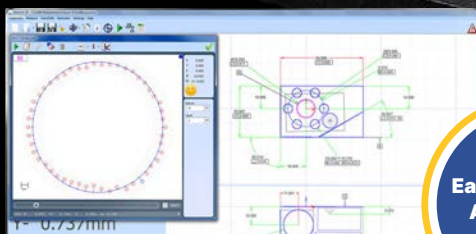
**Captures complex geometries  
for reverse engineering**

**Perfect for rapid first piece &  
GD&T inspections on shop floor**

**ACCURACY  
5  $\mu$ m**

**X & Y RANGE  
280mm/11"**

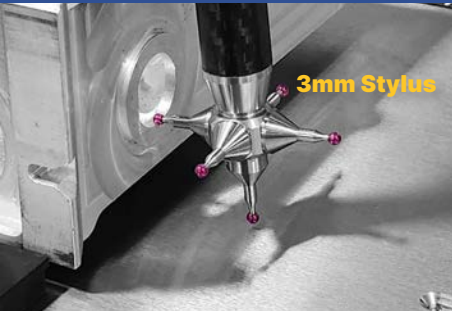
**Z RANGE  
150mm/5.9"**



**Easiest-to-Use  
Aberlink3D  
Software**



**Star Styli Included for versatile 3D Measurement in any axis (X-Y-Z) ▾**



| Measur3D                     |               |
|------------------------------|---------------|
| Measuring Volume (not cubic) |               |
| Cylindrical (X)              | 11" / 280mm   |
| Cylindrical (Y)              | 11" / 280mm   |
| Cylindrical (Z)              | 5.9" / 150mm  |
| Dimensions                   |               |
| Overall Width (X)            | 13.2" / 335mm |
| Overall Height (Y)           | 32.7" / 830mm |
| Overall Depth (Z)            | 28.5" / 725mm |
| Features                     |               |
| Volumetric Accuracy          | 5.0µm         |
| Scale Resolution             | 1.15µrad      |
| Optimum Temp. Range          | 18 - 22°C     |
| Operational Temp. Range      | 5 - 45°C      |

# Extol

## Shop Floor CMM

Moving at speeds up to 750 millimeters per second

Rugged, delta-arm design is automation ready

**Compact 28"  
Footprint**

**ACCURACY  
2.6  $\mu$ m**

**X & Y RANGE  
370mm/14.5"**

**Z RANGE  
270mm/10.6"**



**Shop-Floor  
Ready**



**No Air  
Required**

**Built for  
Automation**

# Systems

## Extol CNC & Manual CMM

|                                 | EXT-370                  | EXT-520            |
|---------------------------------|--------------------------|--------------------|
| <b>Measuring Range</b>          |                          |                    |
| <b>Cylindrical (X)</b>          | Dia. 14.5" / 370mm       | Dia. 20.4" / 520mm |
| <b>Cylindrical (Y)</b>          | Dia. 14.5" / 370mm       | Dia. 20.4" / 520mm |
| <b>Cylindrical (Z)</b>          | 10.6" / 270mm            | 11.8" / 300mm      |
| <b>At Centre</b>                | 14.3" / 365mm            | 15.7" / 400mm      |
| <b>Dimensions</b>               |                          |                    |
| <b>Overall Width (X)</b>        | 28.1" / 715mm            | 37.4" / 950mm      |
| <b>Width Incl. Monitor (X)</b>  | 39.3" / 1000mm           | 46.4" / 1180mm     |
| <b>Overall Depth (Y)</b>        | 28.7" / 730mm            | 38.9" / 990mm      |
| <b>Depth Incl. Monitor (Y)</b>  | 40.5" / 1030mm           | 51.9" / 1320mm     |
| <b>Overall Height (Z)</b>       | 78.7" / 2000mm           | 86.6" / 2200mm     |
| <b>Height to Table (Z)</b>      | 35.4" / 900mm            | 30.4" / 772mm      |
| <b>Features</b>                 |                          |                    |
| <b>Total Weight</b>             | 396 lbs / 180kg          | 464.2 lbs / 211kg  |
| <b>Table Load Capacity</b>      | 440 lbs / 200kg          |                    |
| <b>Volumetric Accuracy</b>      | (2.6 + 0.4L / 100)µm     |                    |
| <b>Scale Resolution</b>         | 0.00001" / 0.0001mm      |                    |
| <b>Operational Temp. Range</b>  | 5 - 45°C                 |                    |
| <b>Max. Acceleration Vector</b> | 750mm / sec <sup>2</sup> |                    |
| <b>Max. Velocity Vector</b>     | 500mm / sec              |                    |

# Axiom

**Manual/CNC CMM**

**Bridge-style precision with a clear growth path**

**Teach & Repeat programming for easy and approachable automated inspections with CNC CMMs**



**Start  
Manual**

**Upgrade  
to CNC**

**Teach  
& Repeat  
Programming**

**Lab-grade  
Accuracy**

**CMM Camera  
Attachment**

**Systems**

### Axiom CNC & Manual CMM

**Manual 600      Manual 900      Manual 1200**

#### Axis Travel

|          |               |               |                |
|----------|---------------|---------------|----------------|
| <b>X</b> | 25.2" / 640mm | 25.2" / 640mm | 25.2" / 640mm  |
| <b>Y</b> | 23.6" / 600mm | 35.4" / 900mm | 47.2" / 1200mm |
| <b>Z</b> | 19.6" / 500mm | 19.6" / 500mm | 19.6" / 500mm  |

#### Overall Size

|          |                |                |                |
|----------|----------------|----------------|----------------|
| <b>X</b> | 44.4" / 1130mm | 44.4" / 1130mm | 44.4" / 1130mm |
| <b>Y</b> | 35.4" / 900mm  | 47.2" / 1200mm | 59.2" / 1500mm |
| <b>Z</b> | 91.3" / 2320mm | 91.3" / 2320mm | 91.3" / 2320mm |

#### \*Volumetric Accuracy

|              |                            |                            |                            |
|--------------|----------------------------|----------------------------|----------------------------|
| <b>TP20</b>  | (2.4 + 0.4L / 100) $\mu$ m | (2.4 + 0.4L / 100) $\mu$ m | (2.4 + 0.4L / 100) $\mu$ m |
| <b>TP200</b> | (2.3 + 0.4L / 100) $\mu$ m | (2.3 + 0.4L / 100) $\mu$ m | (2.3 + 0.4L / 100) $\mu$ m |
| <b>SP25M</b> | (2.1 + 0.4L / 100) $\mu$ m | (2.1 + 0.4L / 100) $\mu$ m | (2.1 + 0.4L / 100) $\mu$ m |

#### Features

|                                |                        |                        |                        |
|--------------------------------|------------------------|------------------------|------------------------|
| <b>Scale Resolution</b>        | 0.0001mm (0.1 $\mu$ m) | 0.0001mm (0.1 $\mu$ m) | 0.0001mm (0.1 $\mu$ m) |
| <b>**Optimum Temp. Range</b>   | 18 - 22°C              | 18 - 22°C              | 18 - 22°C              |
| <b>Operational Temp. Range</b> | 0 - 45°C               | 0 - 45°C               | 0 - 45°C               |
| <b>Air Consumption</b>         | 50 l / min (1.8 cfm)   | 50 l / min (1.8 cfm)   | 50 l / min (1.8 cfm)   |
| <b>Required Air Pressure</b>   | 4 bar (60 psi)         | 4 bar (60 psi)         | 4 bar (60 psi)         |

|                                               |   |   |   |
|-----------------------------------------------|---|---|---|
| <b>Solid Granite Table</b>                    | ✓ | ✓ | ✓ |
| <b>Honeycomb Aluminum &amp; Granite Table</b> | ✓ | ✓ |   |

#### CNC Model Features

|                                 |                               |                        |                        |
|---------------------------------|-------------------------------|------------------------|------------------------|
| <b>Speed</b>                    | 20% faster, 15% more accurate |                        |                        |
| <b>Max. Velocity Vector</b>     | 600mm/sec                     | 600mm/sec              | 600mm/sec              |
| <b>Max. Acceleration Vector</b> | 600mm/sec <sup>2</sup>        | 600mm/sec <sup>2</sup> | 600mm/sec <sup>2</sup> |

# zCAT Portable CMM

**Teach & Repeat** allows you to teach the zCAT what to do, then hit PLAY to reproduce your measurements. It's that simple.

## Portability

means you can program it at your engineering desk, bring it to staff & hit play.

## 360° Rotation

means you or a robot can hot-swap parts to be measured.

**3D**  
Measurements  
on Shop Floor

ACCURACY  
**8  $\mu$ m**

X & Y RANGE  
**700mm/28"**

Z RANGE  
**250mm/9.8"**



# 700mm Cylindrical Volume

**Hot-swap  
parts during  
inspection**



## zCAT

### Measuring Range

|                        |               |
|------------------------|---------------|
| <b>Cylindrical (X)</b> | 27.6" / 700mm |
| <b>Cylindrical (Y)</b> | 27.6" / 700mm |
| <b>Cylindrical (Z)</b> | 9.8" / 250mm  |

### Dimensions

|                           |               |
|---------------------------|---------------|
| <b>Overall Width (X)</b>  | 16.5" / 420mm |
| <b>Overall Height (Y)</b> | 24.4" / 620mm |
| <b>Overall Depth (Z)</b>  | 6.8" / 172mm  |

### Features

|                     |                             |
|---------------------|-----------------------------|
| <b>Total Weight</b> | 30 lbs / 13.6kg             |
| <b>Accuracy</b>     | 8.0μm                       |
| <b>Speed</b>        | User controlled to 150 mmps |

**Teach  
& Repeat  
Programming**

# Systems



# Horizon

## Our most accurate bridge-style CMM

- Innovative, frictionless linear drives for fast, smooth, silent motion
- Wear free parts for greater reliability
- 2204.6 lbs./1000 kg. table capacity

**ACCURACY**  
up to 1.5  $\mu\text{m}$

**X RANGE**  
up to  
1000mm/39.4"

**Y RANGE**  
up to  
2000mm/78.7"

**Z RANGE**  
up to  
800mm/31.5"

**Ideal for  
Contact  
Scanning**

**Auto-  
changing  
probes**



## Halo

- Cost-saving Belt Drive System for X-Y-Z Axis movement
- Suitable for the workshop environment
- Solid granite table with high load capacity
- 2204.6 lbs./1,000 kg. table capacity

**ACCURACY**  
starting at  
1.8  $\mu\text{m}$

**X RANGE**  
up to  
1000mm/39.4"

**Y RANGE**  
up to  
2000mm/78.7"

**Z RANGE**  
up to  
800mm/31.5"



**\*See CMM  
Camera  
Attachment  
pg. 9**

## Azimuth

- Our largest bridge CMM, utilizing a belt drive system
- Up to 13,200 lbs./6,000 kg. table capacity

**ACCURACY**  
up to 2.6  $\mu\text{m}$

**X RANGE**  
up to  
1200mm/47.2"

**Y RANGE**  
up to  
3000mm/118.1"

**Z RANGE**  
up to  
1000mm/39.4"



# SCAN S25T

Optical Line Scanning System, Perfect for Cylindrical & Threaded Components in a Compact Benchtop Design



| S25T                    |                       |
|-------------------------|-----------------------|
| Measuring Range         |                       |
| <b>Diameter</b>         | 1.02" / 26mm          |
| <b>Length</b>           | 7.87" / 200mm         |
| Resolution              |                       |
| <b>Diameter</b>         | 0.000001"/0.0001mm    |
| <b>Length</b>           | 0.000001"/0.0001mm    |
| Accuracy                |                       |
| <b>Diameter</b>         | (0.9 + D[mm])/100) μm |
| <b>Length</b>           | (2.5 + D[mm])/200) μm |
| Repeatability           |                       |
| <b>Diameter</b>         | 0.000016"/0.0004mm    |
| <b>Length</b>           | 0.000031"/0.0008mm    |
| Holding Capacity        |                       |
| <b>Diameter</b>         | 2"/51mm               |
| <b>Length</b>           | 7.87"/200mm           |
| <b>Max. Part Weight</b> | 4.4 lbs./2 kg.        |
| <b>Machine Weight</b>   | 132 lbs./60 kg.       |

# SCAN S65T

## Tilting

**Tilting Optics: Exclusive Optics for Complete Thread Measuring – Non Algorithmic Thread Measurement**

**Complete measurement of threads**

**30°  
Tilting  
Optical  
Scanner**

### S65T

#### Measuring Range

**Diameter** 2.56" / 65mm

**Length** 13.78" / 350mm

#### Resolution

**Diameter** 0.000001"/0.0001mm

**Length** 0.000001"/0.0001mm

#### Accuracy

**Diameter**  $(1 + D[\text{mm}]/100) \mu\text{m}$

**Length**  $(3 + L[\text{mm}]/200) \mu\text{m}$

#### Repeatability

**Diameter** 0.5  $\mu\text{m}$

**Length** <1  $\mu\text{m}$

#### Holding Capacity

**Diameter** 7.87"/200mm

**Length** 14.17"/360mm

**Max. Part Weight** 132 lbs./60 kg.

**Machine Weight** 926 lbs./420 kg.



# Systems



# SCAN S145 Series

**Blazing fast, super precise optical scanner for your Largest Parts**

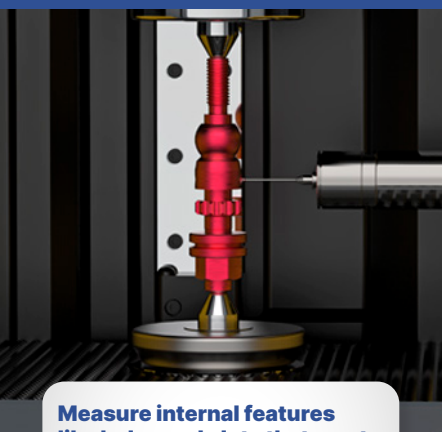
**Attach the probe to any model for enhanced measurement and inspection**

**Fastest  
Inspection of  
Turned Parts**

**360°  
Rotational Axis  
for Dynamic  
Measurement**



## Probing



Measure internal features like holes and slots that most optical systems can't reach—all in one setup.

## Rotational Axis



Dynamic measurement with rotating axis for maximum thread inspection.

### SCAN S145 Series

|                                   | S145                                    | S145L                                     | S145XL                                    |
|-----------------------------------|-----------------------------------------|-------------------------------------------|-------------------------------------------|
| <b>Measuring Range</b>            |                                         |                                           |                                           |
| <b>Diameter</b>                   | 5.7"/145mm                              | 5.7"/145mm                                | 5.7"/145mm                                |
| <b>Length</b>                     | 24.2"/615mm                             | 50.3"/1280mm<br>(48.4"/1230mm with probe) | 70.9"/1800mm<br>(68.9"/1750mm with probe) |
| <b>Resolution</b>                 |                                         |                                           |                                           |
| <b>Diameter</b>                   | 0.0001mm                                | 0.0001mm                                  | 0.0001mm                                  |
| <b>Length</b>                     | 0.001mm                                 | 0.001mm                                   | 0.001mm                                   |
| <b>Accuracy</b>                   |                                         |                                           |                                           |
| <b>Diameter</b>                   | (1.5 + D/100 μm)                        | (1.5 + D/100 μm)                          | (1.5 + D/100 μm)                          |
| <b>Length</b>                     | (4 + L/200 μm)                          | (4 + L/200 μm)                            | (4 + L/200 μm)                            |
| <b>Repeatability</b>              |                                         |                                           |                                           |
| <b>Diameter</b>                   | 0.5μm                                   | 0.5μm                                     | 0.5μm                                     |
| <b>Length</b>                     | 1.0μm                                   | 1.0μm                                     | 1.0μm                                     |
| <b>Holding Capacity</b>           |                                         |                                           |                                           |
| <b>Diameter</b>                   | 10"/254mm (7.9"/200mm w/3D probe)       |                                           |                                           |
| <b>Length</b>                     | 24.2"/615mm                             | 50.3"/1280mm                              | 70.9"/1800mm                              |
| <b>Features</b>                   |                                         |                                           |                                           |
| <b>Max. Part Weight</b>           | 200 lbs./100 kg.                        |                                           |                                           |
| <b>Machine Weight</b>             | 1168 lbs./530 kg.                       | 1433 lbs./650 kg.                         | 1757 lbs./797 kg.                         |
| <b>Axial Positioning Speed</b>    | Up to 160mm/s (Up to 20mm/s with probe) |                                           |                                           |
| <b>Measuring Volume of Probe*</b> | PX: 615/PY: +60, -40/PZ: +130, -15      | PX: 1230/PY: +60, -40/PZ: +130, -15       | PX: 1750/PY: +60, -40/PZ: +130, -15       |

# Venture XT 3030

**Advanced multi-sensor 3D measurement platform delivering optical and tactile capability**

**Comprehensive GD&T analysis and reporting**

**4-in-1  
Multi-Sensor  
System**

**Camera,  
Touch Probe,  
Manual Cross  
Hair & Digital  
Microscope**

## Venture FV

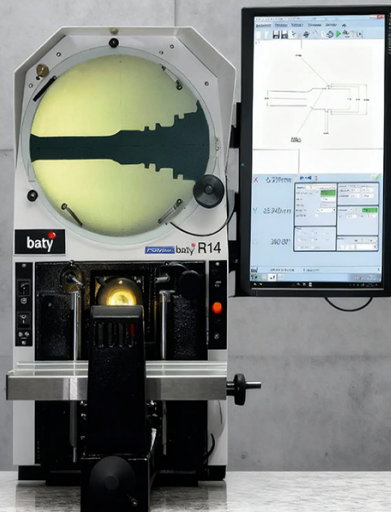
- 3D measurement
- Instant measurements at the push of a button
- CNC rotary indexing allows cylindrical parts to be rotated and measured multiple times per revolution
- Double telecentric optics for high resolution 3D measurement
- All have easy-to-use Fowler FUSION software
- Motorized auto focus

**100s of  
dimensions on  
100s of parts in  
seconds**

**Measure  
with the press  
of a button**



## Optical Comparators



- All feature profile and surface illumination
- Most models with optical edge detection
- Available with up to 24" screen
- Choice of readouts including touch screen powered by Fowler FUSION software
- Made in England



# HS Series

## Horizontal Setting Benches

Available  
motorized  
or non-  
motorized

Large selection  
of accessories to  
handle any job



### Horizontal Setting Benches

|                                | HS4                         | HS5                   | HS6         |
|--------------------------------|-----------------------------|-----------------------|-------------|
| <b>Measuring Range</b>         | 550mm/20" 1050mm/40"        | 1550mm/60" 2050mm/80" | 3050mm/120" |
| <b>Measuring Force</b>         | 15 N                        | 15 N                  | 3N          |
| <b>Max. Permissible Errors</b> | 0.7+L(mm)/1000 $\mu$ m      |                       |             |
| <b>Repeatability</b>           | 0.5 $\mu$ m                 | 0.5 $\mu$ m           | 0.2 $\mu$ m |
| <b>Max. Resolution</b>         | 0.0001mm/0.00001"           |                       |             |
| <b>Max. Displacement Speed</b> | 1500mm/s                    |                       |             |
| <b>Operating Temp.</b>         | +10 $\div$ +40 $^{\circ}$ C |                       |             |

## THV Horizontal Measuring System



Our  
Best Selling  
Horizontal  
Calibration  
Bench

# Horizontal Calibration

For calibration, measuring, and setting

- Calibrate plugs, rings, threads and much more
- Set ID/OD gages, bar gages, swing gages
- Ranges up to 40"/1000mm
- Meets ISO 9000/2000 standards

\*Please note: Calibration benches available up to 118"/3000mm and setting benches available up to 315"/8000mm



Calibration of Plain Rings



Calibration of Threaded Plugs



Horizontal Calibration Benches

|                                | HC3                   | HC4                   | HC5                                                 |
|--------------------------------|-----------------------|-----------------------|-----------------------------------------------------|
| <b>Measuring Range</b>         |                       |                       |                                                     |
| <b>300</b>                     | -                     | -                     | 13"/350mm                                           |
| <b>500</b>                     | 20"/550mm             | 20"/550mm             | 20"/550mm                                           |
| <b>1000</b>                    | 40"/1050mm            | 40"/1050mm            | 40"/1050mm                                          |
| <b>1500</b>                    | 60"/1550mm            | 60"/1550mm            | -                                                   |
| <b>2000</b>                    | 80"/2050mm            | 80"/2050mm            | -                                                   |
| <b>3000</b>                    | 120"/3050mm           | 120"/3050mm           | -                                                   |
| <b>Features</b>                |                       |                       |                                                     |
| <b>Max. Permissible Errors</b> | 0.6+L(mm)/<br>1200 µm | 0.3+L(mm)/<br>2000 µm | 0.15+L/2000 µm*<br>*Note: 0.1+L/<br>2000 µm for 300 |
| <b>Repeatability</b>           | 0.1 µm                | 0.1 µm                | 0.05 µm                                             |
| <b>Max. Resolution</b>         | 0.0001mm              | 0.00001mm             | 0.00001mm                                           |
| <b>Max. Displacement Speed</b> |                       | 4000mm/s              |                                                     |
| <b>Operating Temp.</b>         |                       | +10 ÷ +40 °C          |                                                     |
| <b>Relative Humidity</b>       |                       | 20 ÷ 80%              |                                                     |



| Models                                                        | Hi_CAL<br>150                       | Hi_CAL<br>300                       | Hi_CAL<br>450                       | V1          | V1+             |
|---------------------------------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------|-----------------|
| <b>Measuring range</b>                                        |                                     |                                     |                                     |             |                 |
| 150mm/6"                                                      | •                                   |                                     |                                     |             |                 |
| 300mm/12"                                                     |                                     | •                                   |                                     | •           | •               |
| 400mm/16"                                                     |                                     |                                     |                                     |             |                 |
| 450mm/17.5"                                                   |                                     |                                     | •                                   |             |                 |
| 611mm/24"                                                     |                                     |                                     |                                     | •           | •               |
| 700mm/28"                                                     |                                     |                                     |                                     |             |                 |
| 1100mm/43"                                                    |                                     |                                     |                                     |             |                 |
| 1800mm/71"                                                    |                                     |                                     |                                     |             |                 |
| <b>add 312mm/12" of application range w/ 2nd probe holder</b> |                                     |                                     |                                     |             |                 |
| <b>Precision</b>                                              | 2.0 +<br>L/200 $\mu$ m<br>2 $\mu$ m | 2.0 +<br>L/200 $\mu$ m<br>2 $\mu$ m | 2.0 +<br>L/200 $\mu$ m<br>2 $\mu$ m | 1-3 $\mu$ m | 1.5-2.5 $\mu$ m |
| <b>Repeatability</b>                                          |                                     |                                     |                                     | 0.01mm      | 0.005mm         |
| <b>Max Resolution mm</b>                                      | 0.001mm                             | 0.001mm                             | 0.001mm                             | 0.01mm      | 0.001mm         |
| <b>"Black Mask" Display (1D)</b>                              |                                     |                                     |                                     |             |                 |
| <b>Touch Color Display (2D)</b>                               |                                     |                                     |                                     |             |                 |
| <b>Min/Max/Delta</b>                                          | •                                   | •                                   | •                                   |             |                 |
| <b>Average Difference</b>                                     |                                     |                                     |                                     |             |                 |
| <b>Heights, Diameters, Centerline distance</b>                | •                                   | •                                   | •                                   |             | •               |
| <b>SmartReverse (Smart diameter measurement)</b>              |                                     |                                     |                                     |             |                 |
| <b>Perpendicularity w/ lever indicator</b>                    |                                     |                                     |                                     |             |                 |
| <b>Perpendicularity w/ electronic probe</b>                   |                                     |                                     |                                     |             |                 |
| <b>Angles &amp; Cones</b>                                     |                                     |                                     |                                     |             |                 |
| <b>Temperature Compensation</b>                               |                                     |                                     |                                     |             |                 |
| <b>Works on battery</b>                                       | •                                   | •                                   | •                                   | •           | •               |
| <b>Manual Movement</b>                                        |                                     |                                     |                                     | •           | •               |
| <b>Motorized Movement</b>                                     | •                                   | •                                   | •                                   |             |                 |
| <b>Air Cushion</b>                                            |                                     |                                     |                                     |             |                 |
| <b>Fine Adjustment</b>                                        | •                                   | •                                   | •                                   | •           | •               |
| <b>Long Probes (400mm)</b>                                    |                                     |                                     |                                     |             |                 |
| <b>9 References</b>                                           |                                     |                                     |                                     |             |                 |
| <b>2D Mode</b>                                                |                                     |                                     |                                     |             |                 |
| <b>Tolerances</b>                                             |                                     |                                     |                                     |             |                 |
| <b>Calculation Function</b>                                   |                                     |                                     |                                     |             |                 |
| <b>Programs</b>                                               |                                     |                                     |                                     |             |                 |
| <b>Statistics</b>                                             |                                     |                                     |                                     |             |                 |
| <b>Wireless Data Transfer (option)</b>                        | •                                   | •                                   | •                                   |             |                 |
| <b>USB &amp; RS232 Interface</b>                              | •                                   | •                                   | •                                   | •           | •               |



# V1-V9 Series Electronic Height Gages

**Over 50 years of recognized excellence!**

High accuracy, manual or motorized

See the full comparison chart of all our electronic height gages on pg. 22-23



**Certify Any Height Gage Below For Only \$299.00**

Valid only for Tool-A-Thon 26.1

26.2



54-192-340-0



54-199-570-0



54-199-770-0

Height Gages

| Order No.     | Measuring Range                   | Range with Probe Inverted | List Price  | Sale Price  |
|---------------|-----------------------------------|---------------------------|-------------|-------------|
| V3            |                                   |                           |             |             |
| 54-192-340-0  | 16"/407mm                         | 20"/508mm                 | \$7,596.00  | \$7,217.00  |
| 54-192-370-0  | 28"/711mm                         | 31.9"/812mm               | \$8,515.00  | \$8,091.00  |
| V4            |                                   |                           |             |             |
| 54-191-440-0  | 16"/407mm                         | 28.3"/719mm               | \$9,469.00  | \$8,996.00  |
| 54-191-470-0  | 28"/711mm                         | 40.2"/1023mm              | \$11,069.00 | \$10,517.00 |
| V4+           |                                   |                           |             |             |
| 54-191-440-2D | 16"/407mm                         | 28.3"/719mm               | \$12,443.00 | \$11,822.00 |
| 54-191-470-2D | 28"/711mm                         | 40.2"/1023mm              | \$13,483.00 | \$12,810.00 |
| V5            |                                   |                           |             |             |
| 54-199-540-0  | 16"/407mm                         | 28.3"/719mm               | \$9,916.00  | \$9,421.00  |
| 54-199-570-0  | 28"/711mm                         | 40.2"/1023mm              | \$11,516.00 | \$10,941.00 |
| 54-199-590-0  | 43.7"/1110mm                      | 56"/1422mm                | \$17,820.00 | \$16,930.00 |
| V7            |                                   |                           |             |             |
| 54-199-740-0  | 16"/407mm                         | 28.3"/719mm               | \$15,926.00 | \$15,130.00 |
| 54-199-770-0  | 28"/711mm                         | 40"/1023mm                | \$17,013.00 | \$16,163.00 |
| Probe Sets    |                                   |                           |             |             |
| 54-199-105-0  | 4mm Probe Set, 21 piece           |                           | \$2,561.00  | \$2,433.00  |
| 54-199-106-0  | 8mm Probe Set, 16 piece           |                           | \$2,073.00  | \$1,970.00  |
| 54-199-107-0  | 8mm Basic Probe Set, 7 piece      |                           | \$751.00    | \$714.00    |
| Accessories   |                                   |                           |             |             |
| 54-199-400-0  | Ø8mm Ceramic Probe Holder L=400mm |                           | \$1,555.00  | \$1,478.00  |

Prices & Specifications are subject to change without notice.

25



# Fowler Sylvac Hi\_Cal V2 Electronic Height Gages

For your finer, more delicate parts.

## Features:

- Bluetooth for quick, easily recorded measurements
- Extra low measuring force, from 0.2N
- Measure internal and external diameters, centerlines, heights, widths, depths and MIN/MAX/TIR capability
- Battery life: 40 hours rechargeable during operation
- Touch sensitive probe speed for easy operation
- Base with small footprint

**ISO Certification available  
for \$199.00 extra!**



**54-931-150-BT**

## All models Include:

- Protective cover
- Ruby ball probe Ø3mm
- Setting gage
- Calibration certificate



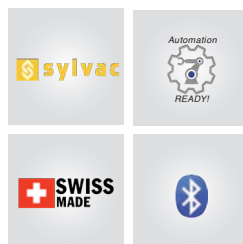
**54-931-300-BT**



**54-931-450-BT**



**54-930-217-0**



| Order No.              | Range                                   | Accuracy          | List Price | Sale Price |
|------------------------|-----------------------------------------|-------------------|------------|------------|
| <b>54-931-150-BT</b>   | 6"/150mm                                | 0.00013"/0.0034mm | \$7,172.00 | \$6,815.00 |
| <b>54-931-150-BT-C</b> | 6"/150mm with ISO/A2LA Certification    |                   | \$7,380.00 | \$7,011.00 |
| <b>54-931-300-BT</b>   | 12"/300mm                               | 0.00016"/0.0042mm | \$7,865.00 | \$7,472.00 |
| <b>54-931-300-BT-C</b> | 12"/300mm with ISO/A2LA Certification   |                   | \$8,106.00 | \$7,701.00 |
| <b>54-931-450-BT</b>   | 17.5"/450mm                             | 0.00020"/0.005mm  | \$8,928.00 | \$8,483.00 |
| <b>54-931-450-BT-C</b> | 17.5"/450mm with ISO/A2LA Certification |                   | \$9,074.00 | \$8,621.00 |
| <b>Accessories</b>     |                                         |                   |            |            |
| <b>54-930-217-0</b>    | Standard Probe Accessory Kit, 5 Piece   |                   | \$1,332.00 | \$1,265.00 |
| <b>54-930-215-0</b>    | Full Probe Accessory Kit, 15 Piece      |                   | \$3,477.00 | \$3,304.00 |

## NEW V1 & V1+ Electronic Height Gages

Introducing the next generation of Trimos entry-level height gages for the workshop.

### Features:

- Accuracy: 0.0012"/0.03mm
- RS232 data output
- Steel base and extra large display with simplified keypad
- V1 features a fine adjust hand-wheel for scribing (scraper included)
- V1+ features bi-directional measuring force hand-wheel for measuring bores, centerlines, heights, MIN/MAX/TIR
- Supplied with 0.236"/6mm ball probe
- Granite base units available as special order



54-180-412-0

54-180-524-5



| Order No.    | Description           | Range     | Resolution      | List Price | Sale Price |
|--------------|-----------------------|-----------|-----------------|------------|------------|
| 54-180-412-0 | V1                    | 12"/300mm | 0.001"/0.01mm   | \$3,369.00 | \$3,200.00 |
| 54-180-424-0 | V1                    | 24"/611mm | 0.001"/0.01mm   | \$4,393.00 | \$4,174.00 |
| 54-180-512-0 | V1+                   | 12"/300mm | 0.0001"/0.001mm | \$4,686.00 | \$4,452.00 |
| 54-180-512-5 | V1+ with granite base | 12"/300mm | 0.0001"/0.001mm | \$5,418.00 | \$5,148.00 |
| 54-180-524-0 | V1+                   | 24"/611mm | 0.0001"/0.001mm | \$5,857.00 | \$5,565.00 |
| 54-180-524-5 | V1+ with granite base | 24"/611mm | 0.0001"/0.001mm | \$6,589.00 | \$6,260.00 |

### Z-HEIGHT Height Gage

With handwheel and fine adjust.

#### Features:

- Base design has a more comfortable grip and is finely ground and lapped for smooth movement on surface plates
- Fine adjust feature allows precise adjustment to required settings
- Indicator holding bar included

Calibration certificate available.

54-175-018-0



### Z-HEIGHT ABS PLUS+ Height Gage

#### Features:

- True ABS measuring system
- Supplied with a NIST certified test block (1" x 2" x 3")
- Large handwheel for both coarse and fine adjustments
- Carbide scriber
- Positive locking lever for scribing

Calibration certificate available.

54-175-012-1



| Order No.    | Range       | Accuracy         | Resolution     | List Price | Sale Price |
|--------------|-------------|------------------|----------------|------------|------------|
| 54-175-012-0 | 0-12"/300mm | ± 0.0015"/0.04mm | 0.0005"/0.01mm | \$882.00   | \$794.00   |
| 54-175-018-0 | 0-18"/500mm | ± 0.002"/0.05mm  | 0.0005"/0.01mm | \$864.00   | \$779.00   |
| 54-175-012-1 | 0-12"/300mm | ± 0.0015"/0.04mm | 0.0005"/0.01mm | \$864.00   | \$778.00   |

## Fowler Bowers Bluetooth

For special application heads, contact the  
Fowler Technical Department 1-800-788-2353

2" - 4" Set



54-567-100-BT



### XTH3 Bluetooth Holematic Pistol Grips

#### Features:

- Coolant proof, dust proof - IP67
- Resolution: 0.00005"/0.001mm
- Bluetooth connectivity to your phone or tablet
- Accuracies: 0.00015" - 0.00035"/0.004mm - 0.009mm
- Tungsten carbide measuring faces on all 3-point heads from 0.5"/12.5mm and up
- Sizes over 0.500"/12.5mm feature blind bore capability
- Includes UKAS certificates for all pistol grip, heads and rings
- Additional individual sizes available

| Order No.                            | Range                                            | Includes                   | List Price | Sale Price |
|--------------------------------------|--------------------------------------------------|----------------------------|------------|------------|
| <b>Pistol Grip Complete Sets</b>     |                                                  |                            |            |            |
| <b>54-567-009-BT</b>                 | 0.080" - 0.250"/2 - 6mm (2 pt.)                  | 5 heads, 1 handle, 3 rings | \$7,737.00 | \$6,964.00 |
| <b>54-567-010-BT</b>                 | 0.250" - 0.375"/6 - 10mm                         | 2 heads, 1 handle, 1 ring  | \$3,034.00 | \$2,731.00 |
| <b>54-567-020-BT</b>                 | 0.375" - 0.750"/10 - 20mm                        | 3 heads, 1 handle, 2 rings | \$3,550.00 | \$3,195.00 |
| <b>54-567-050-BT</b>                 | 0.750" - 2"/20 - 50mm                            | 3 heads, 1 handle, 2 rings | \$4,583.00 | \$4,125.00 |
| <b>54-567-100-BT</b>                 | 2" - 4"/50 - 100mm                               | 3 heads, 1 handle, 2 rings | \$5,101.00 | \$4,591.00 |
| <b>54-567-105-BT</b>                 | 4" - 6"/100 - 150mm                              | 2 heads, 1 handle, 1 ring  | \$4,583.00 | \$4,125.00 |
| <b>54-567-110-BT</b>                 | 6" - 8"/150 - 200mm                              | 2 heads, 1 handle, 1 ring  | \$6,049.00 | \$5,445.00 |
| <b>54-567-200-BT</b>                 | 4" - 8"/100 - 200mm                              | 4 heads, 1 handle, 2 rings | \$9,575.00 | \$8,618.00 |
| <b>54-567-210-BT</b>                 | 0.750" - 4"/20 - 100mm                           | 6 heads, 1 handle, 4 rings | \$6,618.00 | \$5,957.00 |
| <b>54-567-620-BT</b>                 | 0.250" - 0.750"/6 - 20mm                         | 5 heads, 1 handle, 3 rings | \$4,095.00 | \$3,686.00 |
| <b>Connectivity Cables/Accessory</b> |                                                  |                            |            |            |
| <b>54-115-526-0</b>                  | Proximity cable with USB connection              |                            | \$251.00   | \$226.00   |
| <b>54-115-527-0</b>                  | Proximity cable with serial connection 24"/611mm |                            | \$294.00   | \$266.00   |
| <b>54-115-246-BT</b>                 | USB bluetooth receiver                           |                            | \$147.00   | \$133.00   |

#### Extensions

| Order No.           | Length     | Diameter | Fits Heads              | List Price | Sale Price |
|---------------------|------------|----------|-------------------------|------------|------------|
| <b>54-336-301-0</b> | 2.5"/63mm  | 0.230"   | 0.250"-0.375"/6-10mm    | \$194.00   | \$175.00   |
| <b>54-336-302-0</b> | 3"/76mm    | 0.366"   | 0.375"-0.500"/10-12.5mm | \$194.00   | \$175.00   |
| <b>54-336-303-0</b> | 4"/100mm   | 0.479"   | 0.500"-0.750"/12.5-20mm | \$194.00   | \$175.00   |
| <b>54-336-304-0</b> | 6"/150mm   | 0.740"   | 0.750" - 2"/20 - 50mm   | \$296.00   | \$267.00   |
| <b>54-336-306-0</b> | 20"/500mm  | 0.757"   | 0.750" and higher       | \$1,049.00 | \$944.00   |
| <b>54-336-307-0</b> | 40"/1000mm | 1.365"   | 1.375" and higher       | \$1,554.00 | \$1,399.00 |

## Bore Gaging Systems

For special application heads, contact the  
Fowler Technical Department 1-800-788-2353

### XTD3 Bluetooth Electronic Holemikes

3/8" - 3/4" Set



54-367-020-BT



2 Point  
Spherical



2 and 3 Point  
Grooves



3 Point  
Spherical



Ball Screw  
Threads



2 and 3 Point  
Screw Threads



Ball Race  
Measurement



Internal Spline



Slot Width



| Order No.                                         | Range                                  | Includes                   | List Price | Sale Price |
|---------------------------------------------------|----------------------------------------|----------------------------|------------|------------|
| <b>Holemike Complete Sets (Traditional style)</b> |                                        |                            |            |            |
| 54-367-000-BT                                     | 0.080" - 0.250"/2 - 6mm (2 pt.)        | 5 heads, 1 handle, 3 rings | \$6,252.00 | \$5,627.00 |
| 54-367-010-BT                                     | 0.250" - 0.375"/6 - 10mm               | 2 heads, 1 handle, 1 ring  | \$2,938.00 | \$2,645.00 |
| 54-367-020-BT                                     | 0.375" - 0.750"/10 - 20mm              | 3 heads, 1 handle, 2 rings | \$3,506.00 | \$3,156.00 |
| 54-367-050-BT                                     | 0.750" - 2"/20 - 50mm                  | 3 heads, 1 handle, 2 rings | \$4,759.00 | \$4,284.00 |
| 54-367-100-BT                                     | 2" - 4"/50 - 100mm                     | 3 heads, 1 handle, 2 rings | \$5,272.00 | \$4,745.00 |
| 54-367-105-BT                                     | 4" - 6"/100 - 150mm                    | 2 heads, 1 handle, 1 ring  | \$4,200.00 | \$3,780.00 |
| 54-367-110-BT                                     | 6" - 8"/150 - 200mm                    | 2 heads, 1 handle, 1 ring  | \$5,539.00 | \$4,986.00 |
| 54-367-200-BT                                     | 4" - 8"/100 - 200mm                    | 4 heads, 1 handle, 2 rings | \$9,166.00 | \$8,250.00 |
| <b>Connectivity Cables/Accessory</b>              |                                        |                            |            |            |
| 54-115-526-0                                      | Proximity cable with USB connection    |                            | \$251.00   | \$226.00   |
| 54-115-527-0                                      | Proximity cable with serial connection | 24"/611mm                  | \$294.00   | \$266.00   |
| 54-115-246-BT                                     | USB bluetooth receiver                 |                            | \$147.00   | \$133.00   |

#### Extensions

| Order No.    | Length     | Diameter Fits Heads |                         | List Price | Sale Price |
|--------------|------------|---------------------|-------------------------|------------|------------|
| 54-336-301-0 | 2.5"/63mm  | 0.230"              | 0.250"-0.375"/6-10mm    | \$194.00   | \$175.00   |
| 54-336-302-0 | 3"/76mm    | 0.366"              | 0.375"-0.500"/10-12.5mm | \$194.00   | \$175.00   |
| 54-336-303-0 | 4"/100mm   | 0.479"              | 0.500"-0.750"/12.5-20mm | \$194.00   | \$175.00   |
| 54-336-304-0 | 6"/150mm   | 0.740"              | 0.750" - 2"/20 - 50mm   | \$296.00   | \$267.00   |
| 54-336-306-0 | 20"/500mm  | 0.757"              | 0.750" and higher       | \$1,049.00 | \$944.00   |
| 54-336-307-0 | 40"/1000mm | 1.365"              | 1.375" and higher       | \$1,554.00 | \$1,399.00 |

**XT-Series Holemikes****Vernier Bore Micrometers****Features:**

- 3-pt contact with tungsten carbide measuring anvils above 0.5"
- Blind bore measuring heads featured above 0.5"
- Ratchet stop for consistent measuring
- Extensions available for deep measuring
- Includes UKAS certificates for all Holemikes and setting rings



| Order No.           | Range           | Grads    | Measuring Accuracy | Measuring Depth | Ring Included | List Price | Sale Price |
|---------------------|-----------------|----------|--------------------|-----------------|---------------|------------|------------|
| <b>52-255-310-0</b> | 0.250" - 0.312" | 0.00025" | 0.00015"           | 2.28"           | 0.312"        | \$912.00   | \$821.00   |
| <b>52-255-311-0</b> | 0.312" - 0.375" | 0.00025" | 0.00015"           | 2.28"           | 0.312"        | \$845.00   | \$761.00   |
| <b>52-255-312-0</b> | 0.375" - 0.500" | 0.00025" | 0.00015"           | 2.28"           | 0.5"          | \$845.00   | \$761.00   |
| <b>52-255-313-0</b> | 0.500" - 0.625" | 0.00025" | 0.00015"           | 2.44"           | 0.5"          | \$877.00   | \$790.00   |
| <b>52-255-314-0</b> | 0.625" - 0.750" | 0.00025" | 0.00015"           | 2.44"           | 0.75"         | \$926.00   | \$835.00   |
| <b>52-255-315-0</b> | 0.750" - 1"     | 0.00025" | 0.00015"           | 2.60"           | 0.75"         | \$952.00   | \$857.00   |
| <b>52-255-316-0</b> | 1" - 1.375"     | 0.00025" | 0.00015"           | 2.60"           | 1.375"        | \$1,356.00 | \$1,221.00 |
| <b>52-255-317-0</b> | 1.375" - 2"     | 0.00025" | 0.00015"           | 3.15"           | 1.375"        | \$1,388.00 | \$1,250.00 |
| <b>52-255-318-0</b> | 2" - 2.625"     | 0.00025" | 0.0002"            | 3.15"           | 2.625"        | \$1,655.00 | \$1,490.00 |
| <b>52-255-319-0</b> | 2.625" - 3.250" | 0.00025" | 0.0002"            | 3.15"           | 2.625"        | \$1,670.00 | \$1,503.00 |
| <b>52-255-320-0</b> | 3.250" - 4"     | 0.00025" | 0.0002"            | 3.94"           | 3.25"         | \$2,084.00 | \$1,876.00 |
| <b>52-255-321-0</b> | 4" - 5"         | 0.00025" | 0.00025"           | 4.53"           | 5"            | \$2,173.00 | \$1,956.00 |
| <b>52-255-322-0</b> | 5" - 6"         | 0.00025" | 0.00025"           | 4.53"           | 5"            | \$2,521.00 | \$2,269.00 |

**Sets**

|                     |                 |                             |  |  |  |            |            |
|---------------------|-----------------|-----------------------------|--|--|--|------------|------------|
| <b>52-255-565-0</b> | 0.250" - 0.375" | 2 heads, 2 handles, 1 ring  |  |  |  | \$1,855.00 | \$1,670.00 |
| <b>52-255-665-0</b> | 0.375" - 0.750" | 3 heads, 3 handles, 2 rings |  |  |  | \$2,346.00 | \$2,113.00 |
| <b>52-255-775-0</b> | 0.750" - 2"     | 3 heads, 3 handles, 2 rings |  |  |  | \$3,624.00 | \$3,262.00 |
| <b>52-255-890-0</b> | 4" - 6"         | 2 heads, 2 handles, 1 ring  |  |  |  | \$3,560.00 | \$3,205.00 |
| <b>52-255-900-0</b> | 6" - 8"         | 2 heads, 2 handles, 1 ring  |  |  |  | \$5,410.00 | \$4,869.00 |

**Bore Gage Setting Master Kits**

Fowler's Bore Gage Setting Master Kit is used for accurately setting any bore gage up to 6"/150mm in diameter to an accuracy of 0.0001"/0.003mm.

**Each Set includes:****Setting Device**

- Base anvil: 3.950" x 1.050"
- Adjustable anvil: 2.375" x 0.375" (two of each)
- Internal capacity: 6"/150mm
- Centralizer capacity width: 2.750"
- Quick-release holder for fast adjustment

**Economy Gage Block Sets**

Inch model:

- 36 piece
- Tolerances to 0.00005"
- Certificate of Calibration to NIST

Metric model available.

*Bore gage shown not included*

| Order No.           | Description                                        | List Price | Sale Price |
|---------------------|----------------------------------------------------|------------|------------|
| <b>53-646-000-1</b> | Inch Bore Gage Setting Master Kit                  | \$501.00   | \$451.00   |
| <b>53-646-005-0</b> | Bore Gage Setting Master Kit - without Gage Blocks | \$320.00   | \$289.00   |

# Internal & External Electronic Caliper Gages

For grooves and recesses



54-554-611-0

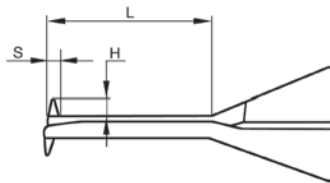


54-554-711-0

## Features:

- Accuracy:  $\pm 0.0008"/\pm 0.02\text{mm}$
- Resolution:  $0.0002"/0.005\text{mm}$
- Analog scale for reversal point indication
- Large, LCD display
- Preset capability

- Absolute and incremental measurements modes
- High-impact, aircraft aluminum case
- Rugged housing



## Dimensions for Internal Calipers

| Metric  | Inch     | L    | S     | H     | Tip Radius |
|---------|----------|------|-------|-------|------------|
| 5-15mm  | 0.2-0.6" | 20mm | 1.0mm | 1.5mm | 0.3mm      |
| 5-25mm  | 0.2-1.0" | 35mm | 1mm   | 1.5mm | 0.3mm      |
| 10-30mm | 0.4-1.2" | 55mm | 2mm   | 3.5mm | 0.5mm      |
| 20-40mm | 0.8-1.6" | 80mm | 3mm   | 6.5mm | 0.5mm      |
| 30-50mm | 1.2-2.0" | 80mm | 3mm   | 8.5mm | 0.5mm      |

## Dimensions for External Calipers

| Metric  | Inch     | L    | S     | H    | Tip Radius |
|---------|----------|------|-------|------|------------|
| 0-10mm  | 0-0.4"   | 40mm | 3mm   | 8mm  | 0.5mm      |
| 0-20mm  | 0-0.8"   | 80mm | 6.5mm | 25mm | 0.75mm     |
| 10-30mm | 0.4-1.2" | 80mm | 6.5mm | 25mm | 0.75mm     |
| 20-40mm | 0.8-1.6" | 80mm | 6.5mm | 25mm | 0.75mm     |
| 30-50mm | 1.2-2.0" | 80mm | 6.5mm | 25mm | 0.75mm     |

| Order No.                     | Range                    | List Price | Sale Price |
|-------------------------------|--------------------------|------------|------------|
| <b>Internal Caliper Gages</b> |                          |            |            |
| 54-554-611-0                  | 0.200" - 0.590"/5 - 15mm | \$220.00   | \$199.00   |
| 54-554-622-0                  | 0.200" - 1"/5 - 25mm     | \$315.00   | \$284.00   |
| 54-554-623-0                  | 0.400" - 1.2"/10 - 30mm  | \$281.00   | \$253.00   |
| 54-554-624-0                  | 0.790" - 1.6"/20 - 40mm  | \$309.00   | \$279.00   |
| 54-554-625-0                  | 1.2" - 2"/30 - 50mm      | \$296.00   | \$267.00   |
| <b>External Caliper Gages</b> |                          |            |            |
| 54-554-711-0                  | 0 - 0.400"/0 - 10mm      | \$231.00   | \$208.00   |
| 54-554-722-0                  | 0 - 0.790"/0 - 20mm      | \$252.00   | \$227.00   |
| 54-554-723-0                  | 0.4" - 1.2"/10 - 30mm    | \$309.00   | \$279.00   |
| 54-554-724-0                  | 0.790" - 1.6"/20 - 40mm  | \$402.00   | \$362.00   |
| 54-554-725-0                  | 1.2" - 2"/30 - 50mm      | \$270.00   | \$243.00   |

## Dial Cylinder Bore Gages

2-point bore measuring



54-646-401-0

## Features:

- Carbide Anvils
- Easy-to-read
- Great value
- Graduation:  $0.00005"/0.001\text{mm}$
- Accuracy:  $0.0006"/0.015\text{mm}$
- Insulated grip
- 9.5" depth above 1.5"
- Chrome plated handle
- 1.4" - 6" model available with an electronic indicator



52-646-400-0

| Order No.    | Range               | Graduation | Accuracy | List Price | Sale Price |
|--------------|---------------------|------------|----------|------------|------------|
| 54-646-401-0 | 1.4 - 6"/35 - 150mm | 0.001mm    | 0.015mm  | \$378.00   | \$322.00   |
| 52-646-100-0 | 0.7" - 1.5"         | 0.0005"    | 0.0009"  | \$178.00   | \$152.00   |
| 52-646-220-0 | 35 - 160mm          | 0.01mm     | 0.02mm   | \$322.00   | \$274.00   |
| 52-646-300-0 | 2" - 6"             | 0.0005"    | 0.0009"  | \$167.00   | \$142.00   |
| 52-646-400-0 | 1.4" - 6"           | 0.0005"    | 0.0009"  | \$228.00   | \$195.00   |
| 52-646-500-0 | 1.4" - 6"           | 0.0001"    | 0.0005"  | \$329.00   | \$280.00   |

Prices & Specifications are subject to change without notice.

Internal & External Measuring

## Swiss Ultralight IV Electronic Calipers

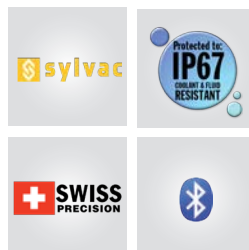


When you have  
**HUGE**  
parts to measure,  
this is the caliper  
you need!

Available Up to  
**2.5m range**

### Features:

- IP67 protected against fluid and dust
- Built-in Bluetooth
- Reinforced frame
- XXL display with 0.79"/20mm high digits
- Lengthened jaws 7.9"/200mm
- Includes upper ID measuring pins (5mm dia.)
- Movable left jaw
- Stainless steel titanium coated jaws
- Hold feature
- Preset function
- Min/Max functions
- Tolerance mode
- Internal and external measurement indicator



**Alternative jaws available, contact the Fowler Technical Department for more information 1-800-788-2353**

| Order No.           | Range              | Accuracy      | List Price | Sale Price |
|---------------------|--------------------|---------------|------------|------------|
| <b>54-110-512-0</b> | 0 - 15"/0 - 400mm  | 0.0012"/30 µm | \$3,500.00 | \$3,326.00 |
| <b>54-110-524-0</b> | 0 - 24"/0 - 600mm  | 0.0016"/40 µm | \$4,000.00 | \$3,801.00 |
| <b>54-110-540-0</b> | 0 - 40"/0 - 1000mm | 0.002"/50 µm  | \$4,700.00 | \$4,466.00 |

### Connectivity Cables/Accessories

|                      |                                        |            |            |
|----------------------|----------------------------------------|------------|------------|
| <b>54-981-724-5</b>  | Sylcom Pro (digital license)           | \$2,585.00 | \$2,457.00 |
| <b>54-981-713-2</b>  | Sylcom Standard (dongle license)       | \$1,158.00 | \$1,100.00 |
| <b>54-115-526-0</b>  | Proximity cable with USB Connection    | \$251.00   | \$226.00   |
| <b>54-115-527-0</b>  | Proximity cable with Serial Connection | \$294.00   | \$266.00   |
| <b>54-115-246-BT</b> | USB Bluetooth Receiver                 | \$147.00   | \$133.00   |

# The Top 6 Reasons

This is the best caliper value on the market



1. **Worry-free lifetime warranty**
2. **Fully integrated bluetooth, no additional equipment needed**
3. **IP67 for harsh & hard-working environments**
4. **Competitively priced versus other major brands**
5. **Operator friendly data collection software**
6. **Swiss precision & quality**

## More features

- Reinforced frame (3.5mm)
- XL display with 11.5mm digits
- Hold feature
- Preset function
- Available with ISO Cert
- 12"/300mm is supplied without depth rod



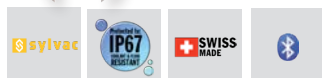
Calipers

| Order No.                              | Range                                  | Accuracy     | Resolution     | List Price | Sale Price |
|----------------------------------------|----------------------------------------|--------------|----------------|------------|------------|
| <b>Bluetooth Built-in</b>              |                                        |              |                |            |            |
| <b>54-100-167-0</b>                    | 6"/150mm                               | 0.0008"/20μm | 0.0005"/0.01mm | \$540.00   | \$514.00   |
| <b>54-100-168-0</b>                    | 8"/200mm                               | 0.0012"/30μm | 0.0005"/0.01mm | \$670.00   | \$637.00   |
| <b>54-100-169-0</b>                    | 12"/300mm                              | 0.0012"/30μm | 0.0005"/0.01mm | \$860.00   | \$818.00   |
| <b>Proximity Cable Communication</b>   |                                        |              |                |            |            |
| <b>54-100-444-1</b>                    | 6"/150mm                               | 0.0008"/20μm | 0.0005"/0.01mm | \$250.00   | \$238.00   |
| <b>54-100-448-1</b>                    | 8"/200mm                               | 0.0012"/30μm | 0.0005"/0.01mm | \$350.00   | \$333.00   |
| <b>54-100-412-1</b>                    | 12"/300mm                              | 0.0012"/30μm | 0.0005"/0.01mm | \$500.00   | \$476.00   |
| <b>Without Data Output</b>             |                                        |              |                |            |            |
| <b>54-100-177-0</b>                    | 6"/150mm                               | 0.0008"/20μm | 0.0005"/0.01mm | \$230.00   | \$219.00   |
| <b>54-100-178-0</b>                    | 8"/200mm                               | 0.0012"/30μm | 0.0005"/0.01mm | \$509.00   | \$484.00   |
| <b>54-100-179-0</b>                    | 12"/300mm                              | 0.0012"/30μm | 0.0005"/0.01mm | \$587.00   | \$558.00   |
| <b>Connectivity Cables/Accessories</b> |                                        |              |                |            |            |
| <b>54-981-724-5</b>                    | Sylcom Pro (digital license)           |              |                | \$2,585.00 | \$2,457.00 |
| <b>54-981-713-2</b>                    | Sylcom Standard (dongle license)       |              |                | \$1,158.00 | \$1,100.00 |
| <b>54-115-526-0</b>                    | Proximity cable with USB Connection    |              |                | \$251.00   | \$226.00   |
| <b>54-115-527-0</b>                    | Proximity cable with Serial Connection |              |                | \$294.00   | \$266.00   |
| <b>54-115-246-BT</b>                   | USB Bluetooth Receiver                 |              |                | \$147.00   | \$133.00   |

Prices & Specifications are subject to change without notice.

# Micron 0.00005" Electronic Caliper

**HIGH Resolution and HIGH Accuracy**



## Features:

- Bluetooth connectivity
- High resolution: 0.00005"/0.001mm
- Accuracy up to 4": 0.0006"/0.015mm
- Accuracy above 4": 0.0012"/0.03mm
- Heavy duty frame (3.5mm)

| Order No.    | Range        | List Price | Sale Price |
|--------------|--------------|------------|------------|
| 54-100-100-0 | 0 - 6"/150mm | \$570.00   | \$542.00   |

## Accessory

|               |                        |         |         |
|---------------|------------------------|---------|---------|
| 54-115-246-BT | USB Bluetooth Receiver | \$58.00 | \$53.00 |
|---------------|------------------------|---------|---------|

## IP67 Electronic Calipers

**Smart Wireless Communication to most phones or tablets**



**54-100-556-BT**

## Features:

- IP67 protected against fluid and dust
- Wireless connectivity for quick error free data collection
- Supplied with NIST certification
- Heavy duty frame with 4-way measuring, inside, outside, depth and step
- Includes extra battery tray and a 1" setting standard



| Order No.     | Range         | Accuracy       | List Price | Sale Price |
|---------------|---------------|----------------|------------|------------|
| 54-100-556-BT | 0 - 6"/150mm  | 0.001"/0.02mm  | \$245.00   | \$221.00   |
| 54-100-512-BT | 0 - 12"/300mm | 0.0015"/0.04mm | \$315.00   | \$284.00   |

## XTRA-VALUE<sup>Plus</sup> Electronic Calipers

**IP54 protected with inch/metric/fractions**



**54-103-006-0**

## Features:

- Inch/Metric/Fraction reading: 0.0005"/0.01mm/ 1/128"
- Heavy Duty frame for extra rigidity and wear resistance
- Super large, easy to read display



| Order No.    | Range         | Accuracy       | List Price | Sale Price |
|--------------|---------------|----------------|------------|------------|
| 54-103-006-0 | 0 - 6"/150mm  | 0.001"/0.02mm  | \$97.00    | \$88.00    |
| 54-103-012-0 | 0 - 12"/300mm | 0.0015"/0.04mm | \$196.00   | \$178.00   |

# XTRA-VALUE CAL Electronic Calipers

26.2



54-101-150-2



54-101-300-1

## Features:

- Stainless steel frame
- Resolution: 0.0005"/0.01mm
- Absolute/Incremental measurement
- 4-way measuring, inside, outside, depth and step
- 6" and 12" regular display models include NIST Cert.



| Order No.    | Range        | Display                         | Accuracy       | List Price | Sale Price |
|--------------|--------------|---------------------------------|----------------|------------|------------|
| 54-101-150-2 | 0 - 6"/150mm | Regular Display                 | 0.001"/0.02mm  | \$70.00    | \$63.00    |
| 54-101-600-1 | 0 - 6"/150mm | Large Display with Hold feature | 0.0015"/0.04mm | \$80.00    | \$72.00    |
| 54-101-200-1 | 8"/200mm     | Regular Display                 | 0.0015"/0.04mm | \$120.00   | \$108.00   |
| 54-101-300-1 | 12"/300mm    | Regular Display                 | 0.0015"/0.04mm | \$200.00   | \$180.00   |
| 54-101-900-1 | 12"/300mm    | Large Display with Hold feature | 0.0015"/0.04mm | \$184.00   | \$166.00   |

## Internal and External Calipers

Add greater versatility to your dial, vernier or electronic calipers.



**Sale \$59.00**

List Price \$65.00

## Features

- Robust housing
- Large LCD display
- Reading: 0.01"/0.1mm/1/64ths
- Accuracy: 0.01"/0.3mm/1/64ths
- Spring loaded with locking nut
- Plastic case

| Order No.    | Description          | Range                  | List Price | Sale Price |
|--------------|----------------------|------------------------|------------|------------|
| 54-554-630-0 | Outside Caliper Gage | 0 - 6"/0 - 105mm       | \$66.00    | \$60.00    |
| 54-554-730-0 | Inside Caliper Gage  | 0.5" - 6"/12.7 - 150mm | \$66.00    | \$60.00    |

Prices & Specifications are subject to change without notice.

35

Calipers



# **XTRA-RANGE® Carbon Fiber Electronic Calipers**



54-100-140-0

## **Features:**

- IP65 protected against fluid and dust
- Lightweight carbon fiber frame
- Stainless steel jaws with ID nibs
- ID/OD pressure device for repeatability
- USB data output (works with 54-520-399-0)
- Preset, ABS/INC, Floating zero, IN/MM, Hold function
- Super large display
- Fitted wooden case



Features constant measuring force mechanism

| Order No.    | Range          | Accuracy       | Jaw Depth  | Weight    | List Price | Sale Price |
|--------------|----------------|----------------|------------|-----------|------------|------------|
| 54-100-124-0 | 0 - 24"/600mm  | 0.0020"/0.05mm | 5.4"/138mm | 2.85 lbs. | \$908.00   | \$818.00   |
| 54-100-140-0 | 0 - 40"/1000mm | 0.0025"/0.06mm | 5.4"/138mm | 3.45 lbs  | \$1,645.00 | \$1,316.00 |
| 54-100-160-0 | 0 - 60"/1500mm | 0.0055"/0.13mm | 5.9"/150mm | 3.45 lbs  | \$2,195.00 | \$1,866.00 |

# **XTRA-RANGE® Electronic Calipers**

For large measurements



## **Features:**

- IP54 protected against fluid and dust
- Resolution: 0.0005"/0.01mm
- Hold feature
- Absolute/Incremental measurement
- Preset mode includes offset size for ID measurements
- Both sizes feature fine adjustment

54-100-312-0

| Order No.    | Range          | Accuracy         | Jaw Depth | List Price | Sale Price |
|--------------|----------------|------------------|-----------|------------|------------|
| 54-100-312-0 | 0 - 12"/300mm  | ± 0.002"/0.05mm  | 3.5"      | \$315.00   | \$285.00   |
| 54-100-024-1 | 0 - 24"/600mm  | ± 0.003"/0.075mm | 4"        | \$515.00   | \$465.00   |
| 54-100-042-1 | 0 - 40"/1000mm | ± 0.004"/0.1mm   | 4.9"      | \$1,271.00 | \$1,144.00 |

# **XTRA-RANGE® Dial Calipers**

With full length depth rod



## **Features:**

- Graduations: 0.001"
- Jaw depth: 3.125"
- Stainless steel construction
- Satin chrome finish
- Full length depth rod
- 0.50" internal measuring nibs on jaws

52-008-024-0

| Order No.    | Range   | Accuracy | List Price | Sale Price |
|--------------|---------|----------|------------|------------|
| 52-008-018-0 | 0 - 18" | ± 0.003" | \$268.00   | \$242.00   |
| 52-008-024-0 | 0 - 24" | ± 0.003" | \$383.00   | \$345.00   |

## Premium Grade Dial Calipers

With mono-block housing for added protection.

The mono-block housing design of this Premium Dial Caliper aides in preventing debris from entering the gearing mechanism. The covered rack aides in preventing debris from entering the rack. This helps to ensure years of continued service and accuracy.



Calipers

### Features:

- Tough shockproof gearing with ultra smooth movement
- 4-way measuring, inside, outside, depth and step
- Solid stainless steel construction with lapped measuring faces
- Heavy duty frame, 1.41"/3.6mm thickness
- 0.100" range per revolution
- 0.001" reading dial, 0.100" range per revolution

| Order No.           | Range     | Dial Color | Accuracy  | List Price | Sale Price |
|---------------------|-----------|------------|-----------|------------|------------|
| <b>52-008-704-1</b> | 0 - 4"    | White      | ± 0.001"  | \$105.00   | \$79.00    |
| <b>52-008-714-1</b> | 0 - 4"    | Black      | ± 0.001"  | \$105.00   | \$79.00    |
| <b>52-008-706-0</b> | 0 - 6"    | White      | ± 0.001"  | \$96.00    | \$87.00    |
| <b>52-008-707-0</b> | 0 - 6"    | Black      | ± 0.001"  | \$95.00    | \$86.00    |
| <b>52-008-708-0</b> | 0 - 8"    | White      | ± 0.0015" | \$145.00   | \$131.00   |
| <b>52-008-712-0</b> | 0 - 12"   | White      | ± 0.002"  | \$212.00   | \$192.00   |
| <b>Metric</b>       |           |            |           |            |            |
| <b>52-008-709-0</b> | 0 - 150mm | Yellow     | ± 0.02mm  | \$123.00   | \$111.00   |

## Outside Vernier Micrometers

0.0001" graduations for higher accuracy



52-240-003-1



52-215-003-1

### Features:

- Graduation: 0.0001"
- Microfine graduations on satin chrome finish and carbide tipped measuring faces
- Diameter of measuring faces: 0.256"
- Flatness: 0.00003"
- Spindle thread hardened, ground and lapped for ultimate accuracy
- Includes a wrench and case
- Sizes over 1"/25mm include a standard

| Order No.    | Range     | Accuracy   | Thimble  | List Price | Sale Price |
|--------------|-----------|------------|----------|------------|------------|
| 52-240-001-1 | 0 - 1"    | ± 0.00016" | Friction | \$57.00    | \$52.00    |
| 52-240-101-1 | 0 - 1"    | ± 0.00016" | Ratchet  | \$54.00    | \$49.00    |
| 52-240-002-1 | 1" - 2"   | ± 0.00016" | Friction | \$81.00    | \$73.00    |
| 52-240-102-1 | 1" - 2"   | ± 0.00016" | Ratchet  | \$69.00    | \$63.00    |
| 52-240-003-1 | 2" - 3"   | ± 0.0002"  | Ratchet  | \$65.00    | \$59.00    |
| 52-240-004-1 | 3" - 4"   | ± 0.0002"  | Ratchet  | \$71.00    | \$64.00    |
| 52-240-005-1 | 4" - 5"   | ± 0.00024" | Ratchet  | \$93.00    | \$84.00    |
| 52-240-006-1 | 5" - 6"   | ± 0.00024" | Ratchet  | \$98.00    | \$89.00    |
| 52-240-007-1 | 6" - 7"   | ± 0.00028" | Ratchet  | \$122.00   | \$110.00   |
| 52-240-008-1 | 7" - 8"   | ± 0.00028" | Ratchet  | \$164.00   | \$148.00   |
| 52-240-009-1 | 8" - 9"   | ± 0.00032" | Ratchet  | \$143.00   | \$129.00   |
| 52-240-010-1 | 9" - 10"  | ± 0.00032" | Ratchet  | \$162.00   | \$146.00   |
| 52-240-011-1 | 10" - 11" | ± 0.00036" | Ratchet  | \$221.00   | \$199.00   |
| 52-240-012-1 | 11" - 12" | ± 0.00036" | Ratchet  | \$225.00   | \$203.00   |

### Sets

|              |                                        |            |            |
|--------------|----------------------------------------|------------|------------|
| 52-215-003-1 | 0 - 3" with standards and fitted case  | \$184.00   | \$166.00   |
| 52-215-004-1 | 0 - 4" with standards and fitted case  | \$304.00   | \$274.00   |
| 52-215-006-1 | 0 - 6" with standards and fitted case  | \$426.00   | \$384.00   |
| 52-215-012-1 | 0 - 12" with standards and fitted case | \$1,337.00 | \$1,204.00 |
| 52-215-612-1 | 6 - 12" Outside Inch Micrometer Set    | \$1,342.00 | \$1,141.00 |

# Outside Vernier Micrometers

0.001" readings



52-253-001-1



**Features:**

- Graduation: 0.001"
- Carbide tipped measuring faces
- Diameter of measuring faces: 0.256"
- Anvil & spindle hardened and precision ground with microlap finish on tips
- Sizes over 1"/25mm include a standard

| Order No.    | Range   | Accuracy | Thimble  | List Price | Sale Price |
|--------------|---------|----------|----------|------------|------------|
| 52-253-001-1 | 0 - 1"  | ± 0.001" | Friction | \$57.00    | \$49.00    |
| 52-253-101-1 | 0 - 1"  | ± 0.001" | Ratchet  | \$76.00    | \$65.00    |
| 52-253-002-1 | 1" - 2" | ± 0.001" | Friction | \$62.00    | \$53.00    |
| 52-253-102-1 | 1" - 2" | ± 0.001" | Ratchet  | \$57.00    | \$50.00    |
| 52-253-003-1 | 2" - 3" | ± 0.001" | Ratchet  | \$93.00    | \$80.00    |
| 52-253-004-1 | 3" - 4" | ± 0.001" | Ratchet  | \$73.00    | \$63.00    |
| 52-253-005-1 | 4" - 5" | ± 0.001" | Ratchet  | \$81.00    | \$69.00    |
| 52-253-006-1 | 5" - 6" | ± 0.001" | Ratchet  | \$94.00    | \$81.00    |

# Digit Counter Micrometers

0.001" digit counter.



52-224-001-1

**Features:**

- Digital counter reads to 0.001"
- Graduations: 0.0001" (using vernier)
- Microfine graduations on satin chrome
- Carbide tipped measuring faces
- Sizes over 1"/25mm include a standard
- Includes case

| Order No.    | Range   | Accuracy | List Price | Sale Price |
|--------------|---------|----------|------------|------------|
| 52-224-001-1 | 0 - 1"  | 0.00016" | \$154.00   | \$131.00   |
| 52-224-002-1 | 1" - 2" | 0.00016" | \$199.00   | \$170.00   |
| 52-224-003-1 | 2" - 3" | 0.0002"  | \$227.00   | \$193.00   |
| 52-224-004-1 | 3" - 4" | 0.0002"  | \$219.00   | \$187.00   |

**Set**

|              |                                            |          |          |
|--------------|--------------------------------------------|----------|----------|
| 52-224-103-0 | 0 - 3" set (set finished in grey enamel)   | \$459.00 | \$391.00 |
| 52-224-104-0 | 0 - 4" set (set finished in grey enamel)   | \$847.00 | \$720.00 |
| 52-224-220-0 | 0 - 75mm set (set finished in grey enamel) | \$537.00 | \$457.00 |



# RAPID-MIC

Quick-Displacement Electronic Micrometers

## Fastest micrometer on the market!



54-815-030-0

### Features:

- IP67 protected against fluid and dust
- Non-rotating spindle with 0.39"/10mm travel per thimble rotation
- Adjustable measuring force, 5N/10N (54-815-030-0 and 54-815-130-0 only)
- Menu customizable with free software
- Larger sizes and specialty anvil micrometers also available (special order)



54-815-111-0

**Calibration certificates available for all sizes.**

| Order No.           | Range              | Accuracy         | List Price | Sale Price |
|---------------------|--------------------|------------------|------------|------------|
| <b>54-815-030-0</b> | 0 - 1.18"/0 - 30mm | 0.00012"/0.003mm | \$850.00   | \$809.00   |

### Set

|                     |                  |  |            |            |
|---------------------|------------------|--|------------|------------|
| <b>54-815-111-0</b> | 0 - 4"/0 - 102mm |  | \$4,200.00 | \$3,991.00 |
|---------------------|------------------|--|------------|------------|

### Bluetooth Models

|                     |                    |                  |            |            |
|---------------------|--------------------|------------------|------------|------------|
| <b>54-815-130-0</b> | 0 - 1.18"/0 - 30mm | 0.00012"/0.003mm | \$1,200.00 | \$1,141.00 |
|---------------------|--------------------|------------------|------------|------------|

### Bluetooth Set

|                     |                  |                  |            |            |
|---------------------|------------------|------------------|------------|------------|
| <b>54-815-112-0</b> | 0 - 4"/0 - 102mm | 0.00020"/0.005mm | \$5,300.00 | \$5,036.00 |
|---------------------|------------------|------------------|------------|------------|

### Connectivity Cables/Accessories

|                      |                                        |            |            |
|----------------------|----------------------------------------|------------|------------|
| <b>54-981-724-5</b>  | Sylcom Pro (digital license)           | \$2,585.00 | \$2,457.00 |
| <b>54-981-713-2</b>  | Sylcom Standard (dongle license)       | \$1,158.00 | \$1,100.00 |
| <b>54-115-526-0</b>  | Proximity cable with USB Connection    | \$251.00   | \$226.00   |
| <b>54-115-527-0</b>  | Proximity cable with Serial Connection | \$294.00   | \$266.00   |
| <b>54-115-246-BT</b> | USB Bluetooth Receiver                 | \$147.00   | \$133.00   |

# Electronic Coolant Resistant Micrometers

For basic outside measurements with higher protection.



54-860-001-0

### Features:

- Protected to IP54 specifications
- Large LCD Display
- Accuracy: .00016"
- Automatic switch off
- Resolution: .00005"/.001mm
- Direct RS-232 output
- Carbide measuring faces
- Absolute & incremental modes
- Sizes over 1"/25mm include standard



| Order No.    | Range                       | Accuracy           | List Price | Sale Price |
|--------------|-----------------------------|--------------------|------------|------------|
| 54-860-001-1 | 0 - 1"/0 - 25mm             | ± 0.00016"/0.004mm | \$197.00   | \$178.00   |
| 54-860-002-1 | 1 - 2"/25 - 50mm w/standard | ± 0.00016"/0.004mm | \$211.00   | \$190.00   |
| 54-860-003-1 | 2 - 3"/50 - 75mm w/standard | ± 0.0002"/0.005mm  | \$221.00   | \$199.00   |
| <b>Set</b>   |                             |                    |            |            |
| 54-860-103-1 | 0 - 3"/0 - 75mm w/standards |                    | \$599.00   | \$540.00   |

## XTRA-VALUE II Electronic Micrometers



54-870-001-0

### Features:

- IP40 protected against fluid and dust
- Resolution: 0.00005"/0.001mm
- Carbide measuring faces
- Absolute and incremental modes
- Ratchet thimble
- Free ball attachment included
- Sizes over 1"/25mm include a calibration standard



| Order No.    | Range              | Accuracy           | List Price | Sale Price |
|--------------|--------------------|--------------------|------------|------------|
| 54-870-001-0 | 0 - 1"/0 - 25mm    | ± 0.00016"/0.004mm | \$106.00   | \$96.00    |
| 54-870-002-0 | 1" - 2"/25 - 50mm  | ± 0.00016"/0.004mm | \$141.00   | \$128.00   |
| 54-870-003-0 | 2" - 3"/50 - 75mm  | ± 0.0002"/0.005mm  | \$172.00   | \$155.00   |
| 54-870-004-0 | 3" - 4"/75 - 100mm | ± 0.0002"/0.005mm  | \$209.00   | \$188.00   |

Prices & Specifications are subject to change without notice.



## Electronic IP54 Blade Micrometers



54-860-275-0

**Sale \$277.00**

List Price \$307.00

### Features:

- IP54 protected against fluid and dust
- Each gage includes appropriate setting ring for exceptional accuracy
- Resolution: 0.00005"/0.001mm
- Friction thimble
- Includes fitted case



## Vernier Inch Blade Micrometers



52-246-001-1

**Sale \$255.00**

List Price \$283.00

### Features:

- Anvil & spindle hardened & precision ground with microlap finish on ends
- Non-rotating spindle
- Ratchet thimble
- Blade thickness = 0.030"; blade width = 0.256"; blade penetration = 0.315"
- Sizes over 1" include a standard

| Order No.    | Range   | Graduation | Accuracy | List Price | Sale Price |
|--------------|---------|------------|----------|------------|------------|
| 52-246-001-1 | 0 - 1"  | 0.0001"    | 0.0001"  | \$304.00   | \$274.00   |
| 52-246-002-1 | 1" - 2" | 0.0001"    | 0.00016" | \$318.00   | \$288.00   |

# Electronic IP54 Disc Micrometers

For accurate pitch diameter measurements.



- Features:**
- Water Resistant to IP54 specifications
  - True inch/metric conversion
  - Friction thimble
  - Large easy-to-read LCD display
  - Extra large .788" disc with .035" edge thickness
  - Easily enters hard-to-reach areas
  - Includes case

| Order No.    | Range       | Resolution      | Accuracy   | List Price | Sale Price |
|--------------|-------------|-----------------|------------|------------|------------|
| 54-860-301-0 | 0-1"/0-25mm | 0.00005"/.001mm | ± 0.00016" | \$338.00   | \$305.00   |

# Vernier Thread Micrometers



- Features:**
- 60° measuring anvils
  - Graduation: 0.001"
  - Ratchet thimble
  - Sizes over 1" include standard

| Order No.    | Range  | Thread Range           | Accuracy | List Price | Sale Price |
|--------------|--------|------------------------|----------|------------|------------|
| 52-219-001-1 | 0 - 1" | 64 - 5 TPI / 0.4 - 5mm | 0.00016" | \$154.00   | \$139.00   |

Prices & Specifications are subject to change without notice.

## IP54 Electronic Depth Micrometer



**Sale \$259.<sup>00</sup>**

List Price \$287.00

### Features:

- IP54 protected against fluid and dust
- Range: 0 - 6"/150mm
- Accuracy: 0.00016"/0.004mm
- Resolution: 0.00005"/0.001mm
- Base surface hardened and microlapped to 0.00008" flatness
- Rod diameter: 0.176"

**Order No. 54-225-456-0**



## Depth Micrometers

### Features:

- Satin chrome finish
- Base surface hardened and microlapped to 0.00008"
- Ratchet thimble
- Locking clamp
- Rod diameter: 0.176"
- Includes fitted case

**Sale \$215.<sup>00</sup>**

List Price \$238.00

**Order No. 52-225-110-0**



| Order No.           | Range  | Graduation | Accuracy | Base Size | List price | Sale Price |
|---------------------|--------|------------|----------|-----------|------------|------------|
| <b>52-225-110-0</b> | 0 - 4" | 0.001"     | 0.0002"  | 2.5"      | \$238.00   | \$215.00   |
| <b>52-225-112-0</b> | 0 - 6" | 0.001"     | 0.0002"  | 2.5"      | \$256.00   | \$231.00   |
| <b>52-225-114-0</b> | 0 - 4" | 0.001"     | 0.0002"  | 4"        | \$213.00   | \$193.00   |
| <b>52-225-116-0</b> | 0 - 6" | 0.001"     | 0.0002"  | 4"        | \$256.00   | \$232.00   |

## Interchangeable Anvil Bluetooth Depth Gage

### Features:

- Supplied standard with mono-plane measuring probe
- Measure normal or inverted positions using the same probe
- Optional measuring inserts available
- Coolant proof, dust proof - IP67
- Bluetooth communication for error free data collection
- 4" measuring base. 8" & 12.5" base attachments available
- Available in 3 ranges. 8", 12" & 19"
- Frame made of hardened stainless steel
- Sleep mode after 20 minutes and automatic wake-up with movement



**Sale \$1,569.<sup>00</sup>**

List Price \$1,650.00

Order No. 54-139-160-1

## X-DEPTH 22" 0 - 22" Electronic Depth Gage

Provides rapid electronic measurement of hole depths.

### Features:

- 0-1" AGD Group 2
- Accuracy: 0.001"/0.03mm
- Resolution: 0.0005"/0.01mm
- 4" base ground and lapped for flatness
- Rods connect for 22" capacity
- Includes 2 extra points (spline & needle)
- Tolerance function



**Sale \$218.<sup>00</sup>**

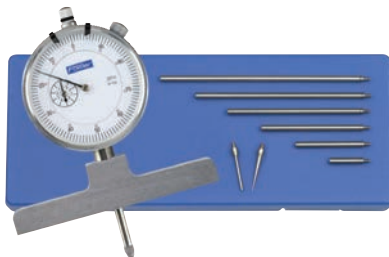
List Price \$241.00

Order No. 54-125-777-0

## X-DEPTH 22" 0 - 22" Dial Depth Gage

### Features:

- 0 - 1" travel indicator with 4" base
- 0.001" Graduations
- Rods connect together for full 22" capacity
- Satin chrome finish
- Includes 2 extra points for small hole applications; one 0.078" dia. x 1" long and one needle point x 1" long



**Sale \$132.<sup>00</sup>**

List Price \$146.00

Order No. 52-125-006-1

## Mark VI Sylvac Electronic Indicators

### Features:

- IP54 protected against fluid and dust
- Output: Proximity/Power - USB/RS232/digimatic/Wireless
- Functions (MIN/MAX/DELTA, TOL, Factor, Preset, Auto Off)
- Large display with LED tolerance indicators

Order No. 54-530-335-0



### Calibration certificates available for all sizes

| Order No.              | Range                            | Accuracy         | Resolution       | List Price | Sale Price |
|------------------------|----------------------------------|------------------|------------------|------------|------------|
| <b>Low Resolution</b>  |                                  |                  |                  |            |            |
| 54-530-125-0           | 0 - 0.500"/12.5mm                | 0.0004"/0.01mm   | 0.0005"/0.01mm   | \$769.00   | \$731.00   |
| 54-530-145-0           | 0 - 1"/25mm                      | 0.0004"/0.01mm   | 0.0005"/0.01mm   | \$950.00   | \$904.00   |
| <b>High Resolution</b> |                                  |                  |                  |            |            |
| 54-530-135-0           | 0 - 0.500"/12.5mm                | 0.00012"/0.003mm | 0.00005"/0.001mm | \$1,050.00 | \$999.00   |
| 54-530-155-0           | 0 - 1"/25mm                      | 0.00016"/0.004mm | 0.00005"/0.001mm | \$1,150.00 | \$1,093.00 |
| 54-530-175-0           | 0 - 2"/50mm                      | 0.00019"/0.005mm | 0.00005"/0.001mm | \$1,950.00 | \$1,853.00 |
| <b>Bluetooth</b>       |                                  |                  |                  |            |            |
| 54-530-335-0           | 0 - 0.500"/12.5mm                | 0.00012"/0.003mm | 0.00005"/0.001mm | \$1,202.00 | \$1,142.00 |
| 54-530-355-0           | 0 - 1"/25mm                      | 0.00016"/0.004mm | 0.00005"/0.001mm | \$1,162.00 | \$1,104.00 |
| <b>Accessories</b>     |                                  |                  |                  |            |            |
| 54-981-724-5           | Sylcom Pro (digital license)     |                  |                  | \$2,585.00 | \$2,457.00 |
| 54-981-713-2           | Sylcom Standard (dongle license) |                  |                  | \$1,102.00 | \$1,047.00 |
| 54-115-246-BT          | USB Bluetooth Receiver           |                  |                  | \$58.00    | \$53.00    |

# INDI-X<sup>blue</sup>

## Electronic Indicators

Our most popular electronic indicators.

### Features:

- Resolution 0.0005"/0.01mm
- 54-520-260-0 also reads 1/64ths
- 2-1/4" dial face
- Lugback and 3/8" stem mountings
- Tolerance function
- Absolute/incremental reading
- Floating zero



54-520-255-0



54-520-250-0



54-520-260-0

### Calibration certificates available for all sizes

| Order No.    | Range        | Accuracy        | List Price | Sale Price |
|--------------|--------------|-----------------|------------|------------|
| 54-520-255-0 | 0.50"/12.5mm | ± 0.001"/0.03mm | \$91.00    | \$82.00    |
| 54-520-250-0 | 1"/25mm      | ± 0.001"/0.03mm | \$88.00    | \$80.00    |
| 54-520-260-0 | 1"/25mm      | ± 0.001"/0.03mm | \$109.00   | \$99.00    |

## Premium Dial Indicators

Smooth, accurate and built tough.

### Features:

- AGD Group 2 specifications
- Accuracy meets ANSI standards
- Shockproof gearing
- Jeweled movement
- Tolerance markers
- Solid steel housing
- Carbide contact point
- Includes NIST Certification



52-520-135-0



52-520-105-0



52-520-110-1

| Order No.    | Range | Graduation | Reading | Balanced Reading | Dial Color | List Price | Sale Price |
|--------------|-------|------------|---------|------------------|------------|------------|------------|
| 52-520-105-0 | 0.50" | 0.001"     | 0 - 100 | 0 - 50 - 0       | White      | \$123.00   | \$99.00    |
| 52-520-110-1 | 1"    | 0.001"     | 0 - 100 | —                | Black      | \$70.00    | \$56.00    |
| 52-520-110-2 | 1"    | 0.001"     | 0 - 100 | —                | White      | \$70.00    | \$56.00    |
| 52-520-120-0 | 2"    | 0.001"     | 0 - 100 | —                | White      | \$186.00   | \$149.00   |
| 52-520-129-0 | 1"    | 0.0005"    | 0 - 50  | 0 - 25 - 0       | White      | \$43.00    | \$35.00    |
| 52-520-300-0 | 10mm  | 0.01mm     | 0 - 100 | 0 - 50 - 0       | White      | \$148.00   | \$119.00   |
| 52-520-500-0 | 25mm  | 0.01mm     | 0 - 100 | 0 - 50 - 0       | White      | \$178.00   | \$142.00   |

## Magnetic Indicators

### Features:

Mag Back:

- Attaches to most 4 hole indicator backs

AGD Group 2 Indicator Features:

- 1" travel
- AGD group 2
- 2-1/4" dial diameter
- Reading: 0.001"
- Continuous reading: 0-100
- Revolution counter
- Tolerance indicators

**Sale \$59.00**

List Price \$65.00



Order No. 52-520-485-0

| Order No.    | Description                                                         | List Price | Sale Price |
|--------------|---------------------------------------------------------------------|------------|------------|
| 52-520-485-0 | Magnetic Back with AGD Group 2 Indicator                            | \$65.00    | \$59.00    |
| 52-585-495-0 | Magnetic Back (for 4 hole backs with 1.8" centerline distance only) | \$29.00    | \$24.00    |

## Depth Base Attachments

### Features:

- Turn your dial or electronic indicator into a depth gage
- 4" length
- Fits indicators with 3/8" and 8mm mounting stems
- Ground and lapped base
- Each supplied with 4 extension points, for added application range (4 - 48 thread)



Order No. 52-125-004-0

| Order No.    | Description                | List Price | Sale Price |
|--------------|----------------------------|------------|------------|
| 52-125-004-0 | Flat depth base attachment | \$52.00    | \$47.00    |

## QuadraTest

### Electronic Test Indicators

#### Features:

- Bluetooth connectivity to your phone or tablet
- IP65 protected against fluid and dust
- 4 measuring modes: Min, Max, TIR and Direct
- 4 measuring resolutions - 0.00005"/0.001mm or 0.0005"/0.01mm
- 1-1/2" diameter dial face rotates a full 360°
- Analog scale for reversal point indication
- Meets or exceeds DIN/ISO Standards (Maximum error on 0.00005" scale at full range: 0.0004")
- 54-562-890-BT is capable of interchanging contact point lengths



54-562-777-BT



#### Calibration certificates available for all sizes.

| Order No.     | Range                         | Contact Point Length | List Price | Sale Price |
|---------------|-------------------------------|----------------------|------------|------------|
| 54-562-777-BT | 0.030"/0.80mm                 | 1/2"                 | \$910.00   | \$865.00   |
| 54-562-888-BT | 0.080"/2.0mm                  | 1-7/16"              | \$1,050.00 | \$998.00   |
| 54-562-890-BT | 0.030"/0.80mm<br>0.080"/2.0mm | 1/2"<br>1-7/16"      | \$1,150.00 | \$1,094.00 |

## X-TEST®

### Horizontal & Vertical Test Indicators

#### Features:

- Super smooth jeweled movement
- Smooth bezel adjustment for easy zero setting
- Accuracy meets DIN 2270 standards
- 0.080" and 0.120" carbide ball contact points (0.040" steel ball)
- 0.060" range with auto reverse and rev. counter
- Easy to read tilted dial
- 5/32" pivotable stem



52-562-005-0



52-562-003-0



52-562-002-BD

| Order No.         | Graduation | Dial Size | Dial Reading | List Price | Sale Price |
|-------------------|------------|-----------|--------------|------------|------------|
| <b>Horizontal</b> |            |           |              |            |            |
| 52-562-001-0      | 0.0005"    | 1-1/2"    | 0 - 15 - 0   | \$170.00   | \$154.00   |
| 52-562-001-BD     | 0.0005"    | 1-1/2"    | 0 - 15 - 0   | \$170.00   | \$154.00   |
| 52-562-002-BD     | 0.0005"    | 1"        | 0 - 15 - 0   | \$185.00   | \$167.00   |
| 52-562-003-0      | 0.001"     | 1"        | 0 - 15 - 0   | \$175.00   | \$158.00   |
| <b>Vertical</b>   |            |           |              |            |            |
| 52-562-004-0      | 0.0005"    | 1-1/2"    | 0 - 15 - 0   | \$182.00   | \$164.00   |

## Indi-X Blue Electronic Indicator and Stand Combo



**Sale \$180.00**

List Price \$199.00

### Features:

- Direct Inch/Metric/Fraction conversion
- Auto off feature
- Lugback and 3/8" stem mountings
- Resolution: .0005"/.01mm/64ths
- Tolerance indicators
- Absolute/incremental reading
- Floating zero
- Carbide tipped point

### Stand:

- 6" x 6" x 2" granite base
- Positive lock screw
- Fine adjustment knob for zero setting
- Column height is 8"

**Order No. 54-580-250-0**



## Fine Adjust Mag Base With Black Dial Indicator Set

### Indicator Features:

- Range: 0-1"
- Graduation: 0.001"
- Meets AGD specifications
- Continuous reading 0-100
- Revolution counter
- Tolerance indicators

**Sale \$94.00**

List Price \$104.00

### Magnetic Base Features:

- Fine adjustment
- Base dimensions: 2" x 2-11/32" x 1-13/16"
- Also mounts test indicators with 1/4" post
- 85 lb. pull
- On-Off lever release magnet
- V-base for placing on round surfaces

**Order No. 52-520-199-0**

## Fine Adjust Mag Base Set with Mag Back

With **INDI-X blue** Electronic Indicator or AGD White face Indicator

### AGD Indicator features:

- AGD Group 2
- Dial diameter: 2-1/4"
- Travel: 1"
- Reading: 0.001"
- Continuous reading: 0 - 100
- Carbide tipped point



### Indi-X blue features:

- Resolution 0.0005"/0.01mm
- 2-1/4" dial face
- Lugback and 3/8" stem mountings
- Tolerance function
- Absolute/incremental reading
- Floating zero

### Magnetic Base features:

- 85 lb. pull
- Fine adjustment
- V-bottom base

### Magnetic Indicator Back features:

- Use for positioning the indicator on most metal surfaces
- Protective coating

| Order No.           | Description                                          | List Price | Sale Price |
|---------------------|------------------------------------------------------|------------|------------|
| <b>54-585-075-0</b> | Fine Adjust Mag Base Set w/Indi-X blue Indicator Set | \$161.00   | \$145.00   |
| <b>52-585-125-0</b> | Fine Adjust Mag Base Set w/AGD Dial Indicator Set    | \$199.00   | \$170.00   |



## Granite Dial Gage Stand

**Sturdy with 0.00005" flatness**

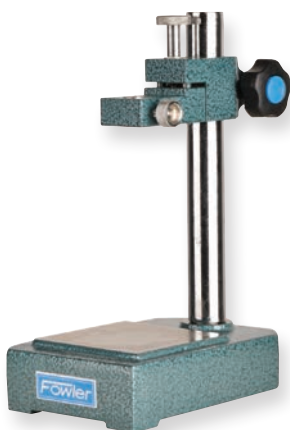
### Features:

- 6" x 6" x 2" granite base
- Positive lock screw
- Fine adjustment knob for zero setting
- Column height is 8"
- Accepts all lug-back indicators

**Order No. 52-580-030-0**

**Sale \$135.00**

List Price \$149.00



## Deluxe Dial Gage Stand

**Holds indicators and probes for thickness and comparative measurements.**

### Features:

- Quick positioning and adjustment
- Zero settings with fine adjustment
- Fine adjustment of 5/32"
- Holds indicators with stems of 3/8" and 8mm
- Working surface of 3-1/2" x 3-1/2"

**Order No. 52-580-015-0**

**Sale \$433.00**

List Price \$481.00



## Height Transfer & Squareness Gage

**Small and compact**

### Features:

- Used for a variety of surface plate applications
- Large fine adjustment knob for precise control
- Swivel clamp anchors swivel and indicator for added accuracy
- Rear surface of the gage has a reference surface to place against a master for checking squareness
- Includes a 7.5" post, indicator rod

**Order No. 53-620-010-0**

**Sale \$381.00**

List Price \$423.00

*Indicator and standard shown not included*

## Articulating Magnetic Base

### Features:

- Adjusts in almost unlimited ways
- Fine adjust
- 85 lb. pull
- V-slot on base for mounting on rounded surfaces

**Sale \$131.00**

List Price \$145.00

Order No. 52-585-008-0



## Magnetic Bases

### Features:

- 9.5" Height and 85 lb. pull
- Base dimensions are 2" x 2-11/32" x 1-13/16" (50mm x 58.7mm x 46mm)
- Accepts all AGD dial indicators
- V-bottom base allows mounting on cylindrical surfaces
- Mounts test indicators with 1/4" post mount

52-585-005-0



52-585-010-0



| Order No.    | Description                        | List Price | Sale Price |
|--------------|------------------------------------|------------|------------|
| 52-585-005-0 | Magnetic Base                      | \$77.00    | \$62.00    |
| 52-585-010-0 | Magnetic Base with fine adjustment | \$83.00    | \$67.00    |

## Flex Arm Magnetic Bases

Adjustable to any position.

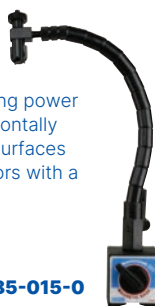
### Features:

- All purpose magnetic base with 100 lbs. of pulling power
- Base can be mounted vertically as well as horizontally
- V-bottom base allows mounting on cylindrical surfaces
- Accepts AGD indicators as well as Test Indicators with a stem

### Chrome Flex Arm Features:

- Corrosion resistant chrome plated flex arm
- 100 lb pull magnetic base

52-585-015-0



52-585-045-0



| Order No.    | Description                   | List Price | Sale Price |
|--------------|-------------------------------|------------|------------|
| 52-585-015-0 | Flex Arm Magnetic Base        | \$85.00    | \$77.00    |
| 52-585-045-0 | Chrome Flex Arm Magnetic Base | \$134.00   | \$121.00   |

## Clinotronic-S

The Clinotronic-S is a portable precision instrument for measuring inclinations up to  $\pm 45^\circ$ . The large, backlit, high contrast color display provides excellent readability even under adverse conditions in the workshop or under a machine.

The Clinotronic-S can be connected to an Android™ device, which can then be used as a remote display. This new feature makes the instrument much more versatile and suitable for many applications. It is built on the success of the Clinotronic PLUS, while retaining the features that made it famous, like its reliability and versatility, plus it adds the latest technology:



### Features:

- Wireless functionality (APP wylerUNIVERSAL for Android™), USB cable as well
- Accuracy:  $\pm 3$  arc minutes at  $45^\circ$
- User friendly
- Adjustable to local gravity
- Improved mechanical accuracy
- Excellent color display with low power consumption

Order No. 54-635-605-0

**Sale \$4,795.00**

List \$5,327.00

## Clinotronic Plus

Clinotronic Plus is an electronic level with unsurpassed versatility. It is economically priced, uses a specially designed microprocessor and the well-proven Wyler inclination sensor.



### Features:

- Range of  $\pm 45^\circ$ , capacity of 0-360°
- Accuracy:  $\pm 3$  arc minutes at  $45^\circ$
- Resolution of 0.01° (selectable)
- Absolute or relative measuring mode selectable by push button
- Seal-tec technology for excellent performance even in difficult environmental conditions
- Interface connection RS-232 is integrated. Special purpose cables available
- No loss of calibration data by power failure
- Response time: value available within 5 seconds
- Repeatability:  $< 0.01^\circ$
- Linearity: 3 min. of arc + 1
- Housing: aluminum hard anodized.
- Dimensions: 4 x 3 x 1" (100 x 75 x 30mm)

**Sale \$4,275.00**

List \$4,500.00

Order No. 54-635-601-0

## Digi Level PLUS+

with smart wireless data



### Features:

- IP65 protected against fluid and dust
- Includes a 6" straight edge with beveled edge and 1/32nds graduations
- V's on top and bottom for measuring on cylindrical surfaces
- Embedded magnets on bottom base for vertical and horizontal hold
- Accuracy:  $\pm 0.2^\circ$
- Resolution: 0.050°

**Sale \$177.00**

List Price \$196.00

| Order No.     | Description                         | List Price | Sale Price |
|---------------|-------------------------------------|------------|------------|
| 54-422-550-BT | Digi-Level PLUS with smart wireless | \$196.00   | \$177.00   |

## mini-MAG Protractor

The mini-MAG Protractor provides instant 360° digital inclination display of any angle.

### Features:

- Accuracy:  $\pm 0.2^\circ$
- Resolution: 0.05°
- Embedded magnets
- Display automatically inverts
- Dimensions: 2.375" x 1.375" x 2.375"
- Hold feature
- Battery Life: up to 250 hrs.



Display inverts for easy reading!



Order No. 54-422-450-1

**Sale \$102.00**

List Price \$113.00

## mini-MAG PLUS Protractor

The Mini-Mag PLUS Protractor features a USB rechargeable battery, a backlit display, Tilt% function and IP54 protection against water, oil, and fluids.

### Features:

- IP54 protected against fluid and dust
- Auto off after 5 minutes
- Embedded magnets
- Display automatically inverts
- Smaller size: 2.12" x 2.12" x 0.9"
- Measuring range: 360° (4 × 90)
- Accuracy:  $\pm 0.2^\circ$
- Resolution: 0.05°
- Hold feature
- Zero function



**Sale \$108.00**

List Price \$120.00

Order No. 54-422-500-0

**54-440-775-1****54-440-740-1**

## Digi-Level PRO Electronic Protractors

Includes embedded magnets for unique measurement areas. On/Off, Zero, Hold and Reverse features.

### Features:

- Ideal for fabrication applications
- Embedded 25 lb. pull magnets
- Full, 360° measuring range
- Accuracy:  $\pm 0.2^\circ$
- Repeatability:  $\pm 0.05^\circ$
- Resolution:  $0.1^\circ$
- Includes standard 3V lithium battery

| Order No.           | Description        | List Price | Sale Price |
|---------------------|--------------------|------------|------------|
| <b>54-440-740-1</b> | 4" Digi-Level PRO  | \$105.00   | \$95.00    |
| <b>54-440-775-1</b> | 12" Digi-Level PRO | \$141.00   | \$127.00   |



## Square, Protractor and Center Head With 12" Blade

### Features:

- Blades are chrome plated, fully hardened and tempered
- Square head has level and scribe point
- Double indexed protractor is graduated 180° in both directions
- Graduated in 8ths, 16ths, 32nds and 64ths

**Order No. 52-370-012-0**

**Sale \$152.00**

List Price \$202.00

# X-BLOX® V-Block Set

## 2 each @:

- Dimensions: 1-1/2" L x 1-1/4" W x 1-1/4" H
- Work capacity: Approximately 1"

## 2 each @:

- Dimensions: 2" L x 1-1/2" W x 1-1/2" H
- Work capacity: 1-1/2"

## All feature:

- Surfaces are square and parallel within 0.0005"
- V-grooves are square and parallel with all surfaces within 0.0005"
- Corresponding dimensions for each pair are alike within 0.0005"

Order No. 52-475-500-0

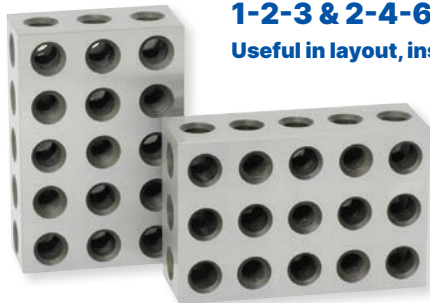


**Sale \$250.00**

List Price \$276.00

## 1-2-3 & 2-4-6 Blocks

Useful in layout, inspection and grinding work.



## Features:

- 23 holes for easy clamping
- Sold in pairs
- Hardened 56 - 60 HRC
- Both styles include 5 threaded holes, 3/8" - 16

| Order No.    | Description  | Accuracy     | List Price | Sale Price |
|--------------|--------------|--------------|------------|------------|
| 52-439-031-0 | 1-2-3 Blocks | ± 0.0001"/1" | \$60.00    | \$54.00    |
| 52-439-032-0 | 1-2-3 Blocks | ± 0.0002"/1" | \$113.00   | \$102.00   |
| 52-439-246-0 | 2-4-6 Blocks | ± 0.0003"/1" | \$230.00   | \$208.00   |

## 1/8" Parallel Set

## Features:

- 2 each of 1/2", 5/8", 3/4", 7/8", 1", 1-1/8", 1-1/4", 1-3/8", 1-1/2" & 1-5/8" heights
- Absolute heights are nominal
- Hardness: 50 HRC, 6" length
- 52-437-000-0 paired in height: 0.001"

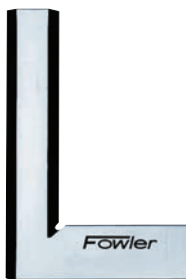
Order No. 52-437-000-0



**Sale \$242.00**

List Price \$268.00

Prices & Specifications are subject to change without notice.



## Bevel Edge Squares

### Features:

- Designed for layout & measurement work
- Squares have accurate right angles both inside and outside
- Made from a single piece of fully seasoned tool steel
- Beams and blades are ground and lapped for straightness and parallelism
- Blades beveled both edges
- Fully hardened to Rockwell 55C
- Packed in individual carton
- Accuracy =  $\frac{0.00008"}{100,000}$  + Length (blade)

| Order No.           | Blade Length | Beam Length | List Price | Sale Price |
|---------------------|--------------|-------------|------------|------------|
| <b>52-426-005-0</b> | 4-7/8"       | 3-1/8"      | \$101.00   | \$91.00    |
| <b>52-426-008-0</b> | 7-7/8"       | 5-1/8"      | \$132.00   | \$119.00   |

## Cylindrical Squares

### Features:

- Used for checking squares, height gages and other instruments
- Hardened and the ends are lapped to 90° angular accuracy
- 6" cylindrical squares:  $\pm 0.0001"$
- 12" cylindrical squares:  $\pm 0.00015"$



| Order No.           | Description     | List Price | Sale Price |
|---------------------|-----------------|------------|------------|
| <b>52-750-006-0</b> | 6" Height/3" Ø  | \$385.00   | \$348.00   |
| <b>52-750-012-0</b> | 12" Height/4" Ø | \$553.00   | \$498.00   |

## Gage Ball Sets

### Features:

- Ball gages are ground and lapped chrome steel
- Hardened to 63RC
- Grade 24 accuracy - AFBMA certificate
- Within .0001" of actual size
- Sphericity within .000025"
- Surface finish to 1.5 micro inches
- 52-438-766 Set includes 26 pairs
- Pair sizes in inches: 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 13/32, 7/16, 15/32, 1/2, 17/32, 9/16, 19/32, 5/8, 21/32, 11/16, 23/32, 3/4, 13/16, 7/8, 15/16 and 1"
- 52-438-777-0 Set includes 25 pairs
- Pair sizes in mm: 1mm through 25mm



**52-438-766-0**

**Sale \$103.00**

List Price \$113.00

| Order No.           | Description                   | List Price | Sale Price |
|---------------------|-------------------------------|------------|------------|
| <b>52-438-766-0</b> | 52 piece Gage Ball Set        | \$113.00   | \$103.00   |
| <b>52-438-777-0</b> | 50 piece Metric Gage Ball Set | \$120.00   | \$108.00   |

# SHOP-BLOX® Rectangular Gage Block Sets



## Features:

- Manufactured to meet Federal Specification ASME B89. 1.9 - 2002 tolerances on length for inch gage blocks
- Certificate of Calibration traceable to NIST
- Tolerances to  $\pm 0.00005$ "
- In high-quality fitted case

| Order No.    | Description | List Price | Sale Price |
|--------------|-------------|------------|------------|
| 53-672-036-0 | 36 pieces   | \$205.00   | \$175.00   |
| 53-672-081-0 | 81 pieces   | \$295.00   | \$250.00   |

## Quill Adapter Kit PLUS



## Features:

- Includes quill installation tool kit
- 0 - 6"/150mm travel
- Accuracy:  $\pm 0.001$ "/0.03mm
- Resolution: 0.0005"/0.01mm/1/64"
- Preset, zero, in/mm, absolute/incremental, on/off functions
- Stainless steel construction
- Interchangeable mounting brackets with hardware
- IP54 protected against fluid and dust
- Large display 9.5mm
- Uses 1 CR2032, 3V battery (2 included)

**Sale \$165.00**

List Price \$209.00

Order No. 54-050-100-0

# COAX-2D 2 Dimensional Coaxial Indicator Sets

Use the 2D Coaxial Set for accurate component centering and positioning in most machining applications. The dial remains stationary during the rotation of the machine spindle.

## Features:

- Graduations and revolution counter 0.0005"/0.01mm)
- 3 internal and 3 external feelers; ball dia.: 1/8" (3mm)
- Includes center point feeler and staining arm
- Restraining arm
- Shank: 3/8" dia. x 7/8" long (10mm x 20mm)
- Measuring range: 0.250" (6mm) axis offset
- Speed recommended 800 RPM max.
- Repeatability to within 0.0002" (0.005mm) of true center
- Capacity, depending on feeler is 5/32-12"/4-300mm) internal diameter; 0-12"/0-300mm external diameter



**TOOL-A-THO!**  
**BEST SELLER!**  
FOWLER HIGH PRECISION

| Order No.           | Description             | List Price | Sale Price |
|---------------------|-------------------------|------------|------------|
| <b>52-710-025-0</b> | 2D Coaxial Set - Inch   | \$353.00   | \$329.00   |
| <b>52-710-030-0</b> | 2D Coaxial Set - Metric | \$353.00   | \$329.00   |

**52-710-025-0**

## Z-CHECK 65 PLUS+

### Z-Axis Tool Setter

#### Features:

- Supplied with zero reference setting block
- IP65 protected against fluid and dust
- Back light turns on when zero reference is achieved
- 4 magnets embedded into base
- 2" default setting height
- Steel contact surface with 0.0002" flatness
- Resolution: 0.00005"/0.001mm
- Repeatability: 0.00015"/0.004mm
- Accuracy: 0.0001"/0.003mm



Display lights when  
ZERO reference  
is reached



**Sale \$164.00**

List Price \$182.00

**TOOL-A-THO!**  
**BEST SELLER!**  
FOWLER HIGH PRECISION

**Order No. 54-188-200-0**

### Electronic Edge Finders



#### Features:

- Six equally spaced light ports provide visibility at any angle
- Edge finder lights instantly when stylus touches work edge
- Repeatability: 0.0002"
- Works on any conductive metal

Along with light indication, model #54-575-650-0 emits an audible "beep" at time of contact



| Order No.           | Stylus | Shank | Audible | List Price | Sale Price |
|---------------------|--------|-------|---------|------------|------------|
| <b>54-575-600-0</b> | 0.200" | 1/2"  | NO      | \$77.00    | \$70.00    |
| <b>54-575-625-0</b> | 0.200" | 1/2"  | NO      | \$264.00   | \$255.00   |
| <b>54-575-650-0</b> | 0.400" | 3/4"  | YES     | \$264.00   | \$255.00   |

## HIGH Accuracy Z-Axis Detectors

For use in CNC machines and other applications where high accuracy is required.



**Sale \$387.00**

List Price \$429.00

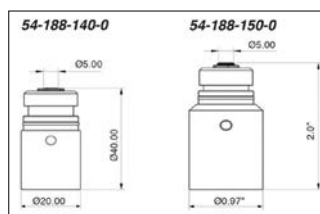


Micro Drill  
Application



### Features:

- IP67 protected against fluid and dust
- High accuracy and repeatability,  $\pm 0.000039"/0.001\text{mm}$
- Carbide touch surface (0.196"/5mm)
- High precision bearing guide system for long life
- Interchangeable magnetic base
- High visibility LED indicator
- Movement stroke 0.078"/2mm
- Battery life approximately 250 hours (on time)



| Order No.    | Model  | Description                            | List Price | Sale Price |
|--------------|--------|----------------------------------------|------------|------------|
| 54-188-150-0 | Inch   | Height: 2"/50.8mm, Dia. 0.97"/24.638mm | \$312.00   | \$281.00   |
| 54-188-140-0 | Metric | Height: 1.57"/40mm, Dia. 0.78"/20mm    | \$429.00   | \$387.00   |

## Tool Set 300 Presetter

### \*While supplies last

Used for the quick checking of heights and diameters (radii) of various types of machine tools. Accuracy is guaranteed by a precise steel measuring column and displacement devices in X and Z coordinates utilizing constant measuring force.

### Tool Holding Spindle

Tool presetter is supplied with high precision tool pot (Grade 0)

- ISO 40 or 50 taper
- Less than 0.00008"/0.002mm concentricity error

### Features:

- Measuring range: (X)11.8"/300mm, (Z)15.7"/400mm
- Min/Max functions for TIR readings
- 2 reference indications
- Preset and Tolerance value inputs
- Radius or diameter indication on X-axis display
- Resolution: 0.00005"/0.001mm
- Floating zero function anywhere within axis range
- Carbide measuring insert for durability
- Counter balanced measuring carriage
- Constant measuring force in both axes
- High precision Swiss measuring system



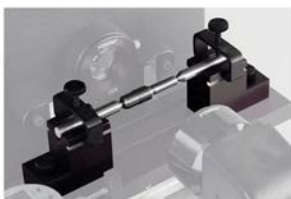
54-188-300-0



| Order No.    | Description                           | List Price  | Sale Price  |
|--------------|---------------------------------------|-------------|-------------|
| 54-188-300-0 | Tool Presetter with 50 Taper Tool Pot | \$21,511.00 | \$16,500.00 |
| 54-188-304-0 | Tool Presetter with 40 Taper Tool Pot | \$12,507.00 | \$11,257.00 |

Prices & Specifications are subject to change without notice.

## Optical Comparator with Accessory Package



**Includes:  
T-Slot V-Blocks  
& T-Slot Centers  
shown**

The Fowler comparator is economically designed for basic comparative and absolute measurements and includes:

- 10x Lens
- 12" 1 Quadrant protractor screen
- T-slot stage with 6" horizontal travel and 2.5" vertical travel
- 1 pair of t-slot mounted V-blocks
- 1 pair of t-slot mounted centers
- 2 Indi-X Indicators (page 30):  
1"/25mm capacity with 0.0005"/0.01mm resolution

| Order No.           | Description                                                | List Price | Sale Price |
|---------------------|------------------------------------------------------------|------------|------------|
| <b>53-900-000-0</b> | 12" Basic Bench Top Optical Comparator without Accessories | \$4,014.00 | \$3,412.00 |
| <b>53-900-100-0</b> | Optical Comparator with Accessory Package                  | \$4,292.00 | \$3,649.00 |
| <b>Accessories</b>  |                                                            |            |            |
| <b>53-900-020-0</b> | 20x Lens                                                   | \$358.00   | \$287.00   |

## 10x Pocket Optical Comparator with 9 reticles

Fowler's 10x Pocket Optical Comparator magnifies images which are sharp, undistorted and free of aberrations. Convenient for checking angles, thread measurements, hole sizes and more. This 10x comparator is widely used by machinists, toolmakers and inspectors in the industry.



### Features:

- Scales are photo-etched into a glass reticle which is placed in actual contact with the measured object, obtaining simultaneous enlarged images of the scale.
- Reticles (protected in individual plastic cases) are easily interchanged by a screw-in mount.
- Measures radii, diameters, angles, hole sizes, pitch and thicknesses.

**Sale \$153.00**

List Price \$179.00

**Order No. 52-664-009-0**

The X-Pro Portable Roughness Tester II can be used for various applications by selecting from a variety of accessories including special application probes and a swivel stand.

RS232 data output is available on additional models (contact the Fowler technical department for more information 1-800-788-2353)



(X-Pro shown with optional stand with swivel)



**TOOL-A-THO!**  
**BEST SELLER!**  
FOWLER HIGH PRECISION

#### Features:

- Small, compact size
- 2 selectable parameters: Ra and Rz
- Large LCD display
- Meets ISO and DIN standards
- NIST traceable specimen included
- Uses 9 volt battery (approx. 3000 measurements)
- Special application probes available

### X-Pro Portable Roughness Tester II

| Order No.           | Description                                                           | List Price | Sale Price |
|---------------------|-----------------------------------------------------------------------|------------|------------|
| <b>54-410-500-0</b> | Portable Surface Roughness Tester 0.0004" probe (NIST specifications) | \$2,808.00 | \$2,528.00 |
| <b>54-410-600-0</b> | Portable Surface Roughness Tester 0.0002" probe (DIN specifications)  | \$2,808.00 | \$2,528.00 |
| <b>54-400-896-0</b> | Adjustable height stand for roughness testers                         | \$740.00   | \$666.00   |

## Shore Portable Durometer

### Hardness testing of flexible materials

Fowler's Portable Durometers are just right for testing the hardness of flexible materials such as rubber and plastics. These gages conform to shore scales.

- Manufactured in accordance with DIN, ASTM, ISO and JIS specifications
- Includes reference test block, operating instructions and fitted case

**53-762-102-0**



**53-762-101-0**



#### Applications:

- 35° blunt taper Durometers are suitable for testing soft and natural rubber products, neoprene, polyesters, soft PVC, leather, Thiokol, nitril rubbers, wax, felt and more.
- Sharp 30° point Durometers are ideal for testing hard rubber, hard synthetic materials, e.g. acrylics, glass, Polystyrol, thermoplastics, printing rolls, vinyl sheets, cellulose acetates, densified wood, etc.

### Shore Portable Durometers

| Order No.           | Description | Penetrator      | Graduation | List Price | Sale Price |
|---------------------|-------------|-----------------|------------|------------|------------|
| <b>53-762-101-0</b> | Shore A     | Blunt taper 35° | 1 Shore    | \$429.00   | \$386.00   |
| <b>53-762-102-0</b> | Shore D     | Sharp 30°       | 1 Shore    | \$475.00   | \$427.00   |

## Steel Rules



- Tempered steel
- Etched, non-glare, black finish
- 5R graduations: 32nds & 64ths, 10ths & 100ths
- 4R graduations: 8ths, 16ths, 32nds, & 64ths
- 16R graduations: 32nds, 64ths, 50ths, & 100ths
- Flexible rules: 0.020" thick
- Gold rules are titanium coated

| Order No.           | Graduation | Flexibility | Finish       | Size | List Price | Sale Price |
|---------------------|------------|-------------|--------------|------|------------|------------|
| <b>52-297-006-0</b> | 4R         | Flexible    | Black        | 6"   | \$18.00    | \$13.00    |
| <b>52-295-012-0</b> | 4R         | Flexible    | Satin Chrome | 12"  | \$32.00    | \$27.00    |
| <b>52-297-012-0</b> | 4R         | Flexible    | Black        | 12"  | \$31.00    | \$22.00    |
| <b>52-300-006-0</b> | 5R         | Flexible    | Satin Chrome | 6"   | \$20.00    | \$14.00    |
| <b>52-307-006-0</b> | 5R         | Flexible    | Black        | 6"   | \$18.00    | \$13.00    |
| <b>52-307-012-0</b> | 5R         | Flexible    | Black        | 12"  | \$30.00    | \$21.00    |
| <b>52-308-006-0</b> | 16R        | Flexible    | Black        | 6"   | \$15.00    | \$13.00    |
| <b>52-310-006-0</b> | 16R        | Flexible    | Satin Chrome | 6"   | \$20.00    | \$14.00    |
| <b>52-310-012-0</b> | 16R        | Flexible    | Satin Chrome | 12"  | \$30.00    | \$27.00    |
| <b>52-330-006-0</b> | 4R         | Rigid       | Satin Chrome | 6"   | \$23.00    | \$17.00    |
| <b>52-337-006-0</b> | 4R         | Rigid       | Black        | 6"   | \$20.00    | \$14.00    |
| <b>52-330-012-0</b> | 4R         | Rigid       | Satin Chrome | 12"  | \$32.00    | \$29.00    |
| <b>52-350-006-0</b> | 16R        | Rigid       | Satin Chrome | 6"   | \$17.00    | \$15.00    |
| <b>52-338-006-0</b> | 16R        | Rigid       | Black        | 6"   | \$17.00    | \$14.00    |
| <b>52-350-012-0</b> | 16R        | Rigid       | Satin Chrome | 12"  | \$36.00    | \$29.00    |

## Pocket Steel Rule



- Rounded edge prevents damage to shirt pocket
- Rule width: 0.470"
- Inch graduations are in 64ths
- Rule thickness: 0.021"
- Metric scale is in 1mm increments

| Order No.           | Description                | List Price | Sale Price |
|---------------------|----------------------------|------------|------------|
| <b>52-380-100-0</b> | 6"/150mm Pocket Steel Rule | \$11.00    | \$10.00    |

# THE FUTURE OF INSPECTION

## AUTOMATED ROBOTS + OPTICAL SCANNING

Let the robot handle repetitive inspections & free up resources for other tasks

Techman collaborative robot for picking parts

3D Camera identifies part from pick bin

Robot places part into inspection solution

Live data

Touchscreen controls allow for quick changes, monitoring, and running different inspection programs

Robot moves part from inspection solution to sort based on inspection classification

# AUTOMATED INSPECTION

Fowler  
HIGH PRECISION

### 1 See

3D camera precisely identifies and locates your parts, even when they're randomly arranged in a bin

### 2 Pick

The robot arm intelligently picks a single part and transfers it with fluid precision to the Inspection Solution

### 3 Inspect

The part is placed into the Inspection Solution for a complete, non-contact inspection in about 30 seconds

### 4 Sort

The robot takes the part and places it into a "Pass," "Fail," or "Rework" bin based on the inspection results, providing actionable, error-free quality data



[fowlerprecision.com/automation](http://fowlerprecision.com/automation)



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