

Vol. 17.3

Willrich Precision Valid Sept. 1st - Dec. 31st 866-945-5742 - sales@willrich.com

Scan F60 & F60T Optical Measuring Center



The all NEW Fowler-Sylvac Scan, developed to measure even the most demanding of cylindrical parts. All new camera and optics, based on years of experience in this field, offering superior image processing, speed and quality.



Easy to use with the renowned "Reflex-Click" technology, offering part recognition, auto-measure and cycle start, all at the push of a button. NEW ergonomically designed work-holding, with quick release tooling for rapid part change overs. New modern software layout, offering new features including, dust filters, graphical statistics view, dynamic results for quick, easy analysis, and more

Complete 2D part scan in less than 3 seconds

Reduce inspection time

Increase productivity

Quick return of investment, typically less than 6 months

The Measuring Solution for Turned Parts!



For more information or to schedule a demo please contact the technical department 1-800-788-2353

Tool-A-Thon Special Pricing!

Model	Scan F60		Scan F60T		F60T
Order Number	54-902-	406-0		54-902-406-5	
	Diameter Length			Diameter	Length
Measuring Range	60mm	300mm		60mm	300m
Resolution	0.0001mm				
Accuracy MPE	1 + D/100 μm	3 + L/200 μm	1	+ D/100 μm	3 + L/200 μm
Repeatability	0.5 <i>μ</i> m	2 μm	•	0.5 μm	2 μm
Maximum Part Weight		10	Okg		
Part Rotation		Y	'es		
Tilting for Thread Measurer	surement –			3	0°
Advanced Programming	Υe				

Order No.	Description	List Price	Sale Price
54-902-406-0	NEW Scan F60 without tilting	\$60,130.00	\$57,123.50
54-902-406-5	NEW Scan F60T with 30° tilting	69,890.00	66,395.50

Scan 52

First horizontal SCAN machine specially designed for workshop measurement close to the machine-tool. The concept is to measure the parts in the same position as they are machined.

Suitable for first-off part, control in process (SPC), sampling or 100% inspection, our Sylvac SCAN 52 machines are set to revolutionize the control in workshop.

Includes:

· Instrument according to technical specifications

• 2 male centers

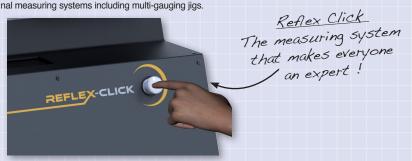
- Computer
- Mouse
- Keyboard
- · Windows multilingual operating system
- Screen
- Manual
- · Sylvac Reflex-Scan Software
- Rotary headstock

(on model 54-902-552-1)



When measuring becomes a breeze!

Place the workpiece on the SCAN machine, click the button and get all the values automatically and without prior programming. Perfectly integrated in the workshop, our SCAN 52 machines replace conventional measuring systems including multi-gauging jigs.



Tool-A-Thon Special Pricing!

Model		54-902-552-0		54-902-552-1	
		Diameter	Length	Diameter	Length
Measuring range	(mm)	0.5 - 52	300	0.5 - 52	300
Numerical interval	(mm)	0.0001	0.0005	0.0001	0.0005
Accuracy	μ m	(1.5 + D/100)	(4 + L/100)	(1.5 + D/100)	(4 + L/100)
Repeatability	μ m	0.5	2.5	0.5	2.5
Rotary headstock				1	/
Weight	kg	103			

Other styles, sizes and sensitivities are available upon request.

Order No.	Description	List Price	Sale Price
54-902-552-0	Scan 52 without rotary headstock	\$34,136.34	\$32,429.52
54-902-552-1	Scan 52 with rotary headstock	39,765.72	37,777.43











GageMaster Vision System - 3D CNC

Fowler GageMaster CNC models help to completely automate the inspection process: including the scanning and best fitting without the need for training skilled operators. Programming the GageMaster CNC is easy: just measure the part once and a full CNC program will be created automatically. The zoom lens is adjustable which allows the recording of magnification changes into the program. For optimum speed and reduced inspection times, measurements from data points taken using the touch probe are combined with those taken using video edge detection. Probe modules fitted with a variety of pre-calibrated styli can also be used in the same inspection by installing a probe changer rack.





Features:

- Teach and repeat programming
- Programmable segmented LED lighting
- High resolution 0.5µm scales for increased accuracy
- · CAD import / export
- · Scanning & best fitting
- · Fully dimensioned part view
- SPĆ included
- One click output to Excel™
- Autofocus
- 165mm Z axis measuring range on adjustable dovetail slide
- 250mm x 120mm and 300mm x 300mm XY stages available
- Auto program from CAD

Technical Specifications:

- Max Work Piece Load (kg): 25
- · Drive Type: CNC / Joystick
- · Bearings: Cross Roller Rail Guide
- Max drive speed: 200mm/sec
- · Camera Type: 2048 x 1590 Pixel, Color USB2 camera with 8 x 9 chip and dynamic latch
- Optics / Lighting: 6.5:1 detent zoom lens. Fully programmable software controlled white LED segmented surface lighting head with understage and through the lens (TTL) lighting as standard
- · Resolution: 0.0005mm
- Accuracy: 2+L / 100
- · Max field of view (FOV): 8x6mm (16mm*)
- Magnification: Optical zoom ratio 27x -175x with digital zoom enhancement to over 1200x
- · Touch Probe option available: Yes
- Probe Type: Renishaw TP20
- Change Rack Compatible: Yes

Tool-A-Thon Special Pricing!

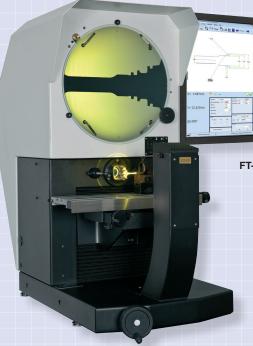
For more information or to schedule a demo please contact the technical department 1-800-788-2353

Order No.	Range (X.Y.Z)	Workstage Area	List Price	Sale Price
54-303-000-0	300 x 300 x 165mm	464 x 462	\$44,288.64	\$42,074.21
54-251-000-0	250 x 125 x 165mm	414 x 262	40,905.22	38,859.96

GageMaster Profile Projector

The Fowler GageMaster Profile Projector with its 400mm screen combines high accuracy noncontact measurement and inspection with a large 300mm x 150mm measuring range.

Choice of digital readouts and automatic profile edge detection. The horizontal light path configuration is ideal for checking machined components that can be secured to the workstage using a range of optional accessories from the Baty fixture family. The robust design of the GageMaster Profile Projector makes it suitable for both the shop floor and standards room.





FT-2E: Complete TOUCH SCREEN DRO with 2D Fusion Touch software as above. Built-in optical edge detection allows data points to be taken 'on the fly' as the projected image is passed under the screenmounted fibre optic sensor. An internally mounted edge sensor is available as an option on all 'R' series projectors.



Features:

- 16"/400mm screen with 90° crosslines and chart clips
- Profile illumination with halogen lamp and green filter
- · Lens magnification choice: 10x, 20x, 25x, 50x and 100x
- Surface illumination (fibre optic)
- · Helix adjustment of light source for accurate thread form projection
- Workstage with two machined slots for holding accessories
- Workstage measuring range of 300mm (12") x 150mm (6")
- Digital angle measurement
- · 10x lens included
- 0.5 micron resolution

Tool-A-Thon Special Pricing!

For more information or to schedule a demo please contact the technical department 1-800-788-2353

Order No.	Description	List Price	Sale Price
53-900-900-0	NEW GageMaster Profile Projector	\$20,298.74	\$19,283.80













The world's first truly portable

DCC Coordinate Measuring Machine!

ONLY 30 lbs.

NO air needed

High accuracy

Calibration Sphere Included

Quick Start Guide

Reusable Shipping Container

Standard 1 year warranty

For a complete list of features visit www.zcat.com



Contact Fowler for a demo 1-800-788-2353

Tool-A-Thon Special Pricing!

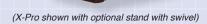
Order No.	Description	List Price	Sale Price
54-950-001-0	zCAT DCC CMM	\$39,950.00	\$37,952.50
Accessories			
54-950-105-0	zCAT MK4 Software	\$4,950.00	
54-950-150-0	zCAT Travel Case	750.00	
54-950-120-0	zCAT Calibration	1,750.00	
54-950-110-0	zCAT 5 Year Service and Calibration Contract	6,850.00	
54-950-115-0	zCAT 5 Year Extended Warranty	1,700.00	
54-950-101-0	TP20 Touch Probe	3,620.00	
54-950-165-0	zCAT Dust Cover	96.90	



The X-Pro Portable Roughness Tester II can be used for many applications by selecting from a variety of accessories, including:

- · Stand with swivel
- · A variety of probes

RS232 is available on certain models (contact the Fowler technical department for more information)



X-Pro Portable Roughness Tester II

Order No.	Description	List Price	Sale Price
54-410-500-0	Portable Surface Roughness Tester .0004" probe (NIST specifications)	\$1762.23	\$1450.00
54-410-600-0	Portable Surface Roughness Tester .0002" probe (DIN specifications)	1762.23	1450.00

X-Pro Portable Roughness Tester II Stand with Swivel

Order No.	Description	List Price	Sale Price
54-400-896-0	Stand with Swivel Attachment	\$424.38	\$360.00

X-Pro Portable Roughness Tester II Probes and Accessories

Order No.	Description	Resolution	List Price	Sale Price
54-400-319-0	General Purpose Probe	.0004"	\$586.99	\$520.00
54-400-326-0	General Purpose Probe	.0002"	586.99	520.00
54-420-321-0	Small Bore Probe	.0004"	766.25	650.00
54-420-327-0	Small Bore Probe	.0002"	766.25	650.00
54-420-301-0	Traverse Chisel Probe	.0004"	766.25	650.00
54-420-302-0	Parallel Chisel Probe	.0004"	766.25	650.00
54-420-328-0	Groove Bottom Probe	.0004"	766.25	650.00
54-420-120-0	AC Adapter Kit		64.82	55.00











V3, V4 & V5 Electronic Height Gages

The Fowler-Trimos V3, V4 and V5 vertical measuring instruments have been developed for the most difficult workshop environments. Manufactured in their entirety in Switzerland, they guarantee a robust, precise and reliable product in the long run.



- Measuring ranges 400mm, 700mm and 1100mm
- · Extremely easy to use
- · "Black mask" display with user friendly functions
- Electronically adjustable measuring force 0.75/1.5 (N)
- · Lithium-ion rechargeable batteries
- Vast range of accessories
- All adjustments possible without tools
- · Cast iron base for optimal stability
- · RS-232 and USB interfaces requires 54-192-112-0 cable
- Air cushion (V4 and V5 Only)
- Dual probe holders (V4 and V5 Only)
- · Carriage displacement: Manual V5 includes selectable manual or motorized car-
- riage displacement)
- · Measures heights, diameters, perpendicularity, centerlines. Min/Max/Delta
- · Accessory measuring probes up to 340mm in length available and provide excellent repeatability
- Resolution: 0.00005"/0.001mm
- Repeatability (2s): 0.00008"/0.002mm (Ø 0.00016"/0.004mm)

All V Models Include:

- Charging unit
- Measuring insert with ruby ball Ø4mm
- · Probe holder elbow Ø 8mm
- Setting gage
- User's manual
- · Test certificate

54-191-440-0



V3
Measuring Range
Range with Probe inverted
Max. Permissible Errors
Frontal Squareness Deviation
Air Cushion

54-192-340-0 16"/407mm 20"/508mm 0.00028"/0.007mm 0.0004"/0.010mm

54-192-370-0 28"/711mm 31.9"/812mm 0.00032"/0.008mm 0.0006"/0.015mm

54-191-470-0

NO

YES



V4 Measuring Range Range with Probe inverted Max. Permissible Errors Frontal Squareness Deviation Air Cushion

54-191-440-0 16"/407mm 28.3"/719mm 0.0002"/0.005mm 0.0004"/0.010mm

28"/711mm 40.2"/1023mm 0.00028"/0.007mm 0.0006"/0.015mm

V5 Measuring Range Range with Probe inverted Max. Permissible Errors (μm) Frontal Squareness Deviation Air Cushion

54-199-540-0 16"/407mm 28.3"/719mm 0.0002"/0.005mm 54-199-570-0 28"/711mm 40.2"/1023mm 2.5 + L(mm)/300 0.00032"/.008mm YES

0.00043"/0.011mm

54-199-590-0

43 7"/1110mm

56"/1422mm

Order No.	Description	Range	List Price	Sale Price
54-192-340-0	V3 Height Gage	16"/407mm	\$4366.62	\$4015.00
54-192-370-0	V3 Height Gage	28"/711mm	4814.40	4428.00
54-191-440-0	V4 Height Gage	16"/407mm	5751.78	5290.00
54-191-470-0	V4 Height Gage	28"/711mm	6691.20	6155.00
54-199-540-0	V5 Height Gage	16"/407mm	6339.30	5673.00
54-199-570-0	V5 Height Gage	28"/711mm	7512.30	6723.00
54-199-590-0	V5 Height Gage	43"/1100mm	11,620.86	10,400.00
Probe Sets				
54-199-105-0	4mm Probe Set, 21 piece		\$1679.94	\$1595.00
54-199-106-0	8mm Probe Set, 16 piece		1253.58	1190.00
54-199-107-0	Economy Probe Set, 7 piece		445.00	420.00

Height Gage Probe Sets 4mm Probe Set

Case 54-199-502-0 Disc-shaped insert Ø 7.7mm Disc-shaped insert Ø 11.5mm 54-199-503-0 Corner insert 1mm Measuring insert holder for: M2.5, M1.6, M1.4 54-194-948-0 54-199-507-0 Insert holder L=80mm M2.5 Insert holder 90° L=80mm Ø 4mm 54-199-508-0 54-199-512-0 Measuring insert holder Ø 1mm 54-199-509-0 Ruby Ball Probe Ø 2mm Ball Probe Ø 1mm 54-199-510-0 Knife-edged measuring probe L=88mm 54-199-019-0 Holder with reduction 8mm/4mm 54-194-935-0 Swivel holder Ø4/Ø8mm Hemispheric probe Probe with pin (plus 4 additional pins) Test indicator tip Ø 1mm Test indicator tip Ø 2mm Test indicator tip Ø 3mm Key for ball insert Hex wrench 1.5mm



8mm Probe Set

Hex wrench 2.5mm

Case 54-194-910-0 54-194-906-0 Carbide Ball Probe Ø 2mm 54-194-912-0 54-194-938-0 Swivel holder 90° Ø 4mm 54-194-942-0 Measuring insert holder Ø 2mm 54-194-930-0,931-0 Insert holder (metric) M2.5 54-199-505-0 Insert holder L=124mm M2.5 Insert holder L=200mm M2.5 Hemispheric probe tip Disc-shaped insert Ø 18mm Test indicator tip Ø 1mm Test indicator tip Ø 2mm Test indicator tip Ø 3mm Key for ball tip Hex wrench 2.5mm



Economy Probe Set

Case	
54-199-503-0 54-199-504-0	Corner insert 1mm Measuring insert M2.5 with ball contact
54-199-506-0	80mm extension M2.5, Ø 4mm
54-199-515-0 54-194-906-0	Hex wrench 2.5mm Carbide ball probe Ø 2mm
54-194-942-0	Measuring insert holder Ø 2mm
54-194-938-0	Measuring insert holder 90°, Ø 4mm, L= 65mm

12"/300mm Probe Holder

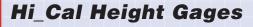




Order No.	Description	List Price	Sale Price
54-199-105-0	4mm Probe Set, 21 piece	\$1679.94	\$1595.00
54-199-106-0	8mm Probe Set, 16 piece	1253.58	1190.00
54-199-107-0	Economy Probe Set, 7 piece	445.00	420.00
54-199-400-0	12"/300mm Holder — for 8mm probes	940.34	890.00







- Extra low measuring force, from 0.2N
- Measurement of internal and external diameters, centerlines, heights, widths and depths
- MIN/MAX/TIR capability
- Excellent repeatability thanks to the motorized carriage
- · Intuitive functions/minimizes key strokes
- · Great mobility
- · High reliability
- · Data output USB and RS-232
- · Battery life: 40 hours rechargeable during operation
- Touch sensitive probe speed for easy operation
- · Base with small footprint

Includes: protective cover, charging set, ruby ball probe Ø3mm, setting gage and calibration certificate



Accessory Probe Sets





Swiss Quality!



FREE Basic Probe Set with 54-931-450-0 Hi_Cal Purchase \$593.00 Value!

54-930-217-0

FREE 1mm Ball Probe with 6"/150mm & 12"/300mm Hi_Cal Purchase

Order No.	Range	Accuracy	List Price	Sale Price
54-931-150-0	6"/150mm	0.00013"/0.0034mm	\$4661.50	\$4160.00
54-931-300-0	12"/300mm	0.00016"/0.0042mm	5357.04	4850.00
54-931-450-0	17.5"/450mm	0.00020"/0.005mm	5608.98	5100.00
Accessories				
54-930-215-0	Full Probe Accessory Set		\$1093.95	\$975.00
54-930-217-0	Basic Probe Accessory Set		593.64	530.00

Twin Beam Electronic Height Gage with Offset Scriber

 NEW carriage design with offset scriber holder allows the use of a longer scriber, 5", without affecting accuracy allowing to reach further for specific applications

 Base is ground and lapped for flatness and ease of movement on surface plates

· Handwheel provides course and fine movement

 Updated electronic and mechanical design offers better accuracy and movement of carriage

 Optional contact sensor can be used to indicate when measuring contact is made between the gage and another conductive surface

Carbide tipped scriber

 Functions include preset, in/mm conversion and ABS/INC for direct or comparative measuring



Twin Beam Dial

Order No.	Range	List Price	Sale Price
54-174-212-3	NEW 12" Height Gage with offset scriber	\$475.00	\$425.00
54-174-224-3	NEW 24" Height Gage with offset scriber	665.00	595.00
Accessory			
54-174-226-0	NEW Contact Sensor	21.00	18.00



List Price

\$99.00

129.00

Sale Price

\$85.00

110.00

Range

12"

Order No.

52-170-006-1

52-170-012-1

Height Gages · Separate digit counters register both upward & downward travel · Zero setting can be obtained throughout the gage's range · Coarse readings in 0.100" graduations: fine readings taken on indicator are 0.001" · Dual chrome plated beams · Carbide-tipped scriber. · Base is hardened, 0 6 3 ground & lapped for maximum flatness 9 4 7 Accuracy 52-174-212-0 ±0.0015" 52-174-224-0 ±0.002" 52-174-212-0

Range

12'

24"









Sale Price

\$215.00

List Price

\$285.00

475.00

Order No.

52-174-212-0

52-174-224-0

Height Gage Accessories

Height Gage Centering Cone Set

- Locates the hole center as the cone is inserted into a hole
- Can be adapted for use with various height gages
- · Measures holes from 1/16" to 1-1/16" ID
- Bar dimensions 5/16" x 3/16"
- Includes 1 holding bar and 2 centering cones





Height Gage Probe Set



- Lets you use any M2 threaded CMM probe in your height gage
- Holder comes with 3 ruby ball CMM probes 2mm ruby ball x 20mm length
- · Bar dimensions 1/2" x 1/4"
- · Can be adapted for use with various height gages

Order No.	Description	List Price	Sale Price
52-565-100-0	NEW Centering Cone Set	\$85.00	\$75.00
52-565-105-0	NEW Centering Cone Set - 8mm mounting shaft, for use with Hi_Gage One	85.00	75.00
52-565-110-0	NEW CMM Probe Set	100.00	90.00

QUICK CHECK Multi-Function Check Standard





- · One compact, multi-function, precise standard
- · Can be used to check and verify a multitude of measuring instruments
- Checks calipers, micrometers, depth gages, bore gages, test and dial indicators, caliper gages, height gages, protractors, combination sets and more
- · Supplied with a manufacturer's test certificate and fitted wood case
- · All sizes marked are actual

Order No. 53-813-015-0

Sale \$1320.00

List \$1612.35

12" Workshop Transfer X-Stand

The Workshop Transfer Stand is compact in size and lightweight!

Adjusts a variety of ways!



- · Overall height 12"
- Revolutionary design
- · Large range fine adjustment
- · Perfect for applications where the stand is moved and/or needs to be transported from location to location
- · Hold test indicators or dial gages with dovetail holders & special adaptors
- Large capacity positioning range · Can be locked in any position
- Base 3" wide x 3.54" long
- · Large handwheel provides fine adjustment
- Stainless steel construction
- · Packed in a high quality aluminum case
- Weight 4.8 lbs. (2.2 kg)



Order No.	Description	List Price	Sale Price
52-620-717-0	12" Workshop Transfer X-Stand	\$127.08	\$99.00

18" Transfer Stand



- Overall Height 19.5"
- · Sturdy construction gives complete rigidity when measuring. Chrome-plated tubular post.
- · Base is hardened and lapped.
- · Can be used with dial test indicators.
- · Quick adjustment on main column with large locking knob
- Weight 6 lbs (2.7 kg)
- Includes clamp for dovetails and 3/8" dial indicators



Order No.	List Price	Sale Price
52-620-019-0	\$240.00	\$199.00

XTRA-SURF Surface Gages

with a built-in Switchable Magnetic Base



- Set includes 3-1/8" x 2-1/16" permanent magnetic base with on/off switch, fine adjustment on base and a 5/16" x 9" upright
- 0.0005"test indicator No. 52-562-778-0 with 0.040", 0.080" & 0.120" contact points
- Swivel clamp to mount indicator
- Two dovetail stems: 5/32" & 3/8"
- · A 4" hardened scriber

Order No.	Description	List Price	Sale Price
52-155-747-0	Xtra-Surf	\$219.80	\$159.00
52-155-743-0	Xtra-Surf w/o Inc	1. 114.52	89.00











TOOL-A-THON vol. 17.3

Dial Calipers







- 4-way measuringCovered rack0.100" per revolution

- · Dial graduation: 0.001"
- · Hardened stainless steel rack

Order No.	Range	Accuracy	List Price	Sale Price
52-008-007-0	6"	± 0.001"	\$91.50	\$50.45
52-008-008-0	8"	± 0.0015"	126.00	89.00

Machinist Grade Dial Calipers



		Dial Face	List	Sale
Order No.	Description	Color	Price	Price
52-008-706-0	0 - 6"	White	\$76.28	\$55.00
52-008-709-0	0 - 150mm (Metric Model)	Yellow	76.28	55.00
52-008-712-0	0 - 12"	White	126.70	97.00

Dial Cal Plus





- · 4-way measurement
- · 0.100" per revolution
- Thumbroll for fine adjustment
- · Carriage lock screw
- · Heavy duty stainless steel frame 4mm thick
- · Adjustable bezel with lock

Order No.	Description	Accuracy	Graduation	List Price	Sale Price
52-008-050-0	0 - 6" - White-face	± 0.001"	0.001"	\$120.82	\$99.00
52-008-051-0	0 - 6" - Black-face	± 0.001"	0.001"	120.82	99.00
52-008-052-0	0 - 150mm - White-face	± 0.03mm	0.02mm	120.82	99.00

Premium Dial Caliper



- inside, depth and step measurements · Solid stainless steel construction
- · Silky smooth movement throughout
- 0 6" range, 0.100" per revolution, 0.001" graduations
 • Thumbroll for rapid setting
- · Knurled lock assures precise settings

Order No. 52-008-006-2

Sale \$105.00

List \$141.41

Vernier Calipers



- · Made of fully hardened stainless steel; microfine black graduations on a satin chrome finish for easy, precise reading
- All models offer a depth rod which can be read directly from verniers
- · Measuring faces are ground and lapped for extreme accuracy
- · 4-way jaws for outside, inside, depth and step measurements
- · All sliding surfaces are raised to prevent defacement and wear of graduations

Order No.	Range	Graduation	Depth of Jaws	List Price	Sale Price
Vernier Caliper w	ith Fine Adjustment				
52-058-016-0	0-6"/0-150mm	0.001"/0.02mm	1.6"	\$49.69	\$34.00
52-058-008-0	0-8"/0-200mm	0.001"/0.02mm	1.9"	72.71	54.00
52-058-012-0	0-12"/0-300mm	0.001"/0.02mm	2.5"	112.73	81.00
Vernier Caliper w	rith Thumb Lock				
52-059-016-0	0-6"/0-150mm	0.001"/0.02mm	1.6"	44.86	31.00



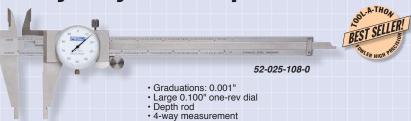








Heavy Duty Dial Calipers with Cross Jaws

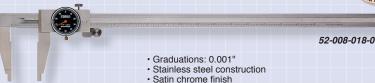


Order No.	Range	Jaw Length	List Price	Sale Price
52-025-108-0	8" Caliper	2.5"	\$138.78	\$78.00
52-025-112-0	12" Caliper	2.875"	201.82	127.00

· Cross-jaws for direct internal measurement · Stainless steel, satin chrome finish

Extended Range Dial Calipers





Depth rod

Order No.	Range	Depth of Jaws	List Price	Sale Price
52-008-018-0	18" Caliper	3.125"	\$252.04	\$135.00
52-008-024-0	24" Caliper	3.375"	305.41	232.00

0.500" internal measuring nibs

TRA-RANGE Electronic Calipers

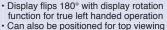


Order No.	Range	Jaw Depth	Accuracy	List Price	Sale Price
54-100-312-0	0 - 12"/300mm Caliper	3.5"	0.002"/0.04mm	\$209.70	\$145.00
54-100-024-1	0 - 24"/600mm Caliper	4"	0.003"/0.08mm	305.41	223.00
54-100-042-1	0 - 40"/1000mm Caliper	4.9"	0.004"/10mm	1254.20	695.00



Left-Handed View

Top View



- Available in 6", 8" and 12" models
- 4-way measuring OD, ID, depth and step
- Stainless steel frame
- · Thumbroll for smooth measuring
- Heavy duty frame is 0.140"/3.5mm thick
- Direct inch/metric conversion
- Resolution 0.0005"/0.01mm
- Floating zero
- · Includes fitted case

Order No.	Range	Accuracy	List Price	Sale Price
54-200-506-0	NEW 0 - 6"/150mm	± 0.0012"/0.03mm	\$89.95	\$85.00
54-200-508-0	NEW 0 - 8"/200mm	± 0.0012"/0.03mm	109.95	104.00
54-200-512-0	NEW 0 - 12"/300mm	± 0.0016"/0.04mm	139.95	132.50

Caliper Jaw Attachments





Caliper shown not included

- Clamps on to caliper jaws, allows attachment of standard micrometer anvils
- · Used alone or in pairs
- Contacts can be mixed or offset for unique applications
- Max. caliper jaw thickness 0.135"
- · Made of stainless steel

Contacts sold separately!













Order No.	Description	List Price	Sale Price
52-249-010-0	NEW Caliper Jaw Attachment	\$40.00	\$36.00
52-249-001-0	Spline: 0.100" dia.	19.39	15.00
52-249-002-0	Knife: 0.188" x 0.031" tip, 30° taper	19.39	15.00
52-249-003-0	Super Spline: 0.050" dia.	19.39	15.00
52-249-004-0	Blade: 0.188" x 0.031"	19.39	15.00
52-249-005-0	Point: 0.020" tip, 30° taper	19.39	15.00
52-249-006-0	Disc: 0.500" dia.	23.03	18.00
52-249-007-0	Complete 7 piece Contact Set, includes 1 Ball Contact	67.90	54.00









Ultra-Cal IV Electronic Calipers



Order No.	Description	Accuracy	List Price	Sale Price
54-100-440-0	0 - 6"/150mm Caliper w/round depth rod	0.0008"/0.02mm	SPECIAL PRICE!	\$91.00
54-100-444-0	0 - 6"/150mm Caliper w/standard depth rod	0.0008"/0.02mm	\$138.00	118.00
Connectivity Kit				
54-115-333-0	Opto Serial Connection Kit		\$127.50	\$114.00
54-115-525-0	Opto USB Connection Kit		156.57	140.00

Ultra-Cal V Electronic Calipers











- 4-way measurement, inside, outside, depth and step. (6" & 8" models)
- · Hardened stainless steel construction
- · Direct RS-232 output
- · Features Absolute/Relative Measuring Modes
- Thumbroll (6" model only)

Order No.	Description	Accuracy	Resolution	List Price	Sale Price
54-100-667-0	Buy 5 standard 6"/	150mm		\$992.95	\$742.50
	Electronic Calipers	(54-100-067-1), Ge	1 FREE		
54-100-067-1	6"/150mm	0.0008"/20µm	0.0005"/0.01mm	\$198.59	\$148.50
54-100-068-1	8"/200mm	0.0012"/30µm	0.0005"/0.01mm	472.77	352.00
54-100-069-1	12"/300mm	0.0012"/30µm	0.0005"/0.01mm	567.32	425.00
Connectivity Kits					
54-115-526-0	Proximity cable with	USB connection		\$136.07	\$122.00
54-115-527-0	Proximity cable with	serial connection		136.07	122.00



54-100-167-0

Ultra Cal VI Fowler

NEW



- · New Design
- IP67 rated
- · Available with or without Bluetooth
- · Heavy duty frame
- Extra large display







Order No.	Description	Accuracy	Resolution	List Price	Sale Price		
Bluetooth							
54-100-167-0	NEW 6"/150mm	0.0008"/20 <i>µ</i> m	0.0005"/0.01mm	\$330.99	\$290.00		
54-100-168-0	NEW 8"/200mm	0.0012"/30 <i>µ</i> m	0.0005"/0.01mm	614.65	465.00		
54-100-169-0	NEW 12"/300mm	0.0012"/30 <i>µ</i> m	0.0005"/0.01mm	819.47	545.00		
Without Bluetoo	Without Bluetooth						
54-100-177-0	NEW 6"/150mm	0.0008"/20 <i>µ</i> m	0.0005"/0.01mm	\$115.00	\$109.00		
54-100-178-0	NEW 8"/200mm	0.0012"/30 <i>µ</i> m	0.0005"/0.01mm	235.00	223.00		
54-100-179-0	NEW 12"/300mm	0.0012"/30µm	0.0005"/0.01mm	315.00	295.00		
Connectivity Kit							
54-115-246-BT	USB bluetooth recei	ver		\$47.33	\$42.60		

0.00005" Electronic Caliper



- Sylvac
 - · Bluetooth connectivity
 - Measuring range 6"/150mm
 - High resolution, 0.00005"/0.001mm
 - Accuracy up to 4", 0.0006"/0.015mm
 Accuracy above 4", 0.0012"/0.03mm

 - Repeatability 0.00016"/0.004mm
 - · RS-232 output
 - Heavy duty frame (3.5mm)









Order No.	Description	List Price	Sale Price
54-100-100-0	NEW 6"/150mm Micron Electronic Caliper	\$384.54	\$345.00
Connectivity Kit			
54-115-246-BT	USB bluetooth receiver	\$47.33	\$42.60





TOOL-A-THON vol. 17.3

XTRA-VALUE CAL Electronic Calipers



- (6" models)
- · Stainless steel frame
- Large easy-to-read display
- Resolution: 0.0005"/0.01mm
- Absolute/Incremental Measurement
- 4-way measuring
- · Also available with super large display

Order No.	Range	Display Type	List Price	Sale Price
54-101-150-2	6"/150mm	Regular Display - includes FREE N.I.S.T Cert.	\$48.75	\$36.00
54-101-600-1	6"/150mm	Super Large Display with hold feature	60.62	44.00
54-101-200-1	8"/200mm	Regular Display	72.71	61.00
54-101-800-1	8"/200mm	Super Large Display with hold feature	90.88	67.00
54-101-300-1	12"/300mm	Regular Display	97.39	79.00
54-101-900-1	12"/300mm	Super Large Display with hold feature	121.35	101.00

XTRA-VALUE Plus Electronic Caliper



Inch/Metric/Fraction reading: .0005"/.01mm/ 1/128"

· Dust, water and oil resistant to IP54 standards making it great for shop environments

· Heavy Duty frame for extra rigidity and wear

· Super large, easy to read 14 x 52mm display

· Combined thumbrest and thumbroll for fine adjustment

Order No. 54-103-006-0

Sale \$60.00

List \$72.49

EURO-CAL IV® Electronic Calipers





54-101-150-2

- Absolute/Incremental Measurement
 - · Water resistant to IP54 standards
 - Resolution: 0.0005"/0.01mm (Fractions in 1/64" increments)
 - Stainless steel frame
 - · 4-way measuring

Order No.	Range	Accuracy	List Price	Sale Price
54-100-330-1	6"/150mm	± 0.001"/0.02mm	\$121.14	\$89.00
54-100-331-0	8"/200mm	± 0.001"/0.02mm	143.41	105.00
54-100-332-0	12"/300mm	± 0.0015"/0.03mm	183.96	138.00

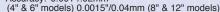
4" thru 12" Economy Digital Calipers





Stainless steel frame

Accuracy: 0.001"/.02mm



• Resolution: 0.0005"/0.01mm

Order No.	Range	List Price	Sale Price
54-100-004-2	0 - 4"/100mm Caliper	\$101.81	\$59.85
54-100-000-2	0 - 6"/150mm Caliper	118.72	75.00
54-100-008-2	0 - 8"/200mm Caliper	139.41	102.00
54-100-112-2	0 - 12"/300mm Caliper	181.75	110.00
54-115-100-0	Wireless Transmitter	101.49	89.50

Water Resistant IP54 Electronic Calipers



- Water resistant to IP54 specifications
- Absolute sensor technology
- · Stainless steel frame
- Accuracy: 0.001"/.02mm
- (6" model) 0.0015"/0.04mm (12" model)
- Resolution: 0.0005"/0.01mm

Order No.	Range	List Price	Sale Price
54-100-777-2	0 - 6"/150mm	\$133.32	\$85.00
54-100-712-2	0 - 12"/300mm	193.94	120.00
54-115-100-0	Wireless Transmitter	101.49	89.50

Wireless Transmitter

For Economy Calipers & IP54 Calipers

Wireless Transmitter allows wireless input from Economy and IP54 Economy Calipers (above) as well as Indi-Max Indicators (pg. 32). Input directly in to Excel, Word, Cad and Notepad.

- Includes 1 USB receiver and 1 Transmitter (good for 1 tool)
- · Audible as well as LED indications when data is sent
- · Input into Excel, Word, Notepad and CAD programs with the press of a button
- Simple plug and play operation
- · Wireless technology allows the use of the tool up to 60 feet away from a computer



Economy IP54 Calipers



Economy Calipers



Indi-Max Indicators

Order No. 54-115-100-0



List \$99.50











Find us on social media

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Swiss-Style Micrometers



0-1" 0.0001"



- · Carbide measuring faces
- Insulated frame
- · Ratchet thimble and locking lever
- · Microfine graduations
- · Sizes over 1" include standard
- · Includes case

Order No.	Range	Accuracy	List Price	Sale Price
52-229-201-0	0 - 1"	± 0.00016"	\$46.04	\$35.00
52-229-202-0	1 - 2"	± 0.00016"	53.92	41.00
52-229-203-0	2 - 3"	± 0.0002"	66.48	49.00
52-229-204-0	3 - 4"	± 0.0002"	76.32	57.00
52-229-205-0	4 - 5"	± 0.00024"	94.25	68.00
52-229-206-0	5 - 6"	± 0.00024"	110.70	79.00

Swiss Style Micrometer Sets



- 0.0001" reading (.01mm on metric set)
- · Carbide measuring faces
- · Ratchet thimble and locking lever
- Microfine graduations
- · Sizes over 1" include standard
- Includes case

Ol N	P	List Balas	Only Dales
Order No.	Range	List Price	Sale Price
52-229-213-0	0 - 3"	\$165.99	\$119.00
52-229-214-0	0 - 4"	235.00	170.00
52-229-220-0	0 - 100mm	235.00	170.00

Inch Outside Micrometers

with Decimal Equivalents on Frame



- Satin chrome finish forged steel frame
- Microfine black graduations
- Anvil and spindle precision ground, with carbide faces
- Ratchet style thimbles for exact and repetitive settings
- · Sizes over 1" include standard
- · Includes case

Order No.	Range	Accuracy	List Price	Sale Price
52-235-001-1	0 - 1"	0.00016"	\$61.91	\$42.00
52-235-002-2	1 - 2"	0.00016"	75.17	51.00
52-235-003-2	2 - 3"	0.0002"	89.57	61.50

Inch Outside Micrometer Set

with Decimal Equivalents on Frame



- 0.0001" reading
- · Carbide measuring faces
- · Ratchet thimble and locking lever
 - Microfine graduations
- · Sizes over 1" include standard
- · Includes case

Order No. 52-235-100-0

Sale \$147.00

List \$215.50



52-215-003-1

- · Diameter of measuring faces: 0.256"
- · Graduation: 0.0001"
- · Flatness: 0.00003"
- · Positive lever locking clamp
- Spindle thread hardened, ground and lapped for ultimate accuracy
 Anvil & spindle hardened and precision ground with microlap finish on tips

· Microfine graduations on satin chrome finish and carbide tipped measuring faces

· Includes a wrench and case

Order No.	Range	Accuracy	Thimble	List Price	Sale Price
52-240-001-1	0 - 1"	± 0.00015"	Friction	\$40.78	\$35.00
52-240-101-1	0 - 1"	± 0.00015"	Ratchet	40.78	35.00
52-240-002-1	1 - 2"	± 0.00015"	Friction	47.41	41.00
52-240-102-1	1 - 2"	± 0.00015"	Ratchet	47.41	41.00
52-240-003-1	2 - 3"	± 0.0002"	Ratchet	55.41	49.00
52-240-004-1	3 - 4"	± 0.0002"	Ratchet	61.91	55.00
52-240-005-1	4 - 5"	± 0.00025"	Ratchet	68.54	61.00
52-240-006-1	5 - 6"	± 0.00025"	Ratchet	75.17	67.00
52-240-007-1	6 - 7"	± 0.0003"	Ratchet	81.68	73.00
52-240-008-1	7 - 8"	± 0.0003"	Ratchet	96.19	84.00
52-240-009-1	8 - 9"	± 0.0003"	Ratchet	109.32	98.00
52-240-010-1	9 - 10"	± 0.0003"	Ratchet	123.95	110.00
52-240-011-1	10 - 11"	± 0.00035"	Ratchet	137.09	122.00
52-240-012-1	11 - 12"	± 0.00035"	Ratchet	150.23	125.00
Sets					
52-215-003-1	0 - 3" with star	ndards and fitted shop hare	dened case	\$176.50	\$114.00
52-215-004-1	0 - 4" with star	ndards and fitted shop hare	dened case	226.65	157.60
52-215-006-1	0 - 6" with star	ndards and fitted wooden of	case	349.23	250.00
52-215-612-1	6 - 12" with sta	andards and fitted wooden	case	719.49	435.00













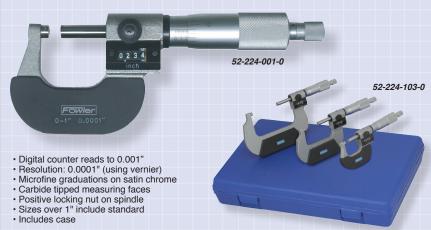








Digit Counter Micrometers



Pange	List Brice	Sale Price
		\$70.00
1 - 2"	117.14	75.00
2 - 3"	133.42	83.50
3 - 4"	146.76	92.00
4 - 5"	155.33	95.00
5 - 6"	162.42	99.00
0 - 3" set	\$352.00	\$215.00
0 - 4" set	499.15	305.00
0 - 75mm set	370.63	232.00
	3 - 4" 4 - 5" 5 - 6" 0 - 3" set 0 - 4" set	0 - 1" \$111.51 1 - 2" 117.14 2 - 3" 133.42 3 - 4" 146.76 4 - 5" 155.33 5 - 6" 162.42 0 - 3" set \$352.00 0 - 4" set 499.15

XTRA-VALUE | Electronic Micrometers









Order No.	Range	List Price	Sale Price
54-870-001-0	0 - 1"/0 - 25mm	\$90.88	\$65.50
54-870-002-0	1 - 2"/25 - 50mm	92.03	67.50
54-870-003-0	2 - 3"/50 - 75mm	108.11	79.50
54-870-004-0	3 - 4"/75 - 100mm	114.73	84.00
54-870-103-0	0 - 3"/0 - 75mm Set	267.80	185.00

· Ratchet thimble

- · Transmitter acts as a keyboard wedge
- · Rechargeable battery (transmitter) with automatic switch off
- Accuracy: ± 0.00016"/.004mm
- Resolution: 0.00005"/0.001mm
- · Carbide measuring faces



Order No. 54-860-001-BT

Sale \$130.00

List \$145.00

Electronic Coolant Resistant Micrometers







- Accuracy: ± 0.00016"/.004mm (up to 2")
- Resolution: 0.00005"/0.001mm
- · Carbide measuring faces
- Absolute & incremental modes

Order No.	Range	List Price	Sale Price
54-860-001-1	0 - 1"/0 - 25mm	\$115.15	\$89.00
54-860-002-1	1 - 2"/25 - 50mm	133.32	103.00
54-860-003-1	2 - 3"/50 - 75mm	145.40	112.00
54-860-004-1	3 - 4"/75 - 100mm	169.68	131.00
54-860-103-1	0 - 3"/0 - 75mm Set	378.75	285.00





















Rapid-Mic Quick-Displacement Electronic Micrometers







- Position recall
- · IP67 with or without data cable.
- · Delrin quick displacement thimble
- Adjustable measuring force, 5N/10N (54-815-030-0 only)
- · Menu customizable with free software
- · Non-rotating spindle, 10mm/spindle rotation
- · USB output or bluetooth available
- Carbide anvils
- Extended Range 0-30mm, 30-66mm and 66-102mm



Order No.	Description	Max Error	List Price	Sale Price
54-815-030-0	0 - 1.18"/0 - 30mm	0.00012"/0.003mm	\$514.79	\$399.00
54-815-060-0	1.18" - 2.6"/30 - 66mm	0.00016"/0.004mm	761.74	695.00
54-815-100-0	2.6" - 4.0"/66 - 102mm	0.00020"/0.005mm	1065.29	945.00
BLUETOOTH MODE	L			
54-815-130-0	0 - 1.18"/0 - 30mm	0.00012"/0.003mm	\$761.74	\$645.50
Set				
54-815-111-0	0 - 4"/0 - 102mm		\$2353.34	\$1995.00
Connectivity Kits				
Order No.	Description			
54-115-526-0	Proximity cable with USB of	connection	\$136.07	\$122.00
54-115-527-0	Proximity cable with serial	connection	136.07	122.00
54-115-246-BT	USB Bluetooth receiver		47.33	42.60

Micrometer Stands



52-247-000-0

Provides a measuring position and angle for outside micrometers and other instruments



XTRA MAG



- · Unique locking nut adjusts micrometer stand to any position for perfect use and viewing
- · Stand folds for storage
- · Holds standard 0-12" micrometers firmly to metal surfaces
- · Use at machine centers, work, assembly and inspection stations, steel tables and shelves
- · V-bottom for mounting on cylindrical surfaces
- · On/Off magnet switch
- Base is 2.30" L x 1.20" W x 3.50" H

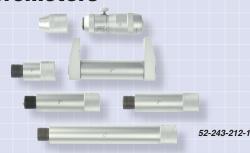
Order No.	Description	List Price	Sale Price
52-247-000-0	Adjustable Micrometer Stand	\$58.04	\$36.50
52-247-005-0	Folding Micrometer Stand	38.84	27.00
52-247-010-0	Magnetic Micrometer Stand	52.02	40.00



- · Ball anvil and spindle for measuring special curved surfaces
- · Ball anvil/flat spindle for measuring tubes or the insides of holes to outer edges
- · Large LCD display, 8.5mm
- · Automatic switch off
- · Hardened steel measuring face
- · Sizes over 1"/25mm include standard

Order No.	Range	Resolution	Accuracy	List Price	Sale Price
Ball Anvil Micro	ometers				
54-860-113-1	0 - 1"/0 - 25mm	0.00005"/0.001mm	0.00016"/0.004mm	\$116.69	\$84.00
54-860-114-1	1 - 2"/25 - 50mm	0.00005"/0.001mm	0.00016"/0.004mm	136.68	102.00
54-860-115-1	2 - 3"/50 - 75mm	0.00005"/0.001mm	0.0002"/0.005mm	156.98	119.00
54-860-116-1	3 - 4"/75 - 100mm	0.00005"/0.001mm	0.0002"/0.005mm	176.87	136.00
Ball Anvil & Spi	indle Micrometers				
54-860-211-1	0 - 1"/0 - 25mm	0.00005"/0.001mm	0.00016"/0.004mm	\$127.17	\$95.00
54-860-212-1	1 - 2"/25 - 50mm	0.00005"/0.001mm	0.00016"/0.004mm	146.78	111.00
54-860-213-1	2 - 3"/50 - 75mm	0.00005"/0.001mm	0.0002"/0.005mm	167.69	128.00
54-860-214-1	3 - 4"/75 - 100mm	0.00005"/0.001mm	0.0002"/0.005mm	189.52	146.00

Inside Micrometers



- Each set consists of an inside micrometer head and a series of fully hardened and lapped extension rods of different lengths all with carbide measuring faces
- · Anvil and spindle are hardened and precision ground with microlap finish on ends
- Microfine graduations on satin chrome
- Positive locking nut on spindle
- It is recommended that the inside micrometer with a rod be calibrated by a micrometer or ring gage.
- · Coiled spring pressure contact type rods are each marked with appropriate length.
- · Quick, easy zero adjustment on the sleeve.
- Accuracy: 0.00005" x (3 + L"/2)
- Graduation: 0.001"
- · Includes a wrench, case and reference standard

Order No.	Range	List Price	Sale Price
52-243-026-1	2 - 6"	\$137.09	\$110.00
52-243-212-1	2 - 12"	169.30	135.00
52-243-220-1	2 - 20"	219.45	175.00
52-243-240-1	2 - 40"	580.45	480.00
52-243-480-1	4 - 80"	1223.73	1075.00
52-243-512-1	4 - 120"	2672.64	1960.00













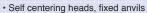


TABLET!

with Complete Set Purchase!







- USB connectivity and Bluetooth
- Resolution: 0.00005"/0.001mm
- IP67 rated

• To reduce hand fatigue, the travel of the Holematic trigger is adjustable for minimum over travel

• 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

SPECIAL OFFER!

Purchase **ANY** Fowler-Bowers BT Set on this page and receive a

voucher for 15% off of a

special application (spherical, thread, groove, etc.) measuring head

2-point thread

54-567-050-BT



Contact the Fowler Technical Department for special measuring applications

Order No.	Range	Includes	List Price	Sale Price
54-567-009-BT	0.080" - 0.250"/2 - 6mm	5 heads, 1 handle, 3 rings	\$6016.98	\$4750.00
54-567-010-BT	0.250" - 0.375"/6- 10mm	2 heads, 1 handle, 1 ring	2359.26	1845.00
54-567-020-BT	0.375" - 0.750"/10 - 20mm	3 heads, 1 handle, 2 rings	2760.12	2185.00
54-567-050-BT	0.750" - 2" /20 - 50mm	3 heads, 1 handle, 2 rings	3563.88	2870.00
54-567-100-BT	2 - 4"/50 - 100mm	3 heads, 1 handle, 2 rings	3966.78	3210.00
54-567-105-BT	4 - 6"/100 - 150mm	2 heads, 1 handle, 1 ring	3563.88	2870.00
54-567-110-BT	6 - 8" /150 - 200mm	2 heads, 1 handle, 1 ring	4704.24	3840.00
54-567-200-BT	4 - 8" /100 - 200mm	4 heads, 1 handle, 2 rings	7446.00	6170.00
54-567-210-BT	0.750" - 4" /20 - 100mm	6 heads, 1 handle, 4 rings	5799.72	4770.00
54-567-620-BT	0.250" - 0.750" 76 - 20mm	5 heads, 1 handle, 3 rings	3289.50	2635.00
Connectivity Kit	s			
Order No.	Description			
54-115-526-0	Proximity cable with USB connection		\$136.07	\$122.00
54-115-527-0	Proximity cable with serial connection		136.07	122.00
54-115-246-BT	USB bluetooth receiver		47.33	42.60



Fowler-Bowers BLUETOOTH XTD3 Electronic Holemike Sets







- · Self centering 3-point heads, fixed anvils
- · USB connectivity and Bluetooth
- Resolution: 0.00005"/0.001mm
- IP67 rated
- · Ratchet stop for consistent measurement
- · Sizes over 1"/25mm offer extended travel
- · Includes UKAS certificates for micrometer, heads and settings rings





SPECIAL OFFER!

Purchase ANY Fowler-Bowers BT Set on this page and receive a voucher for 15% off of a special application (spherical, thread, groove, etc.) measuring head

2-point thread

3-point groove

Contact the Fowler Technical Department for special measuring applications

Order No.	Range	Includes	List Price	Sale Price
54-367-000-BT	0.080" - 0.250"/2 - 6mm	5 heads, 1 handle, 3 rings	\$5483.52	\$4386.00
54-367-010-BT	0.250" - 0.375"/6- 10mm	2 heads, 1 handle, 1 ring	2284.80	1825.00
54-367-020-BT	0.375" - 0.750"/10 - 20mm	3 heads, 1 handle, 2 rings	2726.46	2180.00
54-367-050-BT	0.750" - 2" /20 - 50mm	3 heads, 1 handle, 2 rings	3702.60	2960.00
54-367-100-BT	2 - 4"/50 - 100mm	3 heads, 1 handle, 2 rings	4099.38	3280.00
54-367-105-BT	4 - 6"/100 - 150mm	2 heads, 1 handle, 1 ring	3460.86	2766.00
54-367-110-BT	6 - 8" /150 - 200mm	2 heads, 1 handle, 1 ring	4571.64	3656.00
54-367-200-BT	4 - 8" /100 - 200mm	4 heads, 1 handle, 2 rings	7223.64	5778.00
Connectivity Kits				
Order No.	Description			
54-115-526-0	Proximity cable with USB conne	\$136.07	\$122.00	
54-115-527-0	Proximity cable with serial conn	Proximity cable with serial connection		
54-115-246-BT	USB bluetooth receiver			











Fowler-Bowers XT-Series Holemikes



The Fowler-Bowers range of mechanical two and three point bore micrometers are now available as XT extended travel holemikes, allowing a wide measurement range without the need to interchange anvils.





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

					Meas.	Ring	List	Sale
0	rder No.	Range	Grads.	Accuracy	Depth	Included	Price	Price
52	2-255-310-0	0.250" - 0.312"	0.00025"	0.00015"	2.28"	0.312"	\$709.21	\$531.00
52	2-255-311-0	0.312" - 0.375"	0.00025"	0.00015"	2.28"	0.312"	656.68	492.00
52	2-255-312-0	0.375" - 0.500"	0.00025"	0.00015"	2.28"	0.5"	656.68	492.00
52	2-255-313-0	0.500" - 0.625"	0.00025"	0.00015"	2.44"	0.5"	656.68	492.00
52	2-255-314-0	0.625" - 0.750"	0.00025"	0.00015"	2.44"	0.75"	673.40	505.00
52	2-255-315-0	0.750" - 1"	0.00025"	0.00015"	2.60"	0.75"	739.60	554.00
52	2-255-316-0	1" - 1.375"	0.00025"	0.00015"	2.60"	1.375"	1053.76	790.00
52	2-255-317-0	1.375" - 2"	0.00025"	0.00015"	3.15"	1.375"	1078.96	809.00
52	2-255-318-0	2" - 2.625"	0.00025"	0.0002"	3.15"	2.625"	1287.04	965.00
52	2-255-319-0	2.625" - 3.250"	0.00025"	0.0002"	3.15"	2.625"	1298.56	973.00
52	2-255-320-0	3.250" - 4"	0.00025"	0.0002"	3.94"	3.25"	1620.07	1215.00

Fowler-Bowers XT-Series Holemike Sets

Order No.	Range	Includes	List Price	Sale Price
52-255-565-0	0.250" - 0.375"	2 heads, 2 handles, 1 ring	\$1574.88	\$980.00
52-255-665-0	0.375" - 0.750"	3 heads, 3 handles, 2 rings	1793.36	1345.00
52-255-775-0	0.750" - 2"	3 heads, 3 handles, 2 rings	2817.75	2085.00
52-255-885-0	2" - 4"	3 heads, 3 handles, 2 rings	3820.00	2865.00

Still Using Pin Gages?

MicroGage

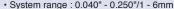
2-Point Small **Bore Gaging System**







The Fowler-Bowers MicroGage 2-point bore gaging system has been designed specifically for the measurement of small bores between 1.0 - 6.0 mm. The measuring heads are equipped with spherical, split-ball, hardchromed contact points.



Switchable resolution 0.0005", 0.00005"/0.01, 0.001, 0.0005mm

Data output: RS-232 or USB proximity sensor

Repeatability: 0.00005"/0.001mm

Sets include setting rings

UKAS-certificates as standard with all setting rings

· Depth stops available

Order No.	Description	List Price	Sale Price
54-551-010-0	0.037" - 0.096"/0.95 - 2.45mm	\$3122.42	\$2950.00
54-551-011-0	0.060" - 0.167"/1.5 - 4.25mm	3055.92	2850.00
54-551-012-0	0.089" - 0.250"/2.25 - 6.35mm	3221.77	3010.00
54-115-526-0	Proximity Cable	136.07	122.00

LIFETIME WARRANTY

We are so confident that these Fowler-Sylvac Mark VI electronic indicators are the most accurate, most dependable, best made products you can buy, we are extending the warranty to last a lifetime! No Gimmicks No Hurdles No Nonsense

Quality, accuracy, dependability, worldclass customer service and now a real Lifetime Warranty!

Mark VI Electronic Indicators

- · Robust construction
- · Water and coolant resistant
- Protection class IP54
- Repeatability: 2μm
- Output: Proximity/Power -USB/RS-232/digimatic/Wireless
- Battery life: 10,000 hours of operation
- · Menus customizable with free software
- Wide range of functions (MIN/MAX/DELTA, TOL, Factor, Preset. Auto Off, etc)
- · Aluminum housing
- Bezel rotates 270°
- · Large display with LED tolerance indicators
- · Includes lug back















Order No.	Description	Maximum Error	Resolution	List Price	Sale Price
54-530-125-0	0 - 0.500"/12.5mm	0.0004"/0.01mm	0.0005"/0.01mm	\$430.75	\$387.50
54-530-135-0	0 - 0.500"/12.5mm	0.00012"/0.003mm	0.00005"/0.001mm	535.81	482.00
54-530-145-0	0 - 1"/25mm	0.0004"/0.01mm	0.0005"/0.01mm	491.64	442.00
54-530-155-0	0 - 1"/25mm	0.00016"/0.004mm	0.00005"/0.001mm	588.34	529.50
54-530-175-0	0 - 2"/50mm	0.00019"/0.005mm	0.00005"/0.001mm	1113.64	1002.00
Bluetooth					
54-530-335-0	0 - 0.500"/12.5mm	0.00012"/0.003mm	0.00005"/0.001mm	\$682.89	\$614.60
54-530-355-0	0 - 1"/25mm	0.00016"/0.004mm	0.00005"/0.001mm	730.22	657.20
Accessories					
54-115-246-BT	USB Bluetooth Rec	eiver		\$47.33	\$42.60
Analog Display					
54-530-535-0	0 - 0.500"/12.5mm	0.00012"/0.003mm	0.00005"/0.001mm	\$619.85	\$557.80
54-530-555-0	0 - 1.00"/25mm	0.00016"/0.004mm	0.00005"/0.001mm	677.69	608.00
I					



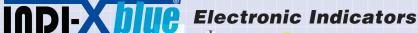








TOOL-A-THON vol. 17.3







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



Order No.	Description	List Price	Sale Price
54-520-255-0	0.50"/12.5mm Indi-X Blue	\$94.45	\$60.00
54-520-250-0	1"/25mm Indi-X Blue	101.69	66.00
54-520-260-0	1"/25mm/64ths Indi-X Blue Inch-Metric-Fraction	104.11	65.00

10 - MAX Electronic Indicators

- · IP54 Coolant & fluid resistant
- · Auto Off feature
- · 2-1/4" dial face
- · 3/8" stem 4-48 thread
- Resolution 0.00005"/0.001mm
- Accuracy: 0.00016"/0.004mm (to 1")
- Tolerance indicators
- · Absolute/incremental reading











Carbide-tipped points!

54-520-320-0

Order No.	Description	List Price	Sale Price
54-520-310-0	1"/25mm Indi-Max	387.70	255.00
54-520-320-0	2"/50mm Indi-Max	503.27	340.00
52-525-605-0	Lugback for 1" and 2" models	17.03	12.50
54-520-399-0	Data cable	155.96	120.00



Order No.	Range	Graduation	Reading	Balanced Reading	Dial Color	List Price	Sale Price
52-520-110-1	1"	0.001"	0 - 100	_	Black Face	\$89.30	\$60.00
52-520-110-2	1"	0.001"	0 - 100	_	White Face	89.30	60.00
52-520-105-0	0.500"	0.001"	0 - 100	0 - 50 -0	White Face	84.47	57.00
52-520-120-0	2"	0.001"	0 - 100	0 - 50 - 0	White Face	138.16	96.50
52-520-129-0	1"	0.0005"	0 - 50	0 - 25 - 0	White Face	108.00	74.00
52-520-135-0	0.05"	0.0001"	0 - 10	0 - 5 - 0	White Face	154.75	108.50
52-520-125-0	0.250"	0.0005"	0 - 50	0 - 25 - 0	White Face	117.88	81.50
52-520-500-0	25mm	0.01mm	0 - 100	0 - 50 - 0	White Face	135.95	94.00

Premium IP54 Shockproof Dial Indicators



Order No.	Range	Graduation	Reading	Contact Point	List Price	Sale Price
52-520-460-0	1"	0.001"	0 - 100	4 - 48 (3/8" stem)	\$96.90	\$81.00
52-520-465-0	1"	0.001"	0 - 100	4 - 48 (3/8" stem)	96.90	81.00





Depth Base Attachment

- · Turn your dial or electronic indicator into a depth gage (may reduce range)
- · 4" length
- Fits indicators with 3/8" mounting stem
- · Ground and lapped base



Order No. 52-125-004-0

Sale \$17.00

List \$39.29

Indicator Chucks



Indicator shown not included



- · Low carbon steel, black oxide finished
- · 0.0140" 0.040" chucking capacity
- · Can be used with small pin gages for special or restricted applications
- Available in both 4 48 and M2.5 threads

Order No. List Price Description Sale Price 52-526-020-0 NEW Indicator Chuck with 4 - 48 thread \$23.00 \$20.00 52-526-021-0 NEW Indicator Chuck with M2.5 thread 23.00 20.00

Indicator Contact Point Set

- · 22 piece set
- 4-48 thread
- · Works with AGD style indicators
- Supplied in fitted case



Order No. 52-525-222-0

List \$37.51



Multimode Electronic Test Indicators

The QuadraTest is the perfect solution to test indicating applications

- · 4 measuring modes: Min, Max, TIR and Direct
- 4 measuring resolutions 0.00005"/0.001mm or 0.0005"/0.01mm
- · Water, oil and coolant resistant to IP65
- 1-1/2" diameter dial face rotates a full 360°
- · Bar graph and numeric digital display
- Meets or exceeds DIN/ISO Standards
 - (Maximum error on .00005" scale at full range: 0.0004")
- Available with 1/2" or extra-long 1-7/16" contact point











Order No.	Range	Contact Point Length	List Price	Sale Price
54-562-777-0	0.040"/1mm	1/2"	\$224.91	\$190.00
54-562-888-0	0.020"/0.5mm	1-7/16"	332.01	290.00
Accessories				
54-115-528-0	Output Cable USB		\$231.13	\$218.00

54-562-777-0





NEW Indicator Design!

- · Solid copper body
- · Super smooth jeweled movement
- · Smoother bezel adjustment for easier zero
- 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







Order No.	Style	Graduations	Dial Diameter	Dial Reading	List Price	Sale Price
52-562-001-0	Horizontal	0.0005"	1-1/2"	0-15-0	\$127.22	\$99.00
52-562-002-0	Horizontal	0.0005"	1"	0-15-0	127.22	99.00

XTEST X-Test Indicators NEW!

NEW Indicator Design!

- · Jeweled movement
- · Revolution counter
- · Easy-to-read tilted dial most indicators!
- Automatic reversal
- · 210° Swivel arc
- 5/32" stem
- Tungsten carbide point: 0.080"
- · Range: 0.060" inch model
- · Range: 1.6mm metric model



TWICE the range of







52-562-005-0

Order No.	Style	Graduations	Dial Diameter	Dial Reading	List Price	Sale Price
52-562-004-0	Vertical	0.0005"	1-1/2"	0-15-0	\$139.31	\$99.00
52-562-005-0	Vertical	0.0005"	1"	0-15-0	139.31	99.00

- · X-Test Dial Test Indicator
- Axial support
- · Height gage bar with clamp
- · Adaptor sleeve: 5/32" to 3/8"







Order No.	Description	Graduations	List Price	Sale Price
52-562-100-0	52-562-001-0 w/accessories	0.0005"	\$183.13	\$155.00
52-562-110-0	52-562-002-0 w/accessories	0.0005"	183.13	155.00

Test Indicators

All Fowler Test Indicators include bi-directional constant clockwise rotation, automatic reversal, three dovetail mountings, jeweled movement, two dovetail clamps and a molded

case.



Order No.	Face Color	Total	Dial Reading	Graduation	Dial Diameter	Point Lenath	List Price	Sale Price
NO.	COIOI	Range	neauiiig	Graduation	Diameter	Lengin	FILLE	Price
52-562-774-0	white	0.030"	0-15-0	0.001"	1"	1/2"	\$114.00	\$75.00
52-562-778-0	black	0.030"	0-15-0	0.0005"	1"	1/2"	121.14	75.00
52-562-775-0	white	0.030"	0-15-0	0.0005"	1"	1/2"	121.14	75.00
52-562-776-0	white	0.030"	0-15-0	0.0005"	1-1/2"	1/2"	126.70	75.00
52-562-780-0	black	0.030"	0-15-0	0.0005"	1-1/2"	1/2"	126.70	75.00



Order	Face	Total	Dial		Dial	Point	List	Sale
No.	Color	Range	Reading	Graduation	Diameter	Length	Price	Price
52-563-770-0	white	0.008"	0-4-0	0.0001"	1"	1/2"	\$121.14	\$75.00
52-563-771-0	black	0.008"	0-4-0	0.0001"	1"	1/2"	121.14	75.00
52-563-777-0	white	0.008"	0-4-0	0.0001"	1-1/2"	1/2"	121.14	75.00
52-563-772-0	black	0.008"	0-4-0	0.0001"	1-1/2"	1/2"	121.14	75.00





Order No.	Face Color	Total Range	Dial Reading	Graduation	Dial Diameter	Point Length	List Price	Sale Price
52-562-781-0	white	.020"	0-10-0	.0005"	1"	1-7/16"	\$124.81	\$78.00
52-562-782-0	black	.020"	0-10-0	.0005"	1"	1-7/16"	124.81	78.00
52-562-783-0	white	.020"	0-10-0	.0005"	1-1/2"	1-7/16"	124.81	78.00
52-562-784-0	black	.020"	0-10-0	.0005"	1-1/2"	1-7/16"	124.81	78.00





Order	Face	Total	Dial		Dial	Point	List	Sale
No.	Color	Range	Reading	Graduation	Diameter	Length	Price	Price
52-560-060-0	white/red	0.020"	0-10-0	0.0005"	1"	1-1/2"	\$95.71	\$65.00
		0.7mm	025-0	0.01mm				



You

TENDER: 1.4" to 6" Dial Bore Gage Set

with Carbide Anvils

Industry's two most popular bore gage ranges combined in one easy-to-use **ELECTRONIC set!**

Preset size of master for absolute reading and use minimum hold feature to lock on the bore size as the gage is rocked in the part to be measured.



Bore Gage Features:

- Range: 1.4"-6"/35mm-150mm
- Carbide anvils
- Self-centering

Indicator Features:

- Bar graph and numeric digital display
- Resolution: 0.00005"/0.001mm
- · Preset with recall
- ABS/INC measurement
- · Min/Max/TIR



For instructional video search "X-tender Bore Gage" at www.youtube.com

Description	List Price	Sale Price
1.4" - 6" Electronic Bore Gage Set	\$326.74	\$255.00
NEW 20" Depth Extension	81.60	73.00
NEW 40" Depth Extension	102.00	91.00
	1.4" - 6" Electronic Bore Gage Set NEW 20" Depth Extension	1.4" - 6" Electronic Bore Gage Set \$326.74 NEW 20" Depth Extension 81.60

Dial Bore Gage Sets with Carbide Anvils

Carbide anvils

- Easy-to-read
- Economical
- · Insulated grip
- · Extensions cannot be used with 52-646-100-0





52-646-100-0

Order No.	Range	Graduation	List Price	Sale Price
52-646-100-0	0.7 - 1.5"	0.0005"	\$150.55	\$110.00
52-646-300-0	2 - 6"	0.0005"	124.39	105.00
52-646-450-0	NEW 20" Depth Ext	tension	81.60	73.00
52-646-475-0	NEW 40" Depth Ext	tension	102.00	91.00

1.4" to 6" or 35mm to 160mm TENDER Dial Bore Gage Sets with Carbide Anvils

Industry's two most popular bore gage ranges combined in one set!

Carbide Anvils

- · Easy-to-read
- Graduation: 0.0005" or 0.01mm
- · Insulated grip
- · 1.4" to 6" range or 35 to 160mm





52-646-400-0

Order No.	Description	Graduation	List Price	Sale Price
52-646-400-0	Inch X-Tender Bore Gage Set	0.0005"	\$189.11	\$129.00
52-646-500-0	Inch X-Tender Bore Gage Set	0.0001"	236.39	170.00
52-646-220-0	Metric X-Tender Bore Gage Set	0.01mm	208.97	120.00
52-646-450-0	NEW 20" Depth Extension		81.60	73.00
52-646-475-0	NEW 40" Depth Extension		102.00	91.00

Bore Gage Setting Master Kit - Inch & Metric

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 (53-646-000-1 - Inch Model)

- Base anvil: 3.950" x 1.050"
- · Adjustable anvil 2.375" x .375" (two each)
 - Internal capacity: 6"/150mm
 - Depth capacity: 1"/25mm
 - Centralizer capacity width: 2.750"
 - Quick-release holder for fast adjustment
 - · Can also be used for external setting, depending on

application (external mics, snap gages, caliper gages)

Economy Gage Block Sets

Inch model:

- 36 piece
- Tolerances to .00005"
- Certificate of Calibration to N.I.S.T.

Metric model:

- 33 piece
- · AS-2 grade
- Certificate of Calibration to N.I.S.T.



	Order No.	Description	List Price	Sale Price
	53-646-000-1	Inch Bore Gage Setting Master Kit	\$303.42	\$210.00
1	53-646-010-0	Standard Metric Bore Gage Setting Master Kit	316.18	180.00

Micrometer & Snap Gage Checking Set

Fowler's setting master is quick, easy and extremely accurate. It comes with a certificate of calibration and a fitted aluminum case. Save time and money by calibrating your own measuring tools quickly and easily.

Set Includes:

Calibration certification traceable to N.I.S.T. standards

Includes:

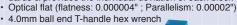
ore gage setting master

and gage block set.

All in a custom-fitted

casal

- Stand height: 12.5"
- 9 pc. Grade AS-0 gage block set (sizes: 0.625", 0.100", 0.125", 0.200", 0.250", 0.300", 0.500", 1.000" & 2.000"
- · Certificate of calibration is traceable to N.I.S.T. standards & provides the individual deviation of each block







Order No.	Description	List Price	Sale Price
53-813-001-2	Complete Micrometer and Snap Gage Checking Set	\$334.48	\$250.00
53-813-002-0	Mic Checker Holder without Blocks	167.63	135.00





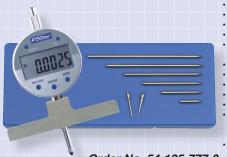






FOOL-A-THON vol. 17.3

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



• 0-1" travel electronic indicator

Zero reset at any position

· On/off button

Relative/absolute measuring

· Bottom surface of the base is hardened,

ground & lapped
• Full 22" range

• Accuracy ± 0.001"

• Resolution .0005"/.01mm

ABS/Incremental measuring

• 4" Base

 Includes 2 extra points for small hole applications; one 0.078" dia. x 1" long and one needle point x 1" long

· Includes shop-hardened case

Order No. 54-125-777-0

Sale \$199.00

X-DEPTH 22° 0-22" Depth Gage

X-SERIES

List \$248.36

Twice the range of competitive products!

- 0 1" travel indicator
- 0.001" Graduations
- Accuracy ± 0.001"
- · Rods connect together for full 22" capacity
- Base size: 4"
- Includes 2 extra points for small hole applications; one 0.078" dia. x 1" long and one needle point x 1" long

Order No. 52-125-006-1

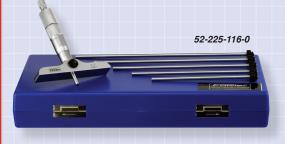
Sale \$135.0

List \$184.27





Economy Depth Micrometers





- Base surface hardened, ground & lapped
- Ratchet thimble
- · Locking clamp
- · Rod diameter: 0.176"

Order No.	Range	Graduation	Base	List Price	Sale Price
52-225-110-0	0 - 4"	0.001"	2.5"	\$132.52	\$110.00
52-225-112-0	0 - 6"	0.001"	2.5"	156.50	130.00
52-225-114-0	0 - 4"	0.001"	4"	143.15	120.00
52-225-116-0	0 - 6"	0.001"	4"	167.50	140.00

HOLDXTEC **Magnetic Base**

- · Accepts 3/8" indicators
- · Dovetail clamp for test indicators
- · Features 2 fine adjusts making it a 6-Axis mag base
- · Mag base has 180 lb. pull with on/off switch
- Central locking system



Order No. 52-585-085-0

Sale \$95.00

List \$159.38

Articulating Mag Base



Order No. 52-585-008-0

· Fine adjust • 85 lb. pull

Sale \$69.00

List \$96.87

Magnetic Base with Fine Adjustment



- · Use with milling machines, lathes, etc.
- Base dimensions 2-1/2" x 2-1/8" x 2"(63.5mm x 54mm x 50mm)
- Accepts all AGD dial indicators
- · V-base for placing on round surfaces
- · On/off lever releases magnet · No risk of marring polished
- · Mounts test indicators with 1/4" post mount

Order No. 52-585-020-0

Sale \$48.00

List \$69.19



- · Sturdy and compact with extreme stability
- 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
- Flatness: 0.00005"

Order No. 52-580-030-0

List \$118.88













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AG Protractor

The mini-MAG Protractor provides instant 360° digital inclination display of any angle with the additional unique feature of embedded magnets on both sides and the bottom which make it ideal for a variety of measurements.

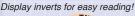
- · Embedded magnets with 3.5lb. pull
- Uses standard 9V battery (250 hrs.) Measuring range: 360° (4 x 90°)
- · Display automatically inverts
- Resolution: 0.05°
- Accuracy: ± 0.2°
- Repeatability: 0.05°
- Dimensions 2.375" x 1.375" x 2.375"
- Hold feature

Order No. 54-422-450-1

Sale \$50.

List \$96.87







ip54

Mini-Mag Plus

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

- · IP54 protected against debris and fluids
- USB rechargeable battery with status light (cable included)
- · 6 month battery life
- · Backlit display
- · Tilt % function
- Auto off after 5 minutes
- · Embedded magnets
- Measuring range: 360° (4 x 90)
- · Display automatically inverts
- Resolution: 0.05°
- Accuracy: ± 0.2°
- Repeatability: 0.05°
- Hold feature
- · Zero function
- Smaller size: 2.12" x 2.12" x .9"
- · Light weight: 2.7 oz.

Order No. 54-422-500-0

Sale \$75.00

List \$107.10





XTRA-VALUE Digi-Level

The Xtra-Value Digi-Level provides instant 360° digital inclination display of any angle. Features aluminum housing, with large LCD, reading hold, absolute 0° at sea level.

- · Measuring Range: 360° (4 x 90°)
- Resolution: 0.05°
- Accuracy: ± 0.2° maximum error
- Repeatability: ± 0.05°
- Dimension: 4" L x 1" W x 3" H
- · Voltage: Standard 9V Battery
- · Battery Life: up to 250 hrs.
- Operating Temp: -5°C to 50°C (23°F to 122°F)
- Storage Temp: -20°C to 65°C (-4°F to 176°F)
- · Weight: 1.1 lbs.

Order No. 54-422-444-0



Block not included

Sale \$100.00

List \$121.14

TRA-VALUE Internal & External Electronic Caliper Gages





INCH • METRIC • FRACTION

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



Order No.	Description	Range	List Price	Sale Price
54-554-630	Outside Caliper Gage	0 - 6"/150mm	\$47.91	\$30.00
54-554-730	Inside Caliper Gage	0.5 - 6"/150mm	47.97	30.00

TRA-VALUE Digital Thickness Gage

INCH • METRIC • FRACTION

- · Range: 0-1"/25mm
- · Robust housing
- · Large LCD display
- Reading: .001"/.01mm/1/64ths
- · Accuracy: .004"
- · Includes 1/8" ball contact, taper point and a long-stem point
- · Battery: CR2032
- Three interchangeable points
- · Batter life: approximately 1 year

Order No. 54-554-830-0



List \$54.00

Electronic Divider

- Range: 0-8"/200mm
- Robust housing
- Large LCD displayReading: 0.01"/.1mm/1/64ths
- Accuracy: 0.001"
- Satin chrome finish
- Alloy jaws
- · Includes metal scribe and graphite attachments

Order No. 54-554-930-0

Sale \$50.00

List \$81.21

















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EZ-Read Black Face Rules

Hardened stainless steel

· White easy-to-read microfine graduations against a black, non-glare finish

52-330-006-0

Satin Chrome Rules

Tempered steel

Rules

· Non-glare

Sharp, easy-to-read microfine graduations

GRADUATIONS 4R: 8ths, 16ths, 32nds, 64ths 16R: 32nds, 64ths, 50ths, 100ths

RIGID STEEL RULES

Order No.	Finish	Size	Reading	List Price	Sale Price
52-330-006-0	Satin Chrome	6"	4R	\$11.95	\$10.00
52-337-006-0	Black	6"	4R	10.09	8.40
52-330-012-0	Satin Chrome	12"	4R	20.73	17.30
52-337-012-0	Black	12"	4R	20.73	17.30
52-350-006-0	Satin Chrome	6"	16R	11.19	9.00
52-338-006-0	Black	6"	16R	10.09	8.20
52-350-012-0	Satin Chrome	12"	16R	19.30	15.50
52-338-012-0	Black	12"	16R	15.14	12.50

FLEXIBLE STEEL RULES

Order No.	Finish	Size	Reading	List Price	Sale Price
52-295-006-0	Satin Chrome	6"	4R	\$11.52	\$9.60
52-297-006-0	Black	6"	4R	9.44	7.85
52-295-012-0	Satin Chrome	12"	4R	17.66	15.00
52-297-012-0	Black	12"	4R	14.47	12.50
52-308-006-0	Black	6"	16R	9.65	8.00
52-310-006-0	Satin Chrome	6"	16R	11.52	10.00
52-308-012-0	Black	12"	16R	14.47	12.00
52-310-012-0	Satin Chrome	12"	16R	16.89	14.00

Combination Square

- · Blades are chrome plated, fully hardened and tempered
- · Includes square, protractor and center head with 12" blade
- · Square head has level and scriber point
- Double indexed protractor is graduated 180° in both directions
- · Graduated in 8ths, 16ths, 32nds and 64ths

Order No. 52-370-012-0

Sale \$150.00 List \$204.59



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.

- · Indicator assembly with 1.6" (42.5mm) diameter dial
- Graduations and revolution counter 0.0005" (.01mm)
- · 3 Internal and 3 External feelers
- · Center point feeler
- · Restraining arm

Specifications:

- Length: 6-7/8" (175mm)
 Shank: 3/8" dia. x 7/8" (10mm x 20mm) long
- · Feeler ball: 1/8" (3mm) dia.
- Dial readings: 0-50
- · Measuring range: 0.250" (6mm) axis offset
- Speed—recommended not to exceed approx. 800 RPM
- · Repeatability to within 0.0002" (0.005mm) of true center
- Capacity depends on feelers installed, but overall range is 5/32-12" (4-300mm) internal diameter; 0-12" (0-300mm) external diameter



52-710-025-0

Order No.	Description	List Price	Sale Price
52-710-025-0	2D Coaxial Set-Inch	\$243.77	\$162.00
52-710-030-0	2D Coaxial Set-Metric	248.54	176.00

Bevel & Magnetic Base Squares NEW!

- · Made of hardened chrome steel
- · Bores in blade reduces weight and provides fixturing locations
- · Embedded magnets in base models (52-434-Series) holds squares in position vertically or horizontally
- · Designed for layout and measurement work
- 52-434-Series has graduated scales in 16ths
- on front and rear of blade
- · Ground and lapped to meet DIN 875 standards



Magnetic

Order No.	Size/Description	List Price	Sale Price
52-438-004-0	NEW 4" Bevel Square with bores	\$25.00	\$22.50
52-438-006-0	NEW 6" Bevel Square with bores	39.00	35.00
52-438-008-0	NEW 8" Bevel Square with bores	48.00	43.00
52-434-004-0	NEW 4" Straight Edge Square w/scale and magnets	24.00	21.50
52-434-006-0	NEW 6" Straight Edge Square w/scale and magnets	33.00	29.50
52-434-008-0	NEW 8" Straight Edge Square w/scale and magnets	45.00	40.50
52-433-004-0	NEW 4" Straight Edge Square with bores	18.00	16.00
52-433-006-0	NEW 6" Straight Edge Square with bores	26.00	23.00
52-433-008-0	NEW 8" Straight Edge Square with bores	39.00	35.00

Steel Squares & Sets



- · Made of the finest carbon tool steel, these economy squares have true right angles both inside and outside · Beams and blades ground and lapped for straightness and parallelism
- · Hardened blade
- grooved at inner corner for clearance of burrs and dirt

Sets come

- eness of blade edge to the working face: $2'' \& 3'' = \pm 0.0006''$,
- $= \pm 0.0008$ ", 9" & 12" $= \pm 0.0012$ "

П	Blade Size	Beam Size
	2"	1.5"
	3"	2.5"
	4"	3"
	6"	4"
	9"	6"
	12"	8"

- 1	A HIGH	• Beam • Square 4" & 6" =
4		
52-4	132-246-0	

complete in a "Shop Hardened" molded case!

Order No.	Size/Description	List Price	Sale Price
52-432-444-0	3 Piece Square Set: 2", 4" & 6" with shop hardened case	\$62.72	\$54.00
52-432-246-0	4 Piece Square Set: 2", 3", 4" & 6" with shop hardened case	74.67	63.00
52-432-469-0	4 Piece Square Set: 4", 6", 9" & 12" with shop hardened case	158.10	129.00
52-432-004-0	4" Square only	22.59	18.00
52-432-006-0	6" Square only	25.11	20.00
52-432-009-0	9" Square only	50.22	41.00
52-432-012-0	12" Square only	85.31	73.00

Cylindrical Squares

- · Used for checking squares, height gages and other instruments
- Hardened and the ends are lapped to 90° angular accuracy
- 6" cylindrical squares: ± 0.0001"
- 12" cylindrical square: ± 0.00015"
- · Includes handles and wood case

Order No.	Description	List Price	Sale Price
52-750-006-0	6" cylindrical square	\$193.11	\$158.00
52-750-012-0	12" cylindrical square	275.79	230.00





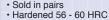


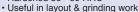






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· 23 holes for easy clamping



Order No.	Description	Accuracy	List Price	Sale Price
52-439-031-0	1-2-3 Blocks	± 0.0002"/1"	\$91.50	\$62.00
52-439-246-0	2-4-6 Blocks	± 0.0003"/1"	215.90	125.00

Premium 1-2-3 Block Set

- · Hardened (HRC 55 60)
- · 23 holes for easy clamping, 5 tapped, 18 untapped thru holes
- · Complete in a shop-hardened case.
- Surface finish: 6-16μ"
- Includes hex wrench and 5 mounting bolts (3/8"-16)



Order No. 52-439-032-0

Sale \$72.00

List \$83.13

1/8" Parallel Set

- · Made from high-grade alloy steel, hardened and ground from 1/8" stock with 2 holes in each parallel.
- 10 pairs, 6" length, 1/8" width. 1/2", 5/8", 3/4", 7/8", 1", 1-1/8", 1-1/4", 1-3/8", 1-1/2" & 1-5/8"
- · Height specifications relate to consistency within each pair.
- Absolute heights are nominal.
- Parallelism: ± 0.0002
- Hardness 58-63 HRC
- Paired in height: ± 0.001"



Order No. 52-437-000-0

Sale \$170.00

List \$233.59

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 \$104.00 List \$124.89

Straight Edges



- Made of selected steels
- Hardened for superior wear resistance
- Matched to precision masters to ensure precision
- Width and thickness have been carefully determined to provide optimum rigidity-to-weight ratios

Order No.	Length	Width	Straightness	Thick	List Price	Sale Price
52-480-050-0	18"	1.32"	0.0003"	0.150"	\$80.33	\$59.00
52-480-055-0	24"	1.61"	0.0003"	0.150"	97.68	68.00
52-480-060-0	36"	2.73"	0.0004"	0.220"	131.80	81.40

Planer & Shaper Gage

- · Range 1/4" to 6-1/4"
- Base and slide are beveled to provide accurate alignment and parallelism
- Base and slide are hardened to 50 HRC
- Base size 3/4" x 5"
- Supplied with 1" and 3" extension posts, maximum height 6-1/4"
- Precision level ensures accuracy
- Parallelism: base to top surface = 0.00032"
- Platform has extra tapped holes to accommodate post for dial indicators and other accessories
- Fitted wood case



Order No. 52-460-005-0

Sale \$145.00 Lis

List \$199.00











OOL-A-THON vol. 17.3



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





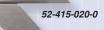


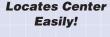
Along with light indication, model #54-575-650-0 emits an audible "beep" at time of contact.

Order No.	Stylus	Shank	Audible	Battery	List Price	Sale Price
54-575-600-0	0.200"	1/2"	NO	12 volt	\$33.77	\$25.00
54-575-625-0	0.200"	1/2"	NO	12 volt	119.09	91.00
54-575-650-0	0.400"	3/4"	YES	12 volt	119.09	91.00

Center Finders

- · Easily locates the center of round parts for scribing
- · Blade hardened to 48-52 HRC
- Accurate to 0.0012"/0.03mm









Order No.	Description	List Price	Sale Price
52-415-020-0	1.5" Center Finder	\$17.00	\$15.00
52-415-025-0	3" Center Finder	19.00	17.00

Magnetic Dial Protractor



- · Both flat and "V" mounting with strong built-in magnet
- · Punch located at center of "V"
- 1° graduations and accuracy
- · Supplied with extra punch



Magnets Hold at Any Angle!

Order No. 52-450-100-0

Sale \$115.00 List \$142.80

Extra Long Drive Pin Punch

- · Made of chrome alloy steel. Hardened on both ends.
- · Knurled finger grip. Length is 8".
- Point sizes: 1/8", 3/16", 1/4", 5/16" and 3/8"
- · Includes fitted case

Order No. 52-500-300-0

Sale \$13.00

List \$17.50

Transfer Punch Sets

- · Punches are made of hardened and tempered tool steel, black oxide finished
- · All sizes are marked and diameters are slightly undersized for easy handling
- · Set supplied with index stand





Order No.	Description	Range	List Price	Sale Price
52-482-028-0	28 pc. Transfer Punch Set	3/32" to 1/2"	\$52.43	\$35.00
52-482-030-0	33 pc. Transfer Punch Set	1/2" to 1"	91.14	70.00

TRA-PUNCH Heavy Duty Transfer Punch Set

- 1/2" 1" range in 1/64"
- · 36 piece set, 3 master punches and 33 individually sized sleeves
- · Simply select the laser etched sleeve for the size required, place it on one of the master punches for that range and it is ready to use
- Punch tips are hardened 48-55 HRC
- Master punches are 4-7/8" in length and sleeves are 1" in length
- 1/4" the weight of a conventional transfer punch set

Order No. 52-482-040-0



List \$90.50

Bell Punch

- · Easily locates and allows center punching of ends on round stock up to 1.4'
- Hardened to 48-52 HRC
- Accurate to 0.0016"/0.04mm





Order No.	Description	List Price	Sale Price
52-500-150-0	Bell Punch	\$21.00	\$18.00
52-500-155-0	Replacement punch	4.50	4.00











TOOL-A-THON vol. 17.3

A "must" for any tool room and machine shop for general marking purposes, Fowler's metal etching pen is used on copper, copper alloy, stainless steel, hardened steel tools and castings, etc. Use it to initial personal tools or to restore graduations on rules, height gages, calipers, micrometers, etc. Its low-cost, disposable design offers limitless applications.

Order No. 52-730-005-0

Sale \$14.50 List \$18.26

Carbide Super Scriber



· Lightweight · Retractable carbide tip · Knurled grip · Machined aluminum body · Pocket clip

Order No.	Description	Overall Length	List Price	Sale Price
52-500-050-0	Carbide Super Scriber	6.5"	\$34.27	\$25.00
52-500-055-0	Carbide Refill		10.50	8.00

2 in 1 Scriber & Center Punch

- · Contains a carbide tipped scriber and a steal center punch all in 1 tool
- · Carbide tip is reversible for double the life
- · Knurled finger grip
- · 1/8" center punch tip · Supplied with convenient pocket clip



Center Punch Below!



Order No. 52-500-060-0

Sale \$6.95

List \$9.68

Replaceable Tip Carbide Scriber w/Magnetic End Cap



· Heavy duty · Replaceable carbide tip · Knurled grip · Magnetic end cap · Pocket clip

Order No.	Description	Overall Length	List Price	Sale Price
52-500-080-0	Replaceable Tip Carbide w/magnetic end cap	5.75"	\$9.45	\$5.95
52-500-085-0	Carbide Refill		1.91	1.50

Fixed Tip Scriber



· Heavy duty · Fixed carbide tip · Pencil-like design · 6" overall length · Pocket clip

Order No. 52-500-090-0

List \$6.36

Portable Durometers

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

Applications:

35° Blunt Taper Durometers are suitable for testing soft and natural rubber products, neoprene, polyesters, soft PVS, 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.



Order No.	Penetrator	Shore Scale	List Price	Sale Price
53-762-301-0	Blunt taper 30°	Α	\$131.09	\$110.00
53-762-302-0	Sharp 30°	D	150.86	128.00

3 Piece Deburring Cutter Set

- · Most economical
- · 3 deburring tools
- Blades are replaceable
- 3 different blades from heavy duty to extra fine.

for brass & cast iron for steel & aluminum for plastic Order No. 52-483-555-0

List \$12.04

Rapid Burr

- "Quick-change" thumb operated button for instant removal, insertion and locking of new blades.
- Supplied with a blade for steel and aluminum.
- Unique rounded head blade swivels freely
- slippage or fatigue.

· Molded to comfortably fit the user's hand without for steel & aluminum Order No. 52-483-025-0 List \$7.04

Deburring Cutter

- "Quick-change" thumb operated button for instant removal, insertion and locking of new blades.
- · Supplied with three blades: 1) for steel and aluminum, 2) for brass and cast iron, 3) for straight edges on all types of metals all with rounded heads for safe deburring that swivel freely
- · Hollow handle with a removable end cap for storage of blades
- · Molded to comfortably fit the user's hand

Order No. 52-483-003-0

Sale \$ 5

List \$15.44













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Pocket Scope and Micro-Lite



52-662-050-0

Available in 20x or 40x

Pocket Scope

- · Fixed focus, no moving parts-never loses focus.
- Accurate readings without adjusting
- · Compact in size, under 5"
- · Provides on-the-job viewing
- · Special bevelled opening gathers and focuses light

Micro-Lite

 Invaluable for inspection and measurement of hard-to-see and reach places

Order No.	Description	Field of View	Scale Range	List Price	Sale Price
52-662-020-0	20x Pocket-Scope with .002" reticle	0.190"	018"	\$35.30	\$25.00
52-662-040-0	40x Pocket-Scope with .001" reticle	0.082"	007"	35.30	25.00
52-662-045-0	Micro-Light (uses AAA battery not include	ded)		25.00	15.00
52-662-050-0	20x Pocket Scope & Micro-Lite Set			59.47	35.00
52-662-055-0	40x Pocket Scope & Micro-Lite Set			59.47	35.00

Deep Hole Light



- Permits viewing in deep holes, around corners, under grooves, etc.
- Includes battery case for 2 penlight batteries and a battery case for one battery for use where space is limited; batteries not included

Features a positive switch

- Curved and straight light conveying devices place intense illumination at their ends directly on the bottom of the hole being viewed
- A small mirror permits viewing in a manner similar to a dentist examining teeth
- · Includes plastic case

Order No. 52-270-000-0

Sale \$35.00

List \$48.66

10x Pocket Optical Comparator Set with illuminator



Fowler's 10x Pocket Optical Comparator Set magnifies images which are sharp, undistorted and aberration free. Convenient for checking angles, thread measurements, hole sizes, as well as photo engraving, etching and many more applications. The illuminator attachment assists where additional light is required. The optical comparator, illuminator and the nine reticles are packaged in a durable wooden case.

Order No. 52-664-609-0

Sale \$115.00

List \$141.51

SHOP-BLOX® Rectangular Gage Block Sets



- · Manufactured to meet N.I.S.T. Federal Specification ASME B89. 1.9 - 2002 tolerances on length for inch gage blocks
- Certificate of Calibration traceable to N.I.S.T.
- Tolerances to ± 0.00005"
- · In high-quality fitted wood case



Order No.	Description	List Price	Sale Price
53-672-036-0	36 piece Economy Rectangular Gage Block Set	\$309.19	\$195.00
53-672-081-0	81 piece Economy Rectangular Gage Block Set	528.81	340.00

X-TENDED RANGE Pin Gage Set Minus and Plus Tolerances



53-880-823-0

Ideal for checking hole size, location, gage slots, distance between holes, go/no-go gaging and setting other gages and micrometers.

- · Class ZZ
- · Black oxide finish offers extra protection against corrosion and rust, promotes longer life, and highlights wear trends that enables calibration to be performed more effectively
- 240 pcs
- Range: 0.011" 0.250" in .001" increments.
- · Set includes 2 handles and our X-Glide all purpose teflon lubricant
- · Certificate of accuracy traceable to N.I.S.T. and registered ISO 9001



Order No.	Description	Accuracy	List Price	Sale Price
53-880-823-0	Plus Pin Gage Set	+0.0002", -0.0000"	\$246.37	\$155.00
53-880-833-0	Minus Pin Gage Set	+0.0000", -0.0002"	246.37	155.00

Pin Gage Handles

- · 8 sizes cover a full range of pin gages (0.011" - 1.0")
- Color coded handle for GO, NO/GO applications
- Both handle and collets are made of aluminum for pin protection
- · Collets are spring loaded and selfcenterina

СО	0.061"-0.260" NO GO
	53-885-001-0



Order No.	Description	List Price	Sale Price
53-885-000-0	0.011" - 0.060"	\$19.46	\$15.00
53-885-001-0	0.061" - 0.250"	22.90	18.00
53-885-002-0	0.251" - 0.500"	26.91	21.00
53-885-003-0	0.501" - 0.625"	29.77	23.00
53-885-004-0	0.626" - 0.750"	36.41	28.00
53-885-005-0	0.751" - 0.832"	39.74	32.00
53-885-006-0	0.833" - 0.916"	44.13	35.00
53-885-007-0	0.917" - 1.0"	49.69	40.00
53-885-008-0	All Sizes 0.011" - 1.0"	253.73	200.00





















Industrial & Automotive Tools

Extended Range Digit Disc Brake Micrometers with Twin Conical Anvils



Inch/Metric

- · Fast, easy-to-read digit counter
- · Can be used for special industrial applications
- Range: 0.3"-1.7"/10-45mm
- Digital counter reads 0.001"/0.01mm sleeve reads 0.0001"/0.01mm
- · Ratchet thimble
- · Carbide tipped measuring faces
- · Includes case and measuring standard

Order No.	Description	List Price	Sale Price
52-234-522-0	Extended Range Digit Disc Brake Micrometer - Inch	\$119.98	\$45.00
52-234-523-0	Extended Range Digit Disc Brake Micrometer - Metric	119.98	45.00

Disc and Rotor/Ball Joint Gage



The pairing of a vice grip and flex arm indicator holder allows this combination to adapt to endless positions for a multitude of measuring application.

- Checks ball joint wear and disc rotor runout
- · Checks tire and wheel runout, gear backlash, valve guide wear, etc.
- Meets state inspection requirements
- · Indicator features 0-1" travel, and 0.001" graduations
- · Includes shop-hardened case

Order No. 52-520-757-0



List \$163.58



Industrial & Automotive Tools

EZ-Drum Electronic Brake Drum Gage Internal/External Gage



· 4" to 20"/100 to 500mm Capacity

· 4" drum preset

• Preset depth at 1" and 1.5"

• Resolution 0.0005"/0.01mm (fractions in 1/64" increments)

Beam has vernier scale to double check reading

· Can be used to check some disc measurements

INCH • METRIC • FRACTION

Order No. 54-150-020-0

Sale \$290.00

List \$389.56

RFAN Tire Gage

For tire tread thickness measurement or various other 1" depth applications

- · Spring-loaded and hold measurement button for ease-of-use
- Super-large display
- Range: 1"/25mm
- · Resolution: 0.0005"/.01mm (Fractions in 1/64" increments)
- Supplied in vinyl holster2.1" base
- · 0.095" diameter rod

Order No. 54-225-500-0

Sale \$15.

List \$24.16

INCH • METRIC • FRACTION

Universal Magnetic Mini Flex Base with Zoom LED Flashlight

This product is ideal for focused applications in Industrial and Automotive!

- · Zoomable 150 lumens ultra-bright flashlight with 3 modes; bright, low and flashing
- · Powerful, low-profile magnetic base
- · Slim, articulating flex base allows easy and accurate positioning.
- · Quick release mounting bracket clamp
- · Batteries included

Order No. 52-630-451-1

Sale \$



















Willrich Precision Ph 866-945-5742 sales@willrich.com

