## Mitutoy/o



# **Spring Promo 2015**



## Precision Tools & Instruments

Prices effective April 1 – June 30, 2015

www.mitutoyo.com





#### **Dear Valued Customers,**

With our breakthrough year behind us at Mitutoyo America Corporation, we wanted to take this opportunity to personally thank the companies and individuals who partner with us, for their continued support and commitment.

The Spring Promotion is our first large scale Precision Tool Promotion of 2015 and will be effective from April 1, through June 30, 2015.

Please check our website at **www.mitutoyo.com** to watch for other new products, promotions and events during 2015.

Sincerely,



Shigeyuki Sasaki President, Mitutoyo America Corporatior



- 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

www.mitutoyo.com/MDC VIDEO DEMO



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-SP	C 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	Ratchet Thimble	\$178.00	\$169.10			
293-348-30	0-1"/0-25.4mm	.00005″/0.001mm	Friction Thimble	\$178.00	\$169.10			
293-349-30	0-1"/0-25.4mm	.0001″/0.001mm	Ratchet 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	\$79.60
05CZA663	80" SPC Cable	\$92.45	\$87.85



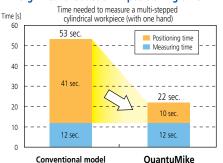




#### **Features**

- 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



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	\$214.70
293-186	1-2"/25-50mm	.00005″/0.001mm	\$258.00	\$245.10
*with SPC Outpu	.t			

\*with SPC Output

Order No.	Description	List Price	Sale Price
05CZA662	40" SPC Cable	\$83.80	\$79.60
05CZA663	80" SPC Cable	\$92.45	\$87.85

## **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

## **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 - 25mm	0.0001mm/ 0.0005mm (switchable)	±0.5µm	\$1,630.00	\$1,548.50
293-130	0 - 1" 0 - 25.4mm	.000005"/.00002" 0.0001mm/0.0005mm (switchable)	±.00002"	\$1,630.00	\$1,548.50

				-
Order No.	Description	List Price	Sale Price	
05CZA662	40" SPC Cable	\$83.80	\$79.60	
05CZA663	80" SPC Cable	\$92.45	\$87.85	





Function lock







## **Tube Micrometers**

**Spherical and Cylindrical Anvils** 



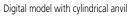
#### **Features**

- IP65 water/dust protection. •
- Designed to measure the wall thickness of various tubing.

The Tube Micrometers have two combinations of measuring faces (carbide-tipped): . spherical-flat type.

- With Ratchet Stop for constant force. •
- With SPC output.
- Supplied in fitted plastic case.





Order No.	Range	Resolution	Accuracy	Remarks	Mass (g)	List Price	Sale Price
395-261		±3μm           0.001mm           ±3μm	±3µm	Type A	270	\$450.00	\$427.50
395-262	0 - 25mm 0.001		±3µm	Туре В	270	\$645.00	\$612.75
395-263			±3µm	Туре С	310	\$684.00	\$649.80
395-264			±3µm	Type D	310	\$433.00	\$411.35
395-362			±.00015"	Туре В	270	\$438.00	\$416.10
395-363	0 - 1" / 0.0005" / 0 - 25.4mm 0.001mm		±.00015"	Type C	310	\$451.00	\$428.45
395-364			±.00015"	Type D	310	\$451.00	\$428.45

**IP**65





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Contra la		
Туре	D	



Order No. Description 05CZA662 40" SPC Cable \$83.80 \$79.60 05CZA663 80" SPC Cable \$92.45 \$87.85

• Mechanical digit counter with .001" reading for guick and error-free reading.

#### **Uni-Mike**

#### **Features**

193-214

• Measures tube thickness, shoulder-edge distance, rivet head height, etc. with interchangeable anvils (flat anvil, rod anvil, V-anvil).

**Features** 

.0001"\*

• Supplied with flat anvil and rod anvil.

Order No.	Range	Graduations	Remarks	List Price	Sale Price
117-107	0-1″	.0001″		\$208.00	\$187.20
117-108	1-2″	.0001″	w/1" standard	\$244.00	\$219.60

## **Digit Outside Micrometers**

117-107



	•	Supplied in fittee	d plastic case.		
Order No.	Range	Graduations	Remarks	List Price	Sale Price
193-211	0–1″	.0001″*	Friction Thimble	\$186.00	\$167.40
193-212	1-2″	.0001″*	Friction Thimble w/standard	\$219.00	\$197.10
193-213	2-3″	.0001″*	Ratchet Stop w/standard	\$245.00	\$220.50

Ratchet Stop w/standard

## **Digital Universal Protractor**



#### **Features**

3-4"

\* .0001" reading is obtained with vernier

- Data output function make it easy to see the statistical data.
- Can be attached to height gages. gage holder (950750, metric)

\$271.00

\$243.90

- Setting preset value.
- Removable blade.

	Order No.	Blade length	Remarks (standard accessory)	List Price	Sale Price	Technical Da Range:	<b>ata</b> -360° to +360°
	187-501	150mm	Height gage holder ( <b>950750)</b>	\$1,210.00	\$1,149.50	Tolerance: ±2' (±0.	±2' (±0.03°)
	187-502	300mm	Height gage holder ( <b>950750)</b>	\$1,210.00	\$1,149.50	Repeatability: Resolution:	1' (0.01°)
187-552	187-551	6″	Height gage holder ( <b>950749)</b>	\$1,170.00	\$1,111.50	Battery: Battery life:	Lithium Battery 2,000 hours
• •	187-552	12″	Height gage holder ( <b>950749)</b>	\$1,210.00	\$1,149.50	· · · · <b>,</b> · · · ·	,

## Micrometers

## **Outside Micrometers — Inch Models**







- Carbide measuring faces
- Ratchet stop

**Features** 

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



Order No.	Range	Graduations	Remarks	List Price	Sale Price		
103-260	0-1″	.0001″	Ratchet Stop	\$118.00	\$106.20		
103-262	1-2″	.0001″	Ratchet Stop	\$138.00	\$124.20		
103-132	1-2″	.0001″	Ratchet Stop	\$122.00	\$109.80		
103-217	2-3″	.0001″	Ratchet Stop	\$154.00	\$138.60		
103-218	3-4″	.0001″	Ratchet Stop	\$177.00	\$159.30		
103-219	4-5″	.0001″	Ratchet Stop	\$192.00	\$172.80		
103-220	5-6″	.0001″	Ratchet Stop	\$213.00	\$191.70		
103-221	6-7″	.0001″	Ratchet Stop	\$241.00	\$216.90		
103-222	7-8″	.0001″	Ratchet Stop	\$254.00	\$228.60		
103-223	8-9″	.0001″	Ratchet Stop	\$282.00	\$253.80		
103-224	9-10″	.0001″	Ratchet Stop	\$292.00	\$262.80		
103-225	10-11″	.0001″	Ratchet Stop	\$306.00	\$275.40		
103-226	11-12″	.0001″	Ratchet Stop	\$319.00	\$287.10		
Micrometer S	Micrometer Sets						
103-922	0-3″	3 pcs/set include: 2pcs. Micromete	s: 103-135, 103-136, 103-217, r Standards	\$431.00	\$387.90		

## **Outside Micrometers**



#### **Features**

- Satin-chrome finished frame
- Improved repeatability for both "expert" and novice users
- Ratchet stop
- Certificate of Inspection provided (0-1", 1-2" models only)
- Speeder for quick thimble rotation
- Carbide measuring faces

Order No.	Range	Graduations	Accuracy	List Price	Sale Price	
With Ratch	et Stop					
101-113	0-1″	.0001″	±.0001"	\$162.00	\$145.80	
101-114*	1-2″	.0001″	±.0001"	\$162.00	\$145.80	
101-119*	2-3″	.0001″	±.0001"	\$177.00	\$159.30	
101-120*	3-4″	.0001″	±.00015"	\$195.00	\$175.50	
With Friction Thimble						
101-117	0-1″	.0001″	±.0001"	\$133.00	\$119.70	
101-118*	1-2″	.0001″	±.0001"	\$162.00	\$145.80	
* Standard Included						

#### Mitutoyo Micrometer Production

Mitutoyo micrometers begin at our automated casting facility in Gohara. This facility provides many cast products to various Mitutoyo manufacturing plants for further processing into world- class measuring tools and instruments.

Once the raw castings are completed they are transferred to one of our manufacturing facilities at Shiwa. Here they are machined converting them into a finished high quality rigid frame required to ensure high accuracy. The frames are then combined with the other components produced in Shiwa such as spindles, anvils, thimbles, etc. to complete the production.

The process does not stop here. Each instrument is quality inspected and tested to ensure full compliance to Mitutoyo and other world standards. Automatic inspection systems employed to provide a full inspection certificate for each tool, which is then packaged and prepared to be shipped to one of our many global Mitutoyo locations.





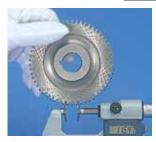
## **Disk Micrometers**



#### **Features**

- .028"/0.7mm (1mm: models over 100mm) edge thickness to enter narrow recesses.
- With Ratchet Stop for constant force.
- With SPC output
- Supplied in fitted plastic case. • (Over 100mm models supplied wooden cases)

Order No.	Range	Resolution	Accuracy	List Price	Sale Price
323-350	0 - 1"/0 - 25.4mm	.00005"/ 0.001mm	±.0002"	\$499.00	\$474.05
323-351	1 - 2"/25.4 - 50.8mm	.00005″/0.001mm	±.0002"	\$560.00	\$532.00
323-352	2 - 3"/50 - 76.2mm	.00005″/0.001mm	±.0003"	\$632.00	\$600.40
323-353	3 - 4"/76.2 - 101.6mm	.00005"/0.001mm	±.0003"	\$669.00	\$635.55



Order No.	Description	List Price	Sale Price
05CZA662	40" SPC Cable	\$83.80	\$79.60
05CZA663	80" SPC Cable	\$92.45	\$87.85



## **Spline Micrometers** 331-351 331-361 **(IP)**65

00005" / 0.001mm

00005" / 0.001mm

.00005" / 0.001mm

.00005" / 0.001mm

±.0001"

±.0001"

±.0001"

±.0001"

±.00015"

±.00015"

#### **Features**

- IP65 water/dust protection.
- The anvil and spindle have a small diameter for measuring splined shafts, slots, and keyways.
- With Ratchet Stop for constant force.
- With SPC output.

\$446.50

\$446.50

\$500.65

\$542.45

\$627.95

\$548.15

- With a standard bar except 0-1" and 0-25mm model.
- Supplied in fitted plastic case.

	Unit: mm
Type A (ø3mm)	Type B (ø2mm)







Range

0 - 1"/0 - 25.4mm

1 - 2"/ 25.4-50.8mm

2 - 3" / 50.8-76.2mm

3 - 4" / 76.2-101.6mm

Order No.

331-351

331-361

331-352

331-353

331-354

331-364

Order No.	Description	List Price	Sale Price	
05CZA662	40" SPC Cable	\$83.80	\$79.60	
05CZA663	80" SPC Cable	\$92.45	\$87.85	

Type A

Type B

Type A

Type A

Type A

Type B

\$470.00

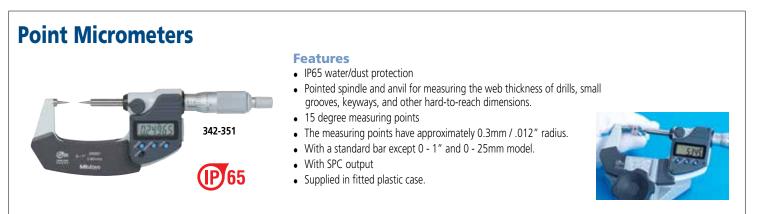
\$470.00

\$527.00

\$571.00

\$661.00

\$577.00



Order No.	Range	Resolution	Accuracy	Point	List Price	Sale Price
342-351	0 - 1"/ 0 - 25.4mm	00005" / 0.001mm	±.0001"	15°	\$462.00	\$438.90
342-352	1 - 2"/ 25.4-50.8mm	00005" / 0.001mm	±.0001"	15°	\$515.00	\$489.25
342-353	2 - 3″ / 50.8-76.2mm	.00005" / 0.001mm	±.0001"	15°	\$537.00	\$510.15
342-354	3 - 4" / 76.2-101.6mm	.00005" / 0.001mm	±.00015"	15°	\$561.00	\$532.95

Order No.	Description	List Price	Sale Price	
05CZA662	40" SPC Cable	\$83.80	\$79.60	
05CZA663	80" SPC Cable	\$92.45	\$87.85	



Order No.

Range

#### **Features**

- .03"/ 0.75mm edge thickness to enter narrow recesses.
- With Ratchet Stop for constant force.
- With SPC output

Resolution

• Supplied in fitted plastic case.



List Price

»	<u>8</u> %	0.75	
⊅	6.5	=≓.	

Type A

422-330	0 - 1"/0 - 25.4mm	.00005″/ 0.001mm	±.00015"	Type A	\$780.00	\$741.00
422-331	1 - 2″/25.4 - 50.8mm	.00005″/0.001mm	±.00015"	Type A	\$835.00	\$793.25
422-332	2 - 3″/50 - 76.2mm	.00005″/0.001mm	±.00015"	Туре А	\$883.00	\$838.85
422-333	3 - 4"/76.2 - 101.6mm	.00005"/0.001mm	±.0002"	Type A	\$920.00	\$874.00
	·					

Order No.	Description	List Price	Sale Price
05CZA662	40" SPC Cable	\$83.80	\$79.60
05CZA663	80" SPC Cable	\$92.45	\$87.85



Sale Price

## **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.

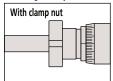


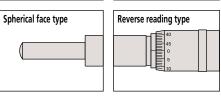
150 Series Mid Size Standard Style Micrometer Heads

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

Order No.	Graduation	Range	Stem Dia.	Stem	Spindle Face	Remarks	List Price	Sale Price
Common Si	ze Small Type	Micrometer	Heads					
148-811	.001″	05″	.375″	Plain	Spherical (SR4)		\$66.05	\$59.45
148-502	.001″	05″	.375″	w/clamp nut & Spindle Lock	Flat		\$68.40	\$61.60
148-801	0.01mm	0-13mm	9.5mm	Plain	Spherical (SR4)		\$66.05	\$59.45
148-121	0.01mm	0-13mm	9.5mm	Plain with Spindle Lock	Flat	-	\$70.25	\$63.25
Ultra-Small	Small Size Mic	rometer He	ads		· · · · · · · · · · · · · · · · · · ·			
148-202	.001″	0250″	.250″	Plain	Flat	-	\$62.85	\$56.60
148-206	.001″	0250"	.250″	Plain	Spherical (SR3)	-	\$64.70	\$58.25
148-208	.001″	0250"	.250″	with Clamp Nut	Spherical (SR3)	-	\$66.05	\$59.45
148-201	0.01mm	0-6.5mm	6mm	Plain	Flat	-	\$62.85	\$56.60
148-205	0.01mm	0-6.5mm	6mm	Plain	Spherical (SR3)	-	\$64.70	\$58.25
148-207	0.01mm	0-6.5mm	6mm	with Clamp Nut	Spherical (SR3)	-	\$66.05	\$59.45
150 Series M	Mid Size Standa	ard Style M	icrometer He	ads				
150-208	.001″	0-1″	.375″	Plain	Flat (Carbide Tip)	-	\$75.20	\$67.70
150-812	.001″	0-1″	.375″	with Clamp Nut	Spherical (SR4)	-	\$80.70	\$72.65
150-802	0.01mm	0-25mm	10mm	with Clamp Nut	Spherical (SR4)	-	\$80.70	\$72.65

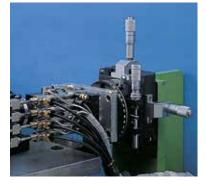
#### **Variety of Specifications**





Spindle lock







## **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	
SPC Output Style				
500-762-10	0-6"/0-150mm	\$248.00	\$235.60	
500-763-10	0-8"/0-200mm	\$312.00	\$296.40	



## • 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	\$89.20
05CZA625	80" SPC Cable	\$95.35	\$90.60

## **ABSOLUTE Digimatic Calipers**



## **ABSOLUTE**<sup>™</sup>

Order No.	Range	Remarks	List Price	Sale Price		
No SPC Out	put Style					
500-195-30	0-4"/0-100mm	.075" Round depth bar	\$144.00	\$136.80		
500-196-30	0-6"/0-150mm		\$156.00	\$148.20		
500-197-30	0-8"/0-200mm		\$224.00	\$212.80		
500-193	0-12"/0-300mm		\$450.00	\$427.50		
With SPC Ou	With SPC Output Style					
500-170-30	0-4"/0-100mm	.075" Round depth bar	\$172.00	\$163.40		
500-171-30	0-6"/0-150mm		\$183.00	\$173.85		
500-172-30	0-8"/0-200mm		\$241.00	\$228.95		
500-173	0-12"/0-300mm		\$525.00	\$498.75		
500-505-10	<b>500-505-10</b> 0-18"/0-450mm Without Thumb Roller \$819.00 \$778.05					
500-506-10	0-24"/0-600mm	Without Thumb Roller	\$900.00	\$855.00		
500-507-10	0-40"/0-1000mm	Without Thumb Roller	\$1,740.00	\$1,653.00		

Order No.	Description	List Price	Sale Price	
959149	40" SPC Cable	\$49.25	\$46.80	
959150	80" SPC Cable	\$55.20	\$52.45	





#### **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.

#### **Features**

- 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



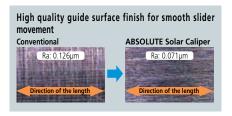


## **ABSOLUTE Solar Calipers**

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



Order No.	Description	List Price	Sale Price
959149	40" SPC Cable	\$49.25	\$46.80
959150	80" SPC Cable	\$55.20	\$52.45

150 19

## **Digimatic Carbon Fiber Calipers**

#### **Features**

- Lightweight Digimatic Calipers that employ CFRP (Carbon Fiber Reinforced Plastics) in the beam and jaws.
- Highly durable and easy to handle.

**ABSOLUTE** 

- 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



MyCAL Lite Digital Calipers	
Features • Economically priced • .001"/0.1mm resolution • Accuracy: ±.005"/±.0.2mm	<b>-</b>

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	\$142.40

Order No.	Range	List Price	Sale Price
552-314-10	40"/1000mm	\$1,890.00	\$1,795.50
552-315-10	60"/1500mm	\$2,260.00	\$2,147.00

**IP7**66

Order No.	Description	List Price	Sale Price
05CZA624	40" IP Caliper Cable	\$93.90	\$89.20
05CZA625	80" IP Caliper Cable	\$95.35	\$90.60

#### **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.



## Calipers

## **Dial Calipers**



#### **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
505-675	6" .100"/rev.		\$121.00	\$108.90
505-689	6" .100"/rev.	Extra Smooth Movement	\$153.00	\$137.70
505-712	6" .100"/rev.	Carbide Tipped Jaws	\$207.00	\$186.30
505-717	6" .200"/rev.		\$111.00	\$99.90
505-676	8" .100"/rev		\$177.00	\$159.30
505-690	8" .100"/rev	Extra Smooth Movement	\$202.00	\$181.80
505-677	12" .100/rev		\$281.00	\$252.90
505-720	12" .200/rev		\$261.00	\$234.90

## **Vernier Caliper**

#### **Features**

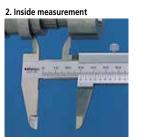
- Can measure OD, ID, depth and steps
- The small vernier face angle (14°) provides easy reading.
- Dual reading scales on vernier..
- Lock screw for holding the sliding jaw position.
- Carbide-tipped jaw type calipers are also available.
- Supplied with vinyl holster in fitted carton.

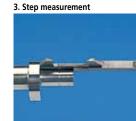
# 530-104

Order No.	Range	Vernier Graduation		Remarks	List Price	Sale Price
		Lower Scale	Upper Scale			
530-104	0 - 150mm / 0 - 6"	0.05mm	1/128"		\$75.90	\$72.10
530-312	0 - 150mm / 0 - 6"	0.02mm	.001″	High accuracy model	\$105.00	\$99.75
530-114	0 - 200mm / 0 - 8"	0.05mm	1/128"		\$124.00	\$117.80
530-118	0 - 200mm / 0 - 8"	0.02mm	.001"	High accuracy model	\$124.00	\$117.80
530-115	0 - 300mm / 0 - 12"	0.05mm	1/128″		\$237.00	\$225.15
530-119	0 - 300mm / 0 - 12"	0.02mm	.001″	High accuracy model	\$232.00	\$220.40

Measurement **Applications** 







4. Depth measurement



## Calipers

## **ABSOLUTE Digimatic Caliper**

With Nib Style and Standard Jaws

#### **Features**

- The rounded faces of the jaws are ideal for accurate ID (inside diameter) measurement.
- With SPC output.
- Supplied in fitted plastic holster in carton. 18"/ 450mm and larger supplied wooden case.



Order No.	Range*	Accuracy	Resolution	Mass (g)	List Price	Sale Price
551-311-10	0 (.4") - 8" / 0 (10) - 200mm	±.001"	.0005″ / 0.01mm	180	\$579.00	\$550.05
551-341-10	0 (.4") - 12" / 0 (10) - 300mm	±.002"	.0005" / 0.01mm	380	\$829.00	\$787.55
551-224-10**	0 (.5″) - 20" / 0 (20) - 500mm	±.0025"	.0005″ / 0.01mm	1,060	\$1,220.00	\$1,098.00
551-226-10**	0 (.5″) - 30" / 0 (20) - 750mm	±.0025"	.0005" / 0.01mm	1,410	\$1,980.00	\$1,881.00
551-227-10**	0 (1") - 40" / 0 (20) - 1000mm	±.003"	.0005" / 0.01mm	3,430	\$2,080.00	\$1,976.00

\*( ): Minimum dimension in ID measurement \*\* Models are not IP67 rated

## **Point Caliper**

SERIES 573 — ABSOLUTE Digimatic

#### **Features**

- Narrow tip jaws fit into very small grooves and tracks, making many previously difficult outside measurements far easier to obtain.
- With depth bar.
- With SPC data output. (Series 573)
- Supplied in fitted plastic case.



Order No.	Range	Accuracy	Resolution	Mass (g)	List Price	Sale Price
573-721	0 - 6" / 0 - 150mm	±.001"	.0005″ / 0.01mm	163	\$407.00	\$386.65
573-725	0 - 6" / 0 - 150mm	±.001"	.0005″ / 0.01mm	163	\$505.00	\$479.75



## **Neck Caliper**

#### SERIES 573 — ABSOLUTE Digimatic

#### Features

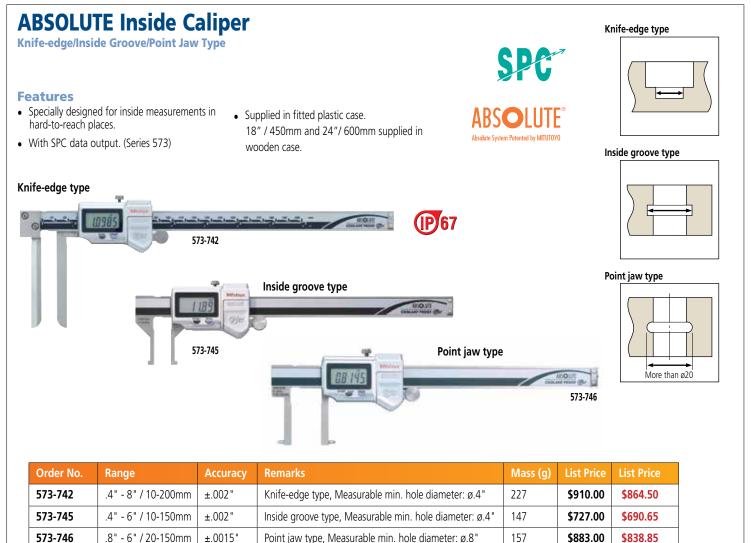
- Point jaw type can measure wall thickness inside bores and recesses.
- Flat jaw type can measure grooves and recesses.
- With SPC data output. (Series 573)
- Supplied in fitted plastic case.











### **Offset Caliper**

SERIES 573 — ABSOLUTE Digimatic

#### **Features**

- Main scale jaw can slide up and down to facilitate measurement of stepped sections. (Hard-to-getat dimensions such as A, B, C can be accurately measured.)
- With depth bar.
- With SPC data output. (Series 573)
- Supplied in fitted plastic case.







## **Inside Measurement**

### **Inside Micrometers**







145-193 Caliper Type Inside Micrometer

141-208 Inside Micrometer

Order No.	Range	Graduations	Style	List Price	Sale Price
141-208	2-8″	.001″	Inside Micrometer	\$195.00	\$175.50
145-193	.2-1.2″	.001″	Caliper Type Inside Micrometer	\$244.00	\$219.60

#### **Optional Accessories**

05CZA662: SPC cable with data switch 1m / 40"
05CZA663: SPC cable with data switch 2m / 80"
300401: Cap for stand holder
300400: Stand holder



Holder

## **Bore Gages**

#### **Features**

- Most popular Bore Gages.
- Carbide-tipped contact points for durability.

Mitutoyo Quality

- 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	\$550.05
511-755	6.5 - 10″		\$652.00	\$619.40
511-756	10 -16″		\$776.00	\$737.20

511-751

#### **Optional Accessories**

953549:	125mm / 4.92" Extension rod
	for 18-35mm / .7 -1.4" models
953552:	125mm / 4.92" Extension rod
	for 35-160mm / 1.4 - 6.5" models
953557:	125mm / 4.92" Extension rod
	for 160-400mm / 6.5 - 16" models
953550:	250mm / 9.84" Extension rod
555550	for 18-35mm / .7 - 1.4" models
953553:	250mm / 9.84" Extension rod
555555.	for 35-160mm / 1 4 - 6 5" models
952361:	250mm / 9 84" Extension rod
552501.	for 160-400mm / 6.5 - 16" models
953551:	500mm / 19.69" Extension rod
955551.	for 18-35mm / .7 - 1.4" models
052554.	
953554:	500mm / 19.69" Extension rod
	for 35-160mm / 1.4 - 6.5" models
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
953559:	750mm / 29.53" Extension rod
	for 160-400mm / 6.5 - 16" models
953556:	1000mm / 39.37" Extension rod
	for 35-160mm / 1.4 - 6.5 " models
953560:	1000mm / 39.37" Extension rod
	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"



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.	Mith 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.	With Extension 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**



www.mitutoyo.com/mholtest VIDE0 DEM0

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





#### **Features**

- 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

# 20% OFF!



368-917

## **Inside Measurement**

## **Digimatic Holtest**

## 20% OFF!

#### **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)









Order No	Range	Accuracy	List Price	Sale Price
468-261	.27535″ / 6.925 - 8.89mm	±.0001"	\$1,110.00	\$888.00
468-262	.35425" / 8.89 - 10.795mm	±.0001"	\$1,110.00	\$888.00
468-263	.4255" / 10.795 - 12.7mm	±.0001"	\$1,120.00	\$896.00
468-264	.565" / 12.7 - 16.51mm	±.0001"	\$1,220.00	\$976.00
468-265	.658" / 16.51 - 20.32mm	±.0001"	\$1,220.00	\$976.00
468-266	.8 - 1" / 20.32 - 25.4mm	±.00015"	\$1,250.00	\$1,000.00
468-267	1 - 1.2" / 25.4 - 30.48mm	±.00015"	\$1,250.00	\$1,000.00
468-268	1.2 - 1.6" / 30.48 - 40.64mm	±.00015"	\$1,280.00	\$1,024.00
468-269	1.6 - 2" / 40.64 - 50.8mm	±.00015"	\$1,290.00	\$1,032.00
468-270	2 - 2.5" / 50.8 - 63.5mm	±.00015"	\$1,400.00	\$1,120.00
468-271	2.5 - 3" / 63.5 - 76.2mm	±.00015"	\$1,400.00	\$1,120.00
468-272	3 - 3.5" / 76.2 - 88.9mm	±.00015"	\$1,420.00	\$1,136.00
468-273	3.5 - 4" / 88.9 - 101.6mm	±.00015"	\$1,440.00	\$1,152.00
468-274	4 - 5" / 101.6 - 127mm	±.00025"	\$1,880.00	\$1,504.00
468-275	5 - 6" / 127 - 152.4mm	±.00025"	\$1,930.00	\$1,544.00
468-276	6 - 7" / 152.4 - 177.8mm	±.00025"	\$2,050.00	\$1,640.00
468-277	7 - 8″ / 177.8 - 203.2mm	±.00025"	\$2,140.00	\$1,712.00
468-278	8 - 9" / 203.2 - 228.6mm	±.00025"	\$2,280.00	\$1,824.00
468-279	9 - 10" / 228.6 - 254mm	±.00025"	\$2,330.00	\$1,864.00
468-280	10 - 11" / 254 - 279.4mm	±.00025"	\$2,410.00	\$1,928.00
468-281	11 - 12" / 279.4 - 304.8mm	±.00025"	\$2,520.00	\$2,016.00

Optional	Accessories

Mounting plate for stand					
156-101-10: Stand					
Extension rod 100mm / 3.94"					
For range 6-12mm / .2755" models					
Extension rod 150mm / 5.9"					
For range 12-20mm / .5"8" models					
Extension rod 150mm / 5.9"					
For range 20-50mm / .8" - 2" models					
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	\$79.60
05CZA663	80" SPC Cable	\$92.45	\$87.85



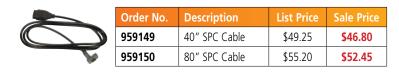
## **Digimatic Depth Gage**

#### **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
571-212-20	0-8"/0-200mm	\$426.00	\$404.70
571-213-10	0-12"/0-300mm	\$492.00	\$467.40



## **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.	Range	Resolution	List Price	Sale Price
547-400S	047″/0-12mm	.00005″/0.001mm	\$831.00	\$789.45
547-520S	047"/0-12mm	.0005″/0.01mm	\$304.00	\$288.80

Order No.	Description	List Price	Sale Price
905338	40" SPC Cable	\$40.05	\$38.05
905409	80" SPC Cable	\$47.75	\$45.40





## 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	\$106.20



## **Series One Dial Indicators**

Mitutoyo's Dial Indicators now offer users more stability and longer life, thanks to advances to the inner workings of the rack and pinion gear system. Shock resistance is increased with a more robust gear train, while contamination resistance has been dramatically increased over other indicators of this type with a tighter seal around the bezel and frame, and the elimination of a lifting lever screw.



Order No.	Graduation	Range	Accuracy	Dial Face	List Price	Sale Price
1410S	.001″	.25″	±.001"	0-100	\$108.00	\$97.20
1410S-10**	.001″	.25″	±.001"	0-100	\$112.00	\$100.80
1410SB*	.001″	.25″	±.001"	0-100	\$108.00	\$97.20
1506S	.0005″	.125″	±.0005"	0-50	\$99.80	\$89.80
1507S	.0005″	.125″	±.0005"	0-25-0	\$99.80	\$89.80

\* with flat back \*\* jeweled

## **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	\$209.00
20465	0.01mm	10mm/1mm	w/lug	0-100	0.013mm	1.4N or less	\$114.00	\$108.30
2416S	.001″	1"/.1"	w/lug	0-100	.001 / .002	1.8N or less	\$119.00	\$113.05
2416S-10	.001″	1"/.1"	w/lug	0-100	.001 / .002	1.8N or less	\$141.00	\$133.95
2424S-19	.001″	2"/1"	w/lug	0-100	.001 / .003	2.5N or less	\$220.00	\$209.00
2776S	.0005″	1" / .05"	w/lug	0-50	.0005 / .002	2.5N or less	\$142.00	\$134.90

# 24165

## "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
w less	513-403	.0001″	.008″	0-4-0	Anti Magnet, Jeweled	\$169.00	\$160.55
1622	513-403T	.0001″	.008″	0-4-0	Anti Magnet, Jeweled Set	\$198.00	\$188.10

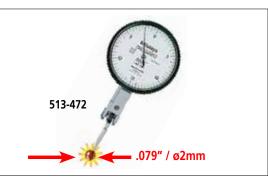


## **Ruby Stylus Test Indicator**

- **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



## **Pocket Type Test Indicator**

#### **Features**

- Jeweled bearings
- Reversible measuring direction
- Contact points adjustable within 220°
- Two holding bars supplied

Order No.	Graduation	Range	Dial Face	Accuracy	List Price	Sale Price
513-504T	.0001″	01″	0-5-0	±.0002"	\$176.00	\$167.20
513-512T**	0005″	.02″	0-10-0	±.0005"	\$182.00	\$172.90
513-518T	.001″	.04″	0-20-0	±.001"	\$138.00	\$131.10

\*\* Long Point

## **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
70105	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

## **Dial Gage Stands**

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

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.





7012-10



7011BN

www.mitutoyo.com



7010S

## **IDC Digimatic Indicators**

#### **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/ $\pm$ 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"/0.01mm Resolution							
543-402	.500"/12.7mm	Lug Back	\$310.00	\$294.50			
543-402B	.500"/12.7mm	Flat Back	\$310.00	\$294.50			
543-476B	1"/25mm	Flat Back	\$454.00	\$431.30			
543-496B	2"/50mm	Flat Back	\$597.00	\$567.15			
.00005"/.00	01"/.0005"/0.001	mm/0.01mm Reso	olution				
543-392	.500"/12.7mm	Lug Back	\$424.00	\$402.80			
543-392B	.500"/12.7mm	Flat Back	\$424.00	\$402.80			
543-472B	1"/25mm	Flat Back	\$568.00	\$539.60			
543-492B	2"/50mm	Flat Back	\$713.00	\$677.35			



Models available with selectable resolutions: .00005"/.0001"/.0005"/0.001mm/0.01mm

Order No.	Description	List Price	Sale Price
905338	40" Cable for Indicators	\$40.05	\$38.05
905409	80" Cable for Indicators	\$47.75	\$45.40

#### • Three large buttons

The popular three-large button design, which is used in products such as the ABS coolant proof Digimatic indicators ID-N/B, 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

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

connected)

#### • Parameter setting mode

Count direction switching, tolerance judgment setting, resolution switching, scale factor setting, and function lock setting • inch/mm conversion (inch/mm models)

#### • 330° rotary display

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



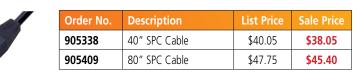
## **Digimatic Height Gages (Standard Type)**

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		±.001"	\$1,540.00	\$1,386.00
192-631-10	0-18"/0-450mm	.0005″/0.01mm	±.002"	\$2,110.00	\$1,899.00
192-632-10	0-24"/0-600mm	or .0002"/0.005mm	±.002"	\$2,690.00	\$2,421.00
192-633-10	0-40"/0-1000mm		±003"	\$5,080.00	\$4,572.00

#### Functions include:

- Zero/ABS setting (ABS and INC modes)
- 2 Value Preset Memory
- Data hold
- ± Counting
- Inch/mm conversion





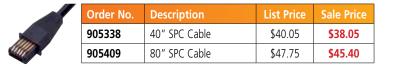
## **Digimatic Height Gages (Multi-Function Type)**

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.

Order No.	Range	Resolution	Accuracy	List Price	Sale Price
192-670-10	0-12"/0-300mm	.0005"(0.01mm)	±001″	\$1,770.00	\$1,593.00
192-671-10	0-18"/0-450mm	[.0002"(0.005mm)	±0015″	\$2,280.00	\$2,052.00
192-672-10	0-24"/0-600mm	Switchable)]	±0015″	\$2,920.00	\$2,628.00



Functions include:

- Zero/ABS setting (ABS and INC modes)
- 2 Value Preset Memory
- Data hold
- ± Counting
- Inch/mm conversion





400

1045

192-670-10

## **Dial Height Gages**

192-150

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	\$1,638.00



Easy and secure clamping



## Gage Blocks

## **Rectangular Steel Gage Block Sets**

516-902-26

#### **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 fullscale 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.

Order No.	Blocks per Set	Grade	Size	Step	Qty	List Price	Sale Price
			.10011009"	.0001″	9		
516-902-26	81	0	.101149″	.001″	49	\$1,970.00	\$1,773.00
510-502-20	01	0	.0595″	.05″	19	\$1,970.00	\$1,775.00
			1 - 4″	1″	4		
			.10011009″	.0001″	9		
516-903-26	81	AS-1	.101149"	.001″	49	\$1,710.00	\$1,539.00
510-505-20	01	AD-1	.0595".	.05″	19	\$1,710.00	\$1,539.00
			1-4″	1″	4		
			.10011009″	.0001″	9	- \$1,550.00	
516-904-26	81	AS-2	.101149″	.001″	49		\$1,395.00
510-904-20	01		.0595″	.05″	19		\$1,353.00
			1-4″	1″	4		
			.10005″		1		
			.10011009″	.0001″	9		
516-914-26	35	0	.101149"	.001″	9	\$1,040.00	\$936.00
510-514-20		0	.1119″	.01″	9	\$1,040.00	\$520.00
			.13″	.1″	3		
			.5, 1, 2, 4″		4		
			1.001-1.009mm	0.001mm	9		
516-947-26	87	AS-1	1.01-1.49mm	0.01mm	49	\$2,460.00	\$2,214.00
510-947-20	0/	A2-1	0.5-9.5mm	0.5mm	19		₽Z,Z14.0U
			10-100mm	10	10		



Order No.	Blocks per Set	Grade	Blocks Incl. In Set	Remarks	List Price	Sale Price
516-930-26	9	0	.0625", .100", .125", .200", .250"	Optical parallel	\$360.00	\$324.00
516-931-26	9	AS-1	, .300", .500" 1", 2"	(t = .5")	\$314.00	\$282.60
516-935-26	9	AS-1	.0625", .100", .125", .200:, .250", .300", .500", 1", 2"		\$242.00	\$217.80

## Square Steel Gage Block Set

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Order No.	Blocks per Set	Grade	Size	Step	Qty	List Price	Sale Price
516-402-26		0	.1001″1009″	0.0001″	9	- \$2,820.00	\$2,538.00
	81		.101″149″	0.001″	49		
	01	0	.05"95"	0.05″	19		
			1" - 4"	1″	4		

## **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	\$89.20
05CZA625	80″	—	IP66/67 Calipers	\$95.35	\$90.60
05CZA662	40″	—	IP65 Micrometers	\$83.80	\$79.60
05CZA663	80″	—	IP65 Micrometers	\$92.45	\$87.85
959149	40″	-	Height Gage 570 Series, Digimatic Indicator 543 and 575 Series, Digimatic Scale Unit 572 Series, Digimatic Absolute Calipers	\$49.25	\$46.80
959150	80″	-	Height Gage 570 Series, Digimatic Indicator 543 and 575 Series, Digimatic Scale Unit 572 Series, Digimatic Absolute Calipers	\$55.20	\$52.45
Without Data Out Sw	vitch				
937387	40″	6	Borematic 568 Series	\$50.85	\$48.30
965013	80″	6	Borematic 568 Series	\$60.10	\$57.10
905338	8 40" — Height Gage 570 Series, Digimatic Indicator 543 and 575 Series, Digimatic Scale Unit 572 Series		\$40.05	\$38.05	
905409	80″	-	Height Gage 570 Series, Digimatic Indicator 543 and 575 Series, Digimatic Scale Unit 572 Series	\$47.75	\$45.40

## Multiplexers – MIG-8USB, MIG-4USB

**MIG-8USB** 

64AAB386

8

146 x 150 x 45

540

\$1,340.00

\$1,206.00

#### Features

Model No. Order No.

Gage Capacity

Mass (g)

List Price

Sale Price

Dimension (mm) W x D x H

• A measurement data transfer device, multiplexer MIG-8USB and MIG-4USB converts digimatic output measurement data to RS-232C and outputs it to an external device such as PC.

Mitutoyo			H10-8018
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64AAB386 Front view



64AAB386 Back view

MeasurLink	<b>ENABLED</b>
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Data Management Software by Mitutoyo

## **Digimatic Mini-Processor**

Order No.	Description	List Price	Sale Price
264-504-5A	DP - 1VR	\$506.00	\$480.70



#### Features

**MIG-4USB** 

4

146 x 150 x 70

710

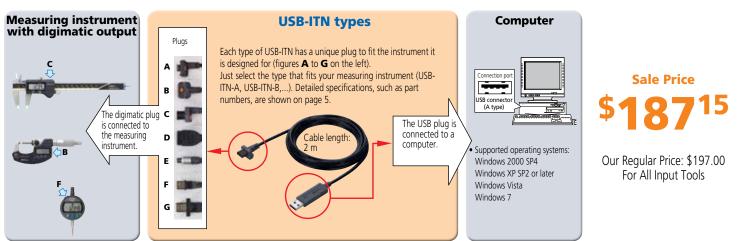
\$830.00

\$747.00

- 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.



## **USB Input Tool Direct**



Determine the plug type suitable for your measuring instrument (one of the seven types from A to G) in the following table, and then select the corresponding USB Input Tool Direct.

Model Order No.	USB-ITN-A 06ADV380A	USB-ITN-B 06ADV380B	USB-ITN-C 06ADV380C	USB-ITN-D 06ADV380D	USB-ITN-E 06ADV380E	USB-ITN-F 06ADV380F	USB-ITN-G 06ADV380G
Whether the existence of a data switch affects usability	Incorporates a data sw whether or not the me	easuring instrument h	able regardless of as a switch.	Does not incorporate a the instrument alone. (H	data switch, so an instrum łowever, the tool can be u	ent fitted with a switch is used with USB-ITPAK.)	
Cable type	A Water-proof with switch	<b>B</b> Water-proof with switch	<b>C</b> With switch	<b>D</b> 10-pin plain	E 6-pin round	<b>F</b> Straight type	G Water-proof straight type
Illustration of the plug that connects to the measuring instrument		Data switch	Data switch				
Socket type on the measuring instrument	• = •		(°	- ISHOT			0
	[Digimatic Caliper /Super Caliper] -500 series -550/551 series	[Digimatic Micrometer, QuantuMike] - <b>293series</b>	[Digimatic Micrometer Head] - <b>164 series</b> [Digimatic Caliper]	[Surface Roughness Tester] -178 series	models that incorporate [Digimatic Micrometer] -121 series -164 series	[Digimatic Height Gage] -192/570/574 series [Digimatic Caliper]	[Digimatic Indicator] - <b>543 series</b>
Codes of major compatible measuring instruments	[Digimatic Carbon Fiber Caliper] -552 series [Digimatic Depth Gage] -571 series [Digimatic Scale Unit] -572 series [Digimatic Exclusive Caliper] -573 series	[Tubular Inside Micrometer] -337 series -339 series [Digimatic	-500 series - 550/ 551 [Digimatic Depth Gage] -571 series [Digimatic Scale Unit] -572 series [Digimatic Exclusive Caliper] -573 series	-179 series [Linear Height] -518 series [Reference Gage] -515 series [Digimatic Indicator] -543 series [Laser Scan Micrometer] -544 series [µ-checker] Digital µ-checker (Using the foot switch)	-227 series -293 series [Tubular Inside Micrometer] -337 series [Tubular Inside Micrometer] -339 series [Digimatic Holtest] -468 series [Reference Gage] -515 series [Borematic] -568 series [Hardness Testing Machines] -810 series	-500/550/551 series [Digimatic Bore Gage] -511 series [Digimatic Indicator] -543 seires [Digimatic Depth Gage/ Digimatic Thickness Gage] -547 series Digimatic Carbon Fiber Caliper] -552 series [Digimatic Scale Unit] -572 series [Portable Hardness Testing Instruments] -811 series	
				Measuring instrument r [Digimatic Indicator]	nodels that do not have a No corresponding	data switch [Digimatic Indicator]	No corresponding
				-543 series ID-F [Linear Gage/Counter] -542 series [Litematic] -318 series	models	[Digimatic Indicator] -543 series [Digimatic Depth Gage/ Digimatic Thickness Gage] -547 series Digimatic model -575 series	models

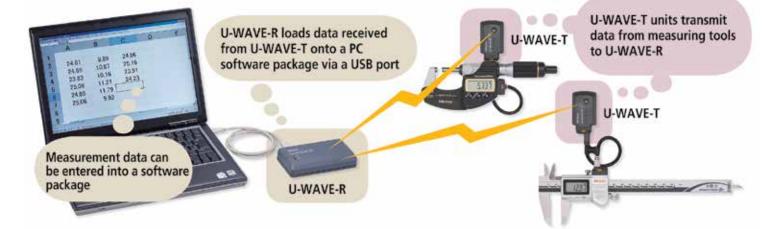
## **U-Wave Wireless Data Communication System**

The U-WAVE system enables easy wireless data communication from a measuring tool to a PC using the Digimatic protocol. Measurement efficiency is improved by eliminating long and cumbersome data cables. The user-friendly interface allows data to be loaded into any software product that accepts keyboard input, such as Excel or Notepad.

#### How to "Spec" a U-Wave System:

- 1. One U-Wave-R required per system (will support up to 100 U-Wave-T): Order No. 02AZD810D
- 2 One U-Wave-T required per tool: Order No. 02AZD730D
- 3. Select the required connecting cable (cable length approx. 6"). Use the convenient U-Wave Cable Selection Chart to convert your existing cable part number to the corresponding U-Wave cable order number.





### **U-Wave-R**

#### **Features**

- Supports up to 100 U-Wave-T
- Comes complete with U-WavePak set-up/data input software.
- U-WavePak, standard with U-Wave-R features a keyboard interface function. This allows measurement data to be easily entered into in Excel, Notepad or other formats that accepts numeric value input via a keyboard.
- Supplied with USB connecting cable.
- MeasurLink<sup>®</sup> V6.1 Real-Time PLUS supports the U-Wave System.

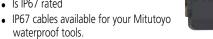


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## **U-Wave-T**

#### **Features**

• Is IP67 rated



- Battery life approx. 400,000 data transmissions.
- Up to 60 feet transmission range Actual range depends on the local radio transmission characteristics.

Order No.	Description	Use For Cables	List Price	Sale Price
02AZD810D	U-Wave-R		\$499.00	\$474.05
02AZD730D	U-Wave-T		\$220.00	\$209.00
02AZD790A	U-Wave Connecting Cable A	05CZA624 or 05CZA625	\$110.00	\$104.50
02AZD790B	U-Wave Connecting Cable B	05CZA662 or 05CZA663	\$110.00	\$104.50
02AZD790C	U-Wave Connecting Cable C	959149 or 959150	\$110.00	\$104.50
02AZD790D	U-Wave Connecting Cable D	936937 or 965014	\$110.00	\$104.50
02AZD790E	U-Wave Connecting Cable E	937387 or 965013	\$110.00	\$104.50
02AZD790F	U-Wave Connecting Cable F	905338 or 905409	\$110.00	\$104.50
02AZD790G	U-Wave Connecting Cable G	21EAA194 or 21EAA190	\$110.00	\$104.50

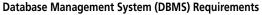
## MeasurLink

## **MeasurLink**<sup>®</sup> Real Time Data Collection Software

MeasurLink 7 Real-Time Standard Edition is designed for customers who want to acquire and analyze data in real-time and check variable and attribute inspection to maximize production and minimize defects. It has views to allow the user to create Parts, Characteristics with nominal and tolerance and Traceability lists. The data collection interface provides real-time graphics for Run charts, Control charts, Histograms and Statistics. Standard views include Datasheet (observations and charts), Classic View (chart windows), and the 2D view (part images with callouts that include charts and statistical data). Full reporting template functionality is also provided. Supported data sources include keyboard, RS232 and USB devices

MeasurLink 7 Real-Time Professional Edition enables customers to connect and acquire data from Mitutoyo Coordinate Measuring Machines, Vision and Form Measuring Systems via native integration (DDE). ASCII and QMD (xml-based) file imports are also supported. In addition to all of the features supported by MeasurLink 7 Real-Time Standard Edition, this application also supports data filters. Full reporting functionality with templates is also provided. Supported data sources include keyboard, RS232C and USB devices, native Mitutoyo integration (DDE), ASCII and QMD (xml-based) file imports.

MeasurLink 7 Real-Time Professional 3D Edition is designed for customers who wish to collect data using the Hoops 3D graphics view. Hoops 3D files can be exported from most CAD systems and provides the operator with a real view of the part. Camera angle and position can be saved for each characteristic providing for an intuitive prompted guided sequencing for the inspector. Supported data sources include keyboard, RS232C and USB devices, native Mitutoyo integration (DDE), ASCII and QMD (xml-based) file imports.



MeasurLink 7 ships with a copy of Microsoft® SQL Server Express Edition 2008 R2, this can be for a standalone or a workgroup installation.

MeasurLink 7 also supports the following Microsoft SQL Server versions:

- Microsoft® SQL Server 2008 Standard Edition
- Microsoft® SQL Server 2008 Enterprise Edition
- Microsoft® SQL Server 2005 Workgroup Edition
- Microsoft<sup>®</sup> SQL Server 2005 Standard Edition

#### **Operating System Requirements**

All MeasurLink 7 products are supported on the following Microsoft® Windows Operating System versions:

- All Windows XP SP3 versions
- All Windows Vista SP2 versions
- All Windows 7 versions
- Both 32bit and 64bit operating systems supported ٠
- \*\* Note: All product media will contain installers for both 32bit and 64bit systems

#### PC (OS Specific Hardware Requirements (Network)

Windows 7	<ul> <li>1 gigahertz (GHz) or faster 32-bit (x86) or 64-bit (x64) processor</li> <li>2 gigabyte (GB) RAM (32-bit)</li> <li>16 GB available hard disk space (32-bit) or 20 GB (64-bit)</li> <li>DirectX 9 graphics device with WDDM 1.0 or higher driver</li> <li>DVD-ROM drive</li> </ul>	Microsoft Partner Silver Independent Software Vendor Silver Mobility
Windows Vista SP2	<ul> <li>1 gigahertz (GHz) 32-bit (x86) or 64-bit (x64) processor</li> <li>2 gigabyte (GB) of system memory</li> <li>40 GB hard drive with at least 15 GB of available space (20 GB for Home Basic)</li> <li>Support for DirectX 9 graphics with WDDM and 128 MB of graphics memory</li> <li>DVD-ROM drive</li> </ul>	Silver Desktop Silver Midmarket Solution Provider
Windows XP SP3	<ul> <li>1 gigahertz (GHz) 32-bit (x86)</li> <li>1 gigabyte (GB) of system memory</li> <li>40 GB hard drive with at least 15 GB of available space</li> <li>DVD-ROM drive</li> </ul>	Marriel Marriel

Order No.	Description	List price	Sale Price
64AAB177	MEASURLINK V7.0 REAL-TIME STANDARD EDITION	\$1,195.00	\$1,075.00
64AAB178	MEASURLINK V7.0 REAL-TIME PROFESSIONAL EDITION	\$1,795.00	\$1,615.00
64AAB179	MEASURLINK V7.0 REAL-TIME PROFESSIONAL 3D EDITION	\$1,995.00	\$1,795.00





Software Vendor (ISV)

## **Digimatic Scales**

## **ABSOLUTE Digimatic Scale Units**

#### **Features**

- The ORIGIN key allows setting of an absolute zero point to be used as reference in subsequent measurements. Once set, the ABS Digimatic Scale Unit is ready to show its true position whenever turned on rather than 0.00" as with standard models.
- The ZERO/ABS key allows the display to be zero-set at any slider position along the beam for incremental comparison measurements. This key will also allow return to the absolute coordinate with a display of the true position from the origin point.
- No rack, no pinion, no glass scale. Digimatic Scale Unit is safely embedded in the hardened stainless steel blade.
- Horizontal or vertical face according to the scale mounting direction.
- Special type that is provided with diameter displaying function is available for lathes.
- All units come with two mounting brackets, each located at either end of the scale.
- With SPC data output.

Order No	Model	Range	Accuracy	Resolution	Туре	List Price	Sale Price
572-210-20	SD-4"DX	0-4" / 0-100mm	.001″ / 0.03mm	.0005" / 0.01mm	Horizontal single-function	\$235.00	\$223.25
572-211-20	SD-6"DX	0-6" / 0-150mm	.001" / 0.03mm	.0005" / 0.01mm	Horizontal single-function	\$249.00	\$236.55
572-212-20	SD-8"DX	0-8" / 0-200mm	.001" / 0.03mm	.0005i" / 0.01mm	Horizontal single-function	\$290.00	\$275.50
572-213-10	SD-12"D	0-12" / 0-300mm	.002" / 0.04mm	.0005" / 0.01mm	Horizontal single-function	\$559.00	\$531.05
572-310-10	SD-6"D	0-4" / 0-100mm	.001" / 0.03mm	.0005" / 0.01mm	Vertical single function	\$260.00	\$247.00
572-311-10	SD-6"D	0-6" / 0-150mm	.001" / 0.03mm	.0005" / 0.01mm	Vertical single-function	\$276.00	\$262.20
572-312-10	SD-8"D	0-8" / 0-200mm	.001" / 0.03mm	.0005" / 0.01mm	Vertical single function	\$320.00	\$304.00
572-313-10	SD-12"D	0-12" / 0-300mm	.002" / 0.04mm	.0005" / 0.01mm	Vertical single function	\$616.00	\$585.20

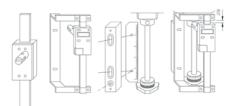


## **Quill Kit with Absolute Encoder**

**Easy Installation Fits Most Vertical Knee Mills** 

#### **Features**

- Easy to read LCD with resolution of .0005"/0.01mm. 0 -6" Travel inch/mm
- Push button controls for inch/mm, Zero-Set and On/Off.
- Powered by a single SR-44 Battery which lasts about 1 year with normal use.
- SPC Output for data transmission to Data Processors or a Remote Display.



Order No.	Description	List Price	Sale Price
053906B	Digimatic Quill Kit complete with brackets & scale for Bridgeport Type machines.	\$306.00	\$275.40



# ABSOLUTE

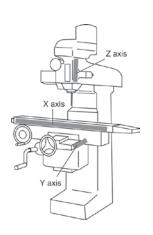


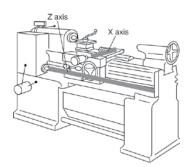
The Mitutoyo Quill Kit mounted on a vertical mill.

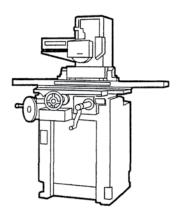
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## **Digital Readout**











Order No.	Description	X Travel	Y Travel	Z Travel	X Axis type	Y Axis type	Z Axis type	List Price	Sale Price
64PKA058	12" X 30" DRO Mill Pkg	30″	12″		AT715	AT715		\$1,490.00	\$1,341.00
64PKA059	12" X 36" DRO Mill Pkg	36″	12″		AT715	AT715		\$1,490.00	\$1,341.00
64PKA060	14" X 30" DRO Mill Pkg	30″	14″		AT715	AT715		\$1,490.00	\$1,341.00
64PKA061	14" X 40" DRO Mill Pkg	40″	14″		AT715	AT715		\$1,490.00	\$1,341.00
64PKA062	16" X 36" DRO Mill Pkg	36″	16″		AT715	AT715		\$1,490.00	\$1,341.00
64PKA063	16" X 40" DRO Mill Pkg	40″	16″		AT715	AT715		\$1,490.00	\$1,341.00
64PKA064	18" X 40" DRO Mill Pkg	40″	18″		AT715	AT715		\$1,490.00	\$1,341.00
64PKA065	12' x 30" x 6" Mill Pkg	30″	12″	6″	AT715	AT715	AT715	\$2,220.00	\$1,998.00
64PKA066	12' x 36" x 6" Mill Pkg	36″	12″	6″	AT715	AT715	AT715	\$2,220.00	\$1,998.00
64PKA067	16' x 36" x 6" Mill Pkg	36″	16″	6″	AT715	AT715	AT715	\$2,220.00	\$1,998.00
64PKA035	6" X 28" Lathe Pkg	6″		28″	AT116		AT715	\$1,680.00	\$1,512.00
64PKA036	6" X 30" Lathe Pkg	6″		30″	AT116		AT715	\$1,680.00	\$1,512.00
64PKA037	6" X 36" Lathe Pkg	6″		36″	AT116		AT715	\$1,680.00	\$1,512.00
64PKA038	6" X 40" Lathe Pkg	6″		40″	AT116		AT715	\$1,680.00	\$1,512.00
64PKA039	8" X 40" Lathe Pkg	8″		40″	AT116		AT715	\$1,680.00	\$1,512.00
64PKA040	8" X 44" Lathe Pkg	8″		44″	AT116		AT715	\$2,040.00	\$1,836.00
64PKA041	8" X 48" Lathe Pkg	8″		48″	AT116		AT715	\$2,040.00	\$1,836.00
64PKA042	10" X 40" Lathe Pkg	10″		40″	AT116		AT715	\$1,680.00	\$1,512.00
64PKA043	10" X 44" Lathe Pkg	10″		44″	AT116		AT715	\$2,040.00	\$1,836.00
64PKA044	10" X 48" Lathe Pkg	10″		48″	AT116		AT715	\$2,040.00	\$1,836.00
64PKA045	10" X 60" Lathe Pkg	10″		60″	AT116		AT715	\$2,040.00	\$1,836.00
64PKA046	12" X 40" Lathe Pkg	12″		40″	AT116		AT715	\$1,680.00	\$1,512.00
64PKA047	12" X 44" Lathe Pkg	12″		44″	AT116		AT715	\$2,040.00	\$1,836.00
64PKA048	12" X 48" Lathe Pkg	12″		48″	AT116		AT715	\$2,040.00	\$1,836.00
64PKA049	12" X 52" Lathe Pkg	12″		52″	AT116		AT715	\$2,040.00	\$1,836.00
64PKA050	12" X 60" Lathe Pkg	12″		60″	AT116		AT715	\$2,040.00	\$1,836.00
64PKA051	12" X 72" Lathe Pkg	12″		72″	AT116		AT715	\$2,040.00	\$1,836.00
64PKA052	14" X 40" Lathe Pkg	14″		40″	AT116		AT715	\$1,680.00	\$1,512.00
64PKA053	14" X 44" Lathe Pkg	14″		44″	AT116		AT715	\$2,040.00	\$1,836.00
64PKA054	14" X 48" Lathe Pkg	14″		48″	AT116		AT715	\$2,040.00	\$1,836.00
64PKA055	14" X 52" Lathe Pkg	14″		52″	AT116		AT715	\$2,040.00	\$1,836.00
64PKA056	14" X 60" Lathe Pkg	14″		60″	AT116		AT715	\$2,040.00	\$1,836.00
64PKA057	16" X 60" Lathe Pkg	16″		60″	AT116		AT715	\$2,040.00	\$1,836.00
64PKA026	6" X 12" Grinder Pkg		12″	6″		AT116	AT116	\$1,620.00	\$1,458.00
64PKA027	6" X 14" Grinder Pkg		14″	6″		AT116	AT116	\$1,620.00	\$1,458.00
	8" X 12" Grinder Pkg		12″	8″		AT116	AT116	\$1,620.00	\$1,458.00
64PKA029	8" X 14" Grinder Pkg		14″	8″		AT116	AT116	\$1,620.00	\$1,458.00
64PKA030	8" X 16" Grinder Pkg		16″	8″		AT116	AT116	\$1,620.00	\$1,458.00
64PKA031	10" X 18" Grinder Pkg		18″	10		AT116	AT116	\$1,620.00	\$1,458.00
64PKA032	10" X 24" Grinder Pkg		24″	10		AT116	AT116	\$1,620.00	\$1,458.00
64PKA033	12" X 18" Grinder Pkg		18″	12		AT116	AT116	\$1,620.00	\$1,458.00
64PKA034	12" X 20" Grinder Pkg		20″	12		AT116	AT116	\$1,620.00	\$1,458.00

## 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  $\pm 0.5 \mu m$  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	\$10,890.00
544-116-1A	.020" - 2.36"/0.5mm - 60mm	.000002"005"/0.00005 - 0.1mm	\$8,940.00	\$8,046.00



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**

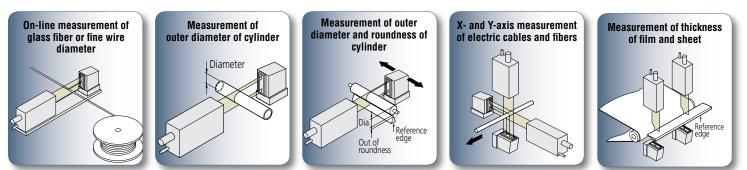
#### **Features**

- 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

# Package

#### LSM-6200 Display Unit Included!

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	\$9,333.00
64PKA118	LSM-501S	.002″4″	0.05~10mm	±0.04µm	±0.5µm	3,200 scans/sec	\$9,330.00	\$8,397.00
64PKA119	LSM-503S	.012" - 1.18"	0.3~30mm	±0.11µm	±1.0µm	3,200 scans/sec	\$10,110.00	\$9,099.00
64PKA120	LSM-506S	.04" - 2.36"	1~60mm	±0.36µm	±3µm	3,200 scans/sec	\$11,480.00	\$10,332.00
64PKA121	LSM-512S	.04" - 4.72"	1~120mm	±0.85µm	±6µm	3,200 scans/sec	\$17,680.00	\$15,912.00
64PKA122	LSM-516S	.04" - 6.30"	1~160mm	±1.4µm	±7µm	3,200 scans/sec	\$28,480.00	\$25,632.00



## **Sensor Systems**

## Litematic and Litematic Head High-resolution Measuring Unit

#### **Features**

- The Litematic is designed for measuring easily-deformed workpieces and high-precision parts such as pin gages, thin-wall bearings, plastic parts, and springs.
- Extra-low measuring force of 0.01N (1gf).
- Hands free operation with optional foot switch.
- Ceramic anvil is free from corrosion and easy to maintain.
- The Litematic Head unit can be mounted onto fixtures or an optional stand to allow great flexibility of use.
- With SPC output.

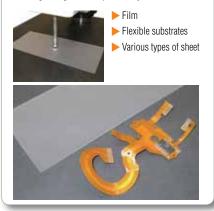


Order No.	Resolution	Range	Accuracy (at 20°C)	List Price	Sale Price
318-221A	Suinch Suinch I	0 - 2" (50mm)	(0.5 + L / 100)µm L=Measured length (mm)	\$8,480.00	\$7,632.00
318-226A	0.1µm, 1µm	0 - 2" (50mm)	(0.5+L/100)µm L=Measured length (mm)	\$8,480.00	\$7,632.00
957460	Dedicated Stand for	Stand for Model 318-226A*			\$3,496.00



#### Film and sheet

If the workpiece flexes, making accurate measurement impossible, using a type with a larger measuring force or adding a weight to the spindle may be effective.



#### Rubber and plastic

If the workpiece is soft the risk of indentation may be reduced by replacing the standard contact point with one of larger radius, such as an optional carbide-ball type.

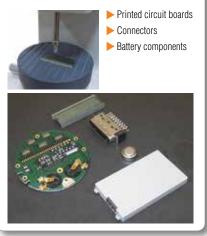


#### Precision components



#### Electronic components

For this type of workpiece the smallest measuring force available is recommended.



#### Thin sheet metal

Because the measuring force is small, deformation of the workpiece can be minimized.
Chassis
Shimming materials
Blade springs
Beverage can materials

#### Medical and pharmaceutical products

If the workpiece is soft the risk of indentation may be reduced by replacing the standard contact point with one of larger radius, such as an optional carbide-ball type.



## **Rockwell Hardness Testers**

- Model: HR-210MR
- Rockwell Motorized test force
- control Test force selection
- manual by weight



# Model: HR-320MS

- Rockwell/Rockwell Superficial
- Motorized test force control
- Test force selection manual by weight

 Dial a weight test force selection • Auto brake/start

Rockwell

control

Model: HR-430MR

• Motorized test force

#### Model: HR-430MS Rockwell/Rockwell

- Superficial • Motorized test force control
- Dial a weight test force selection
- Auto brake/start

Model Order No.	HR-210MR <b>963-220-10A</b>	HR-320MS 963-231-10A	HR-430-MR <b>963-240-10A</b>	HR-430MS <b>963-241-10A</b>	
Rockwell	+	+	+	+	
Rockwell Superficial	_	+		+	
Light Force Brinell	Optional	Optional	Optional	Optional	
Display Unit	Analog	Digital: Hardness value, Scale display, Timer setting, Conversion, GO/NG judgment, Offset setting			
Data Output	_	RS-232C SPC (Digimatic)			
Dial a Weight	_	_	+	+	
Motorized Test Force Control	+	+	+	+	
Automatic Brake/Start	_	_	+	+	
List Price	\$6,100.00	\$8,740.00	\$9,000.00	\$10,000.00	
Sale Price	\$4,990.00	\$6,990.00	\$7,990.00	\$8,990.00	

#### Mitutoyo is proud to introduce the new 963 Series of Hardness Testers.

Four new features packed yet economical Rockwell and Rockwell Superficial Hardness Testers cover a large range of testing applications. These testers meet the current international requirements such as ASTM E18 and are designed for years of accurate results.

## **Durometers (Digital and Analog)**

For Rubber and Plastics Hardness Testing

Durometers are suitable for testing natural rubber, neoprene, polyesters, P.V.C., leather, Thiokol, nitril, wax, vinyl, cellulose acetates, glass, polystyrol and other materials.





Compact Digital 811-336-10

Order No	Model	Scale	Display	Graduation	Range	Indenter	List Price	Sale Price
811-335-10	HH-335	Shore A	Analog	1.0	10~90	Blunt Taper	\$599.00	\$569.05
811-336-10	HH-336	Shore A	Digital	0.5	10~90	Blunt Taper	\$1,280.00	\$1,216.00
811-337-10	HH-337	Shore D	Analog	1.0	20~90	Sharp Point	\$599.00	\$569.05
811-338-10	HH-338	Shore D	Digital	0.5	20~90	Sharp Point	\$1,280.00	\$1,216.00
64AA964		Test Block Set (Shore A Scale)					\$188.00	\$178.60
64AAA590		Test Block Set (Shore B Scale					\$188.00	\$178.60
64AAA962		"A" Scale Durometer Stand					\$959.00	\$911.05
64AAA796		"D" Scale Durometer Stand					\$2,500.00	\$2,375.00

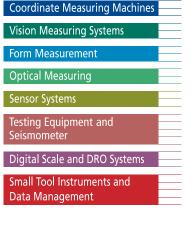




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