

GREAT DEALS

RICES EFFECTIVE SEPTEMBER 1

Bulletin No. 2193

FALL PROMO 2015

PRECISION TOOLS & INSTRUMENTS







Dear Valued Customers,

we wanted to take this opportunity to personally thank the companies and individuals who partner with us, for their

The Fall Promotion is our second large scale Precision Tool Promotion of 2015

Please check our website at www.mitutoyo.com to watch for



Shigeyuki Sasaki





- New electromagnetic ABSOLUTE sensor Improved resistance to environmental conditions such as dirt, oil and water that can cause false readings
- New ratchet thimble models improve one-hand operability
- New Anti-slip finish for improved grip while taking measurements
- Long battery life 2.4 years under normal operation
- Fully compatible with existing Mitutoyo Digimatic peripherals (SPC Cables, U-Wave wireless transmitters, DP1-VR...etc) – SPC output enabled IP65 Models
- Function-lock system prevents inadvertent setting changes
- Certificate of inspection provided





Order No. Range		Resolution	Remarks	List Price	Sale Price					
IP65 - With SPC Output										
293-330-30	0-1"/0-25.4mm	.00005"/0.001mm	Ratchet Stop	\$240.00	\$228.00					
293-331-30	1-2"/25.4-50.8mm	.00005"/0.001mm	Ratchet Stop w/Standard	\$283.00	\$268.85					
	IP65 - Non-SPC Output									
293-340-30	0-1"/0-25.4mm	.00005"/0.001mm	Ratchet Stop	\$178.00	\$169.10					
293-344-30	0-1"/0-25.4mm	.00005"/0.001mm	0.001mm Ratchet Thimble		\$169.10					
293-348-30	0-1"/0-25.4mm	.00005"/0.001mm Friction Thimble		\$178.00	\$169.10					
293-341-30	1-2"/25.4-50.8mm	.00005"/0.001mm	Ratchet Stop w/Standard	\$243.00	\$230.85					
293-345-30	1-2"/25.4-50.8mm	.00005"/0.001mm	Ratchet Thimble w/Standard	\$243.00	\$230.85					
		MDC Lite Mic	rometers							
293-831-30	0 - 1" / 0 - 25.4mm	.00005" / 0.001mm	Ratchet Stop	\$135.00	\$128.25					
293-832-30	0 - 1" / 0 - 25.4mm	.00005" / 0.001mm	Friction Thimble	\$139.00	\$132.05					

Order No.	Description	List Price	Sale Price
05CZA662	40" SPC Cable	\$83.80	\$75.50
05CZA663	80" SPC Cable	\$92.45	\$83.50





QuantuMike

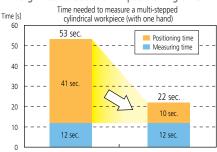
Coolant Proof Micrometer



Features

- Faster measurement with 2mm travel per revolution instead of the standard 0.5mm
- A patented ratchet thimble mechanism helps ensure repeatability
- A Function lock helps prevent error
- IP-65 protection level
- Certificate of inspection provided

Significant reduction in positioning time



Conventional model

QuantuMike

Order No.	Range	Resolution	List Price	Sale Price
293-180*	0-1"/0-25mm	.00005"/0.001mm	\$262.00	\$248.90
293-181*	1-2"/25-50mm	.00005"/0.001mm	\$300.00	\$285.00
293-185	0-1"/0-25mm	.00005"/0.001mm	\$226.00	\$217.70
293-186	1-2"/25-50mm	.00005"/0.001mm	\$258.00	\$245.10

*with SPC Output

Order No.	Description	List Price	Sale Price	
05CZA662	40" SPC Cable	\$83.80	\$75.50	
05CZA663	80" SPC Cable	\$92.45	\$83.50	



MDH Micrometer

High-Accuracy Sub-Micron Digimatic Micrometer



Features

- Enabling .000005"/ 0.1µm resolution measurement, this micrometer is ideal for customers who need to make highly accurate measurements with a hand-held tool.
- The ABS (absolute) rotary sensor also eliminates the need to perform origin setting each time the power is turned on, letting you start measuring straight away. With no possibility of overspeed errors, the High-Accuracy Digimatic Micrometer also delivers a higher level of reliability.
- Certificate of inspection provided

	Order No. Range		Resolution	Accuracy	List Price	Sale Price
293-100 0 -		0 - 25mm	0.0001mm/ 0.0005mm (switchable)	±0.5µm	\$1,630.00	\$1,467.00
	293-130	0 - 1" 0 - 25.4mm	.000005"/.00002" 0.0001mm/0.0005mm (switchable)	±.00002"	\$1,630.00	\$1,467.00

				\
Order No.	Description	List Price	Sale Price	
05CZA662	40" SPC Cable	\$83.80	\$75.50	
05CZA663	80" SPC Cable	\$92.45	\$83.50	





Function lock

Micrometer Stand

The micrometer stand is designed to provide the convenience of a benchtop tool with hand micrometers or other gages.

Order No. Description		List Price	Sale Price	
156-101-10	Micrometer Stand	\$110.00	\$99.00	





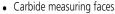


Outside Micrometer Sets — Inch Models









- Ratchet stop
- Hammertone, baked-enamel-finished frame.
- With a standard bar except for 0-1" model.
- Certificate of inspection provided (0-1",1-2" models only)





.001" graduation

Order No.	Range	Included in set	Mass(g)	List Price	Sale Price
103-929	0 - 3" (3pcs./set)	103-177, 103-178, 103-179, 2 Micrometer Standards	750	\$391.00	\$352.00
103-930	0 - 4" (4pcs./set)	103-177, 103-178, 103-179, 103-180, 3 Micrometer Standards	1600	\$469.00	\$422.00
103-904-10	103-904-10 0 - 6" (6pcs./set) 103-177, 103-178, 103-179, 103-180, 103-181, 103-182, 5 Micrometer Standards		2200	\$998.00	\$898.00
103-905-10 0 - 12" (12pcs./set) 103-177, 103-178, 103-179, 103-180, 103-181, 103-1 103-185, 103-186, 103-187, 103-188, 11 Micrometer 1		103-177, 103-178, 103-179, 103-180, 103-181, 103-182, 103-183, 103-184, 103-185, 103-186, 103-187, 103-188, 11 Micrometer Standards	9000	\$2,600.00	\$2,340.00
103-906	6 - 12" (6pcs./set)	103-183, 103-184, 103-185, 103-186, 103-187, 103-188, 6 Micrometer Standards		\$1,650.00	\$1,485.00

.0001" graduation

Order No.	Range	Included in set		List Price	Sale Price
103-922	0 - 3" (3pcs./set) 103-135, 103-136, 103-217, 2pcs. Micrometer Standards		705	\$431.00	\$388.00
103-931	0 - 4" (4pcs./set)	./set) 103-135, 103-136, 103-217, 103-218, 3pcs. Micrometer Standards		\$532.00	\$479.00
103-907-40	907-40 0 - 6" (6pcs./set) 103-135, 103-136, 103-217, 103-218, 103-219, 103-220, 5 Micrometer Standards		2200	\$876.00	\$789.00
103-908-40	0 - 12" (12pcs./set)	103-135, 103-136, 103-217, 103-218, 103-219, 103-220, 103-221, 103-222, 103-223, 103-224, 103-225, 103-226, 11pcs. Micrometer Standards	9000	\$2,420.00	\$2,178.00
103-909	6 - 12" (6pcs./set)	103-221, 103-222, 103-223, 103-224, 103-225, 103-226, 6pcs. Micrometer Standards		\$1,750.00	\$1,575.00

Indicating Micrometers



Features

- Retractable anvil with indicator for three-wire measurements of pitch diameter of precision screws and parallelism measurements.
- IP protection level: 54

Order No.	Range	Graduation	Indicating range	List Price	Sale Price
510-131*	0 - 1"	.00005"	±.0023"	\$848.00	\$763.20
510-134	3 - 4"	.00005"	±.0023"	\$1,110.00	\$999.00
510-151	0 - 1"	.00005"	±.0023"	\$848.00	\$763.20

^{*}Retractable anvil button on the right side.

Digit Outside Micrometers



- Mechanical digit counter with .0001" reading for quick and error-free reading.
- Supplied in fitted plastic case.

Order No.	Range	Graduations	Remarks	List Price	Sale Price
193-211	0–1"	.0001"*	Friction Thimble	\$186.00	\$176.70
193-212	1-2"	.0001"*	Friction Thimble w/standard	\$219.00	\$208.05
193-213	2-3"	.0001"*	Ratchet Stop w/standard	\$245.00	\$232.75
193-214	3-4"	.0001"*	Ratchet Stop w/standard	\$271.00	\$257.45

^{* .0001&}quot; reading is obtained with vernier

Micrometer Heads





148 Series Small Size Standard Style Micrometer Heads

Standard small size make these mic heads convenient for many gage fixtures.



148 Series Ultra-Small/Small Size Style Micrometer Heads

Extra small size make these mic heads fit where larger mic heads won't.

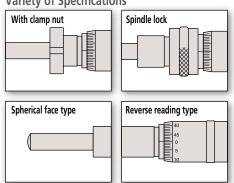


150 Series Mid Size Standard Style Micrometer Heads

The longer range make these mic heads great for wide range adjustment applications.

Order No.	Graduation	Range	Stem Dia.	Stem	Spindle Face	List Price	Sale Price
Common Si	ze Small Type N	licrometer He	ads				
148-811	.001"	05"	.375"	Plain	Spherical (SR4)	\$66.05	\$59.50
148-502	.001"	05"	.375"	w/clamp nut & Spindle Lock	Flat	\$68.40	\$61.50
148-801	0.01mm	0-13mm	9.5mm	Plain	Spherical (SR4)	\$66.05	\$59.50
148-121	0.01mm	0-13mm	9.5mm	Plain with Spindle Lock	Flat	\$70.25	\$63.50
Ultra-Small	/Small Size Micr	ometer Heads					
148-202	.001"	0250"	.250"	Plain	Flat	\$62.85	\$57.00
148-206	.001"	0250"	.250"	Plain	Spherical (SR3)	\$64.70	\$58.50
148-208	.001"	0250"	.250"	with Clamp Nut	Spherical (SR3)	\$66.05	\$59.50
148-201	0.01mm	0-6.5mm	6mm	Plain	Flat	\$62.85	\$57.00
148-205	0.01mm	0-6.5mm	6mm	Plain	Spherical (SR3)	\$64.70	\$58.50
148-207	0.01mm	0-6.5mm	6mm	with Clamp Nut	Spherical (SR3)	\$66.05	\$59.50
150 Series I	Mid Size Standa	rd Style Micro	meter Heads				
150-208	.001"	0-1"	.375"	Plain	Flat (Carbide Tip)	\$75.20	\$68.00
150-812	.001"	0-1"	.375"	with Clamp Nut	Spherical (SR4)	\$80.70	\$72.50
150-802	0.01mm	0-25mm	10mm	with Clamp Nut	Spherical (SR4)	\$80.70	\$72.50

Variety of Specifications









ABSOLUTE Coolant Proof Calipers

Order No.	Range	List Price	Sale Price				
Non-Output Style							
500-752-10	0-6"/0-150mm	\$209.00	\$198.55				
500-753-10	0-8"/0-200mm	\$280.00	\$266.00				
500-754-10*	0-12"/0-300mm	\$484.00	\$459.80				
SPC Output Styl	e						
500-762-10	0-6"/0-150mm	\$248.00	\$235.60				
500-763-10	0-8"/0-200mm	\$312.00	\$296.40				
500-764-10*	0-12"/0-300mm	\$537.00	\$510.20				

^{* ±.0015&}quot; accuracy



Features

- Its sealed housing is IP-67 rated, meaning it's immune to the coolants, dirt, grit and chips found in many manufacturing environments.
- .0005"/0.01mm resolution with ±.001" accuracy.
- Certificate of inspection provided



Order No.	Description	List Price	Sale Price
05CZA624	40" SPC Cable	\$93.90	\$84.50
05CZA625	80" SPC Cable	\$95.35	\$86.00



ABSOLUTE Digimatic Calipers

ABSOLUTE



Order No.	Description	List Price	Sale Price
959149	40" SPC Cable	\$49.25	\$44.50
959150	80" SPC Cable	\$55.20	\$50.00





DIGIMATIC **AOS: Advanced Onsite Sensor**



AOS* Absolute Digimatic Calipers

A new series of digimatic calipers derived from 30 years of accumulated Mitutoyo technologies. The patented Advanced Onsite Sensor (AOS) offers improved measurements dependability by increasing resistance to harsh workshop conditions.

- Electromagnetic inductive sensor improves environmental resistance against dirt, water and oil
- A battery life of approximately 3.5 years has been achieved under normal use through the adoption of Mitutoyo's ABSOLUTE scale.
- The slider configuration features an ergonomic, thumb-friendly shape.
- Step-measurement capable.
- The data output function allows integration into statistical process control and measurement systems.
- Display character height: 9mm
- * AOS applies to 4", 6" and 8" models



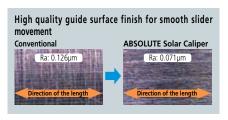


ABSOLUTE Solar Calipers

Order No.	Range	Description	List Price	Sale Price
500-474	0-6"/0-150mm	w/o output	\$195.00	\$185.25
500-475	0-8"/0-200mm	w/o output	\$254.00	\$241.30

Features

- Absolute Encoder Technology
- No battery needed
- Works in low lighting conditions above 60 lux
- 0.0005"/0.01mm resolution
- Supplied in fitted plastic case





Digimatic Carbon Fiber Calipers



552-314-10



Features

- Lightweight Digimatic Calipers that employ CFRP (Carbon Fiber Reinforced Plastics) in the beam and jaws.
- Highly durable and easy to handle.
- Direct readout of ID measurements from the LCD. (Offset value can be set easily by pressing the Offset key.)
- Preset function for setting a desired starting point.
- With SPC data output.
- Special models available with ceramic jaws which are suitable for measuring abrasive and magnetic products.
- Supplied in fitted wooden case.
- .0005"/0.01mm Resolution



Order No.	Range	List Price	Sale Price
552-313-10	24"/600mm	\$1,060.00	\$954.00
552-314-10	40"/1000mm	\$1,890.00	\$1,701.00
552-315-10	60"/1500mm	\$2,260.00	\$2,034.00
552-316-10	80"/2000mm	\$3,540.00	\$3,186.00

Order No.	Description	List Price	Sale Price
05CZA624	40" IP Caliper Cable	\$93.90	\$84.50
05CZA625	80" IP Caliper Cable	\$95.35	\$86.00

MyCAL Lite Digital Calipers



- Economically priced
- .001"/0.1mm resolution
- Accuracy: ±.005"/±.0.2mm

Order No. Range		List Price	Sale Price	
700-113-10	0-6"/0-150mm	\$116.00	\$92.80	
700-123-10	0-8"/0-200mm	\$178.00	\$142.43	

Mitutoyo Caliper Production

Mitutoyo's high quality calipers are designed and built in our Utsunomiya, Japan factory. These tools begin as specially developed stainless steel sheets, which are then laser cut to the general shape seen in the finished part. The frames and sliders, once laser cut, are machined to final size permitting assembly in our highly automated production facility. Once completed, each caliper is thoroughly inspected and tested to ensure the high precision and quality a Mitutoyo customer deserves. Each caliper is packaged with it's own unique certificate of inspection as further proof of its quality.





Features

- Stainless Steel
- Mitutoyo has improved the durability of its calipers by using a TiN coating on the sliding surfaces of the 6" and 8" main beam.
- .001" graduations
- New designed dial movement for ultra smooth sliding and high shock protection.
- Titanium Nitride (TiN) coating is applied to the sliding surface to increase wear resistance (except for 0 - 12" and 0 - 300mm model).
- Lock screw for dial bezel and for holding the sliding jaw position.
- Can measure OD, ID, depth, and steps.
- Models available with carbide-tipped OD and ID jaws.
- Supplied in fitted plastic case.





Order No.	Range	Remarks	List Price	Sale Price
505-742-56	6" .100"/rev.	Black Dial Face	\$121.00	\$108.90
505-742	6" .100"/rev.		\$121.00	\$108.90
505-738	6" .100"/rev.	Carbide Tipped Jaws	\$207.00	\$186.30
505-740	6" .200"/rev.		\$111.00	\$99.90
505-743	8" .100"/rev		\$177.00	\$159.30
505-746	12" .100/rev		\$281.00	\$252.90
505-749	12" .200/rev		\$261.00	\$234.90

Rectangular Steel Gage Block Sets

20% OFF!



Order No.	Blocks per Set	Grade	Size	Step	Qty	List Price	Sale Price
516-902-26	81	0	.10011009"	.0001"	9	\$1,970.00	\$1,576.00
			.101149"	.001"	49		
			.0595"	.05"	19		
			1 - 4"	1"	4		

Square Steel Gage Block Set



Order No.	Blocks per Set	Grade	Size	Step	Qty	List Price	Sale Price
516-402-26 81		.1001"1009"	0.0001"	9			
	01	0	.101"149"	0.001"	49	\$2,820.00	\$2,256.00
	81		.05"95"	0.05"	19		
			1" - 4"	1"	4		

Gage Block Production

Mitutoyo has been producing gage blocks for more than 70 years. Since the time when the Numata Research laboratory entered the market on a full-scale production basis, the production of Mitutoyo gage blocks now exceeds a total of 23 million pieces in 45 years, and they continue to be used all over the world. Advanced processing techniques have been cultivated by Mitutoyo over the years with its research and development advancing measurement technology and creating new products, such as new types of gage block, as well as leading-edge measuring equipment for gage block evaluation. With a reputation for innovation and reliability endorsed by history, and an extensive sales/service network stretching throughout the world, Mitutoyo continues to support manufacturing industries wherever they may be found.

Inside Measurement



Borematic

ABSOLUTE Digimatic Snap Bore Gage Sets



568-936

Features

- TiN-coated measuring contact points provide excellent durability and impact resistance and allow the instrument to measure to the bottom of a blind hole.
- Large LCD digits of 8.5mm height for error-free reading.
- 330-degree rotatable display unit for easy reading at any angle.
- GO/NO-GO judgment function.





- The ABSOLUTE linear encoder eliminates overspeed errors.
- With SPC data output.
- Setting rings for origin point setting are optional.
- Can measure deep holes by attaching an optional extension rod.
- Measurement can be taken closer to the bottom of a blind bore.

Interchangeable Head Set

Each set includes one display unit with interchangeable measuring heads of the sizes specified and extension rod.

Set Order No.	Range	Display Unit	Adaptor Supplied	Individual Head No.	Setting rings included	List Price	Sale Price
568-928	.275"5" / 6.985 - 12.7mm	568-015	954595	04AZB139 04AZB140 04AZB141	177-179 (.35" DIA.) 177-283 (.425" DIA.)	\$2,230.00	\$1,784.00
568-929	.5" - 1" / 12.7 - 25.4mm	568-015	216556	04AZA721 04AZA722	177-182 (.65" DIA.)	\$2,530.00	\$2,024.00
	12.7 - 25.4mm		216557	04AZA730	177-287 (.8" DIA.)		
568-930	1" - 2" / 25.4 - 50.8mm	568-015	216557	04AZA731 04AZA739 04AZA740	177-289 (1.2" DIA.) 177-291 (1.6" DIA.)	\$3.080.00	\$2,464.00
568-936	2" - 4" / 50.8 - 101.6mm	568-015	216558	04AZA754 04AZA755 04AZA756 04AZA757	177-315 (2.5" DIA.) 177-319 (3.5" DIA.)	\$4,440.00	\$3,552.00

Bore Gages

Features

- Most popular Bore Gages.
- Carbide-tipped contact points for durability.
- The dial indicator is fully protected by a rugged cover.
- Optional extension rods can be attached for measuring deep holes.

Order No	Range	Graduation (Indicator)	List Price	Sale Price
511-751	.7 - 1.4"		\$411.00	\$390.45
511-752	1.4 -2.5"		\$401.00	\$380.95
511-753	2.0 - 6.0"		\$438.00	\$416.10
511-754	4.0 - 6.5"	.0001" (2923SB-10)	\$579.00	\$550.00
511-755	6.5 - 10"		\$652.00	\$619.40
511-756	10 -16"		\$776.00	\$737.20
511-932	.7 - 6.0"		\$1,030.00	\$978.50



Ontional	

953549:	125mm / 4.92" Extension rod
	for 18-35mm / .7 -1.4" models

125mm / 4.92" Extension rod 953552:

for 35-160mm / 1.4 - 6.5 " models

953557: 125mm / 4.92" Extension rod

for 160-400mm / 6.5 - 16" models

250mm / 9.84" Extension rod 953550: for 18-35mm / .7 - 1.4" models

953553: 250mm / 9.84" Extension rod

for 35-160mm / 1.4 - 6.5 " models

250mm / 9.84" Extension rod 952361: for 160-400mm / 6.5 - 16" models

500mm / 19.69" Extension rod 953551:

for 18-35mm / .7 - 1.4" models

953554:

for 35-160mm / 1.4 - 6.5 models

500mm / 19.69" Extension rod

953558: 500mm / 19.69" Extension rod

for 160-400mm / 6.5 - 16" models

953555: 750mm / 29.53" Extension rod

for 35-160mm / 1.4 - 6.5 " models 750mm / 29.53" Extension rod 953559:

for 160-400mm / 6.5 - 16" models 1000mm / 39.37" Extension rod 953556:

for 35-160mm / 1.4 - 6.5 " models

1000mm / 39.37" Extension rod 953560:

for 160-400mm / 6.5 - 16" models



Holtest Sets

Complete Unit Sets

• Each set includes complete gages (micrometer head units and measuring heads for each size).

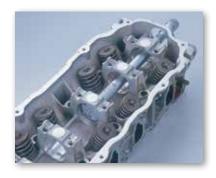
Features

- TiN-coated measuring contact points (over 6mm / .275" range models) provide excellent durability and impact resistance and allow the instrument to measure to the bottom of a blind hole (up to 100mm / 4"models).
- Highly durable because of carbide-tipped contact points (anvils up to 12mm / .5" models).
- Can measure deep holes using an Extension rod (optional) which is available on models over 6mm (.275") measuring range.
- With Ratchet Stop for constant force.
- Setting Rings for zero point adjustment are optional.
- Supplied in fitted plastic case up to 100mm / 4". Over 100mm / 4" supplied in wooden case.
- Graduations: .0002 "





368-917



Order No.	Range	Individual Range	Setting Rings Included	Remarks	List Price	Sale Price
368-917	.5"8"	.565", .658"	.65" DIA.		\$1,490.00	\$1,192.00
368-918	.8" - 2"	.8-1", 1-1.2", 1.2- 1.6", 1.6-2"	1" DIA., 1.6" DIA.	With Extension	\$3,410.00	\$2,728.00
368-919	2" - 4"	2-2.5", 2.5-3", 3-3.5", 3.5-4"	2.5" DIA., 3.5" DIA.	Rod	\$4,860.00	\$3,888.00
368-920	4" - 8"	4-5", 5-6", 6-7", 7-8"	5" DIA., 7" DIA.		\$7,440.00	\$5,952.00

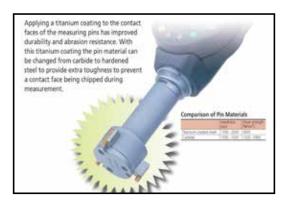
Individual Holtests with a TiN Anvil Coating





Order No.	Range	Graduations	List Price	Sale Price
368-261	.275"350"	.0001"	\$599.00	\$479.20
368-262	.350"425"	.0001"	\$599.00	\$479.20
368-263	.425"500"	.0001"	\$599.00	\$479.20
368-264	.500"650"	.0002"	\$621.00	\$496.80
368-265	.650"800"	.0002"	\$621.00	\$496.80
368-266	.800"-1.0"	.0002"	\$645.00	\$516.00
368-267	1.0"-1.2"	.0002"	\$645.00	\$516.00
368-268	1.2"-1.6"	.0002"	\$806.00	\$644.80
368-269	1.6"-2.0"	.0002"	\$850.00	\$680.00
368-270	2.0"-2.5"	.0002"	\$855.00	\$684.00
368-271	2.5"-3.0"	.0002"	\$928.00	\$742.40
368-272	3.0"-3.5"	.0002"	\$953.00	\$762.40

20% OFF!



- A constant force ratchet design for more repetitive measurements
- TiN coated anvils for longer wear life
- Certificate of Inspection provided
- New "cut pin method" keeps pins from sliding out of holder

Inside Measurement



Digimatic Holtest

Features

- TiN-coated measuring contact points provide excellent durability and impact resistance and allow the instrument to measure to the bottom of a blind hole (up to 100mm / 4" models).
- Large LCD readout.
- Functions available: Presetting, Zero/ABS, Auto power On/Off, Data hold, Data output, Error alarm, Battery replacement alarm.
- With Ratchet Stop for constant force.
- Can measure deep holes by attaching an Extension rod (optional).
- Setting rings for origin point setting are optional.
- Supplied in fitted plastic case up to 100mm / 4". Over 100mm / 4" supplied in wooden case.
- Resolution: .00005"/0.001mm (over 4" models: .0001"/0.001mm)



Optional Accessories

04AZB157: Mounting plate for stand

156-101-10: Stand

952322: Extension rod 100mm / 3.94"

For range 6-12mm / .275 - .5" models 21: Extension rod 150mm / 5.9"

952621: Extension rod 150mm / 5.9" For range 12-20mm / .5" - .8" models

952622: Extension rod 150mm / 5.9"

For range 20-50mm / .8" - 2" models **952623:** Extension rod 150mm / 5.9"

For range 50-300mm / 2" - 12" models





Order No.	Description	List Price	Sale Price
05CZA662	40" SPC Cable	\$83.80	\$75.50
05CZA663	80" SPC Cable	\$92.45	\$83.50

Digimatic Holtest Interchangeable Head Sets

Each set includes one display unit with interchangeable measuring heads of the sizes specified with TiN-coated measuring contact points.







468-976

Depth / Thickness Measurement



Features

- ABSOLUTE Digimatic Depth Gage can keep track of the origin point once set for the entire life of the battery
- Base and measuring faces are hardened and micro-lapped.
- Optional wider extension base are available. (up to 18"/450mm range models)
- With SPC data output.

Order No.	Range	List Price	Sale Price
571-211-30	0-6"/0-150mm	\$358.00	\$322.20
571-212-30	0-8"/0-200mm	\$408.00	\$367.20
571-213-10	0-12"/0-300mm	\$492.00	\$442.80





Order No.	Description	List Price	Sale Price	
959149	40" SPC Cable	\$49.25	\$44.50	
959150	80" SPC Cable	\$55.20	\$50.00	

Digimatic Thickness Gages

The Thickness Gages offer a quick and efficient means of inspection with their convenient grip handle, thumb trigger and spring-loaded spindle. The various models cover a wide range of applications.

Order No.	der No. Range Resolution		List Price	Sale Price
547-400S	047"/0-12mm	.00005"/0.001mm	\$831.00	\$789.45
547-500S	047"/0-12mm	.0005"/0.01mm	\$282.00	\$267.90



Order No.	Description	List Price	Sale Price
905338	40" SPC Cable	\$40.05	\$36.05
905409	80" SPC Cable	\$47.75	\$43.00









547-500S

Quick Mini

Quick Mini is a convenient snap-action pocket thickness gage offering LCD digital readout. Quick Mini is ideal for rapid checking of a wide variety of materials including metal, paper, plastics and wood.



Order No.	Range	Resolution	List Price	Sale Price
700-118-20	05"/0-12.7mm	.0005"/0.01mm	\$118.00	\$112.10





Series Two Dial Indicators

Order No.	Graduation	Range/Rev	Туре	Dial Reading	Accuracy First 2.5 Rev/Overall	Force	List Price	Sale Price
23585-10	.0001"	.5" / .01"	w/lug	0-10	±.0001/±.0008	2.0N or less	\$220.00	\$198.00
2803S-10	.0001"	.025" / .01"	w/lug	0-5-0	±.0001 / ±.0001	2.5N or less	\$160.00	\$144.00
24165	.001"	1" / .1"	w/lug	0-100	±.001 / ±.002	1.8N or less	\$119.00	\$107.00
2416S-10	.001"	1" / .1"	w/lug	0-100	±.001 / ±.002	1.8N or less	\$141.00	\$126.90
24245-19	.001"	2"/1"	w/lug	0-100	±.001 / ±.003	2.5N or less	\$220.00	\$198.00
27765	.0005"	1" / .05"	w/lug	0-50	±.0005/±.002	2.5N or less	\$142.00	\$127.80



"Quick-Set" Test Indicators

The most direct gear train design ever applied to Test Indicators means—higher levels of sensitivity, reliability, repeatability and accuracy throughout tool life.

Features

- Anti-magnetic
- Jeweled bearings
- No-clutch structure
- Water and dust resistant
- Glare-free crystal with scratch-resistant coating
- Metric dial faces in yellow
- Measuring force 0.3N or less

Order No.	Graduation	Range	Dial Face	Remarks	List Price	Sale Price
513-402	.0005"	.030"	0-15-0	Anti Magnet, Jeweled	\$130.00	\$123.50
513-402T	.0005"	.030"	0-15-0	Anti Magnet, Jeweled Set	\$154.00	\$146.30
513-412	.0005"	.030"	0-15-0	Long Point	\$186.00	\$176.70
513-412T	.0005"	.030"	0-15-0	Long Point Set	\$215.00	\$204.25
513-403	.0001"	.008"	0-4-0	Anti Magnet, Jeweled	\$169.00	\$160.55
513-403T	.0001"	.008"	0-4-0	Anti Magnet, Jeweled Set	\$198.00	\$188.10



Ruby Stylus Test Indicator

Features

• Wear characteristic improved by 50%.

• Non-magnetic and non-conductive material, enable its use in EDM operation

Contact Point diameter: .079" Stem diameter: Ø3/8"

Order No.	Graduation	Range	Force	Accuracy	List Price	Sale Price
513-472	.0005"	.03"	.072N or less	±.0005"	\$145.00	\$137.75



ABSOLUTE Digimatic Indicator ID-U

- Slim type digital indicator with low price.
- Large LCD and simple key operation.
- After the initial origin setting, the ID-U no longer needs absolute positioning over the entire battery life; the origin is remembered even after power-off.
- Ideal for installation into measuring devices because of it's compact design and long battery life.
- Employing the ABSOLUTE linear encoder, the ID-U always displays the spindle "Absolute Position" from the origin at power-on. Also unlimited response speed eliminates over-speed errors.
- Flat back type only no option for backs.
- SPC data output.

Order No.	Resolution	Range	Model	Accuracy	Measuring force	List Price	Sale Price
575-123	.0005"/0.01mm	1" / 25.4mm	ID-U1025E	.0008"	1.8N or less	\$195.00	\$175.50





ABSOLUTE Digimatic Indicator ID-S

ABSOLUTE® Absolute System Patented by MITUTOYO

TE[®]



Features

- As compact as standard Series 2 dial indicators.
- After the initial zero-setting with the ORIGIN button, the repeated absolute positioning is no longer necessary over the entire battery life.
- Employing the ABSOLUTE linear encoder, the ID-S always displays the spindle "Absolute Position" from the origin at power-on. Also unlimited response speed eliminates over-speed errors.
- SPC data output.

Order No.	Resolution	Range	Accuracy	Measuring force	Remarks	List Price	Sale Price
Stem dia. 3/8	#4-48 UNF Thread						
543-792	.00005"/0.001mm	.5" / 12.7mm	±.0001"	1.5N or less	w/ lug back	\$273.00	\$245.70
543-796	.00005"/0.001mm	.5" / 12.7mm	±.0001"	2.5N or less	w/ lug back	\$301.00	\$270.90
543-793	.0001"/0.001mm	.5" / 12.7mm	±.0001"	1.5N or less	w/ lug back	\$273.00	\$245.70
543-783	.0005"/0.01mm	.5" / 12.7mm	±.0010"	1.5N or less	w/ lug back	\$177.00	\$159.30
543-792B	.00005"/0.001mm	.5" / 12.7mm	±.0001"	1.5N or less	w/ flat-back	\$273.00	\$245.70
543-796B	.00005"/0.001mm	.5" / 12.7mm	±.0001"	2.5N or less	w/ flat-back	\$301.00	\$270.90
543-793B	.0001"/0.001mm	.5" / 12.7mm	±.0001"	1.5N or less	w/ flat-back	\$273.00	\$245.70
543-783B	.0005"/0.01mm	.5" / 12.7mm	±.0010"	1.5N or less	w/ flat-back	\$177.00	\$159.30
Stem ø 8mm,	M2.5 x 0.45 Thread						
543-791	.00005"/0.001mm	.5" / 12.7mm	±.0001"	1.5N or less	w/ lug back	\$282.00	\$253.80
543-795	.00005"/0.001mm	.5" / 12.7mm	±.0001"	2.5N or less	w/ lug back	\$310.00	\$279.00
543-782	.0005"/0.01mm	.5" / 12.7mm	±.0008"	1.5N or less	w/ lug back	\$177.00	\$159.30
543-791B	.00005"/0.001mm	.5" / 12.7mm	±.0001"	1.5N or less	w/ flat-back	\$282.00	\$253.80
543-795B	.00005"/0.001mm	.5" / 12.7mm	±.0001"	2.5N or less	w/ flat-back	\$310.00	\$279.00
543-782B	.0005"/0.01mm	.5" / 12.7mm	±.0008"	1.5N or less	w/ flat-back	\$177.00	\$159.30

Calculation Type Digimatic Indicator ID-C

Features

- The new Calculation-Type Digimatic Indicator features both a Key-Lock and Parameter-Lock. This is designed to prevent accidental changing of settings during operation.
- Improved parameter setting software makes it even easier to set all of the available parameters and determine and upload the proper coefficients for calculation.(optional)
- FAST measurement frequency allows the user to increase the number of readings per second from 10 to 50, allowing higher accuracy meaurements of TIR and MAX/MIN.
- An analog bar provides easy to read values when scanning for Max, Min, and TIR Values.
- The Absolute Digimatic indicator performs internal calculations using the formula Ax+B+Cx-1 (assuming spindle displacement as x) while the specified coefficients A, B and, C can be set with respect to the purpose of measurement or dimensions of the fixtures. This unique features allows you to read your measurements directly, without fumbling for conversions.

accuracy meac	HEITIETIS OF TIN ATIU IVIAW	IVIIIN.						
Order No.	Resolution	Range	Accuracy	Measuring Force	List Price	Sale Price		
Stem dia. 3/8, #4-48 UNF Thread								
543-342B	.00005/.0001/.0005" 0.001/0.01mm	.5"/12.7mm	±.00010"/0.003mm	1.5N or less	\$445.00	\$400.50		
543-592B		1"/25.4mm	±.00010"/0.003mm	1.8N or less	\$596.00	\$536.40		
543-597B	Selectable	2"/50.8mm	±.00025"/0.006mm	2.3N or less	\$748.00	\$673.20		
Stem Threa	d ø 8mm, M2.5 x 0.45	Thread						
543-341B	.00005/.0001/.0005"	.5"/12.7mm	±.00010"/0.003mm	1.5N or less	\$455.00	\$400.50		
543-591B	0.001/0.01mm Selectable	1"/25.4mm	±.00010"/0.003mm	1.8N or less	\$596.00	\$536.40		
543-596B		2"/50.8mm	±.00025"/0.006mm	2.3N or less	\$748.00	\$673.20		





14



Peak Hold-Type ABSOLUTE Digimatic Indicator ID-C

With Max./Min. Value Holding Function

Features

- The new Peak Hold-Type Digimatic Indicator features both a Key-Lock and Parameter-Lock. This is designed to prevent accidental changing of settings during operation.
- Parameter setting software makes it even easier to set all of the available parameters
- An analog bar provides easy to read values when scanning for Max, Min, and TIR Values
- The maximum, minimum, or runout value can be displayed during measurement.
- GO/±NG judgment is performed by setting the upper and lower tolerances for max., min. and runout values.
- High speed sampling ratio of 50 times/s.
- Employing the ABSOLUTE linear encoder, the Signal ID-C always displays the spindle "Absolute Position" from the origin at power-on.

Order No.	Resolution	Range	Accuracy	Remarks	List Price	Sale Price	
Stem dia. 3/8, #4-48 UNF Thread							
543-302	.00005/.0001/.0005"	.5"/12.7mm	±.00010"/0.003mm	w/lug	\$445.00	\$400.50	
543-302B	0.001/0.01mm Selectable	.5"/12.7mm	±.00010"/0.003mm	Flat-back	\$445.00	\$400.50	
Stem Threa	d ø 8mm, M2.5 x 0.45	Thread					
543-301	.00005/.0001/.0005"	.5"/12.7mm	±.00010"/0.003mm	w/lug	\$445.00	\$400.50	
543-301B	0.001/0.01mm Selectable	.5"/12.7mm	±.00010"/0.003mm	Flat-back	\$445.00	\$400.50	









Bore Gage Type ABSOLUTE Digimatic Indicator ID-C



Features

- The new Bore Gage-Type Digimatic Indicator features both a Key-Lock and Parameter-Lock. This is designed to prevent accidental changing of settings during operation.
- Parameter setting software makes it even easier to set all of the available parameters.(optional)
- FAST measurement frequency allows the user to increase the number of readings per second from 10 to 50
- The minimum value holding function provides the easy of detection of hole diameter.
- An analog bar indicator is integrated to enhance the intuition in reading.
- GO/±NG judgment is performed by setting the upper and lower tolerances.
- Up to three sets of master values and upper/lower tolerance values can be memorized.
- Employing the ABSOLUTE linear encoder, the ID-C always displays the spindle "Absolute Position" from the origin at power-on.



Ausolute System	Patented by MITUTOYO	

ARSOLLITE®

Order No.	Resolution	Range	Accuracy	Measuring Force	List Price	Sale Price
543-312B	.00005/.0001/.0005"	.5"/12.7mm	±.00010"/0.003mm	1.5N or less	\$445.00	\$400.50
543-311B	0.001/0.01mm Selectable	.5"/12.7mm	±.00010"/0.003mm	1.5N or less	\$445.00	\$400.50



Digimatic Indicators ID-C

Features

- Absolute Encoder ensures all settings and readings maintained for the life of the battery (even when the power is turned off)
- Preset, Zero-Set, inch/mm, +/- direction and GO/±NG functions
- Face rotates 330° for use at various angles
- Stem diameter: .375"
- Immune to overspeed error
- SPC output provided
- Average battery life 7,000 hours using SR-44 battery (541980)

Order No.	Range	Remarks	List Price	Sale Price
.0005"/0.01	mm Resolution			
543-402	.500"/12.7mm	Lug Back	\$310.00	\$279.00
543-402B .500"/12.7mm		Flat Back	\$310.00	\$279.00
543-476B	1"/25mm	Flat Back	\$454.00	\$408.60
543-496B	2"/50mm	Flat Back	\$597.00	\$537.30
.00005"/.00	01"/.0005"/0.001	mm/0.01mm Reso	olution	
543-392	.500"/12.7mm	Lug Back	\$424.00	\$381.60
543-392B	.500"/12.7mm	Flat Back \$424.00		\$381.60
543-472B	543-472B 1"/25mm		\$568.00	\$511.20
543-492B	2"/50mm	Flat Back	\$713.00	\$641.70



Order No.	Description	List Price	Sale Price
905338	40" Cable for Indicators	\$40.05	\$36.05
905409	80" Cable for Indicators	\$47.75	\$43.00

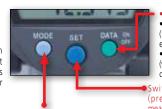
• 330° rotary display

The display can be rotated 330°, allowing use at a position where you can easily read the measurement value.



• Three large buttons

The popular three-large button design, which is used in products such as the ABS coolant proof Digimatic indicators ID-NVB, makes buttons easier to press and operations easier to perform.



Power switch

Data output
 (when connected to an external device)

 Data hold (when no external device is connected)

Switches between the ABS (preset) and INC (zeroset)

Parameter setting mode
 Count direction switching, tolerance judgment setting, resolution

switching, scale factor setting, and function lock setting

• inch/mm conversion (inch/mm models)

Digimatic Indicator ID-H

High Accuracy and High Functional Type

Features

- This new-generation digital indicator offers the excellent accuracy and functionality expected from this class of indicator. Take advantage of its high accuracy backed up by 0.5µm / .00002" resolution, remote control functionality via a handheld controller (or an RS-232C interface) and easy runout measurements with the well-established analog bar display.
- The maximum, minimum, or runout value can be displayed during measurement.
- GO/±NG judgment is performed by setting the upper and lower tolerances. If a judgment result is out of tolerance, the display backlighting changes from green to red, so tolerance judgment can be made at a glance.
- With SPC data output.
- With RS-232C input/output

Stem dia. 3/8" #4-48 UNF Thread

Order No.	Resolution	Range	Model	Accuracy	List Price	Sale Price
543-562A	.00002", .00005",	1.2" / 30.4mm	ID-H530E	0.0015mm	\$883.00	\$794.70
543-564A	.0001", 0.0005mm, 0.001mm	2.4" / 60.9mm	ID-H560E	0.0025mm	\$1,050.00	\$945.00

Price 14.70 15.00

Indicators / Stands



ABSOLUTE Digimatic Indicator ID-F

With Back-lit LCD Screen

Features

- With the ABSOLUTE Linear Encoder technology, once the measurement reference point has been preset it will not be lost when the power is turned on.
- GO/±NG judgment is performed by setting the upper and lower tolerances. If a judgment result is out of tolerance, the display backlighting changes from green to red, so tolerance judgment can be made at a glance.
- The maximum, minimum, or runout value can be displayed during measurement.

 An analog bar indicator has been integrated to handle upper/lower limit approaching and zero approaching. It enhances the ease of operation in the same manner as a dial indicator. The display range of the analog bar can be changed.

• With SPC data output.







Stem dia. 3/8" #4-48 UNF Thread

Order No.	Resolution	Range	Model	Accuracy	List Price	Sale Price
543-552A	.00005", .0001",	1" / 25.4mm	ID-F125E	.00012"	\$667.00	\$600.30
543-558A	.0005", .001", 0.001mm, 0.01mm	2" / 50.8mm	ID-F150HE	.00012"	\$773.00	\$675.70

Dial Gage Stands

The compact and versatile Dial Gage Stands are commonly used general-purpose stands for comparison measurements, 4" maximum height capacity. They feature a wide fine adjusting range for zero-setting gage heads.

Order No.	Max. Ht. Capacity	Anvil Type	List Price	Sale Price
7007-10	3.54"	Square Serrated Anvil	\$554.00	\$526.30
7001-10	4.0"	Round Serrated Anvil	\$554.00	\$526.30
7002-10	4.0"	Flat Anvil	\$554.00	\$526.30



Magnetic Stands

Mitutoyo Magnetic Stands accept all AGD-type dial indicators, test indicators and probes having .375", 6mm or 8mm diameter shanks and/or lug back with 1/4" diameter mounting hole. The On/Off switch offers instant mounting and dismounting without any adverse effect to the indicators or work surface.

Mitutoyo Magnetic Stands have 132 Lbf of magnetic force to help prevent damage to indicators and probes due to accidental base fall-over.

Order No.	Decription	List Price	Sale Price
7010S	Magnetic Stand w/6" Rod & Universal Clamp	\$131.00	\$124.45
7011BN	Magnetic Stand w/6" Adjustable Rod & Universal Clamp	\$149.00	\$141.55
7012-10	Flexible Magnetic Stand	\$202.00	\$191.90
7033B	Universal Magnetic Stand	\$194.00	\$184.30



Mitutoyo SPC Cables

Mitutoyo SPC cables for tools with Mitutoyo Digimatic SPC output.



Order No.	Length	Pins	For Use With	List Price	Sale Price
With Data Out Switch	1				
05CZA624	40"	_	IP66/67 Calipers	\$93.90	\$84.50
05CZA625	80"	_	IP66/67 Calipers	\$95.35	\$86.00
05CZA662	40"	_	IP65 Micrometers	\$83.80	\$75.50
05CZA663	80"	_	IP65 Micrometers	\$92.45	\$83.50
959149	40"	_	Height Gage 570 Series, Digimatic Indicator 543 and 575 Series, Digimatic Scale Unit 572 Series, Digimatic Absolute Calipers	\$49.25	\$44.50
959150	80"	_	Height Gage 570 Series, Digimatic Indicator 543 and 575 Series, Digimatic Scale Unit 572 Series, Digimatic Absolute Calipers	\$55.20	\$50.00
Without Data Out Sw	ritch				
937387	40"	6	Borematic 568 Series	\$50.85	\$45.80
965013	80"	6	Borematic 568 Series	\$60.10	\$54.50
905338	40"	_	Height Gage 570 Series, Digimatic Indicator 543 and 575 Series, Digimatic Scale Unit 572 Series	\$40.05	\$36.05
905409	80"	_	Height Gage 570 Series, Digimatic Indicator 543 and 575 Series, Digimatic Scale Unit 572 Series	\$47.75	\$43.00

Digimatic Mini-Processor

Order No.	Description	List Price	Sale Price
264-504-5A	DP - 1VR	\$506.00	\$455.40



Features

- This is a palm-sized printer used to print measurement data from the digimatic gage or to perform statistical analysis.
- This printer offers excellent functionality. You can use it not only to print measurement data, perform a variety of statistical analyses, and draw a histogram or D chart but also to perform complicated operations for X-R control chart.
- Equipped with RS-232C output and GO/NG judgment output as standard functions, this processor ensures high reliability as an advanced quality inspection machine.
- The line thermal printer enables fast and quiet printing.



Digital Protractor

- Full 360° range (90° x 4).
- Machined aluminum frame.
- Alternate reference (zero).
- Reading hold.
- Simple calibration requiring no special fixtures.
- Display remains upright to view at all angles. (950-317, Pro 360 Model).
- RS232C output. (950-318 Pro 3600 Model).
- Supplied in fitted carrying case.



Order No.	950-317	950-318	
Model	Pro 360	Pro 3600	
Range	360° (90°x4)	360° (90°x4)	
Decolution	0.1°	0.01° (0° to 9.99°)	
Resolution	0.1	0.1° (10° to 90°)	
	10.19Loval +10° Dlumb +10°	±0.05° (0° to 10°)	
Accuracy	±0.1°Level ±10°, Plumb ±10° ±0.2° Maximum error	±0.1° (80° to 90°)	
	±0.2 Maximum error	±0.2° (10° to 80°)	
Repeatability	±0.1°	±0.05°	
Cross Axis Error	Minimal	Minimal	
Battery Life	500 Hrs. Standard 9-Volt Battery	500 Hrs. Standard 9-Volt Battery	
Temperature	-5°C to 50°C (23° to 122°F)	-5°C to 50°C (23° to 122°F)	
Operation	,	` '	
Storage	-20°C to 65°C (-4°F to 149°F)	-20°C to 65°C (-4°F to 149°F)	
Weight	289g (10.2oz.)	295g (10.4oz.)	
Output	N/A	RS-232C Compatible	
Standard Accessories	Plastic Case	Plastic Case	
List Price	\$270.00	\$445.00	
Sale Price	\$256.50	\$422.75	



ABSOLUTE Digimatic Height Gages

Features

- Built in ABSOLUTE linear encoder
 This encoder eliminates the necessity of setting the reference point at every power-on.
 It has improved reliability because no over-speed error will occur.
- Fine-adjustment carriage to feed the slider finely.
- Carbide-tipped scriber is provided.
- With SPC data output.

Order No.	Range	Accuracy	Resolution	List Price	Sale Price
570-244	0 - 8" /0 - 200mm	±.001"	.0005" /0.01mm	\$636.00	\$509.00
570-248	0 - 40" /0 - 1000mm	±.003"	.0005" /0.01mm	\$3,790.00	\$3,600.00

Order No.	Range	Accuracy	Resolution	List Price	Sale Price
570-312	0 - 12" / 0 - 300mm	±.0015"	.0005" /0.01mm	\$627.00	\$595.70
570-314	0 - 24" / 0 - 600mm	±.002"	.0005" /0.01mm	\$1,130.00	\$1,073.50





Order No.	Description	List Price	Sale Price
905338	40" SPC Cable	\$40.05	\$36.05
905409	80" SPC Cable	\$47.75	\$43.00





Digimatic Height Gages (Standard Type)

Now with two resolutions and two value preset memory and increased character height for easier viewing.

Order No.	Range	Resolution	Accuracy	List Price	Sale Price
192-630-10	0-12"/0-300mm	.0005"/0.01mm or .0002"/0.005mm	±.001"	\$1,540.00	\$1,390.00
192-631-10	0-18"/0-450mm		±.002"	\$2,110.00	\$1,900.00
192-632-10	0-24"/0-600mm		±.002"	\$2,690.00	\$2,420.00
192-633-10	0-40"/0-1000mm		±003"	\$5,080.00	\$4,570.00



Order No.	Description	List Price	Sale Price
905338	40" SPC Cable	\$40.05	\$36.05
905409	80" SPC Cable	\$47.75	\$43.00



Height Gages / Microscopes

Digimatic Height Gages (Multi-Function Type)

Now with two resolutions and two value preset memory and increased character height for easier viewing.

Features

- Highly versatile multi-function type.
- Carbide-tipped long scriber is provided.
- Rigid construction ensures repeatable measurement.
- Switchable resolution.
- Coarse/fine feed switching.
- With SPC data output.
- Two preset reference height.

• 2 Value Preset Memory

• Zero/ABS setting (ABS and INC modes)

Functions include:

Data hold

± Counting

Inch/mm conversion

Order No.	Range	Resolution	Accuracy	List Price	Sale Price
192-670-10	0-12"/0-300mm	.0005"(0.01mm) [.0002"(0.005mm)	±001"	\$1,770.00	\$1,593.00
192-671-10	0-18"/0-450mm		±0015"	\$2,280.00	\$2,055.00
192-672-10	0-24"/0-600mm	Switchable)]	±0015"	\$2,920.00	\$2,630.00



Order No.	Description	List Price	Sale Price
905338	40" SPC Cable	\$40.05	\$36.05
905409	80" SPC Cable	\$47.75	\$43.00

192-670-10

Dial Height Gages

Double-column structure ensures high measuring accuracy. Coarse/Fine Feed switching. Carbide-tipped scriber.

Features

- Easy and error-free reading with both up and down digital counters as well as a dial.
- Provided with a feed wheel for easy coarse feeding.
- Carbide-tipped scriber is provided.
- The counters and dial can be re-zeroed at any scriber position.

Order No.	Range	Graduation	List Price	Sale Price
192-150	0-12"	.001"	\$1,010.00	\$909.00
192-151	0-18"	.001"	\$1,400.00	\$1,260.00
192-152	0 - 24"	.001"	\$1,820.00	\$1,640.00





Easy and error free reading

TM-505/510 Toolmaker's Microscopes

Features

192-150

• Angle measurement is performed easily by turning the angle scale disc to align the cross-hair reticle with the workpiece image.

• Illumination intensity can be adjusted.

• Included standard accessories create an overall magnification of 30X. Magnifications can be changed from 20 - 200X by using optional objectives and/or eyepieces.

Model No.	TM-505 TM-510		
Order No.	176-808A	176-809A	
XY stage travel range	2 x 2" / 50 x 50mm		
Measurement method	Digimatic Micrometer Head IN/MM (164-164 2pc)	Digimatic Micrometer Head IN/MM (164-164 2pc)	
XY stage table top size	6 x 6" / 152 x 152mm 9.4 x 6" / 240 x 152mm		
Effective area of table	3.8 x 3.8" / 96 x 96mm 6 x 3.8" / 154 x 96mm		
Max. workpiece height	4.5" / 115mm 4.2" / 107mm		
Max. stage loading	11lbs		
List Price	\$5,490.00	\$7,320.00	
Sale Price	\$4,940.00	\$6,590.00	



Laser Scan Micrometers

Ultra-High Accuracy

Laser Scan Micrometer LSM-902/6900

Features

- High-accuracy inspection of pin and plug gages and other tight-tolerance parts such as medical and aerospace
- Ultra-high accuracy: Linearity of ±0.5µm for entire range
- Statistical calculation mode
- Ultra-high repeatability of ±0.05µm
- Data output to PC or other external devices from display unit



Bench Top

Laser Scan Micrometer LSM-9506

Features

- Integrated display and measuring unit into one unit
- Statistical calculation mode
- RS-232C interface, I/O interface, and SPC output interface are provided as standard



Order Number	Range	Resolution	List Price	Sale Price
544-496A	.004" - 1.0"/0.1mm - 25mm	.000001"0005"/0.00001 - 0.01mm	\$12,200.00	\$10,980.00
544-116-1A	.020" - 2.36"/0.5mm - 60mm	.000002"005"/0.00005 - 0.1mm	\$8,940.00	\$8,046.00



www.mitutoyo.com/LSM VIDEO DEMO

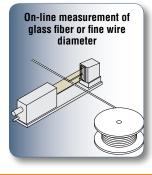
Includes Quicktool, a free software package that makes operation of LSM setting simple and easy. For use with customer supplied PC and RS-232C cable

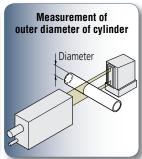
High Accuracy Non-Contact Measuring Systems

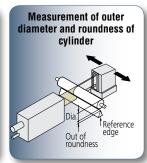
- Excellent linearity: down to +/- 0.3 microns
- High speed scanning capable: 3200 scans per second
- Various ranges available for selecting the best laser for your application
- Statistical calculation mode
- Includes Quicktool*, a free software package that makes operation of LSM setting simple and easy
- Its memory function has been increased to allow storage of up to 100 programs
- *For use with customer supplied PC and RS-232C cable

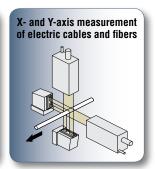


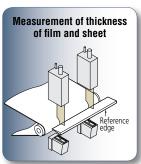
Order No	Model	Range Inch	Range mm	Repeatability	Linearity	Scanning Rate	List Price	Sale Price
64PKA117	LSM-500S	.0002"08"	0.005~2mm	±0.03µm	±0.3µm	3,200 scans/sec	\$10,370.00	\$7,090.00
64PKA118	LSM-501S	.002"4"	0.05~10mm	±0.04µm	±0.5µm	3,200 scans/sec	\$9,330.00	\$6,050.00
64PKA119	LSM-503S	.012" - 1.18"	0.3~30mm	±0.11µm	±1.0μm	3,200 scans/sec	\$10,110.00	\$6,830.00
64PKA120	LSM-506S	.04" - 2.36"	1~60mm	±0.36µm	±3µm	3,200 scans/sec	\$11,480.00	\$8,200.00
64PKA121	LSM-512S	.04" - 4.72"	1~120mm	±0.85µm	±6µm	3,200 scans/sec	\$17,680.00	\$14,400.00
64PKA122	LSM-516S	.04" - 6.30"	1~160mm	±1.4µm	±7μm	3,200 scans/sec	\$28,480.00	\$25,200.00











Profile Projectors





PH-A14 Horizontal Profile Projector

Features

- Mitutoyo's lens technology and workmanship combine to provide a bright, crisp image for error free inspection
- 8" x 4" floating-type workstage incorporates linear scales for fast, accurate measurement
- The workstage provides high accuracy and can handle a workload of up to 100 lbs.
- 10x objective lens and fiber illuminator are standard accessories



Order No.	Description	List Price	Sale Price
64PKA087	PH-A14 Profile Projector w/QM Data (Arm Mount)	\$8,290.00	\$7,875.00
64PKA086	PH-A14 Profile Projector w/KA counter & tray	\$6,380.00	\$6,060.00
64AAA129B	PHA14 Stand (optional)	\$707.00	\$636.50

PV-5110 Profile Projector

QM Data

Features

- Large 500mm screen
- Floor model that uses a downward illumination system.
- Digital readout protractor screen (including zero-setting, ABS/INC coordinate switching functions) for easy and error-free angle measurement.
- Angled screen allows projected images to be easily traced or compared with a template.
- The oblique surface illumination system provides clear and bright images, allowing easy inspection of non-reflective workpieces such as plastic parts or printed materials.

Standard Accessories

- 200x100mm (8" x 4") stage
- 10x projection lens set
- Surface illumination unit
- Counter stand for KA counter
- Power cord, halogen bulb, fuse, grounding wire, allen wrench, vinyl cover





QM Data

Order No.	Description	List Price	Sale Price
304-919A	Profile Projector PV-5110	\$24,200.00	\$21,780.00
264-156A	QM-Data200 (Arm-Mount Model)	\$2,720.00	\$2,585.00
332-151	Optoeye-200	\$1,650.00	\$1,320.00
12AAE672	Attachment (B) for Optoeye-200	\$58.65	\$53.00
174-173A	KA Counter	\$587.00	\$529.00



PV-5110 with optional KA counter





PH-3515F Horizontal Profile Projector

Features

- Heavy-Duty, bench-top model with horizontal optical system
- Erect image on Day-bright screen
- 14" (356mm) dia. protractor screen with crosshair line for easy alignment
- Floating-type workstage incorporates linear scales for fast, accurate measurement
- Suitable for thread pitch measurements free from blurred or distorted images when the workpiece is angled

Order No.	Description	List Price	Package Price
64PKA088A	PH-3515F Profile Projector w/QM Data (Arm Mount)	\$13,500.00	\$12,825.00
64PKA089A	PH-3515F Profile Projector w/KA counter & tray	\$11,600.00	\$11,020.00
64AAB176	PH-3515 Stand (optional)	\$687.00	\$618.50



PJ-A3000 Vertical Profile Projector









PJ-A3010F-200

Features

- A series of midsize profile projectors featuring bright, 12.40" (315mm) diameter screens and easy-tooperate XY measurement tables.
- A floating table makes measuring quicker and easier.
- Easy-to-read digital counters are located near the projection screen, thereby minimizing strain associated with excessive movement
- For edge sensing capabilities, order the Optoeye-200, part number 332-151

Order No.	Description	XY Range	List Price	Sale Price
302-701A	PJ-A3010F-200	8" x 4"	\$13,600.00	\$12,240.00
302-703A	PJ-A3010F-100	3.94" x 3.94"	\$10,800.00	\$9,720.00

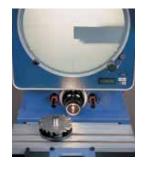
Optional Accessories

Order No.	Description	List Price	Sale Price
264-156A	QM-Data 200	\$2,720.00	\$2,585.00
332-151	Optoeye 200	\$1,650.00	\$1,320.00
64PMI167	Stand for PJ-A3000	\$688.00	\$653.60
12AAA807	RS-232C Cable	\$54.30	\$49.00
12AAE671	Attachment board (A)	\$40.80	\$37.00



Vertical Profile Projectors

The main advantage of a vertical profile projector is the ability to place flexible parts such as gaskets directly on the stage glass allowing "gravity" to hold the part in place.



Horizontal Profile Projectors

The chief advantage of a horizontal projector is the ability to measure larger/heavier parts than could be measured on a vertical comparator.



Distributed By:

Note: All information regarding our products, and in particular the illustrations, drawings, dimensional and performance data contained in this printed matter as well as other technical data are to be regarded as approximate average values. We therefore reserve the right to make changes to the corresponding designs. The stated standards, similar technical regulations, descriptions and illustrations of the products were valid at the time of printing. In addition, the latest applicable version of our General Trading Conditions will apply. Only quotations submitted by ourselves may be regarded as definitive. Mitutoyo products are subject to US Export Administration Regulations (EAR). Re-export or relocation of Mitutoyo products may require prior approval by an appropriate governing authority.

Trademarks and Registrations

Designations used by companies to distinguish their products are often claimed as trademarks. In all instances where Mitutoyo America Corporation is aware of a claim, the product names appear in initial capital or all capital letters. The appropriate companies should be contacted for more complete trademark and registration information.

Coordinate Measuring Machines

Vision Measuring Systems

Form Measurement

Optical Measuring

Sensor Systems

Testing Equipment and Seismometer

Digital Scale and DRO Systems

Small Tool Instruments and Data Management

Mitutoyo

Mitutoyo America Corporation

www.mitutoyo.com
One Number to Serve You Better
1-888-MITUTOYO (1-888-648-8869)

M³ Solution Centers:

Aurora, Illinois (Headquarters) Boston, Massachusetts Huntersville, North Carolina Mason, Ohio Plymouth, Michigan City of Industry, California Birmingham, Alabama Renton, Washington Houston, Texas