



SPRING PROMO 2013

Precision Tools & Instruments

Prices effective April 1 - June 28, 2013





Dear valued customers,

Our 50th Anniversary celebration is in full swing at Mitutoyo America Corporation with special promotions, historic events, and other memorable activities occurring throughout the year.

The commencement of the measuring tools and instruments Spring promotion has now launched and will run from April 1, 2013 to June 28, 2013.


It is important for us to take this opportunity to personally thank the companies and individuals for their continual support and commitment over the past half century and look forward to working with everyone in the next fifty years.


Please check our website at www.Mitutoyo.com to watch for other exciting news happenings at Mitutoyo during our year of celebration.

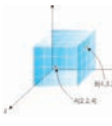
Sincerely,

Shigeyuki Sasaki
President, Mitutoyo America Corporation


INNOVATION & LONGEVITY


1934 Mitutoyo Japan opens 


1963 Mitutoyo America Corporation opens (formerly known as MTI Corporation) 


1976 First Mitutoyo CMM sold in US 


1977 Mitutoyo America Corporation moves headquarters to Paramus, NJ from New York City


1980 Los Angeles, CA and Dallas, TX offices opened 


1982 Plymouth, MI office opened 

1983 Commenced production of Digimatic calipers "CD Series" First Digimatic tool sold in the US 


1984 Boston, MA office opened 


1988 Aurora office opened 


1992 Corporate Headquarters moved to Aurora, IL 


1994 Calibration Lab opens in Elk Grove Village, IL 


1994 Calibration Labs acquire ISO9002 Registration


1994 Charlotte, NC office opened 


2000 Introduced Digital Caliper with built-in ABSOLUTE scale 


2001 Introduced ABSOLUTE Coolant Proof Linear Scale 


2002 Mitutoyo opens ISO 17025 Accredited Calibration Lab 


2003 World's first CNC Form measuring instrument 


2003 Mason, OH office opened 


2004 MACH-V In-Line CMM 


2005 Large CNC CMM C1600/2000 machines released 


2005 Nanocord Umap (minute Form measuring) 


2007 QuantuMike micrometer 

2011 High-Accuracy Sub-micron Digimatic Micrometer 

2012 70th Anniversary of gage block manufacturing 

2012 Birmingham, AL M3 Center opens 

2013 Celebrating 50 years serving US 

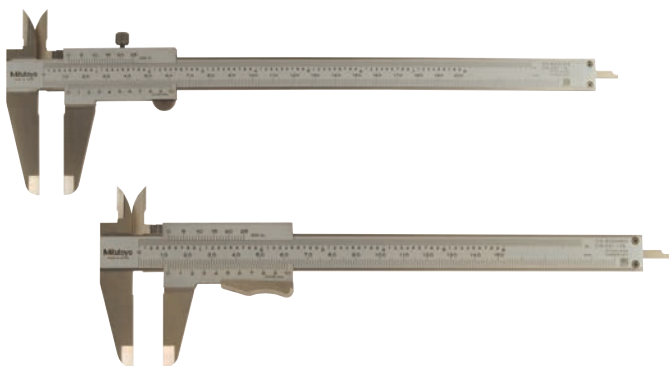
2014 80th Anniversary of Mitutoyo Japan 

Calipers

Vernier Calipers

FEATURES

- Can measure OD (outside diameter), ID (inside diameter), depth, and steps.
- The small vernier face angle (14°) provides easy reading.
- Dual reading scales on vernier. (metric/inch and inch models only)
- Lock screw for holding the sliding jaw position.
- Metric/inch dual scale
- Supplied with vinyl holster in fitted carton.



Order No.	Range	Accuracy	Graduation	List Price	Sale Price
530-118	0 - 200mm / 0 - 8"	±0.03mm	Lower: 0.02mm	\$121.00	\$112.50
531-128	0 - 150mm / 0 - 6"	±0.03mm	Upper: .001"	\$105.00	\$97.70

Dial Calipers

FEATURES

- Lock screw for dial bezel and for holding the sliding jaw position
- Can measure OD, ID, depth, and steps.
- Stainless Steel
- .001" graduations
- .200" per Rev.

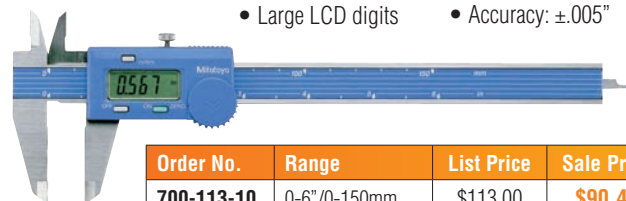


Order No.	Range	List Price	Sale Price
505-716	0 - 4"	\$92.90	\$86.40

MyCAL Lite

FEATURES

- Economically priced
- Large LCD digits
- .001"/0.1mm resolution
- Accuracy: ±.005"

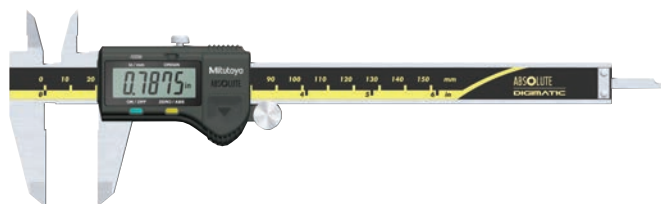


Order No.	Range	List Price	Sale Price
700-113-10	0-6"/0-150mm	\$113.00	\$90.40
700-123-10	0-8"/0-200mm	\$174.00	\$139.20

Digimatic Calipers with Absolute Encoder

FEATURES

- The ZERO/ABS key allows the display to be Zero-Set at any slider position along the scale for incremental comparison measurements. This switch will also allow return to the absolute (ABS) coordinate and display of the true position from the origin point (usually jaws-closed point).
- Carbide-tipped jaw type calipers are also available.
- Thumb roller included only on calipers up to and including 12" or 300mm.



Order No.	Range	List Price	Sale Price
With SPC Output			
500-170-20	0-4"/100mm	\$172.00	\$160.00
500-171-20	0-6"/0-150mm	\$183.00	\$170.20



Order No.	Description	List Price	Sale Price
959149	40" Caliper Cable	\$49.25	\$44.30
959150	80" Caliper Cable	\$55.20	\$49.70

Coolant Proof Calipers

FEATURES

- It's sealed housing is IP-67 rated, meaning it's immune to the coolants, dirt, grit and chips found in many manufacturing environments.
- .0005"/0.01mm resolution with ±.001" accuracy for 6" models and 8" models.
- Certificate of inspection provided (6"/8" models).



Order No.	Range	List Price	Sale Price
Non-Output Style			
500-753-10	0-8"/0-200mm	\$273.00	\$253.90
500-754-10	0-12"/0-300mm	\$472.00	\$439.00

Mitutoyo Caliper Production

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

Micrometers

Ratchet Thimble Micrometers

FEATURES

- Improved repeatability for both “expert” and novice users
- Constant force device allows easy one-handed operation
- Clearly audible ratchet
- Certificate of Inspection provided



Order No.	Range	Graduation	List Price	Sale Price
101-717	0-1"	.0001"	\$131.00	\$121.80

Outside Micrometers Ratchet Stop



103-260-99

Order No.	Range	Graduation	List Price	Sale Price
103-260-99	0-1"	.0001"	\$83.55	\$77.70

IP 65 Waterproof Micrometers

FEATURES

- IP65 coolant proof protection
- Two measuring modes, ABS and INC
- Functions available: Origin setting, Inch/mm selection, Zero-setting.
- Carbide-tipped measuring faces.



Order No.	Range	Resolution	Remarks	List Price	Sale Price
Non-Output Style					
293-244	0-25mm	0.001mm	Ratchet Thimble	\$209.00	\$194.40
293-344	0-1"/0-25.4mm	.00005"/0.001mm	Ratchet Thimble	\$173.00	\$160.90
Output Style					
293-234	0-25mm	0.001mm	Ratchet Thimble	\$249.00	\$231.60
293-334	0-1"/0-25.4mm	.00005"/0.001mm	Ratchet Thimble	\$249.00	\$231.60
293-347	3-4"/76.2-101.6mm	.00005"/0.001mm	Ratchet Thimble	\$333.00	\$309.70

Order No.	Description	List Price	Sale Price
05CZA662	40" IP65 Mic Cable	\$81.75	\$73.60
05CZA663	80" IP65 Mic Cable	\$90.15	\$81.15



Measurement data output function is available with a water-resistant connection cable.

Quickmike with Absolute Encoder and SPC Output

Quick non-rotating 1.2" (30mm) stroke spindle... the spindle advances .4" (10mm) per thimble rotation-no-torsion on the work-piece, reducing inspection time.



Order No.	Range	Resolution	Accuracy	List Price	Sale Price
293-676	0-1.2"/0-30.48mm	.00005"/0.001mm	±.0001"	\$579.00	\$538.50

Order No.	Description	List Price	Sale Price
937387	40" Quick Mic Cable	\$49.60	\$44.65
965013	80" Quick Mic Cable	\$58.60	\$52.80



Mitutoyo Micrometer Production



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

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

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

Micrometers/ Height Gages

MDH Micrometer

High-Accuracy Sub-Micron Digimatic Micrometer

FEATURES

- Enabling .00005"/0.1µm resolution measurement, this micrometer is ideal for customers who need to make highly accurate measurements with a hand-held tool.
- The ABS (absolute) rotary sensor also eliminates the need to perform origin setting each time the power is turned on, letting you start measuring straight away. With no possibility of overspeed errors, the High-Accuracy Digimatic Micrometer also delivers a higher level of reliability.



Order No.	Range	Resolution	Accuracy	List Price	Sale Price
293-100	0 - 25mm	0.0001mm/0.0005mm (switchable)	±0.5µm	\$1,590.00	\$1,510.00
293-130	0 - 1" 0 - 25.4mm	.000005"/.00002" 0.0001mm/0.0005mm (switchable)	±.00002"	\$1,590.00	\$1,510.00

Order No.	Description	List Price	Sale Price
05CZA662	Cable(1m)	\$81.75	\$73.60
05CZA663	Cable (2m)	\$90.15	\$81.15



Micrometer Stand

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



Micrometer sold separately

156-101-10

Order No.	Mic Range	List Price	Sale Price
156-101-10	0-4"	\$107.00	\$99.50

Digital Counter Height Gage

FEATURES

- Dual digit counters for up and down reference
- Dial and digit counters can be zeroed at any scriber position
- Course feed wheel and fine feed knob
- Comfortable grip base
- Slider clamp
- Carbide scriber



Order No.	Range	Graduation	List Price	Sale Price
192-150	0 - 12"	.001"	\$990.00	\$920.70

Vernier Height Gage

Standard Height Gage with adjustable main scale

FEATURES

- Zero reference point can be adjusted.
- Stain chrome finished scales for glare-free reading.
- Extra-large base for rigidity.
- Optional magnifier for easier reading
- Carbide-tipped scriber is provided.



Order No.	Range	Graduation	List Price	Sale Price
514-103	0 - 12" / 0 - 300mm	.001" / 0.02mm	\$776.00	\$721.70

New Series 192 Digimatic Height Gages

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

The Heavy Duty Style has a built in touch probe for the optional touch probe listed below.

Functions include:

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

Order No.	Range	Resolution	Accuracy	List Price	Sale Price
Standard Style with output					
192-631-10	0-18" / 0-450mm	.0002" (0.005mm)	±.002"	\$2,060.00	\$1,915.80

Order No.	Description	List Price	Sale Price
905338	40" Cable for Height Gage	\$39.05	\$35.15
905409	80" Cable for Height Gage	\$46.55	\$41.90



Height Gages / Rules

Linear/QM Height Production

Kure, Japan is located a short train ride east of Hiroshima. The train skirts along the coastal waters where freighters and fishing boats ply their trade. It is here that our popular 518 series Linear and QM Height Gauges find their way to you.

These gages rely on a combination of parts and components from a variety of Mitutoyo manufacturing operations in Japan. Linear scales and detectors from Kiyohara, castings from Gohara, software from Kawasaki and many items produced within the Kure operation. These gauges are assembled by hand in a climate controlled manufacturing environment to ensure a high quality, accurate gauge is provided to you.

QM-Height Series

The new world standard in height measurement!

Extreme accuracy, increased functionality and ease of use. The QM-Height delivers outstanding accuracy of $\pm(.00011+.0002 \times L/40)''$ to satisfy your most critical measurement needs. It measures maximum/minimum and displacement from the surface or by increment. It also measures inside/outside diameter via a unique process (detect the circle apex and process by tracing measurement). Additionally, all the measurements can be saved and recalled after measurement.

Order No.	Range	Accuracy at 20°C	List Price	Sale Price
64PKA094	0-14"/0-350mm	<ul style="list-style-type: none"> $\pm(.00011+.0002 \times L/40)''$ (L=Length in inches) Linear Height AC Adapter 	\$2,899.50	\$2,696.50



Linear Height LH-600E

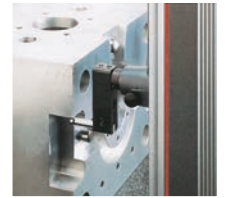
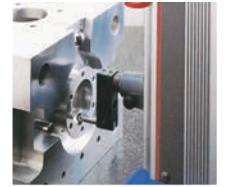
The Mitutoyo Linear Height LH-600E offers advanced performance for reliable and easy 2D measurement.

Measuring Range (stroke) 0-38"(24") / 0-972mm(600mm)

FEATURES

- Excellent accuracy of $(1.1+0.6L/600)\mu\text{m}$ with $0.1\mu\text{m}/0.5\mu\text{m}$ resolution/repeatability.
- Perpendicularity (frontal) of $5\mu\text{m}$ and straightness of $4\mu\text{m}$ are guaranteed.
- Pneumatic full/semi-floating system allows adjustment of air-cushion height.
- One-key operation for running a semi-automatic measurement.
- Data entry from a Digimatic tool.

Order No.	Description	List Price	Sale Price
518-351A-21	Linear Height Gage	\$8,270.00	\$7,691.00



182-126



Steel Rules

FEATURES

- Clear graduations on black-chrome finish.
- Stainless tempered.

Order No.	Size	Graduations				Width	Accuracy	List Price	Sale Price
Wide Rigid Rules									
182-104	6" (3R)	1/32	1/64	1/10	1/50th	3/4"	+ .004"/- .0035"	\$14.15	\$13.15
182-108	6" x 150mm	1/10	1/50	1mm	0.5mm	3/4"	+ .004"/- .0035"	\$20.50	\$19.10
182-126	12" x 300mm	1/50	1/100	1mm	0.5mm	1"	+ .005"/- .0035"	\$38.00	\$35.30
182-151	450mm	1mm	0.5mm	1mm	0.5mm	30mm	+ .006"/- .0035"	\$37.25	\$34.60
182-163	24" (5R)	1/32	1/64	1/10	1/100th	13/16"	+ .007"/- .0035"	\$60.40	\$56.20
Full-Flexible Rules									
182-201	6" (4R)	1/8	1/16	1/32	1/64	1/2"	+ .004"/- .0035"	\$13.45	\$12.50
182-205	6" x 150mm	1/32	1/64	1mm	0.5mm	1/2"	+ .004"/- .0035"	\$13.45	\$12.50
182-211	150mm	1mm	0.5mm	1mm	0.5mm	12mm	+ .005"/- .0035"	\$20.95	\$19.50
182-222	12" (16R)	1/32	1/64	1/50	1/100	1/2"	+ .005"/- .0035"	\$26.60	\$24.75
182-224	12" (3R)	1/32	1/64	1/10	1/50	1/2"	+ .005"/- .0035"	\$26.60	\$24.75
182-225	12" x 300mm	1/32	1/64	1mm	0.5mm	1/2"	+ .005"/- .0035"	\$26.60	\$24.75
Semi-Flexible Rules									
182-301	4" x 100mm	0.5mm	1mm	1/32	1/64	5/8"	+ .004"/- .0035"	\$18.70	\$17.40
182-305	12" x 300mm	0.5mm	1mm	1/32	1/64	5/8"	+ .005"/- .0035"	\$35.00	\$32.60

Bore Gages



Dial Bore Gages

FEATURES

- Interchangeable anvils and necessary accessories to perform close tolerance I.D. measurements.
- Carbide ball contact point for durability.
- Optional extension rods can be attached.
- A Digimatic Indicator can be attached in place of the dial gage.
- Accuracy: $.0002''/5\mu\text{m}$



Order No.	Graduation (Indicator)	Range	Spacers	Anvils	List Price	Sale Price
511-703	N.A (w/o indicator)	50-150mm	4	11	\$275.00	\$255.80
511-745	.0005" (2922SB)	6.5"-10"	7	6	\$577.00	\$536.60
511-756	.0001" (2923SB-10)	10"-16"	7	5	\$757.00	\$704.00

Digimatic Holtest Three-Point Internal Micrometers

FEATURES

- TiN-coated measuring contact points provide excellent durability and impact resistance and allow the instrument to measure to the bottom of a blind hole (up to 100mm / 4" models).
- Large LCD readout.
- Functions available: Presetting, Zero/ABS, Auto power On/Off, Data hold, Data output, Error alarm, Battery replacement alarm.
- Can measure deep holes by attaching an Extension rod (optional).

with TiN coated contact points

Order No.	Range	Accuracy	List Price	Sale Price
468-262	.35 - .425" / 8.89 - 10.795mm	$\pm .0001''$	\$1,080.00	\$1,004.00
468-270	2 - 2.5" / 50.8 - 63.5mm	$\pm .00015''$	\$1,370.00	\$1,274.00



Borematic w/Absolute Technology Encoder

FEATURES

- TiN-coated measuring pins provide excellent durability and impact resistance and allow the instrument to measure near the bottom of a blind hole.
- Digital display with quick-action lever operation makes for easy and fast measurement.
- Built-in Absolute scale system with absolute origin eliminates the necessity to set the origin at every power-on. The system is also immune to over-speed errors, increasing the reliability of measurement.
- A tolerance judgment function is built in to allow GO/NG judgment based on user-defined upper and lower limit settings.

Order No.	Range	Display Unit	Adaptor Supplied	Individual Head No.	Setting Rings Included	List Price	Sale Price
568-928	.275" - .5" / 6.985-12.7mm	568-015	954595	04AZB139 04AZB140 04AZB141	177-179 (.35" DIA) 177-283 (.425" DIA)	\$2,180.00	\$2,027.40



TiN coated contact points ("-10" suffix models only)

ABSOLUTE™
Absolute System Patented by MITUTOYO



Order No.	Description	List Price	Sale Price
905338	40" SPC Cable	\$39.05	\$35.15
905409	80" SPC Cable	\$46.55	\$41.90

Data Collection

Mitutoyo SPC Cables

Mitutoyo SPC cables for tools with Mitutoyo Digimatic SPC output.



Order No.	Length	Pins	For Use With	List Price	Sale Price
With Data Out Switch					
05CZA624	40"	—	IP66/67 Calipers	\$91.60	\$82.45
05CZA625	80"	—	IP66/67 Calipers	\$93.00	\$83.70
05CZA662	40"	—	IP65 Micrometers	\$81.75	\$73.60
05CZA663	80"	—	IP65 Micrometers	\$90.15	\$81.15
959149	40"	—	Height Gage 570 Series, Digimatic Indicator 543 and 575 Series, Digimatic Scale Unit 572 Series, Digimatic Absolute Calipers	\$49.25	\$44.30
959150	80"	—	Height Gage 570 Series, Digimatic Indicator 543 and 575 Series, Digimatic Scale Unit 572 Series, Digimatic Absolute Calipers	\$55.20	\$49.70
Without Data Out Switch					
937387	40"	6	Borematic 568 Series	\$49.60	\$44.65
965013	80"	6	Borematic 568 Series	\$58.60	\$52.80
905338	40"	—	Height Gage 570 Series, Digimatic Indicator 543 and 575 Series, Digimatic Scale Unit 572 Series	\$39.05	\$35.15
905409	80"	—	Height Gage 570 Series, Digimatic Indicator 543 and 575 Series, Digimatic Scale Unit 572 Series	\$46.55	\$41.90

Data Collection and Processor (DP-1VR)

DP-1VR with optional Digimatic Micrometer, Cable and Stand

Mitutoyo's DP-1VR is so compact, but with this powerful little device you can print data from your Digimatic caliper, micrometer and more using the Data Output function, and it can even calculate statistics.



Our Regular Price: \$494.00
Order Number: **264-504-5A**

Sale Price: \$459.40



MeasurLink® 7

An Integrated Solution for Quality Data Management

Starter Kit

Data collection can start immediately after connecting the measuring instrument to a computer

MeasurLink® 7 Real-Time Standard Edition

USB Input Tool Direct for Digimatic Caliper #06ADV380F

ABSOLUTE Digimatic Caliper #500-171-20 with SPC output

The input tool directly connects the measuring instrument to a USB port on a computer

The values displayed on the measuring instrument can be sent to the computer just by pressing the data switch.



This is the same result as that of typing numbers using the keyboard and then pressing Enter.

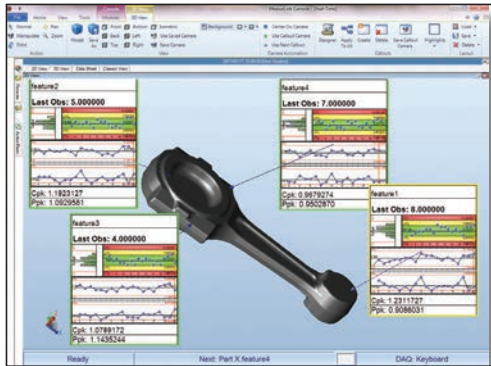
Order No.	Description	List Price	Sale Price
PROM001	6" Digimatic Caliper		
	USB Input Tool Direct	\$1,570.00	\$1,195.00
	MeasurLink Real Time Standard V7 SPC Software		

MeasurLink Real Time SPC Software

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

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

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



Database Management System (DBMS) Requirements

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

MeasurLink 7 also supports the following Microsoft SQL Server versions:

- Microsoft® SQL Server 2008 Standard Edition
- Microsoft® SQL Server 2008 Enterprise Edition
- Microsoft® SQL Server 2005 Workgroup Edition
- Microsoft® SQL Server 2005 Standard Edition

Operating System Requirements

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

- All Windows XP SP3 versions
- All Windows Vista SP2 versions
- All Windows 7 versions
- Both 32bit and 64bit operating systems supported

** Note: All product media will contain installers for both 32bit and 64bit systems

PC (OS Specific Hardware Requirements (Network))

Windows 7	<ul style="list-style-type: none"> • 1 gigahertz (GHz) or faster 32-bit (x86) or 64-bit (x64) processor • 2 gigabyte (GB) RAM (32-bit) • 16 GB available hard disk space (32-bit) or 20 GB (64-bit) • DirectX 9 graphics device with WDDM 1.0 or higher driver • DVD-ROM drive
Windows Vista SP2	<ul style="list-style-type: none"> • 1 gigahertz (GHz) 32-bit (x86) or 64-bit (x64) processor • 2 gigabyte (GB) of system memory • 40 GB hard drive with at least 15 GB of available space (20 GB for Home Basic) • Support for DirectX 9 graphics with WDDM and 128 MB of graphics memory • DVD-ROM drive
Windows XP SP3	<ul style="list-style-type: none"> • 1 gigahertz (GHz) 32-bit (x86) • 1 gigabyte (GB) of system memory • 40 GB hard drive with at least 15 GB of available space • DVD-ROM drive



Order No.	Description	List price	Sale Price
64AAB177	MEASURLINK V7.0 REAL-TIME STANDARD EDITION	\$1,195.00	\$1,080.00
64AAB178	MEASURLINK V7.0 REAL-TIME PROFESSIONAL EDITION	\$1,795.00	\$1,620.00
64AAB179	MEASURLINK V7.0 REAL-TIME PROFESSIONAL 3D EDITION	\$1,995.00	\$1,800.00



Dial Indicator

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

Order No.	Graduation	Range	Range /Rev	Dial Face	Remarks	List Price	Sale Price
2414S	.001"	.5"	.1"	0 - 100	Lug Back	\$107.00	\$99.50
2803S-10	.0001"	.025"	.01"	0 - 5 - 0	Lug Back	\$156.00	\$145.10



Dial & Digimatic Indicators Production



At Mitutoyo, we know that not all gauges are created equal. That's why we take great pride in the quality, design, components and assembly of our precision dial and digimatic indicators.

In our factory located in Nakatsugawa, Japan, the quality of our gauges begins with strict control over the manufacture of the components used within the assembly. This control allows us to ensure we are delivering the top quality product that our customers require.

After assembly, each gauge is inspected in an automatic measuring station to ensure accuracy. Gauges are identified by bar code which allows the inspected data to be printed on certificates which are then matched for packing with the instrument.

These extra steps are your assurance that the gauge meets or exceeds our rigid standards of quality.

IDS Digimatic Indicators with Absolute Encoder

Order No.	Resolution	Range	Remarks	Model	Accuracy	List Price	Sale Price
543-683	.0005"/0.01mm	.5" / 12.7mm	Lug Back	ID-S1012E	.0008"	\$173.00	\$160.90
543-683B	.0005"/0.01mm	.5" / 12.7mm	Flat Back	ID-S1012E	.0008"	\$173.00	\$160.90
543-692B	.00005"/0.001mm	.5" / 12.7mm	Flat Back	ID-S112E	.00012"	\$266.00	\$247.40



Functions:

Origin-set Zero-set, ± Counting, Power ON/OFF Data output, inch/mm conversion

ABSOLUTE™
Absolute System Patented by MITUTOYO



Order No.	Description	List Price	Sale Price
905338	40" Cable for Indicators	\$39.05	\$35.15
905409	80" Cable for Indicators	\$46.55	\$41.90

ID-U Digimatic Indicator

FEATURES

- Slim type digital indicator with low price.
- Large LCD and simple key operation.
- After the initial origin setting, the ID-U no longer needs absolute positioning over the entire battery life; the origin is remembered even after power-off.
- SPC data output.
- Ideal for installation into measuring devices because of its 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.
- Unlimited response speed eliminates over-speed errors.
- Flat back type only no option for backs.

ABSOLUTE™
Absolute System Patented by MITUTOYO

Order No.	Description	List Price	Sale Price
905338	40" Cable for Indicators	\$39.05	\$35.15
905409	80" Cable for Indicators	\$46.55	\$41.90

Order No.	Range	Resolution	Accuracy	List Price	Sale Price
575-123	1"/25.4mm	.0005"/0.01mm	.0008"	\$190.00	\$176.70



Indicators/Digimatic Scales

Solar IDS Digimatic Indicators

FEATURES

- Measurement tool with a solar power source. Ready for use from 40 lux illumination.
- Mitutoyo's unique ABS (Absolute) sensor automatically restores the last origin position when the indicator is turned on.
- A super capacitor maintains a reserve of approximately 3.5 hours under low light conditions.
- Origin-set, +/- direction and inch/mm
- Resolution: .0005"/0.01mm or .00005"/0.001mm
- Measuring range: .5"/12.7mm
- Stem diameter: 3/8" or 8mm available
- SPC output provided



ABSOLUTE™
Absolute System Patented by MITUTOYO

Lifting Lever



Lifting Knob



Lifting Cable



Optional accessories

Lifting lever (mm)	:No. 21EZA198
Lifting lever (inch)	:No. 21EZA199
Lifting cable	:No. 540774
Lifting knob (mm)	:No. 21EZA105
Lifting knob (inch)	:No. 21EZA150



Order No.	Range	Remark	List Price	Sale Price
.0005"/0.01mm Resolution				
543-507	.500"/12.7mm	Lug Back	\$190.00	\$176.70
543-507B	.500"/12.7mm	Flat Back	\$190.00	\$176.70
.00005"/.0001" Resolution				
543-502	.500"/12.7mm	Lug Back	\$296.00	\$275.30
543-502B	.500"/12.7mm	Flat Back	\$296.00	\$275.30

Order No.	Description	List Price	Sale Price
905338	40" Cable for Indicators	\$39.05	\$35.15
905409	80" Cable for Indicators	\$46.55	\$41.90

Magnetic Stands

Mitutoyo's Magnetic Stands accept all dial indicators and dial test indicators. The ON-OFF switch offers instant mounting and dismounting without any adverse effect to the indicators or workpiece surface.

7011BN



Order No.	Applicable holding stem dia.	List Price	Sale Price
7011BN	ø6mm, ø8mm*, ø9.53mm (3/8")	\$145.00	\$134.90



ABS Digimatic Scale Units with SPC Output

MITUTOYO Digimatic Scale Units can be installed on almost any surface, offering the user precise linear measurement capability with the added benefits of LCD readout and output for recording data and SPC.

FEATURES

- No rack, no pinion, no glass scale. Digimatic Scale is safely embedded in the hardened stainless steel blade.
- All units come with two mounting brackets, each located at either end of the scale.
- Battery life of approximately 1.5 years.

Multi Function Type



Order No.	Description	List Price	Sale Price
959149	40" Scale Cable	\$49.25	\$44.30
959150	80" Scale Cable	\$55.20	\$49.70

Order No.	Range	Accuracy	Resolution	Remarks	List Price	Sale Price
572-474	18"/450mm	.002"	.0005"/0.01mm	Multi Function Type	\$782.00	\$727.30
572-477	40"/1000mm	.0025"	.0005"/0.01mm	Multi Function Type	\$1,500.00	\$1,395.00
572-490	40"/1000mm	.0025"	.0005"/0.01mm	Diameter Display	\$543.00	\$505.00



Laser Scan Micrometers

ABS-Absolute Digital Readout System



FEATURES

- Bolt Hole Circle Calculation
- Diameter Display and Tool Offsets (Parameter Mode)
- Memory compensation value
- Selecting Coordinates 0 to 10
- Preset
- Zero Approach Machining
- Pitch Approach Machining
- 1/2 Calculation
- Standard Resolution: .001"/.0005"/.0002"/.0001"/.00005" (0.010mm/0.005mm/0.002mm/0.001mm): When connecting AT715.002"/.0010"/.0005"/.0004"/.0002"/.0001" (0.020mm/0.010mm/0.004mm/0.002mm): When connecting AT715 Series (DIA.).

Affordable price and High Performance. KA Counter connected with AT715 scales as an electromagnetic induction system.



Using new Electromagnetic Induction Detection with improved reliability and improved contamination protection.

True Absolute Scale Technology means original part datum point is never lost even when power is off.

The sizes of the AT715 range from 4" (100mm) to 72" (1800mm) with an accuracy at 20°C of 7+13xLO/1000 μm (LO: Effective Length in/mm). It has a response speed of 50m/min and a IP-67 rating for dust and water.

ABS-AOS-DRO Mill Packages (2-Axis)

Order No.	Description/Table Travel	Remarks	List Price	Sale Price
64PKA060	14" x 30" Mill Package	Includes AT715 scales. KA-12 Digital Readout, brackets and cables	\$1,490.00	\$1,385.70
64PKA061	14" x 40" Mill Package	Includes AT715 scales. KA-12 Digital Readout, brackets and cables	\$1,490.00	\$1,385.70
64PKA062	16" x 36" Mill Package	Includes AT715 scales. KA-12 Digital Readout, brackets and cables	\$1,490.00	\$1,385.70
64PKA063	16" x 40" Mill Package	Includes AT715 scales. KA-12 Digital Readout, brackets and cables	\$1,490.00	\$1,385.70

LSM-500S

Mitutoyo's LSM-500S Series Laser Micrometers have the highest scanning speed in the world. A speed of 3,200 scans/sec makes in line measurements more accurate and repeatable.

LSM-6200 Display Unit

It's memory function has been increased to allow storage of up to 100 programs and includes a built in program to measure odd fluted drills and endmills.



Order No	Model	Range Inch	Range mm	Repeatability	Linearity	Scanning Rate	List Price	Sale Price
544-532*	LSM-500S	.0002" - .08"	0.005-2mm	±0.03μm	±0.3μm	3,200 scans/sec	\$6,920.00	\$6,436.00
544-534*	LSM-501S	.002" - .4"	0.05-10mm	±0.04μm	±0.5μm	3,200 scans/sec	\$5,900.00	\$5,487.00
544-536*	LSM-503S	.012" - 1.18"	0.3-30mm	±0.11μm	±1.0μm	3,200 scans/sec	\$6,660.00	\$6,194.00
544-538*	LSM-506S	.04" - 2.36"	1-60mm	±0.36μm	±3μm	3,200 scans/sec	\$8,000.00	\$7,440.00

*LSM-6200 display unit is required. Order No. 544-072A

544-072A	LSM-6200 Display Unit						\$3,200.00	\$2,976.00
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Linear Gage/Litematic

Linear Gage LGF



Order No	Range	Resolution	Accuracy*	Force**	Stem Dia	List Price	Sale Price
542-181	.4" (10mm)	0.0001mm	(0.8+L/50)	1.2N/1.1N/1.0N	8mm	\$999.00	\$929.00
542-182	1" (25mm)	0.0001mm	(0.8+L/50)	4.6N/4.3N/4.0N	15mm	\$1,260.00	\$1,171.80
542-161	.4" (10mm)	0.001mm	(1.5+L/50)	1.2N/1.1N/1.0N	8mm	\$614.00	\$571.00
542-171	.4" (10mm)	0.0005mm	(1.5+L/50)	1.2N/1.1N/1.0N	8mm	\$614.00	\$571.00
542-162	1" (25mm)	0.001mm	(1.5+L/50)	4.6N/4.3N/4.0N	15mm	\$790.00	\$734.70
542-163	2" (50mm)	0.001mm	(1.5+L/50)	5.7N/5.3N/4.9N	15mm	\$955.00	\$888.20
542-173	2" (50mm)	0.0005mm	(1.5+L/50)	5.7N/5.3N/4.9N	15mm	\$955.00	\$888.20
542-613	2" (50mm)	0.005mm	(7.5+L/50) μ m	5.7N/5.3N/4.9N	15mm	\$586.00	\$545.00

EH Counter Multi-function Display Unit

FEATURES

- DIN compatible Panel-mounting type and DIN size (144 x 72mm). It can be easily incorporated into each system instrument
- This counter can be used on a desktop by mounting it on the supplied stand leg
- The standard RS-232C interface allows easy communication with an external PC
- The RS Link function permits multiple EH counters (6 units maximum) to be connected with daisy chain and data to be input/output from one channel of the terminal RS-232C interface
- The maximum value, minimum value, and TIR (runout) measurements are possible
- The 2-gage input type can perform 2-axis display and make addition or subtraction calculations between 2 gages



542-071A



542-075A

Model	EH-101P	EH-102P
Order No.	542-075A	542-071A
Applicable input	2.5MHz (Differential square-wave)	
Applicable gage	LGK, LGF with scale origin point mark, LGB, LGH (0.1 μ m)	
Number of gage input	1 (Single-display)	2 (Double-display)
Resolution (Depending on the linear gage type connected)	.000005", .00005", .0005"/ 0.0001mm, 0.0005mm, 0.001mm, 0.005mm, 0.01mm	
Mass	760g	800g
Tolerance judgment display	LED display (3 step: Amber, Green, Red / 5 step: Amber, Amber flash, Green, Red flash, Red)	
List Price	\$951.00	\$1,160.00
Sale Price	\$884.40	\$1,079.00

Litematic and Litematic Head High-resolution Measuring Unit

FEATURES

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



318-221A

318-226A

Order No.	Resolution	Range	Accuracy (at 20°C)	List Price	Sale Price
318-221A	.5 μ inch, 5 μ inch, 50 μ inch,	0 - 2" (50mm)	(0.5 + L / 100) μ m L=Measured length (mm)	\$8,270.00	\$7,691.00
318-226A	0.01 μ m, 0.1 μ m, 1 μ m	0 - 2" (50mm)	(0.5+L/100) μ m L=Measured length (mm)	\$8,270.00	\$7,691.00

Hardness Testing

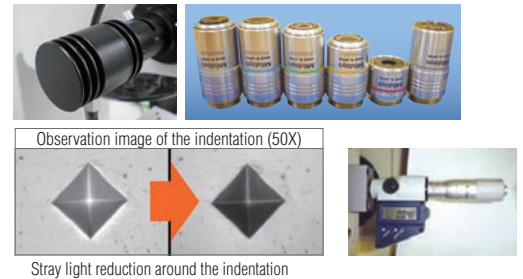
HM-210 / 220

Micro Vickers Hardness Testing Machines

FEATURES

- The latest technology electromagnetic force motor used in the loading mechanism enables the test force to be freely selected (see test force specifications) over the wide range of 0.4903mN to 19610mN (0.05gf to 2 kgf). It is also possible to freely set load dwell times. Now your desire for absolute control over the indentation size in Vickers hardness testing can be satisfied. The HM-200 series always offers the test force most appropriate for the specimen material and shape.
- Newly-designed 'MH Plan' objectives are optimized for measuring indentation images. The lineup includes 6 types of long working distance objectives: 10X, 20X, 50X and 100X for measuring indentation images, and 2X and 5X for enabling wide-range measurement around indentations.
- The motorized turret allows for up to 4 objective lenses and 2 indenter assemblies to be mounted at the same time.

Model No.	HM-210 Type A	HM-210 Type A V/K
Part No.	64AAB305	64AAB306
Fixed test force (mN)	98.07, 196.1, 294.2, 490.3, 980.7, 1961, 2942, 4903, 9807 (10gf-1000gf)	
Arbitrary test force	≤100 gf in 1 gram increments, > 100gf in 10 gram increments	
Test force control	Force generation by electromagnetic and automatic control (load, dwell, unload)	
Control unit	Color LCD Touch Screen	
Loading Rate	60 μ/ sec	
Load Dwell Time	0-999 sec	
Indenter	Vickers	Vickers and Knoop
Objective Lenses	10x, 50x	10x, 20x, 50x
Objective turret	Motor driven and manual operation	
Filar Eye Piece	Dual Line, 10X, .01μ min	
List Price	\$21,800.00	\$27,700.00
Sale Price	\$20,275.00	\$25,760.00



Stray light reduction around the indentation

HR Series Hardness Testers

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

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

Model Order No.	HR-430-MR 963-240-10A	HR-430MS 963-241-10A
Rockwell	●	●
Rockwell Superficial	—	●
Light Force Brinell	Optional	Optional
Display Unit	Digital: Hardness value, Scale display, Timer setting, Conversion, GO/NG judgment, Offset setting	
Data Output	RS-232C SPC (Digimatic)	
Dial a Weight	●	●
Motorized Test Force Control	●	●
Automatic Brake/Start	●	●
List Price	\$8,780.00	\$9,780.00
Sale Price	\$7,995.00	\$8,995.00



Model: HR-430MR

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



Model: HR-430MS

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

Mitutoyo MF Series Microscopes

FEATURES

- Observation with a clear and flare-less erect image and a wide field of view
- Measuring accuracy that is the highest in its class (and conforms to JIS B 7153)
- ML series, high-NA objectives that are specially designed for the MF series (long working distance type)
- Illumination unit (reflected/transmitted) selectable from a high-intensity LED or halogen bulb (required)
- Variable aperture diaphragm (reflected/transmitted) allows observation measurement while suppressing light diffraction
- Variety of standardized stages in sizes up to 400~200mm
- Quick-release mechanism useful for moving the stage quickly when measuring workpieces that are large in size or quantity
- Coarse/fine feed handles equipped as standard on both sides allow precise focus and observation measurement regardless of handedness
- High-magnification eyepiece observation up to 2000X
- Standard measuring microscope that has a wide variety of optional accessories including a Vision Unit and various digital CCD cameras
- Low-noise design

176-664-10



Order Number	Description	Stage Size	Stage Travel	List Price	Sale Price
64PKA093	MF-A2017C Microscope LED Illumination Unit (MF) Binocular Tube	16" X 13.5"	8" X 6.7"	\$25,560.00	\$23,770.00

Stereo Microscopes with Continuous 1X - 4X Magnification

Traditional binocular/Trinocular stereo microscopes for industrial, medical, and classroom applications. It is ideal for electrical small part inspection, assembly, and medical/biological dissection.

FEATURES

- Continuous 1X - 4X magnification
- The image is 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
- Binocular Tube Inclination: 45°
- Focusing Range: 1.46" (37mm)
- Interpupillary Adjustable Range: 2.12" - 2.99" (54mm - 76mm)



377-972A

Order No.	Description	List Price	Sale Price
377-972A	Binocular Stereo Microscope	\$1,120.00	\$1,041.00
377-974A	Trinocular Stereo Microscope	\$1,350.00	\$1,255.00

Turret Style Stereo Microscopes

The 377-990A, is a high-accuracy four-step magnification binocular stereo microscope. With a horizontal changer allowing 6X, 12X, 25X, and 50X magnifications with a standard 1X objective and 10X eyepieces, the 77-990A has limitless capabilities for electrical small part inspection.

The 377-991A, with its vertical five-step magnification changer is ideal for small part assembly. This trinocular stereo microscope with standard 6X, 10X, 16X, 25X, and 40X magnifications, has flexibility from 3.2X to 160X magnifications.

FEATURES

- Superior quality optics provide high-resolution
- Always in sharp focus at all magnifications
- The Parfocal Optical System allows relaxed strain-free viewing
- Long working distance
- Extreme large field of view (23mm diameter)



377-990A



377-991A

Order No.	Description	List Price	Sale Price
377-990A	Binocular Stereo Microscope	\$1,660.00	\$1,544.00
377-991A	Trinocular Stereo Microscope	\$1,520.00	\$1,414.00

Linear Scales you can trust, because we do.



Mitutoyo's Linear Scale technology is used in our own machines and instruments.

Our Linear Scale products include:

- NC Linear Scales compatible with controllers such as FANUC, Mitsubishi, Siemens and more
- Enclosed, Exposed, Glass, and Tape Scales
- High IP ratings for high resistance to contamination
- Easy installation and calibration setup with simple software
- Easy to set up scales with adjustment software built into the signal cable
- A wide variety of specifications from submicron resolution to extended ranges (12m)



Mitutoyo

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