

**MeasurLink** ENABLED

Data Management Software by Mitutoyo



# FALL PROMO 2023

## PRECISION TOOLS & INSTRUMENTS

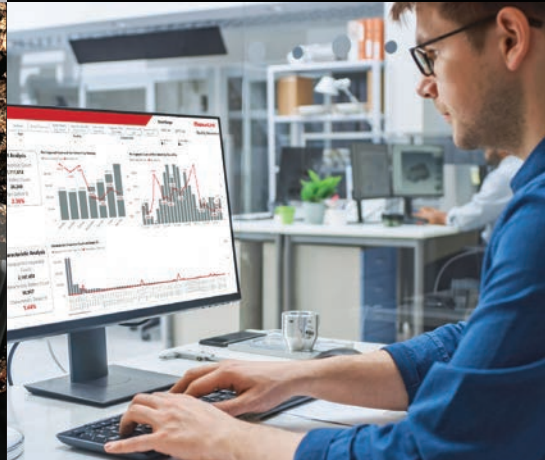
Effective October 2nd through December 15th



FALL PROMO 2023



The Global Standard for Wireless Connection



**NEW**  
Products

**NEW FEATURED  
PRODUCTS**



**Dear Valued Customers,**

I want to take a moment to express my sincere appreciation for your continued support and commitment to Mitutoyo products and services.

The 2023 fall promotion contains many new products such as the completely redesigned LH600F Linear Height Gage, IDC/IDF indicators and pneumatic fixturing for the Litematic. The promotion also features popular Mitutoyo tools and instruments including data management solutions, calipers, micrometers, linear encoders, indicators, height gages, microscopes, hardness testers, Quick Scope digital microscopes and Quick Image digital profile projectors. Prices are Effective October 2nd through December 15th, 2023.

You can find all of the latest promotions, products and events on our website, [www.mitutoyo.com](http://www.mitutoyo.com) as well as My.Mitutoyo.

Thank you for trusting us with your metrology needs.

Sincerely,

*Matthew B. Dye*  
**Matt Dye**  
President, Mitutoyo America Corporation



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**Litematic Units with Vacuum..... 3**

Measure easily deformed workpieces such as films and foils with better repeatability and accuracy. The new Litematic now has a vacuum that holds delicate workpieces down against the surface for more reliable thickness measurements.



**LH 600 F/FG600E Linear Height Gages ..... 4**

The Mitutoyo LH-600F Linear Height Measurement System is the latest model in the Mitutoyo Linear Height Gage line with several new features like an adjustable, rotatable display, intuitive touchscreen interface, and added output options for even easier, highly accurate 2D dimensional measurements.



**IDC/IDF Digimatic Indicators ..... 6**

These new Digimatic Indicators have higher resolutions down to 20µinch/0.5 µm, a built-in calibration date warning and analog bar on the larger LCD display, and new S1 Digimatic output capabilities.



**Linear Gage/EJ Counters ..... 9**

The new EJ Counters have two inputs each which save space, are DIN rail mountable, compact, expandable, and offer output options such as, EtherNet/IP, CC-Link, PROFINET, EtherCAT or USB Connection. The LG100 Series Linear Gages have improved specifications such as higher impact resistance, superior ingress protection (IP67G), long-life bearings, tighter repeatability and narrow range accuracy, and a reference origin (for position recall)



**MeasurLink® Defect Analysis for Power BI..... 11**

This groundbreaking product combines the power of MeasurLink®, our industry-leading quality management software, with the dynamic capabilities of Microsoft Power BI, empowering organizations to harness the potential of their quality data, enabling easier, faster actionable improvements with large amounts of data points.



**MF/MF-U w/M2 Pkgs ..... 28**

Mitutoyo is pleased to announce the release of MF microscope packages that include the M2 geometric software and touch screen tablet as well as a retrofit package for D generation MF and MF-U microscopes in the field.

**Litematic Units with Vacuum..... 3**

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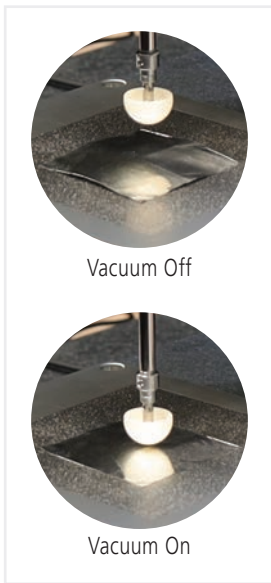
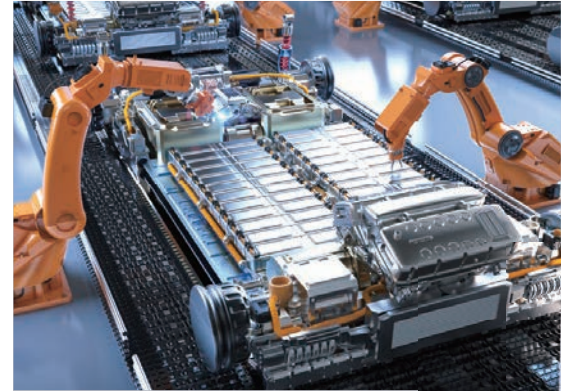
**Digital Profile Projectors..... 31**

## Solution for Battery Foil Thickness Measurement

The key to success:

High accuracy thickness measurement of battery foil samples

- > The combination of the Litematic and the vacuum plate system provides high accuracy measurement of easily deformed material.
- > Litematics allow measurements at forces as low as 0.01N. The ceramic ball contact included with the Vacuum Packages will increase the force to 0.04N.
- > The vacuum plate absorbs the contact-sensitive specimen, such as a battery film, onto the plate surface for more stable measurement.
- > Mitutoyo America provides vacuum plate packages as well as custom made solutions.
- > Optional set 02AZE375 enables the application of up to 10 intermediate forces.
- > Data export to MeasurLink® and MS Excel.



318-221A + 64PKA297



318-221A + K543722



318-226A + 64PKA298 + 957460



### Stand-alone Litematic Main Unit

Code	Model	Test Force*	List	Promo
318-221A	VL-50-B	0.01N	\$9,340.00	<b>\$8,406.00</b>

- > Measuring accuracy (20°C) up to  $(0.5+L/100)$   $\mu\text{m}$  L=arbitrary measuring length (mm)
- > Repeatability up to 0.05  $\mu\text{m}$

\*The ceramic ball contact included with Vacuum Packages will add 0.03N



### Vacuum Package Add-Ons

Code	Model	List	Promo
64PKA297	50x50mm Vacuum Package	\$4,139.00	<b>\$3,725.10</b>
K543722	Laser activated Vacuum Package	\$8,990.00	<b>\$8,091.00</b>



### Separate Type Litematic Main Unit

Code	Model	Test Force*	List	Promo
318-226A	VL-50S-B	0.01N	\$9,340.00	<b>\$8,406.00</b>
957460	Granite Stand		\$4,820.00	<b>\$4,338.00</b>

- > Measuring accuracy (20°C) up to  $(0.5+L/100)$   $\mu\text{m}$  L=arbitrary measuring length (mm)
- > Repeatability up to 0.05  $\mu\text{m}$

\*The ceramic ball contact included with Vacuum Packages will add 0.03N



### Vacuum Package Add-Ons

Code	Model	List	Promo
64PKA298	100x100mm Vacuum Package	\$5,139.00	<b>\$4,625.10</b>

## High-Accuracy Height Gage Linear Height LH-600F/FG600E

The highest accuracy height gage on the market is now even easier to use.

The Mitutoyo LH-600F Linear Height Measurement System is the latest model in the Mitutoyo Linear Height Gage line, designed to be more user-friendly while maintaining the best-in-class reliability and accuracy of previous models.

### New Features:

- > Rotatable touch screen interface
- > New self-check feature
- > High-accuracy encoder more resistant to contaminants
- > Improved 2D mode
- > Calibration date warning
- > S1 Digimatic output capable of sending data directly to Excel, wired or wirelessly
- > Additional probe and extension options

### Still Featuring:

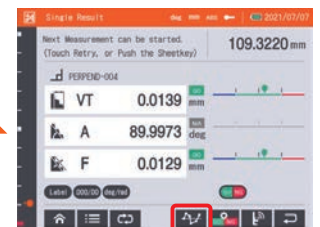
- > Resolution down to 0.1µinch (selectable)
- > Highest accuracy in its class  $\pm (1.1+0.6L/600) \mu\text{m}$
- > Pneumatic full/semi-float system with built-in compressor
- > Capable of standard measurements such as heights and diameters or advanced measurements like angles, diagonal distances and perpendicularity (optional probes may be required)
- > The Origin can be set at centerline positions, peaks of radii or simply on the surface plate or gage blocks



### Perpendicular/straightness measurement - Graph creation



Show results in real time during measurement.



Show results after measurement.



You can monitor the graphs of past measurement results.



Show measurement results in graph form.

Order No	Description	Range (Stroke)	Resolution (selectable)	List	Promo
Promo030	LH-600F INCH/MM	977mm (600mm) / 38" (24")	0.0001/0.001/0.01/0.1mm .0000001/.000001/.00001/.0001"	\$9,995.00	<b>\$8,995.50</b>

Prices effective October 2nd – December 15th

### Easy operation using keypad and touch screen navigation

Contextual guidance on the large-screen touch panel supports your measurements.



#### Simple, straightforward keys with icons

Icons allow the user to find the required operation at a glance.

##### Basic measurements

Height (top) measurement	Height (bottom) measurement	Width (inside) measurement	Width (outside) measurement
Shaft (top) measurement	Shaft (bottom) measurement	Circle (shaft) measurement	Max.-Min. (top) measurement
Hole (bottom) measurement	Hole (top) measurement	Circle (hole) measurement	Max.-Min. (bottom) measurement

##### Advanced measurement functions

Part program measurement	2D measurement	Power

##### Power

##### Measurement settings

Measurement origin setting	Probe selection	Measurement origin switching

##### Other

Home screen	System settings	Data output

#### Touch panel with guidance

Measurement guidance is displayed on the large touch panel of the 8.4-inch color LCD, enabling intuitive operation.



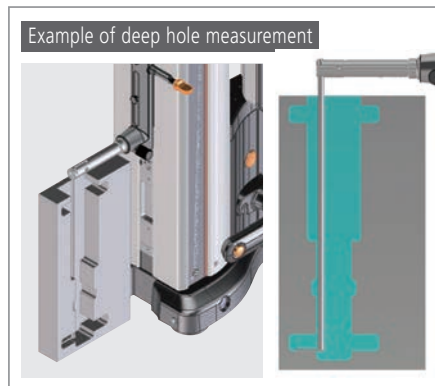
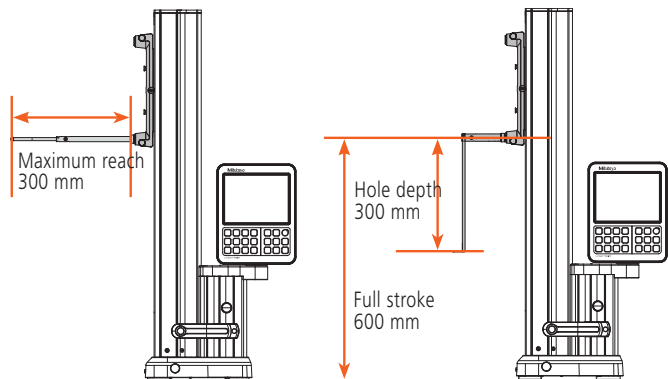
Guidance screen



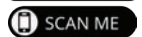
Operable with gloves

#### Expanded measurement area

With the new optional probes, you can now measure areas that were beyond the capacity of conventional probes.



To see full brochure,  
use the QR code below.



**IDC/IDF Digimatic Indicators**

High-performance ABS Digimatic Indicators

- > **20 pinch/0.5 µm resolution.** The ID-C and ID-F ranges now include models with 0.0005 mm resolution. The units are also capable of resolution switching. \*Except for the ID-C 0.01 mm resolution model.
- > **Large screen and analog bar.** The units have large screens that can display various information in an easy-to-read manner. They also have an analog bar, convenient for observing subtle movements such as the approach to tolerance.
- > **New Digimatic S1 Output.** S1 is Mitutoyo's new, bidirectional output format that enables writing information to the gages such as calibration date warnings, operator info, and the ability to poll the serial number (wired or wirelessly) for easier gage management.
- > **Calibration period notification function.** The LCD displays an icon to notify the user when the set calibration time approaches. This facilitates the proper precision management of ID-C/ID-F.

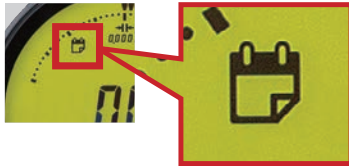


Improved work efficiency thanks to excellent readability

**Large screen and analog bar**

The units have large screens that can display various information in an easy-to-read manner. They also have an analog bar, convenient for observing subtle movements such as the approach to tolerance.

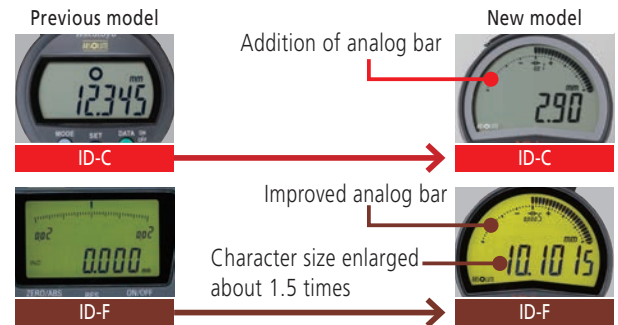
Calibration period notification function



- > **Simple Calculation Function.** The result of the spindle movement value multiplied by the calculation coefficient can be displayed in real time. This reduces the work of measuring with a jig or similar tool.

$$f(x) = Ax$$

f(x): Displayed value  
 x: Spindle movement value  
 A: Selected value



**ID-C Series - Battery Operated**

Order No.		Range	Resolution	Maximum Permissible Error			Measuring force MPL (N)	Interface	Net mass (g)		List	Promo
With Lug	Flat Back			MPE <sub>E</sub>	Hysteresis MPE <sub>H</sub>	Repeatability MPE <sub>r</sub>			With Lug	Flat Back		
543-702	543-702B	0.5" / 12.7mm	0.00002" / .00005" / 0.0001" / 0.0005" / 0.0005mm / 0.001mm / 0.01mm	± 0.00012" / 0.002mm	0.00008" / 0.002mm	0.00008" / 0.002mm	1.5 or less	d1/d2/S1	195	165	\$482.00	\$433.80
543-707	543-707B	0.5" / 12.7mm		0.4 to 0.7			d1/d2/S1	190	160	\$753.00	\$677.70	
-	543-722B	1" / 25.4mm		1.8 or less			d1/d2/S1	-	195	\$620.00	\$558.00	
-	543-732B	2" / 50.8mm		2.3 or less			d1/d2/S1	-	260	\$808.00	\$727.20	
543-712	543-712B	0.5" / 12.7mm	0.0005" / 0.01mm	± 0.001" / 0.02mm	0.001" / 0.02mm	0.0005" / 0.01mm	0.9 or less	d1/S1	190	160	\$352.00	\$316.80
543-717	543-717B	0.5" / 12.7mm		0.2 to 0.5			d1/S1	185	155	\$564.00	\$507.60	
-	543-727B	1" / 25.4mm		1.8 or less			d1/S1	-	190	\$516.00	\$464.40	
-	543-737B	2" / 50.8mm		± 0.0015" / 0.04mm			2.3 or less	d1/S1	-	245	\$677.00	\$609.30

**ID-F Series - AC Powered**

Order No.	Range	Resolution	Maximum Permissible Error			Measuring force MPL (N)	Interface	Net mass (g)	List	Promo
			MPE <sub>E</sub>	Hysteresis MPE <sub>H</sub>	Repeatability MPE <sub>r</sub>					
543-852A	1" / 25.4mm	0.005mm / 0.001mm / 0.01 mm	± 0.0001" / 0.0025mm	0.00008" / 0.002mm	0.00008" / 0.002mm	1.8 or less	d1/d2/S1	240	\$757.00	\$681.30
543-854A	2" / 50.8mm	0.00002" / .00005" / 0.0001" / 0.0005" / 0.001" (selectable)	± 0.00016" / 0.004mm			2.3 or less	d1/d2/S1	330	\$860.00	\$774.00
543-858A			± 0.00012" / 0.003mm			2.3 or less	d1/d2/S1	330	\$877.00	\$789.30

Prices effective October 2nd – December 15th

## Calculation-Type Digimatic Indicator ID-C

- > Calculation-Type Digimatic Indicator features both a key lock and parameter lock.
- > Fast measurement frequency up to 50 per second.
- > An analog bar provides easy-to-read values when scanning for Max, Min and TIR Values.
- > 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) **21EZA313**
- > 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 feature allows for reading measurements directly, without searching for conversions.



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**10% OFF**



**ABSOLUTE**

**SPC**

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

Order No.	Resolution	Range	Accuracy	Measuring Force	List	Promo
<b>543-342B-10</b>	.00005"/.0001"/.0005" (0.001/0.01mm) Selectable	.5"/12.7mm	±.00010"/0.003mm	1.5N or less	\$504.00	<b>\$453.60</b>

SPC cable – 1m: **905338** 2m: **905409**

## Bore Gage ABSOLUTE Digimatic Indicator ID-C



Installed on optional bore gage probe (page 9)

- > Hold automatically picks up hole diameter after a sweep.
- > Bore Gage Digimatic Indicator features both a key lock and parameter lock.
- > Fast measurement frequency up to 50 per second.
- > An analog bar indicator is integrated to enhance the intuition in reading.
- > Up to three sets of master values and upper/lower tolerance values can be memorized.

- > GO/NO-GO judgment
- > Employing the ABSOLUTE linear encoder, the ID-C always displays the spindle Absolute Position from the origin at power-on.
- > 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) **21EZA313**

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**ABSOLUTE**

**SPC**

Order No.	Resolution	Range	Accuracy	Measuring Force	List	Promo
<b>543-312B-10</b>	.00005"/.0001"/.0005" (0.001/0.01mm) Selectable	.5"/12.7mm	±.00010"/0.003mm	1.5N or less	\$504.00	<b>\$453.60</b>

SPC cable – 1m: **905338** 2m: **905409**

## Peak Hold ABSOLUTE Digimatic Indicator ID-C

With Max./Min. Value Holding Function

- > Peak Hold Digimatic Indicator features both a Key Lock and Parameter Lock.
- > An analog bar provides easy-to-read values when scanning for Max, Min and TIR Values.
- > GO/NO-GO judgment
- > The maximum, minimum or runout value can be displayed during measurement.

- > Fast measurement frequency up to 50 per second.
- > Employing the ABSOLUTE linear encoder, the Signal ID-C always displays the spindle Absolute Position from the origin at power-on.
- > Improved parameter setting software makes it even easier to set all of the available parameters and then determine and upload the proper coefficients for calculation. (optional) **21EZA313**

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**ABSOLUTE**

**SPC**

Order No.	Resolution	Range	Accuracy	Remarks	List	Promo
<b>Stem dia. 3/8", #4-48 UNF Thread</b>						
<b>543-302-10</b>	.00005"/.0001"/.0005" 0.001/0.01mm	.5"/12.7mm	±.00010"/0.003mm	w/lug	\$504.00	<b>\$428.40</b>
<b>543-302B-10</b>	Selectable	.5"/12.7mm	±.00010"/0.003mm	Flat-back	\$504.00	<b>\$428.40</b>

SPC cable – 1m: **905338** 2m: **905409**

www.mitutoyo.com

### Digimatic Indicator ID-H Remote Programming Capable

> This 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/NO-GO 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 RS-232C input/output

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

Order No.	Resolution	Range	Model	Accuracy	List	Promo
543-562A	.00002", .00005", .0001", 0.0005mm, 0.001mm	1.2" / 30.4mm	ID-H530E	0.0015mm	\$1,000.00	\$900.00
543-564A	.00002", .00005", .0001", 0.0005mm, 0.001mm	2.4" / 60.9mm	ID-H560E	0.0025mm	\$1,190.00	\$1,071.00

SPC cable – 1m: 936937 2m: 965014

10% OFF

21EZA099  
Remote controller (optional)



543-564A



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### ABSOLUTE Digimatic Indicator ID-U

> Slim 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 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 overspeed errors.  
 > Flat-back type has no option for backs.

10% OFF

575-123



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Order No.	Resolution	Range	Model	Accuracy	Measuring force	List	Promo
575-123	.0005"/0.01mm	1" / 25.4mm	ID-U1025E	.0008"	1.8N or less	\$221.00	\$198.90

SPC cable – 1m: 905338 2m: 905409

### 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.



See Digimatic indicators made specifically for bore gages (page 7)



511-751

Order No.	Range	Anvils	Spacers	List	Promo
511-751-20	.7 - 1.4"	9	2	\$467.00	\$443.65
511-752-20	1.4 - 2.5"	6	4	\$455.00	\$432.25
511-753-20	2.0 - 6.0"	11 (2" sub anvil)	4	\$497.00	\$472.15
511-754-20	4.0 - 6.5"	13	4	\$657.00	\$624.15
511-755-20	6.5 - 10"	6	7	\$741.00	\$703.95
511-756-20	10 - 16"	5 (3" sub anvil)	7	\$880.00	\$836.00





## EJ Series Industrial interface-mounted compact counter

### Compact size and easy to use

Up to 8 compact counters (EJ counters) can be linked providing the capacity to connect up to 16 gages. On a DIN rail, each unit can be connected directly without using cables, so it takes up minimal space. All linked units and gages can be driven by a single power source.

### EtherNet/IP, CC-Link, PROFINET, EtherCAT or USB Connection

Data can be output through an industrial interface by linking a compact counter (EJ counter) with an interface unit. Constant data monitoring and positional management are performed. A USB interface is also provided for easy connection with a computer.

Note: The range of interfaces is set to be expanded in the near future.

### Calculation function

Enables sum difference operations between 2 gages connected to the same counter. Functions such as tolerance judgment and peak hold are also included.



Order No	Description	List	Promo
542-081	Main EJ Module Counter	\$524.00	\$497.80
542-081A	Main EJ Module w/AC Components	\$606.00	\$575.70
21HZA149	USB only interface	\$385.00	\$365.75
21HZA186	CC-Link Module (Mitsubishi), and USB	\$854.00	\$811.30
21HZA187	PROFINET Module	\$854.00	\$811.30
21HZA188	EtherNet/IP Module	\$887.00	\$842.65
21HZA264	EtherCat Module	\$850.00	\$807.50

## Linear Gage LG100 Series



Order No	Description	List	Promo
542-190	LG100-110, Range: .4"/10mm, Res: .00005"/1μm	606.00	\$575.70
542-193	LG100-125, Range: 1"/25mm, Res: .00005"/1μm	\$772.00	\$733.40
542-196	LG100-150, Range: 2"/50mm, Res: .00005"/1μm	\$936.00	\$889.20
542-191	LG100-0510, Range: .4"/10mm, Res: .00002"/0.5μm	\$661.00	\$627.95
542-194	LG100-0525, Range: 1"/25mm, Res: .00002"/0.5μm	\$827.00	\$785.65
542-197	LG100-0550, Range: 2"/50mm, Res: .00002"/0.5μm	\$992.00	\$942.40
542-192	LG100-0110, Range: .4"/10mm, Res: 5μinch/0.1μm	\$716.00	\$680.20
542-195	LG100-0125, Range: 1"/25mm, Res: 5μinch/0.1μm	\$882.00	\$837.90

## Linear Gage LG200 Series



Order No	Description	List	Promo
542-188	LG200-0110, Range: 0.4"/10mm, Res: .00005"/0.1μm	\$806.00	\$725.40
542-187	LG200-0510, Range: 0.4"/10mm, Res: .00002"/0.5μm	\$753.00	\$677.70
542-186	LG200-110, Range: 0.4"/10mm, Res: .00005"/1μm	\$699.00	\$629.10

### High accuracy

Precision and accuracy demanded by the automated assembly and inspection markets, are guaranteed. Due to our expertise as a manufacturer of measuring instruments, repeatability in the full measurement range (2σ) and narrow-range precision are also guaranteed.

### Environment resistance

Sliding durability of more than 50 million cycles\*, with protection level of IP67G. A highly oil-resistant material is used in the rubber cap and cable sheath, so it can be used even in harsh environments.

\* 10 mm range models (Actual value from in-house tests)

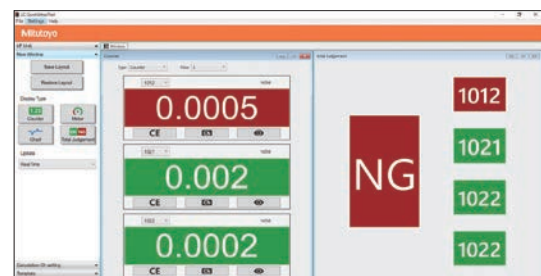
### Reference point detection (LG100 Series)

Reference point signal output functions are featured throughout this series. When incorporating into a device the master setting value is easy to set and is retained after shutdown.

## LG QuickSetup Tool

A configuration tool is FREE for use with the EJ counter when connected via the optional USB interface. Multiple settings normally carried out with counter operating keys can now be easily applied from a computer. Live displays allow for easily viewing gage positions or measurements at a glance.

Note: This software can be used free of charge and downloaded from the Mitutoyo website.  
<https://www.mitutoyo.co.jp/eng/contact/products/lg/>



**Quickmikes**

The new Quickmike series still boasts the super-fast spindle feed rate that's **20x faster** than standard micrometers.

- IP65 protection – can be used around cutting fluids
- > MIN Hold – the minimum measurement can be held on the display for more repeatable and accurate measurements
- > Larger LCD – 33% larger, 10mm character height
- > Function lock – prevents accidental changes
- > 5 year battery life – more operating time, less downtime looking for and replacing batteries
- > Non-rotating spindle



**MeasurLink<sup>3</sup> ENABLED**  
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**ABSOLUTE™ SPC**

**COOLANT PROOF™ IP65**



Order No.	Range	Resolution	Accuracy	Flatness	Parallelism	List	Promo
293-676-20	0 - 1.2"	.00005"/0.001mm	±0.0001"	0.000012"	0.00008"	\$673.00	<b>\$639.35</b>
293-677-20	1 - 2.2"	.00005"/0.001mm	±0.0001"	0.000012"	0.00008"	\$735.00	<b>\$698.25</b>

SPC cable with data switch – 1m: **05CZA662** 2m: **05CZA663**

**MDC-Lite Micrometer**

- > Provided only with zero set and in/mm (inch/metric models only) keys.
- > A ratchet stop or friction thimble for a constant measuring force.
- > Measurement readout with large characters on the LCD.
- > No spindle clamp. No data output.

Order No.	Range	Resolution	Remarks	List	Promo
293-831-30	0 - 1" / 0 - 25.4mm	.00005" / 0.001mm	Ratchet Stop	\$171.00	<b>\$162.45</b>
293-832-30	0 - 1" / 0 - 25.4mm	.00005" / 0.001mm	Friction Thimble	\$182.00	<b>\$172.90</b>



**Digimatic Micrometer**

- > New electromagnetic ABSOLUTE sensor - Improved resistance to environmental conditions such as dirt, oil and water, which can cause false readings.
- > New ratchet thimble on select models improves 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-VA, etc.) – SPC output-enabled IP65 models.
- > Function-lock system prevents inadvertent setting changes.
- > Certificate of Inspection provided.



**COOLANT PROOF™**



**IP65**

**MeasurLink<sup>3</sup> ENABLED**  
Data Management Software by Mitutoyo

	Order No.	Range	Resolution	Remarks	List	Promo
<b>fit</b>	293-330-30*	0-1"/0-25.4mm	.00005"/0.001mm	Ratchet Stop	\$272.00	<b>\$258.40</b>
	293-340-30	0-1"/0-25.4mm	.00005"/0.001mm	Ratchet Stop	\$226.00	<b>\$214.70</b>
	293-344-30	0-1"/0-25.4mm	.00005"/0.001mm	Ratchet Thimble	\$226.00	<b>\$214.70</b>
	293-349-30	0-1"/0-25.4mm	.0001"/0.001mm	Ratchet Thimble, tenths reading	\$226.00	<b>\$214.70</b>
<b>fit</b>	293-331-30*	1-2"/25.4-50.8mm	.00005"/0.001mm	Ratchet Stop w/Standard	\$320.00	<b>\$304.00</b>
	293-341-30	1-2"/25.4-50.8mm	.00005"/0.001mm	Ratchet Stop w/Standard	\$275.00	<b>\$261.25</b>
	293-345-30	1-2"/25.4-50.8mm	.00005"/0.001mm	Ratchet Thimble w/Standard	\$275.00	<b>\$261.25</b>
<b>fit</b>	293-334-30*	0-1"/0-25.4mm	.00005"/0.001mm	Ratchet Thimble	\$292.00	<b>\$277.40</b>
<b>fit</b>	293-335-30*	0-1"/0-25.4mm	.00005"/0.001mm	Friction Thimble	\$272.00	<b>\$258.40</b>

\*with SPC Output

**fit** U-WAVE Fit compatible

SPC cable with data switch – 1m: **05CZA662** 2m: **05CZA663**



## Purchase the world's first 5µinch /0.1µm resolution micrometer and receive a USB input tool and cable (\$300 value)

Using precision digital measuring tools together with a USB input tool improves both measurement results and data reliability. The high-accuracy MDH with 5 millionths resolution can output in its entirety in both inch and metric. Resulting data can input directly to Excel®, MeasurLink®, or other SPC programs.

To receive this special offer, use promo code: **PROMO029**.

> Range: 0-1", Resolution: .000005", Accuracy: +/- .000020

Part #	Description	List Price
<b>PROMO029</b>	Package: MDH Mic, SPC Cable, USB Input Tool	<b>\$1,850.00</b>
<b>293-130-10</b>	MDH Micrometer with high accuracy, high resolution output	\$1,850.00
<b>05CZA662</b>	SPC CONNECTING CABLE (1M)	\$92.35
<b>264-020</b>	USB INPUT TOOL	\$217.00



## MeasurLink®, Defect Analytics for Power BI

Bridging the gap between precision measurement and insightful analytics.

Unlock advanced data insights from your existing MeasurLink® data. With Power BI, these insights become interactive, visual, and easily shareable across your organization, transforming complex data into meaningful narratives. Customizable dashboards offer a real-time overview of your operations, enabling you to quickly identify trends, pinpoint issues, and make data-backed decisions faster than ever before. You can leverage the integrated system's full capabilities on any device, providing unprecedented flexibility and responsiveness. Imagine the benefits this powerful synergy could bring to your organization – increased operational efficiency, improved product quality, and enhanced competitive advantage.

### Quality Dashboard Benefits

- > Identify locations of quality problems in a manufacturing plant
- > Identify parts with quality problems
- > Identify characteristics with quality problems
- > Inspection count activity
- > Defect count and percentages
- > Identify time series of quality improvement:
  - Month over Month
  - Week over Week
  - Day over Day

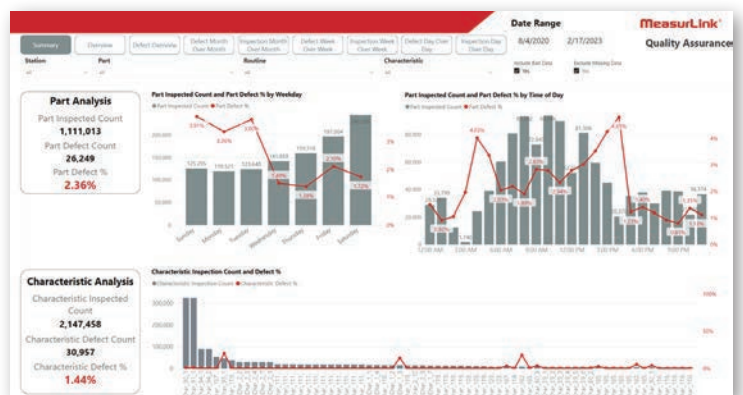
### Power BI Defect Analysis

- > Microsoft Power BI report
- > Data Model from MeasurLink®, DB
- > Visuals for Inspection Count and Defects
- > Multi-page
- > Summary and Overview
- > Time over time
- > Drill through ability
- > Filters (Dimensions) for:
  - Station
  - Part
  - Routine
  - Characteristic
  - Date Range

### MeasurLink®, Data Model

- > Star schema built around Inspection Run Data
- > Characteristic Tolerance and Actual used for determining defects
- > DAX expressions used to preprocess extracted data
- > Data model intended to be refreshed periodically (e.g., daily) – scheduled in Power BI service
- > Web publishing and viewing requires Microsoft Power BI subscription (not provided with purchase of report)

**MeasurLink® ENABLED**  
Data Management Software by Mitutoyo



Order No.	Description	List	Promo
<b>64AAB857</b>	MeasurLink®, Defect Analytics Report for Power BI	\$1,995.00	<b>\$1,895.25</b>

## Coolant-Proof Calipers

- > Sealed housing is IP-67 rated, meaning it's immune to the coolants, dirt, grit and chips found in many manufacturing environments.
- > Easy to use - no need to wipe or clean the scale.
- > .0005"/0.01mm resolution with  $\pm 0.001$ " accuracy.
- > Automatic power-on/off.
- > Certificate of Inspection provided.



COMPATIBLE WITH  
**U-WAVE fit**

**MeasurLink** ENABLED  
Data Management Software by Mitutoyo

Order No.	Range	List	Promo
<b>Non-Output Style</b>			
500-752-20	0-6"/0-150mm	\$237.00	<b>\$225.15</b>
500-753-20	0-8"/0-200mm	\$317.00	<b>\$301.15</b>
<b>SPC Output Style</b>			
<b>fit</b> 500-762-20	0-6"/0-150mm	\$281.00	<b>\$266.95</b>
<b>fit</b> 500-763-20	0-8"/0-200mm	\$354.00	<b>\$336.30</b>

\*  $\pm 0.0015$ " accuracy **fit** U-WAVE Fit compatible SPC cable - 1m: **05CZA624** 2m: **05CZA625**



## COOLANT PROOF™ IP67

COOLANTPROOF is the universal term of Mitutoyo Digimatic Small Tool Instruments that are free from measurement error and physical deterioration due to routine exposure to water, cutting oil or coolant. This high performance is achieved by using encoders that are inherently immune to contamination, where exposure is inevitable, combined with comprehensive sealing techniques and extremely oil-resistant materials to guarantee a long working life under normal operating conditions.

## Digimatic Carbon Fiber Caliper



552-314-10

**MeasurLink** ENABLED  
Data Management Software by Mitutoyo

Order No.	Range	Accuracy	Resolution	List	Promo
552-312-10	0(.5")-18"	$\pm 0.002$ "	.0005"/0.01mm	\$1,070.00	<b>\$1,016.50</b>
552-313-10	0(.5")-24"	$\pm 0.002$ "	.0005"/0.01mm	\$1,200.00	<b>\$1,140.00</b>
552-314-10	0(1")-40"	$\pm 0.002$ "	.0005"/0.01mm	\$2,150.00	<b>\$2,042.50</b>
552-315-10	0(1")-60"	$\pm 0.004$ "	.0005"/0.01mm	\$2,570.00	<b>\$2,441.50</b>
552-316-10	0(1")-80"	$\pm 0.005$ "	.0005"/0.01mm	\$4,020.00	<b>\$3,819.00</b>

SPC cable - 1m: **05CZA624** 2m: **05CZA625**

- > 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.
- > Can be used in workshop conditions exposed to coolant, water, dust or oil.
- > Incorporates ABSOLUTE measurement system.
- > Automatic power-on/off.



## CERA Caliper Checker



**33% OFF**

Order No.	Range	Remarks (length to check)	List	Promo
515-565	0 - 12"	Outside measurement: 1", 2", 4", 6", 8", 10", 12" Inside measurement: 1", 2", 4", 6", 8", 10", 12"	\$4,980.00	<b>\$3,336.60</b>

Prices effective October 2nd - December 15th

### CERA Caliper Checker

- > Permanently wrung, high grade CERA gage blocks in a protective metal casing.
- > Stands perpendicular for height gage inspection.

\* Also includes same features as CERA Gage Blocks

### CERA (Zirconia Ceramic) Gage Blocks\*

- > Extremely high wear resistance, 3x better than carbide.
- > Corrosion proof - no oil needed.
- > Closest expansion coefficient to steel.
- > Anti-magnetic - keeps away steel dust.
- > High wringing force due to high density.
- > Crack and burr resistant.
- > Low thermal conductivity - excellent dimensional stability under brief temperature changes (from handling, etc.).

## Digimatic Calipers

- > AOS 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
- > Resolution: .0005"/0.01mm

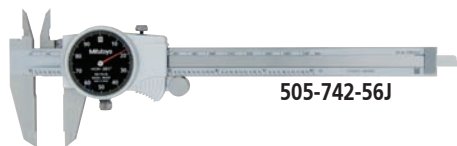


Order No.	Range	Remarks	List	Promo
<b>No SPC Output Style</b>				
500-195-30	0-4"/0-100mm	.075" round depth bar	\$163.00	<b>\$154.85</b>
500-197-30	0-8"/0-200mm		\$255.00	<b>\$242.25</b>
<b>With SPC Output Style</b>				
<i>fit</i> 500-170-30	0-4"/0-100mm	.075" round depth bar	\$195.00	<b>\$185.25</b>
<i>fit</i> 500-171-30	0-6"/0-150mm		\$207.00	<b>\$196.65</b>
<i>fit</i> 500-172-30	0-8"/0-200mm		\$273.00	<b>\$259.35</b>
500-505-10	0-18"/0-450mm	without thumb roller	\$930.00	<b>\$883.50</b>
500-506-10	0-24"/0-600mm	without thumb roller	\$1,020.00	<b>\$969.00</b>
500-507-10	0-40"/0-1000mm	without thumb roller	\$1,970.00	<b>\$1,871.50</b>

*fit* U-WAVE Fit compatible

SPC cable with data switch - 1m: 959149 2m: 959150

## Dial Caliper

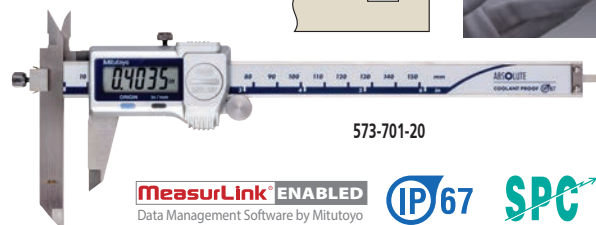
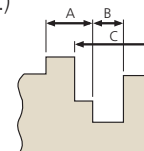


- > Smooth sliding with high shock protection.
- > Lock screw for dial bezel and for holding the sliding jaw position.
- > Can measure OD, ID, depth and steps.
- > Models available with carbide-tipped OD and ID jaws.

Order No.	Range	Remarks	List	Promo
505-742J	0-6" .100"/rev		\$143.00	<b>\$135.85</b>
505-738J	0-6" .100"/rev	carbide-tipped jaws	\$234.00	<b>\$222.30</b>
505-740J	0-6" .200"/rev		\$131.00	<b>\$124.45</b>
505-743J	0-8" .100"/rev		\$209.00	<b>\$198.55</b>
505-746J	0-12" .100/rev		\$318.00	<b>\$302.10</b>
505-749J	0-12" .200/rev		\$297.00	<b>\$282.15</b>
505-742-56J	0-6" .100"/rev	black dial face	\$143.00	<b>\$135.85</b>

## Offset Caliper

- > Main scale jaw can slide up and down to facilitate measurement of stepped sections. (Hard-to-reach dimensions such as A, B, C can be accurately measured.)
- > With depth bar.
- > With SPC data output.



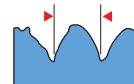
Order No.	Range	Accuracy	Resolution	List	Promo
<i>fit</i> 573-701-20	0-6" / 0-150mm	±.001"	.0005" / 0.01mm	\$527.00	<b>\$500.65</b>
<i>fit</i> 573-702-20	0-8" / 0-200mm	±.001"	.0005" / 0.01mm	\$604.00	<b>\$573.80</b>
<i>fit</i> 573-704-20	0-12" / 0-300mm	±.0015"	.0005" / 0.01mm	\$809.00	<b>\$768.55</b>

*fit* U-WAVE Fit compatible

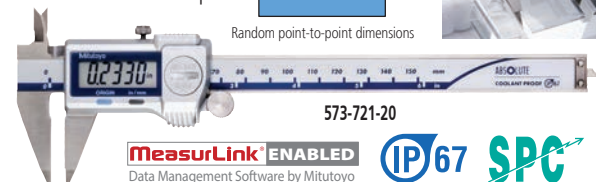
SPC cable with data switch - 1m: 05CZA624 2m: 05CZA625

## Point Caliper

- > Narrow tip jaws fit into very small grooves and tracks, making many previously difficult outside measurements easier to achieve.
- > With depth bar.
- > With SPC data output.



Random point-to-point dimensions



Order No.	Range	Accuracy	Resolution	List	Promo
<i>fit</i> 573-721-20	0-6" / 0-150mm	±.001"	.0005" / 0.01mm	\$461.00	<b>\$437.95</b>
<i>fit</i> 573-725-20*	0-6" / 0-150mm	±.001"	.0005" / 0.01mm	\$573.00	<b>\$544.35</b>

\* Extended tips

*fit* U-WAVE Fit compatible

SPC cable with data switch - 1m: 05CZA624 2m: 05CZA625

## Low-Force Caliper

- > Due to the low measuring force, these calipers are ideal for elastic or resilient workpieces such as plastic parts and rubber parts that standard calipers can't measure consistently.
- > With SPC data output.



Order No.	Range	Accuracy	Resolution	List	Promo
<i>fit</i> 573-291-30	0-7" / 0-180mm	±.002"	.0005" / 0.01mm	\$931.00	<b>\$884.45</b>

*fit* U-WAVE Fit compatible

www.mitutoyo.com

**Borematic**

Quick, spring-loaded lever action/movement

- › Titanium-coated measuring pins provide excellent durability and impact resistance, while allowing the instrument to measure close to the bottom of blind holes.
- › Digital display with quick-action lever operation enables quick and easy measurement.
- › Built-in ABSOLUTE System eliminates the need to set the origin point every time the unit is turned on. The system is immune to over-speed errors, thus increasing the reliability of measurement.
- › The Digimatic Borematic is compatible with statistical process control systems and measurement support systems.
- › Built-in tolerance judgment function allows GO/NO-GO judgment based on user-defined upper and lower limit settings.

**SAVE  
20%**



**MeasurLink** ENABLED  
Data Management Software by Mitutoyo

**ABSOLUTE**

**SPC**

**Individual Gages:** includes one digital display unit and one interchangeable measuring head (plus adapter if required)

Order No	Size Range	Accuracy	Extension Rod	List	Promo
568-461	0.275" - 0.350"	±5µm ±0.00025 in	100mm (952322)	\$1,600.00	\$1,280.00
568-462	0.350" - 0.425"			\$1,600.00	\$1,280.00
568-463	0.425" - 0.500"			\$1,600.00	\$1,280.00
568-464	0.50" - 0.65"	±5µm ±0.00025 in	150mm (952621)	\$1,630.00	\$1,304.00
568-465	0.65" - 0.80"			\$1,630.00	\$1,304.00
568-466	0.8" - 1.0"			\$1,630.00	\$1,304.00
568-467	1.0" - 1.2"	±6µm ±0.0003 in	150mm (952622)	\$1,690.00	\$1,352.00
568-468	1.2" - 1.6"			\$1,870.00	\$1,496.00
568-469	1.6" - 2.0"			\$1,870.00	\$1,496.00
568-470	2.0" - 2.5"			\$1,830.00	\$1,464.00
568-471	2.5" - 3.0"			\$1,890.00	\$1,512.00
568-472	3.0" - 3.5"	±6µm ±0.0003 in	150mm (952623)	\$1,920.00	\$1,536.00
568-473	3.5" - 4.0"			\$1,920.00	\$1,536.00
568-474	4.0" - 4.5"			\$2,020.00	\$1,616.00
568-475	4.5" - 5.0"			\$2,130.00	\$1,704.00

**Technical Data**

**Resolution:** 0.001mm or 0.00005 in/0.001mm

**Display:** LCD

**Response speed:** Infinite

**Battery:** SR44 (1 pc), 938882, for initial operational checks (standard accessory)

**Battery life:** Approx. 5,000 hours in continuous use

**Scale type:** Electrostatic capacitance absolute encoder

**Functions**

GO/NO-GO judgment, GO/NO-GO judgment zoom, 2-Point Preset, Zero-setting, Data hold, Error alarm, Low battery voltage alert, Data output, Function Lock, 330° rotary display, inch/mm conversion (inch/mm models)

**Complete Unit Gage Sets:** includes several individual gages to cover the overall size range of the set

Order No	Overall Range	Range of Individual Gages	Setting Rings	List	Promo
568-965	0.275" - 0.5"	0.275-0.35", 0.35-0.425", 0.425-0.5"	0.35" DIA., 0.425" DIA.	\$5,530.00	\$4,424.00
568-966	0.5" - 1"	0.5-0.65", 0.65-0.8", 0.8-1"	0.65" DIA., 0.8" DIA.	\$5,760.00	\$4,608.00
568-967	1" - 2"	1-1.2", 1.2-1.6", 1.6-2"	1.2" DIA., 1.6" DIA.	\$6,020.00	\$4,816.00
568-968	2" - 3"	2-2.5", 2.5-3"	2.5" DIA.	\$4,310.00	\$3,448.00
568-969	3" - 4"	3-3.5", 3.5-4"	3.5" DIA.	\$4,780.00	\$3,824.00



Complete-Unit Set

**Interchangeable-Head Sets**

Order No	Overall Range	Range of Individual Gages	Setting Rings	List	Promo
568-928	0.275" - 0.5"	0.275-0.35", 0.35-0.425", 0.425-0.5"	0.35" DIA., 0.425" DIA.	\$2,460.00	\$1,968.00
568-929	0.5" - 1"	0.5-0.65", 0.65-0.8", 0.8-1"	0.65" DIA., 0.8" DIA.	\$2,780.00	\$2,224.00
568-930	1" - 2"	1-1.2", 1.2-1.6", 1.6-2"	1.2" DIA., 1.6" DIA.	\$3,400.00	\$2,720.00
568-936	2" - 4"	2-2.5", 2.5-3", 3-3.5", 3.5-4"	2.5" DIA., 3.5" DIA.	\$4,890.00	\$3,912.00



Interchangeable-Head Set

Includes one digital display unit with several interchangeable measuring heads (and adapters as required) to cover the total size range plus one extension rod

Prices effective October 2nd - December 15th

## Digimatic Holtest

- › Titanium-coated measuring pins provide excellent durability and impact resistance, while allowing the instrument to measure close to the bottom of blind holes.
- › 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.
- › Measure deep holes by attaching an extension rod (optional).
- › Setting rings are included in sets, but optional for individual gages.
- › Supplied in fitted plastic case up to 4"/100mm. Over 4"/100mm supplied in wooden case.
- › Resolution: .00005"/0.001mm (over 4" models: .0001"/0.001mm)

Digimatic Holtests – Individual Units			
Order No.	Range	List	Promo
468-261	Digimatic Holtest, .275 - .35"	\$1,230.00	<b>\$984.00</b>
468-262	Digimatic Holtest, .35" - .425"	\$1,230.00	<b>\$984.00</b>
468-263	Digimatic Holtest, .425 - .5"	\$1,240.00	<b>\$992.00</b>
468-264	Digimatic Holtest, 0.5" - 0.65"	\$1,340.00	<b>\$1,072.00</b>
468-265	Digimatic Holtest, 0.65" - 0.8"	\$1,340.00	<b>\$1,072.00</b>
468-266	Digimatic Holtest, 0.8" - 1"	\$1,380.00	<b>\$1,104.00</b>
468-267	Digimatic Holtest, 1.0 - 1.2"	\$1,380.00	<b>\$1,104.00</b>
468-268	Digimatic Holtest, 1.2" - 1.6"	\$1,410.00	<b>\$1,128.00</b>
468-269	Digimatic Holtest, 1.6" - 2.0"	\$1,420.00	<b>\$1,136.00</b>
468-270	Digimatic Holtest, 2" - 2.5"	\$1,550.00	<b>\$1,240.00</b>
468-271	Digimatic Holtest, 2.5" - 3"	\$1,550.00	<b>\$1,240.00</b>
468-272	Digimatic Holtest, 3" - 3.5"	\$1,570.00	<b>\$1,256.00</b>
468-273	Digimatic Holtest, 3.5" - 4"	\$1,590.00	<b>\$1,272.00</b>
468-274	Digimatic Holtest, 4" - 5"	\$2,070.00	<b>\$1,656.00</b>
468-275	Digimatic Holtest, 5" - 6"	\$2,130.00	<b>\$1,704.00</b>
468-276	Digimatic Holtest, 6" - 7"	\$2,260.00	<b>\$1,808.00</b>
468-277	Digimatic Holtest, 7" - 8"	\$2,350.00	<b>\$1,880.00</b>
468-278	Digimatic Holtest, 8" - 9"	\$2,520.00	<b>\$2,016.00</b>
468-279	Digimatic Holtest, 9" - 10"	\$2,570.00	<b>\$2,056.00</b>
468-280	Digimatic Holtest, 10" - 11"	\$2,660.00	<b>\$2,128.00</b>
468-281	Digimatic Holtest, 11" - 12"	\$2,770.00	<b>\$2,216.00</b>
Digimatic Holtests – Interchangeable Head Sets			
468-976	Digimatic Holtest Head Set, 0.275" - 0.5"*	\$2,240.00	<b>\$1,792.00</b>
468-977	Digimatic Holtest, Head Set, 0.5" - 0.8"*	\$1,820.00	<b>\$1,456.00</b>
468-978	Digimatic Holtest, Head Set, 0.8" - 2"*	\$4,540.00	<b>\$3,632.00</b>
468-979	Digimatic Holtest, Head Set, 2" - 4"*	\$5,200.00	<b>\$4,160.00</b>
468-980	Digimatic Holtest, Head Set, 4" - 8"*	\$6,110.00	<b>\$4,888.00</b>
Digimatic Holtests – Complete Unit Sets			
468-986	Digimatic Holtest, Unit-Set, 0.275" - 0.5"*	\$4,360.00	<b>\$3,488.00</b>
468-987	Digimatic Holtest, Unit-Set, 0.5" - 1"*	\$4,630.00	<b>\$3,704.00</b>
468-988	Digimatic Holtest, Unit-Set, 1" - 2"*	\$5,250.00	<b>\$4,200.00</b>
468-989	Digimatic Holtest, Unit-Set, 2" - 3"*	\$5,890.00	<b>\$4,712.00</b>
468-990	Digimatic Holtest, Unit-Set, 3" - 4"*	\$6,930.00	<b>\$5,544.00</b>



**MeasurLink** ENABLED  
Data Management Software by Mitutoyo

**20% OFF**

**IP 65**



### Measuring Deep Holes

An extension rod (optional accessory) can be fitted to provide measurement of deep holes.



Complete-Unit Set



Interchangeable-Head Set

**Holtest**

- > Titanium-coated measuring pins provide excellent durability and impact resistance, while allowing the instrument to measure close to the bottom of blind holes.
- > Three-point design ensures self-centering action for stable measurements in the range above .275" bore diameter.
- > With ratchet stop for constant force.

**Holtest Type II**

- > Holtest Type II models are also available. These lower costs units have solid, hardened alloy steel anvils.

**Holtest**



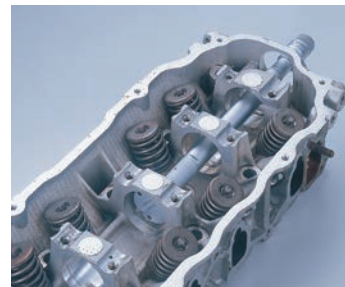
**20% OFF**

**Mechanical Holtests – Individual Units**

Order No.	Description/Range	List	Promo
368-021	Holtest, 0.08" - 0.1"	\$1,660.00	<b>\$1,328.00</b>
368-022	Holtest, 0.1" - 0.12"	\$1,660.00	<b>\$1,328.00</b>
368-023	Holtest, 0.12" - 0.16"	\$1,330.00	<b>\$1,064.00</b>
368-024	Holtest, 0.16" - 0.2"	\$1,330.00	<b>\$1,064.00</b>
368-025	Holtest, 0.2" - 0.24"	\$1,330.00	<b>\$1,064.00</b>
368-026	Holtest, 0.24" - 0.28"	\$1,330.00	<b>\$1,064.00</b>
368-261	Holtest, 0.275" - 0.35"	\$660.00	<b>\$528.00</b>
368-262	Holtest, 0.35" - 0.425"	\$660.00	<b>\$528.00</b>
368-263	Holtest, 0.425" - 0.5"	\$660.00	<b>\$528.00</b>
368-264	Holtest, 0.5" - 0.65"	\$685.00	<b>\$548.00</b>
368-265	Holtest, 0.65" - 0.8"	\$685.00	<b>\$548.00</b>
368-266	Holtest, 0.8" - 1.0"	\$711.00	<b>\$568.80</b>
368-267	Holtest, 1.0" - 1.2"	\$711.00	<b>\$568.80</b>
368-268	Holtest, 1.2" - 1.6"	\$888.00	<b>\$710.40</b>
368-269	Holtest, 1.6" - 2.0"	\$936.00	<b>\$748.80</b>
368-270	Holtest, 2.0" - 2.5"	\$942.00	<b>\$753.60</b>
368-271	Holtest, 2.5" - 3.0"	\$1,020.00	<b>\$816.00</b>
368-272	Holtest, 3.0" - 3.5"	\$1,050.00	<b>\$840.00</b>
368-273	Holtest, 3.5" - 4.0"	\$1,100.00	<b>\$880.00</b>
368-274	Holtest, 4.0" - 5.0"	\$1,410.00	<b>\$1,128.00</b>
368-275	Holtest, 5.0" - 6.0"	\$1,600.00	<b>\$1,280.00</b>
368-276	Holtest, 6.0" - 7.0"	\$1,640.00	<b>\$1,312.00</b>
368-277	Holtest, 7.0" - 8.0"	\$1,700.00	<b>\$1,360.00</b>
368-278	Holtest, 8.0" - 9.0"	\$1,920.00	<b>\$1,536.00</b>
368-279	Holtest, 9.0" - 10"	\$2,160.00	<b>\$1,728.00</b>
368-280	Holtest, 10" - 11"	\$2,180.00	<b>\$1,744.00</b>
368-281	Holtest, 11" - 12"	\$2,240.00	<b>\$1,792.00</b>

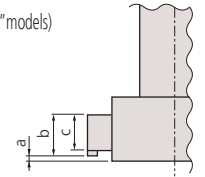
**Mechanical Holtests – Complete Unit Sets**

368-916	Holtest, Set, 0.275" - 0.5"*	\$2,440.00	<b>\$1,952.00</b>
368-917	Holtest, Set, 0.5" - 0.8"*	\$1,640.00	<b>\$1,312.00</b>
368-918	Holtest, Set, 0.8" - 2.0"*	\$3,760.00	<b>\$3,008.00</b>
368-919	Holtest, Set, 2.0" - 4.0"*	\$5,350.00	<b>\$4,280.00</b>
368-920	Holtest, Set, 4.0" - 8.0"*	\$8,200.00	<b>\$6,560.00</b>
368-926	Holtest, 2pc Set, .08" - .12"*	\$3,520.00	<b>\$2,816.00</b>
368-927	Holtest, 4pc Set, .12" - .28"*	\$5,610.00	<b>\$4,488.00</b>



**Measuring a Blind Hole**

The measuring contact points held in the jaws permit measuring the diameter of a blind hole to the bottom. (up to 100mm / 4" models)



**Measuring Deep Holes**

An extension tube (optional accessory) can be fitted to enable measurement of deep holes.



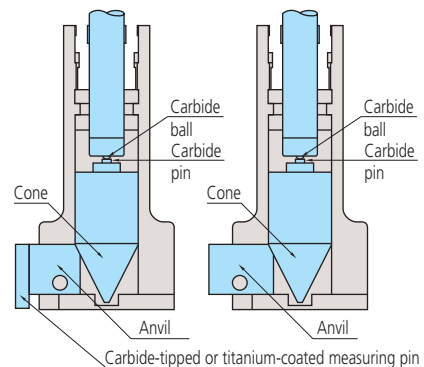
TiN coated contact points

Range	a	b	c
6 - 12mm / .275 - .5"	2	—	2.5
12 - 20mm / .5 - .8"	0.3	5.6	3.5
20 - 30mm / .8 - 1.2"	0.3	8.3	5.2
30 - 50mm / 1.2 - 2"	0.3	13	10
50 - 100mm / 2 - 4"	0.3	17	14
100 - 300mm / 4 - 12"	12.4	21	13.8



**Inspection Certificate Supplied as Standard**

An Inspection Certificate is supplied with each instrument, which assures product quality and safety. On request, Mitutoyo can issue a Calibration Certificate, at a cost, from our accredited calibration laboratory.





## Digimatic Height Gages

Now with higher resolution  
(.0002"/.0005")

- > Heavy duty, multi-function type.\*
- > Carbide-tipped long scriber is provided.
- > Rigid construction ensures repeatable measurement.
- > Switchable resolution.
- > Optional bi-directional touch probe. (192-008)\*
- > Coarse/fine feed switching.
- > SPC data output.
- > ABS and INC modes.
- > Two-value preset memory.
- > Data/hold.
- > Inch/mm conversion.

**20% OFF**



192-670-10

Order No	Range	Resolution	Accuracy	List	Promo
192-670-10*	0-12"/0-300mm	.0005" (0.01mm) [.0002" (0.005mm) Switchable]	±001"	\$2,010.00	<b>\$1,608.00</b>
192-671-10*	0-18"/0-450mm		±0015"	\$2,590.00	<b>\$2,072.00</b>
192-672-10*	0-24"/0-600mm		±0015"	\$3,320.00	<b>\$2,656.00</b>
192-673-10*	0-40"/0-1000mm		±0025"	\$6,210.00	<b>\$4,968.00</b>
192-630-10	0-12"/0-300mm		±001"	\$1,750.00	<b>\$1,400.00</b>
192-631-10	0-18"/0-450mm		±0015"	\$2,390.00	<b>\$1,912.00</b>
192-632-10	0-24"/0-600mm		±0015"	\$3050.00	<b>\$2,440.00</b>
192-633-10	0-40"/0-1000mm		±0025"	\$5,760.00	<b>\$4,608.00</b>

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## Surfptest SJ-210 Packages

- > The 2.4" color graphic, back-lit LCD provides excellent readability.
- > Replace Skid system offers user-friendly and intuitive menu navigation.
- > Performs roughness analysis conforming to various international standards (EN ISO, VDA, ANSI, JIS) and customized settings.
- > Calculation results, assessed profiles, bearing and amplitude curves can be displayed.
- > Supports 16 languages.

**15% OFF**



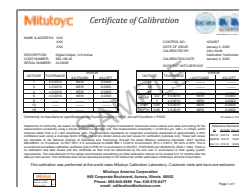
178-561-12A

**MeasurLink** ENABLED  
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Order No	Description	List	Promo
64PKA226A	Calibration Package	\$3,250.00	<b>\$2,762.50</b>
178-561-12A	SJ-210 inch/mm 4mN (Standard Drive Unit)		
178-390	FREE EXTRA DETECTOR		
C178-602	50% off Calibrated specimen		



178-390



Order No	Description	List	Promo
64PKA227A	Data Collection Package	\$3,590.00	<b>\$3,051.00</b>
178-561-12A	SJ-210 inch/mm 4mN (Standard Drive Unit)		
02AZD730G	U-WAVE TRANSMITTER		
02AZD790D	U-WAVE connecting cable D		
02AZD810D	FREE U-WAVE RECEIVER		



02AZD730G



02AZD810D



02AZD790D

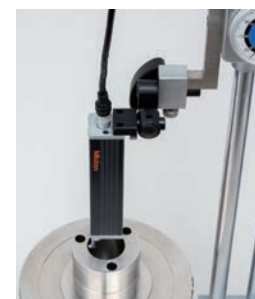
Order No	Description	List	Promo
64PKA228A	Height Gage Package	\$3,930.00	<b>\$3,340.00</b>
178-561-12A	SJ-210 inch/mm 4mN (Standard Drive Unit)		
12AAA233	Height gage adapter (Inch)		
192-150	12" Dial height gage		



12AAA233



192-150



U-WAVE is a wireless system that turns any Mitutoyo gage with Digimatic output into a wireless keyboard for fast, error-free data collection. U-WAVE transmitters now come in three models: Bluetooth®, Fit and Standard. Send data with a push of a button or request it from the PC or mobile device.



## U-WAVE Bluetooth®

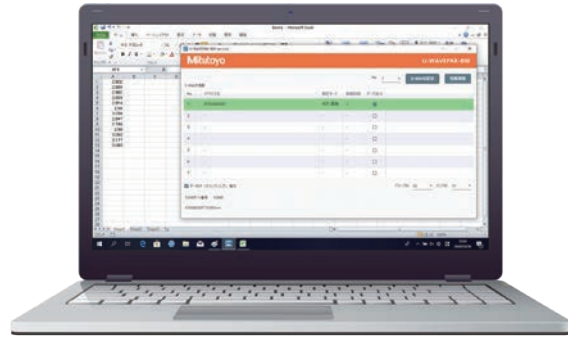
### U-WAVE-TMB/TCB

The new U-WAVE Bluetooth® transmitter features:

- Now utilizes the popular Bluetooth® 4.2 Low Energy Wireless Technology.
- This new Bluetooth® version of U-WAVE allows a simple connection to smartphones, tablets and Bluetooth® enabled Laptops and PC's.
- The same low profile and ergonomic fit benefits of the U-WAVE Fit.
- A buzzer type and IP67 type with dustproof and waterproof specifications are available.
- Up to 7 units can be connected to 1 Bluetooth® enabled PC without a receiver.
- New U-WAVEPak for Android, iOS and Windows available at no cost.



Request an assessment to determine how quickly your company can obtain a full ROI



The measurement data is used to make the software in the PC Transferable PC Communication Software U-WAVEPAK-BW.

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IP67

U-WAVE-TMB



MeasurLink<sup>®</sup> ENABLED  
Data Management Software by Mitutoyo

U-WAVE-TCB



10% OFF

### U-WAVE-TMB/TCB\*

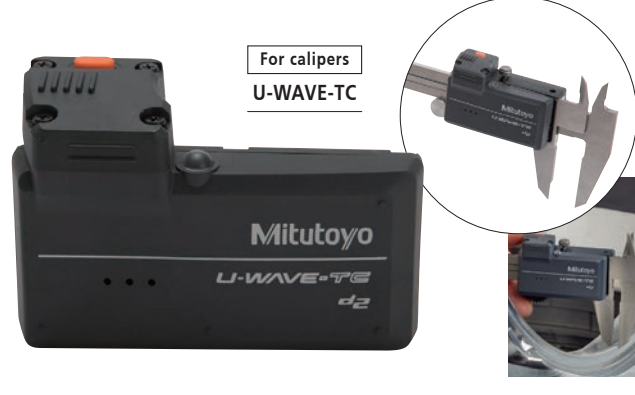
Order No.	Model	Measuring Instrument*	Remarks	List	Promo
264-624	U-WAVE-TCB	4", 6", 8", 12" IP67 caliper/standard caliper	IP67/LED	\$210.00	\$189.00
264-625	U-WAVE-TCB	4", 6", 8", 12" IP67 caliper/standard caliper	Buzzer/LED	\$210.00	\$189.00
264-626	U-WAVE-TMB	COOLANT-PROOF (IP65) micrometer	IP67/LED	\$210.00	\$189.00
264-627	U-WAVE-TMB	COOLANT-PROOF (IP65) micrometer	Buzzer/LED	\$210.00	\$189.00
02AZF310	Connection unit	IP67 caliper/COOLANT-PROOF (IP65) micrometer	Waterproof	\$77.20	\$69.48
02AZF300	Connection unit	Standard caliper	Standard	\$77.20	\$69.48

\* No U-WAVE Receiver required

Prices effective October 2nd – December 15th

# U-WAVE Wireless Data Transmitters

The new Mitutoyo U-WAVE Fit wireless data transmitter fits to the back of popular Mitutoyo hand-held measuring instruments. This new design allows for a snug fit behind the display resulting in a more ergonomic feel. U-WAVE Fit is the same technology as the U-WAVE T, just a smaller version.



U-WAVE-TM for micrometers and U-WAVE-TC for calipers are available both as, the buzzer and water/dust-proof IP67 types. The buzzer type notifies the normal reception of data by LED and buzzer sound. The water/dust-proof IP67 type is designed for harsh environments and therefore, is only equipped with LED notification of data reception.

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Data Management Software by Mitutoyo

**10% OFF**

## U-WAVE-Fit (Transmitter)

Order No.	Model	Measuring Instrument*	Remarks	List	Promo
264-620	U-WAVE-TC	4", 6", 8", 12" IP67 caliper/standard caliper	IP67/LED	\$210.00	<b>\$189.00</b>
264-621	U-WAVE-TC	4", 6", 8", 12" IP67 caliper/standard caliper	Buzzer/LED	\$210.00	<b>\$189.00</b>
264-622	U-WAVE-TM	COOLANT-PROOF (IP65) micrometer	IP67/LED	\$210.00	<b>\$189.00</b>
264-623	U-WAVE-TM	COOLANT-PROOF (IP65) micrometer	Buzzer/LED	\$210.00	<b>\$189.00</b>
02AZF310	Connection unit	IP67 caliper/COOLANT-PROOF (IP65) micrometer	Waterproof	\$77.20	<b>\$69.48</b>
02AZF300	Connection unit	Standard caliper	Standard	\$77.20	<b>\$69.48</b>

\* Please contact Mitutoyo or distributor for further details

## U-WAVE-R (Receiver)

Order No.	Remarks	Software	Number of U-WAVE-R units that can be connected to PC	Number of U-WAVE-T units that can be connected	List	Promo
02AZD810D	U-WAVE-R + software	U-WAVE PAK	Up to 15	Up to 100	\$549.00	<b>\$494.10</b>

- The transmitter is designed to fit in the space behind the display, and the connecting cable has been replaced by a rigid connector
- Approx. 20 m transmission range (within visible range)
- 2.4GHz wireless system for reliable and secure data transmission
- Easy data export to Microsoft® Excel® or SPC software applications
- Transmitter confirms data transfer by an LED signal and optional buzzer
- An IP67 transmitter is available to ensure a coolant-proof gaging system
- Low power consumption: 400,000 data transmissions with a single battery

## Standard U-WAVE Wireless System

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Data Management Software by Mitutoyo

U-WAVE is a wireless system that connects to a gage with SPC output. The data is sent to a receiver that is connected to a PC through a USB connection.

- > 2.4 GHz ZigBee wireless with a 60ft range.
- > HID compatible (Keyboard Entry) and Serial (VCP).
- > Supports Mitutoyo Digimatic or Digimatic 2 Type A, B, C, D, E, F, G.
- > Includes U-WAVEPAK Setup Software.



Order No.	Description	List	Promo
02AZD730G	U-WAVE-T/IP67 TYPE	\$243.00	<b>\$218.70</b>
02AZD880G	U-WAVE-T/BUZZER TYPE	\$243.00	<b>\$218.70</b>
02AZD810D	U-WAVE-R	\$549.00	<b>\$494.10</b>
02AZD790A	U-WAVE CONNECTING CABLE A	\$121.00	<b>\$108.90</b>
02AZD790B	U-WAVE CONNECTING CABLE B	\$121.00	<b>\$108.90</b>
02AZD790C	U-WAVE CONNECTING CABLE C	\$121.00	<b>\$108.90</b>
02AZD790D	U-WAVE CONNECTING CABLE D	\$121.00	<b>\$108.90</b>
02AZD790E	U-WAVE CONNECTING CABLE E	\$121.00	<b>\$108.90</b>
02AZD790F	U-WAVE CONNECTING CABLE F	\$121.00	<b>\$108.90</b>
02AZD790G	U-WAVE CONNECTING CABLE G	\$121.00	<b>\$108.90</b>

## ABSOLUTE 1D Height Gage QM-Height Series

- > High-resolution ABSOLUTE linear encoder for position detection
- > High-accuracy:  $\pm(2.4 + 2.1L / 600)\mu\text{m}$
- > Pneumatic flotation system / positioning grip allows for smooth movement along surface plate (select models)
- > Large, stationary display panel with user-friendly icon control keys and GO/NO-GO LED indicator
- > Digital and USB output: Supports Mitutoyo wireless SPC output
- > Fully compatible with existing Mitutoyo Digimatic peripherals (SPC cables, U-WAVE wireless transmitters, multiplexers, etc.)
- > **Battery life of 1200 hours in continuous use with four AA batteries, an improvement from 300 hours.**

### GO/ $\pm$ NG judgment by LED (red, orange, green) and measurement examples

- > LEDs are activated at the time of tolerance judgment: green for GO, red for +NG, and orange for -NG. -NG, GO and +NG also appear on the LCD.

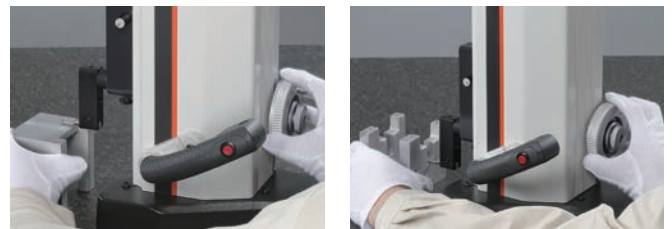


- > Measure diameters, gap distances, center-to-center distances, and more
- > Sub-display can show difference between current and previous measurement or distance from current measurement to origin
- > The origin can be set at the top of a surface plate, centerline, or any top or bottom surface within its range

# d2

"d2" is the name for Mitutoyo Digimatic output compatible with up to 8 digits of I/O data.

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Data Management Software by Mitutoyo



### d2 Digimatic and USB outputs

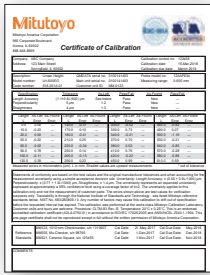
- Digimatic and USB ports are provided as standard. Using the U-WAVE-T measurement data wireless communication system enables instant transmission of measurement data to a PC via wireless communication which reduces manual input errors and improves data reliability and operational efficiency.



To install **U-WAVE-T**, separately purchase the optional mounting plate (**02AZE990**).

# 10% OFF PLUS Complimentary Shipping & Calibration

## 5% OFF Accessories

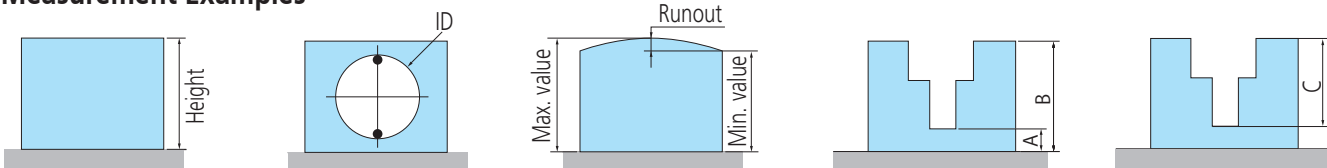


\*Complimentary accredited calibration applies to orders placed October 2 through December 15, 2023. Mitutoyo America Corporation reserves the right to change or discontinue this offer at any time. This offer is void wherever prohibited or restricted by law. No cash value. Complimentary accredited calibration will be conducted prior to unit shipping and cannot be applied toward previously placed orders. Refer to our terms and conditions for further details.



\*Complimentary ground shipping for the 48 contiguous United States. Offer applies to orders placed October 2 through December 15, 2023. Mitutoyo America Corporation reserves the right to change or discontinue this offer at any time. This offer is void wherever prohibited or restricted by law. No cash value. For Alaska and Hawaii special rates apply. Contact us for details. Complimentary shipping cannot be applied toward previously placed orders. Orders may only be shipped to a single address. If customer returns product, they are responsible for the shipping cost. Refer to our terms and conditions for further details.

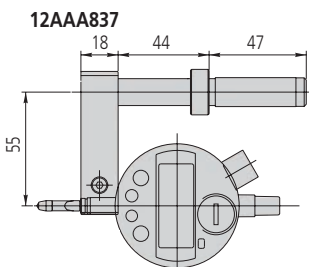
### Measurement Examples



Part No.	Range	Resolution	Remarks	List	Promo
64PKA094CCAL	0 - 14" / 0 - 350mm	0.001mm / 0.0005mm / .00005" / .0001" (selectable)	Pneumatic Flotation System	\$4,585.00	\$4,126.50
64PKA095CCAL	0 - 24" / 0 - 600mm			\$5,219.00	\$4,697.10
64PKA129CCAL	0 - 14" / 0 - 350mm			\$5,135.00	\$4,621.50
64PKA094CCAL	0 - 24" / 0 - 600mm			\$5,759.00	\$5,183.10

### Optional Accessories

Order No.	Description	List	Promo
12AAC072	DEPTH PROBE	\$218.00	\$207.10
12AAA837	INDICATOR HOLDER (ACCEPTS 3/8" STEM)	\$159.00	\$151.05
12AAA793	PROBE EXTENSION HOLDER (3.3" / 85mm)	\$177.00	\$168.15
226118	SHANK WITH M3 THREAD SCREW	\$139.00	\$132.05
957265	20MM DIA. DISK STYLUS FOR LINEAR HEIGHT	\$420.00	\$399.00
957264	14MM DIA. DISK STYLUS FOR LINEAR HEIGHT	\$342.00	\$307.80
12AAF669	10PI BALL CONTACT POINT(COAXIAL)	\$259.00	\$246.05
957261	2MM DIA. BALL STYLUS FOR LINEAR HEIGHT	\$232.00	\$220.40
517-814-10	GRAPLATE 36X48" GRADE A	\$3,075.00	\$2,921.25
517-964-10	GRAPLATE STAND 36X48"	\$1,215.00	\$1,154.25
517-808-10	GRAPLATE 24X36" GRADE A	\$1,602.00	\$1,521.90
517-956-10	GRAPLATE STAND 24X36"	\$1,129.00	\$1,072.55
06AFM380D	USB-ITN-D INPUT TOOL DIRECT CABLE	\$217.00	\$206.15
02AZD730G-D	U-WAVE TRANSMITTER W/ CONNECTING CABLE (D)	\$363.00	\$344.85
02AZD810D	U-WAVE-RECEIVER	\$549.00	\$521.55



12AAC072



02AZD730G-D



02AZD810D



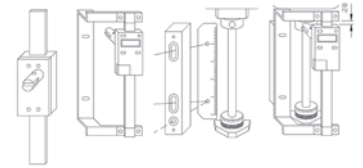
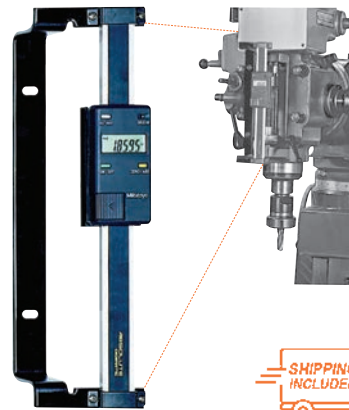


## Digimatic Quill Kit

Easy Installation, Fits Most Vertical Knee Mills

- > Easy-to-read LCD with resolution of .0005"/0.01mm. 0-6" travel.
- > 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.
- > ABS encoder.

**MeasurLink** ENABLED  
Data Management Software by Mitutoyo



The Mitutoyo Quill Kit mounted on a vertical mill.

**ABSOLUTE**™



Order No.	Description	List	Promo
053906B	Digimatic Quill Kit complete with brackets & scale for Bridgeport Type machines.	\$342.00	\$324.90

## ABSOLUTE Digimatic Scale Units

- > 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.
- > Multi-function types with diameter displaying function are also available for lathes. (Contact Mitutoyo.)
- > All units come with two mounting brackets, each located at either end of the scale.
- > With SPC data output.



**ABSOLUTE**™

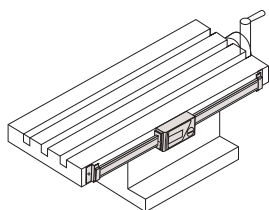
Order No	Model	Range	Accuracy	Resolution	Type	List	Promo
572-210-30	SD-4"DX	0-4" / 0-100mm	.001" / 0.03mm	.0005" / 0.01mm	Horizontal single-function	\$259.00	\$246.05
572-211-30	SD-6"DX	0-6" / 0-150mm	.001" / 0.03mm	.0005" / 0.01mm	Horizontal single-function	\$274.00	\$260.30
572-212-30	SD-8"DX	0-8" / 0-200mm	.001" / 0.03mm	.0005" / 0.01mm	Horizontal single-function	\$319.00	\$303.05
572-213-10	SD-12"D	0-12" / 0-300mm	.002" / 0.04mm	.0005" / 0.01mm	Horizontal single-function	\$616.00	\$585.20
572-310-10	SDV-6"D	0-4" / 0-100mm	.001" / 0.03mm	.0005" / 0.01mm	Vertical single function	\$287.00	\$272.65
572-311-10	SDV-6"D	0-6" / 0-150mm	.001" / 0.03mm	.0005" / 0.01mm	Vertical single-function	\$304.00	\$288.80
572-312-10	SDV-8"D	0-8" / 0-200mm	.001" / 0.03mm	.0005" / 0.01mm	Vertical single function	\$353.00	\$335.35
572-313-10	SDV-12"D	0-12" / 0-300mm	.002" / 0.04mm	.0005" / 0.01mm	Vertical single function	\$678.00	\$644.10



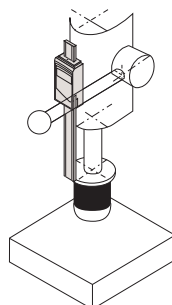
**MeasurLink** ENABLED  
Data Management Software by Mitutoyo

### Applications

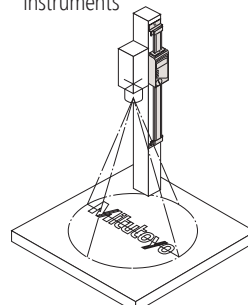
Machine table position



Drilling machine stroke position

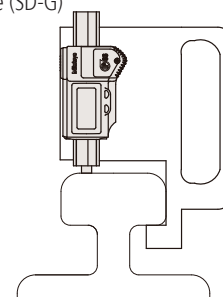


Focus setting on optical instruments

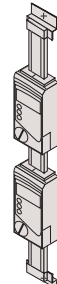


### Special Applications

As a measurement jig for outdoor use (SD-G)



Detector head mechanism



## Mitutoyo Digital Readout Packages

Mounting Hardware Included on all machine retrofit packages

SAVE  
**\$200**  
PER PACKAGE



### All DRO Packages Include:

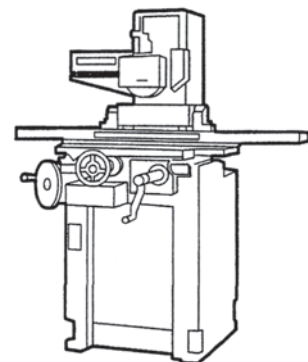
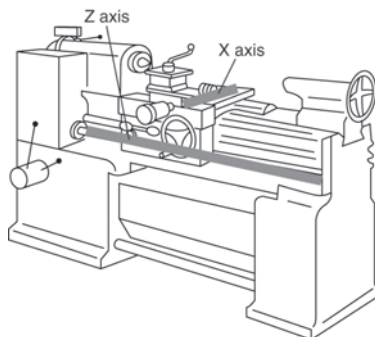
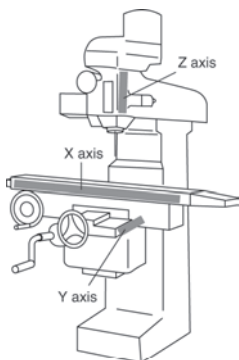
- > KA-200 Counter
- > KA-200 Counter tray/arm kit
- > High Resolution Linear Scales (down to .0001" or better!)
- > Bracket Kit(s)

**MeasurLink** ENABLED  
Data Management Software by Mitutoyo



Package Part No.	Description	X Travel	Y Travel	Z Travel	X Axis Type	Y Axis Type	Z Axis Type	List	Promo
64PKA058B	12" X 30" DRO Mill Package	30"	12"		AT715	AT715		\$1,640.00	<b>\$1,440.00</b>
64PKA059B	12" X 36" DRO Mill Package	36"	12"		AT715	AT715		\$1,640.00	<b>\$1,290.00</b>
64PKA060A	14" X 30" DRO Mill Package	30"	14"		AT715	AT715		\$1,640.00	<b>\$1,440.00</b>
64PKA062B	16" X 36" DRO Mill Package	36"	16"		AT715	AT715		\$1,640.00	<b>\$1,440.00</b>
64PKA063A	16" X 40" DRO Mill Package	40"	16"		AT715	AT715		\$1,640.00	<b>\$1,440.00</b>
64PKA035A	6" X 28" Lathe Package	6"		28"	AT116		AT715	\$1,600.00	<b>\$1,400.00</b>
64PKA039A	8" X 40" Lathe Package	8"		40"	AT116		AT715	\$1,600.00	<b>\$1,400.00</b>
64PKA042A	10" X 40" Lathe Package	10"		40"	AT116		AT715	\$1,600.00	<b>\$1,400.00</b>
64PKA046A	12" X 40" Lathe Package	12"		40"	AT116		AT715	\$1,600.00	<b>\$1,400.00</b>
64PKA050A	12" X 60" Lathe Package	12"		60"	AT116		AT715	\$1,820.00	<b>\$1,620.00</b>
64PKA052A	14" X 40" Lathe Package	14"		40"	AT116		AT715	\$1,600.00	<b>\$1,400.00</b>
64PKA057A	16" X 60" Lathe Package	16"		60"	AT116		AT715	\$1,820.00	<b>\$1,620.00</b>
64PKA026A	6" X 12" Grinder Package	6"		12"	AT116		AT116	\$1,780.00	<b>\$1,580.00</b>
64PKA028A	8" X 12" Grinder Package	8"		12"	AT116		AT116	\$1,780.00	<b>\$1,580.00</b>
64PKA029A	8" X 14" Grinder Package	8"		14"	AT116		AT116	\$1,780.00	<b>\$1,580.00</b>

Other packages and kits are available for mills, lathes, grinders and custom machines and applications. Contact your local distributor for details.





## Ultra-High Accuracy Laser Scan Micrometer LSM-6902H



- > Improved narrow range Repeatability of 0.03µm / 1.2µin
- > The best repeatability available in the 25mm/1" class.
- > The ultra-precise scanning motor enables the highest measurement accuracy.
- > Thanks to excellent linearity, an accuracy of ±0.5µm over the entire measuring range and a higher accuracy of ±(0.3+0.1ΔD)µm over a narrow range are guaranteed.
- > An excellent option for measuring pin gages or plug gages.



544-499A

Order No	Range	Resolution	List	Promo
544-499-1A	.004" - 1.0"/0.1mm - 25mm	.000001" - .0005"/0.00001 - 0.01mm	\$13,400.00	<b>\$12,060.00</b>
544-116-1A	.020" - 2.36"/0.5mm - 60mm	.000002" - .005"/0.00005 - 0.1mm	\$9,850.00	<b>\$8,865.00</b>

QUICKTOOL\* is free downloadable software that makes programming the LSM-6200 quick and easy.  
\*For use with customer-supplied PC and optional RS-232C cable.

## Bench Top Laser Scan Micrometer LSM-9506

- > Integrated display and measuring unit in one unit.
- > Statistical calculation mode.
- > RS-232C output, I/O interface, and SPC output interface are standard.



544-116-1A



## High-Accuracy Non-Contact Measuring Systems

- > Excellent linearity: down to +/- 0.3 micron.
- > High-speed scanning capable: 3,200 scans per second.
- > Various ranges available for selecting the best laser for your application.
- > Statistical calculation mode.
- > Memory function has been increased to allow storage of up to 100 programs.

QUICKTOOL\* is free downloadable software that makes programming the LSM-6200 quick and easy.  
\*For use with customer-supplied PC and optional RS-232C cable.

Package

FREE  
LSM 6200  
Display!



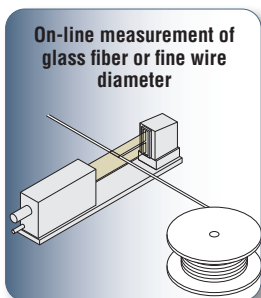
UP TO 35% OFF!

## LSM-6200 Display Unit Included

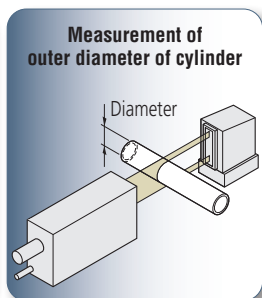


Order No	Model	Range Inch	Range mm	Repeatability	Linearity	Scanning Rate	List	Promo
64PKA117	LSM-500S	.0002" - .08"	0.005~2mm	±0.03µm	±0.3µm	3,200 scans/sec	\$11,430.00	<b>\$7,773.00</b>
64PKA118	LSM-501S	.002" - .4"	0.05~10mm	±0.04µm	±0.5µm <sup>†</sup>	3,200 scans/sec	\$10,280.00	<b>\$6,682.00</b>
64PKA119	LSM-503S	.012" - 1.18"	0.3~30mm	±0.11µm	±1.0µm <sup>†</sup>	3,200 scans/sec	\$11,140.00	<b>\$7,576.00</b>
64PKA120	LSM-506S	.04" - 2.36"	1~60mm	±0.36µm	±3µm <sup>†</sup>	3,200 scans/sec	\$12,650.00	<b>\$8,982.00</b>
64PKA121	LSM-512S	.04" - 4.72"	1~120mm	±0.85µm	±6µm <sup>†</sup>	3,200 scans/sec	\$19,150.00	<b>\$15,804.00</b>
64PKA122	LSM-516S	.04" - 6.30"	1~160mm	±1.4µm	±7µm <sup>†</sup>	3,200 scans/sec	\$31,310.00	<b>\$27,553.00</b>

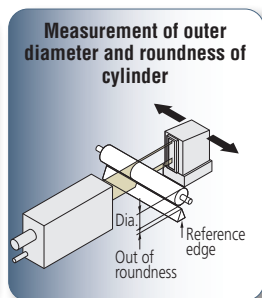
<sup>†</sup> Linearity over entire range. Higher accuracies are possible over smaller ranges.



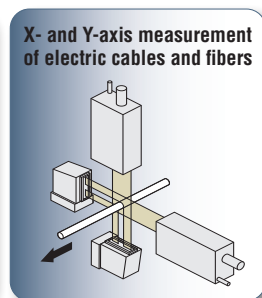
On-line measurement of glass fiber or fine wire diameter



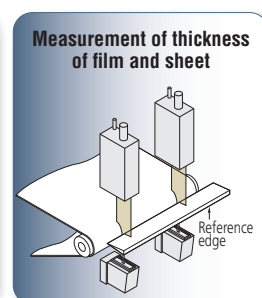
Measurement of outer diameter of cylinder



Measurement of outer diameter and roundness of cylinder



X- and Y-axis measurement of electric cables and fibers



Measurement of thickness of film and sheet

Prices effective October 2nd - December 15th



## Rockwell and Rockwell Superficial Hardness Tester

With Real-Time Electronic Test Force Control

- › Closed-loop control of testing forces.
- › Initial and Total test forces (loads) are applied with unparalleled accuracy and repeatability.
- › Extended indenter arm reaches inside diameters and hard-to-reach surfaces at eye level, allowing the operator to easily see where the indenter accesses small or hard-to-reach parts.
- › Automatic cycle start after initial set point is reached.
- › Continuous test mode for automatic testing of all like sized parts.
- › Touch-screen operation with color LCD.
- › All hardness parameters set automatically via the touch screen.
- › Cylindrical and spherical surface corrections.
- › Auto conversion to most common hardness scales or tensile strength.

**MeasurLink** ENABLED  
Data Management Software by Mitutoyo



**HR-530**  
810-233-33A



**HR-530L**  
810-333-33A

Model No.	810-233-33A		810-333-33A	
Order No.	HR-530		HR-530L	
Hardness testing methods	Rockwell / Rockwell Superficial / Brinell / Plastics Hardness			
Initial Test Force	29.42 N (3kgf), 98.07 N (10kgf)			
Test Force (N)	Rockwell Superficial	147.1 N (15kgf), 294.2 N (30kgf), 441.3 N (45kgf)		
	Rockwell Superficial	588.4 N (60kgf), 980.7 N (100kgf), 1471 N (150kgf)		
	Light Force Brinell	61.29 N (6.25kgf), 98.07 N (10kgf), 153.2 N (15.625kgf), 245.2 N (25kgf), 294.2 N (30kgf), 306.5 N (31.25kgf), 612.9 N (62.5kgf), 980.7 N (100kgf), 1226 N (125kgf), 1839 N (187.5kgf)		
Test Force Control	Automatic (load / hold / unload)			
Maximum Specimen Size	Height: 9.8" (250mm) Depth: 5.9" (150mm)		Height: 15.5" (395mm) Depth: 5.9" (150mm)	
	External Data Output: RS-232C, digimatic, USB2.0			
External Dimensions	Main Unit	9.84" x 26.38" x 23.82" (250 w x 667 d x 621 h mm)		11.6" x 26.2" x 30.1" (300 w x 667 d x 766 h mm)
	Touch-Panel Display	191 w x 147 d x 71 h mm		
Mass	Approx. 60 kg		Approx. 69 kg	
<b>List</b>	\$16,000.00		\$19,200.00	
<b>Promo</b>	<b>\$14,400.00</b>		<b>\$17,280.00</b>	

## A Complete line of Rockwell hardness testing machines to suit practically every application

Scan QR Code to learn more!



SCAN ME



320MS



HR430MR



HR430MS



HR530/HR530L



HR-610A/620A



HR-620B



Our packaged kits are designed to ensure you receive all necessary components and certificates needed to conduct ASTM Compliant Testing.

**10% OFF ALL HARDNESS TESTERS!**

### Calibration Set

Order No.	Order No.	Order No.	Order No.
64HAA462	64HAA463	64HAA464	64HAA465
HRC Scale	HRBW Scale	HR30N Scale	HR30TW Scale
Test Blocks	Test Blocks	Test Blocks	Test Blocks
64HAA181	64HAA172	64HAA270	64HAA303
64HAA177	64HAA170	64HAA266	64HAA301
64HAA173	64HAA168	64HAA262	64HAA299
	Universal Style Indenter with Flat		
64HAA100	64HAA119	64HAA101	64HAA119

## Micro Vickers Hardness Testers - HM Series

- > Built-in microscope unit for indentation analysis and accurate workpiece positioning
- > Automatic Turret Mechanism (automatic selection mechanism that controls the position of the indenter and objective lens through touch panel control or AV PAK software)
- > Wide range of available test forces between 0.486mN (0.0000495kgf) - 19610mN (1.9997kgf)
- > LED illumination unit
- > Each model has a complementary vision unit (AV PAK PC - required for series B&D testers, 810-454A - series A (observational unit))
- > Adjustable X-Y stage with built-in digital micrometers for detailed measurement analysis
- > Compatible with MH Plan Objectives

**MeasurLink** ENABLED  
Data Management Software by Mitutoyo



Functions	System A	System B	System D
Focusing	Manual	Manual	Automatic
Testing Action	Single Point	Single Point	Pattern Specific
Test-point Positioning	Manual X-Y Stage	Manual X-Y Stage	Automatic X-Y Stage
Measuring Indentations	Manual Monoscope	Automatic by AVPAK	Automatic by AVPAK
Camera (for observing and measuring indentations)	600,000 pixels B&W*	Color, 3 million pixels	Color, 3 million pixels
Operating the main unit	Touchel Panel	PC**	PC**
<b>Order No</b>	<b>64AAB305PA</b>	<b>64AAB323PA</b>	<b>64AAB380PA</b>
Main Unit	HM-210A	HM-210B	HM210D
<b>List</b>	\$24,000.00		
<b>Promo</b>	<b>\$21,000.00</b>	<b>For more pricing information or an application inquiry please scan QR code</b>	

Additional packages featuring combined Knopp & Vickers Indenter sets can be found on our webpage.



## Heavy Load Hardness Testers - HV Series

Highly evolving basic model

### HV-110/120 System A

- > Equipped with a high performance motorized test force selection function and motorized turret mounts.
- > Operates as smoothly as electric models but with the certainty of traditional test forces.
- > A List function make it easy to perform multi-point and average hardness evaluations, which required extra effort or external data processors with conventional manual models. This convenient screen enables consistency of test results.
- > Motorized test force selection and motorized turret positions can be easily controlled via a touch screen control panel. Adjustable X-Y stage with built-in digital micrometers for detailed measurement analysis



Advanced models promise additional productivity improvements

### HV-110/120 System B,C,D

- > B,C and D series testers feature AVPAK dedicated image software enabling automatic indentation reading with excellent automatic edge detection capability, reducing reading variation and visual error.
- > C and D series testers add powered X-Y stages which enable automatic continuous testing. This allows extended multi-point testing, complex pattern creation and multiple work piece analysis now carried out automatically.
- > D series testers add Auto Focus and create a fully automatic system that dramatically shortens the cycle time of your test and indentation analysis!



To set up a demonstration or get more information please use the QR code.





## Hand Tool Hardness - hardness testing at your finger tips



### Durometers (Digital and Analog)

For Rubber and Plastic Hardness Testing

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



Compact Dial  
811-336-10



Compact Digital  
811-336-10

MeasurLink<sup>®</sup> ENABLED  
Data Management Software by Mitutoyo



Order No	Model	Scale	Display	Graduation	Range	Indenter	List	Promo
811-335-10	HH-335	Shore A	Analog	1.0	10~90	Blunt Taper	\$660.00	\$594.00
811-336-10	HH-336	Shore A	Digital	0.5	10~90	Blunt Taper	\$1,410.00	\$1,269.00
811-337-10	HH-337	Shore D	Analog	1.0	20~90	Sharp Point	\$660.00	\$594.00
811-338-10	HH-338	Shore D	Digital	0.5	20~90	Sharp Point	\$1,410.00	\$1,269.00

### HH-411 Hardmatic

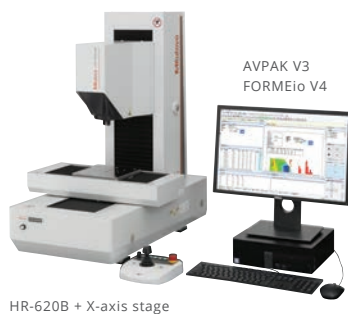
Rebound Leeb portable hardness tester featuring reproducibility and ease of operation on large parts. It is lightweight and can be carried into the shop or out in the field.

MeasurLink<sup>®</sup> ENABLED  
Data Management Software by Mitutoyo

Order No.	Type	List	Promo
810-298-10	HH-411 Hardmatic	\$4,400.00	\$3,960.00



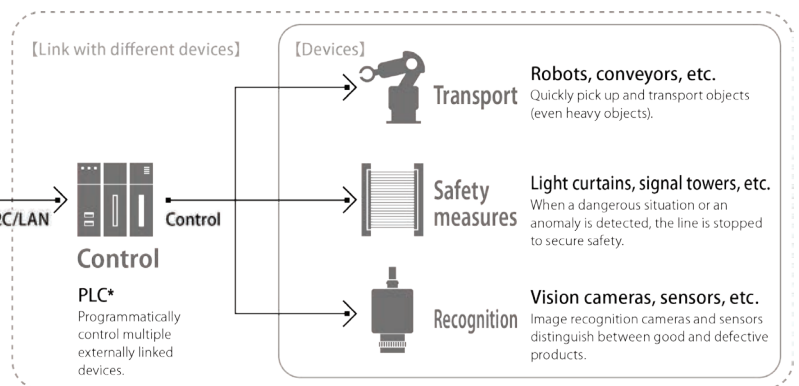
Here at Mitutoyo we pride ourselves in providing a complete lineup of hardness testing equipment, capable of meeting the needs of any application.



HR-620B + X-axis stage

AVPAK V3  
FORMEio V4

RS-232C/LAN



\* Programmable Logic Controller

For more information regarding all things hardness testing, please visit our webpage to stay up to date on our latest promotions and product offerings.



## MF / MF-U Measuring Microscopes with Metlogix M2 Software and Touch-Screen Tablet

Featuring M2 geometric measuring display

- > Highest measuring accuracy in its class
- > Stage travel range up to 400mm x 200mm / 16in x 8in
- > Quick release mechanism and zero-set buttons on stage controls increase operability when working larger workpieces
- > Easy to use all-in-one PC Touch Screen Display
- > M2 Geometric 2D Measurement Software
- > Camera port is standard on all models
- > Wide range of objectives available from 1x to 100x
- > M2 Retrofit package available for D generation MF and MF-U microscopes
- > Microscope packages with M2 software and tablet are listed below



176-890-10 - MF-UD4020D with 64PKA234 - M2 Software/Hardware Add-On

MeasurLink<sup>®</sup> ENABLED  
Data Management Software by Mitutoyo

### Sample Packages

Order No	Description	List	Promo
176-861-10PK1	MF-A1010, LED, MONOCULAR TUBE, WITH M2 SYSTEM	\$21,500.00	\$19,350.00
176-861-10PK2	MF-A1010, LED, BINOCULAR TUBE, WITH M2 SYSTEM	\$22,600.00	\$20,340.00
176-863-10PK1	MF-A2070, LED, MONOCULAR TUBE, WITH M2 SYSTEM	\$28,100.00	\$25,290.00
176-863-10PK2	MF-A2070, LED, BINOCULAR TUBE, WITH M2 SYSTEM	\$29,200.00	\$26,280.00
64PKA234	M2 Retrofit Kit for MF / MF-U Microscopes M2 2D Data Processing Unit with software and hardware, including a tablet PC. This package includes on-site installation and calibration for customers with existing MF of MF-U Microscopes	\$4,300.00	\$3,870.00

Please visit our landing page to receive more information.



SCAN ME

## MF Measuring Microscopes

- > Observation with a crisp and high-resolution erect image and a wide field of view.
- > Measuring accuracy that is highest in its class (and conforms to JIS B 7153).
- > Included 3x objective and binocular eyetube.
- > Illumination unit (reflected/transmitted) selectable from a high-intensity LED.
- > Quick-release mechanism useful for moving the stage quickly when measuring workpieces that are large in size or quantity.
- > Dedicated camera port allows for simultaneous eyepiece and digital observation.

Model No. (XY stage size)	MF-A1010D
XY stage travel range	4 x 4" / 100 x 100mm
Z-axis travel range	6" / 150mm
Focusing method	Manual focusing (Coarse focusing: 30mm/rev., Fine focusing: 0.2mm/rev.)
Measurement method	Linear encoder (2-axis model: X / Y-axis, 3-axis model: X / Y / Z-axis)
Resolution (switchable)	.0001" / .00005" / .00001" (0.001mm / 0.0005mm / 0.0001mm)
Measuring accuracy (at 20°C)	XY-axis: (2.2+0.02L)µm, L = Measuring length (mm) when not loaded, JIS B 7153
Indication accuracy (at 20°C)	Z-axis: (5+0.04L)µm, L = Measuring length (mm), (MF-B type)
Floating function	X and Y axes with Quick-release mechanism
XY stage top size	11 x 11" / 280 x 280mm
Effective glass size	7 x 7" / 180 x 180mm
Max. stage loading	22lbs / 10kg
Max. workpiece height	6" / 150mm



MeasurLink<sup>®</sup> ENABLED  
Data Management Software by Mitutoyo

176-863-10PK1

To learn more about our MF and MF-U Microscopes please visit our webpage.



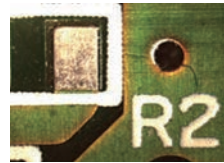
SCAN ME

## TM Toolmakers' Microscopes

- › Adjustable illumination intensity.
- › Angle measurement is performed easily by turning the angle scale disc to align the cross-hair reticle with the workpiece image.
- › Includes standard accessories create an overall magnification of 30X. Magnifications can be changed from 20 - 200X by using optional objectives and/or eyepieces.
- › .000050" Resolution Digimatic micrometer heads included.



**MeasurLink** ENABLED  
Data Management Software by Mitutoyo



Newly designed LED illumination

TM-A505B  
176-820A



Model No.		TM-A505B	TM-A1005B
Order No.		176-820A	176-821A
Eyepiece		Standard accessory: 15X (field number: 13), Options: 10X, 20X	
Objective lens		Standard accessory: 2X, Options: 5X, 10X	
Microscope head	Maximum height of workpiece	4.53" / 115mm	4.21" / 107mm
	Transmitted illumination	Stepless brightness adjustment, White LED light source, with green filter	
Illumination unit	Surface illumination	Oblique single-source type, Stepless brightness adjustment, White LED light source	
	Measuring range	2" x 2" / 50x50mm	4" x 2" / 100x50mm (An optional 2"/50mm gage block is required to cover full range. A CERA block is recommended.)
Cross-travel stage	Usable area of the stage glass	3.8" x 3.8" / 96x96mm	6" x 3.8" / 154x96mm
	Maximum stage glass loading	11 lbs. / 5kg	
Linear measurement method		Micrometer heads included	
<b>List</b>		\$6,160.00	\$8,030.00
<b>Promo</b>		<b>\$5,544.00</b>	<b>\$7,227.00</b>

Modular MOTICAM accessory for seamless image documentation



Order No.	Description
64PMI247	MOTICAM S1, 1.2 MEGAPIXEL-1/3" CMOS, USB
64PMI249	MOTICAM S3, 3.0 MEGAPIXEL-1/2" CMOS, USB
64PMI248	MOTICAM S6, 6.0 MEGAPIXEL-1/1.8" CMOS, USB
64PMI252	MOTICAM 1080, 2.0 MEGAPIXEL-1/2.8" CMOS, USB/HDMI
63AAA060	.37x C-Mount Eyetube Adapter

## Trinocular Stereo Microscope MSM-414TL

- › Continuous 1X - 4X magnification.
- › Image always in focus throughout zoom range.
- › Crisp, erect images with high resolution and excellent stereoscopic effect.
- › Stereo-tube can be rotated a full 360° for viewing at any angle.
- › Bilateral zoom control knob adds convenience and increases operator efficiency.
- › Diopter adjustment for both eyepieces.

Model	MSM-414TL
<b>Order No.</b>	<b>377-974A</b>
Optical tube	Trinocular
Total magnification	10X - 40X
Eyepiece	10X (377-016)
Objective	1X - 4X
Working distance	80mm
Field of view	20mm - 5mm
Dimensions	H=13.2" x W=6.7" x D=9.3"
Mass	13.2 lbs (6kg)

Order No.	Description	List	Promo
<b>377-974A</b>	MSM-414TL Stereo Microscope	\$1,520.00	<b>\$1,368.00</b>
<b>377-481</b>	C-mount Video Adapter for MSM-414TL	\$59.35	
<b>64PMI252</b>	Digital camera w/software 1080, 2.0 Mega Pixels, HDMI/USB	\$1,650.00	

377-481 & 64AAB526 purchased separately\*



Camera with software for digital viewing



## Quick Scope Series

The Quick Image series of digital microscopes offer high accuracy, high magnification manual 3D optical measurements.

- > High speed image auto focus for 3D measurements.
- > High pixel count color camera.
- > LED lighting with 4-quadrant ring light.
- > Zoom with interchangeable objective lenses.
- > Includes 1.5x objective, PC, and QSPak 12 software.

Includes Factory installation, A2LA accredited calibration, and training



QS-L2010Z/AFC  
359-713-10

## Advanced Lighting

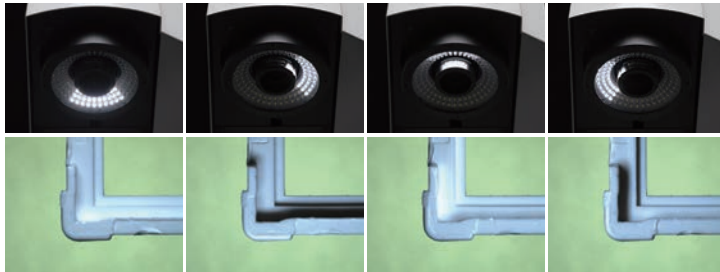


Transmitted light

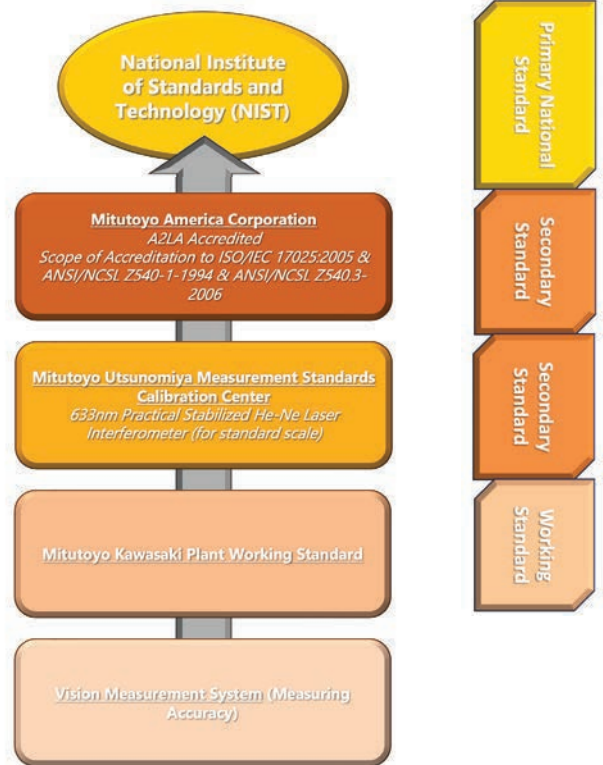
Co-axial light

Ring light

## 4-quadrant LED Lighting



## Traceability to National Standards



359-713-10PK

## Sample Packages

Model	Stage Size	Package No.
QS-L2010Z/AFC	8" x 4" x 6"	359-713-10PK
QS-L3017Z/AFC	12" x 6.7" x 6"	359-714-10PK
QS-L4020Z/AFC	16" x 8" x 6"	359-715-10PK

For pricing information please make an inquiry on our web page.



SCAN ME

To read more about the Quick Scope microscope visit our landing page.



SCAN ME

Prices effective October 2nd – December 15th

## Quick Image Series

The Quick Image series of digital profile projectors offer high accuracy, high speed 2D optical measurements.

- > Stitching function allows measurements of parts larger than the field of view.
- > Manual or motorized stages available.
- > High pixel count color camera.
- > Automatic part location with pattern search tool.
- > Includes PC and QIPak 6 software.

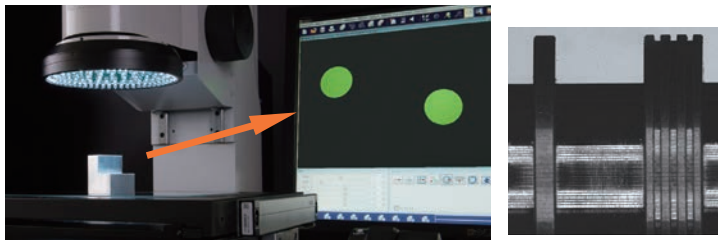
Includes Factory installation, A2LA accredited calibration, and training



## Ease of Focus

Wide focus range

Our specially designed optical system achieves a long focal depth of 22mm. This allows measurements without time-consuming manual focus, supporting an efficient measurement operation.



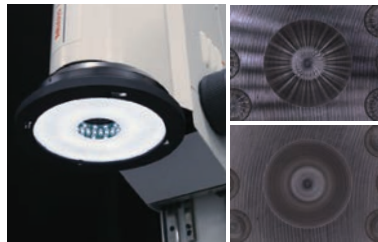
Focusing in on a stepped workpiece like the one shown above is unnecessary with the telecentric objective.

Measurement accuracy is guaranteed to be accurate when targets are within the focal depth

## Ring Light Diffusion Plate

Order No.: 02ATX180

Effective on a reflective workpiece such as a machined surface. This plate makes the surface appear smooth to obtain an image suited to measurement. The working distance is 76mm.



No Diffusion Plate

Diffusion Plate



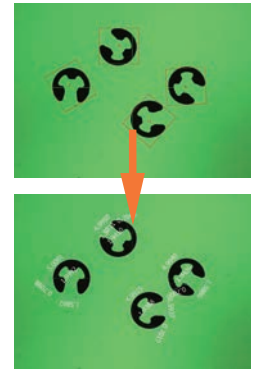
QI-A2010D  
361-851A

## Measure Multiple Workpieces Within the Field of View All at Once

Locate and measure multiple workpieces with just one click

Use pattern search for multiple workpieces within the screen view, and measure them all in one operation with the one-click execution function. This eliminates the need for accurate positioning of workpieces and cumbersome setup of fixtures.

Auto-Recognition



To read more about our Quick Image Digital Profile Projector please scan QR code.



SCAN ME

Mag.	0.2x	Manual Stage Model					Motorized Stage Models				Promo
		Model No.	QI-A1010D	QI-A2010D	QI-A2017D	QI-A3017D	QI-A4020D	QI-C2010D	QI-C2017D	QI-C2017D	
		Order No.	361-850A	361-851A	361-852A	361-853A	361-854A	361-860A	361-861A	361-862A	
		Package No.	361-850A	361-851A	361-852A	361-853A	361-854A	361-860APK	361-861APK	361-862APK	
0.5x	Model No.	QI-B1010D	QI-B2010D	QI-B2017D	QI-B3017D	QI-B4020D					
	Order No.	361-855A	361-856A	361-857A	361-858A	361-859A					
Measuring Range (X x Y)			3.94" x 3.94" 100 x 100mm	7.87" x 3.94" 200 x 100mm	7.87" x 6.69" 200 x 170mm	11.8" x 6.69" 300 x 170mm	15.7" x 7.87" 400 x 200mm	7.87" x 3.94" 200 x 100mm	7.87" x 3.94" 200 x 170mm	11.8" x 6.69" 300 x 170mm	
Travel Range (Z axis)		3.94" (100mm)									
Measurement accuracy (E1xy)		±(3.5+0.02L) μm L: arbitrary measuring length (mm)									



SCAN ME



**Mitutoyo America Corporation**

965 Corporate Boulevard  
Aurora, Illinois 60502  
1-888-648-8869

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# FALL PROMO 2023

## PRECISION TOOLS & INSTRUMENTS

Effective October 2nd through December 15th

FALL PROMO 2023

**MeasurLink<sup>®</sup> ENABLED**  
Data Management Software by Mitutoyo

