Mitutoyo



Small Tool Instruments and Data Management

Form Measurement

Digital Scales and DRO Systems

Sensor Systems

Test Equipment

Optical Measurement

FALL PROMO 2024

PRECISION TOOLS & INSTRUMENTS

Effective September 9th through December 13th



Mitutoyo











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 2024 Mitutoyo Fall Promotion features many great Mitutoyo precision measurement instruments such as a wide variety of Surftest surface roughness instruments, new protective soft cases for Mitutoyo micrometers and calipers, new IDC/IDF indicators with S1 Digimatic output capabilities, test indicators, profile projectors, and the very popular redesigned LH-600F Linear Height Gage. The fall promotion also features many other trusted Mitutoyo tools and instruments including data management solutions, calipers, micrometers, linear encoders, test indicators, height gages, microscopes, hardness testers, and contact sensors such as linear gages and the motorized Litematic contact gage. Prices are effective September 9, 2024 through December 13, 2024.

You can find all of the latest promotions, products and events on our website, www. mitutoyo.com, as well as on my.mitutoyo.com. Thank you for trusting Mitutoyo with your metrology needs.

Sincerely,

Matt Dye President, Mitutoyo America Corporation

Matthew B. Syc







TABLE OF CONTENTS

| Products | Surftest |
|------------------------|---|
| Products | New protective soft cases for your Mitutoyo measurement tools provide a lighter, more modern alternative to our wooden cases. These soft cases are available in packages including mechanical and digital micrometers and calipers as well as empty for your existing Mitutoyo tools. |
| Products | ID-C/ID-F Digimatic Indicators |
| NEW Products | Test Indicators |
| Products | Profile Projectors |
| Products | LH-600F Linear Height Gages |

| Surftest SJ-210 Packages 3 |
|-----------------------------|
| Tool Kits4 |
| Indicators 6 |
| Dial Test Indicators 7 |
| Bore Gages 10 |
| Holtest 11 |
| Borematic 13 |
| Profile Projectors 14 |
| LH-600F 16 |
| QM Height 18 |
| Calipers/Caliper Checker 20 |
| Micrometers 22 |
| U-WAVE Bluetooth® Wireless |
| Data Transmitters 24 |
| U-WAVE Wireless |
| Data Transmitters 25 |
| Litematic Units 26 |
| Linear Gages/EJ Counters 27 |
| Digimatic Scales 28 |
| Linear Encoders29 |
| Hardness Testers 30 |
| Microscopes 34 |
| |

Surftest SJ-210 Packages

MeasurLink® ENABLED

- > 2.4-inch color LCD display with backlighting is switchable to vertical or horizontal left / right-hand views.
- > The built-in battery allows approximately 1,000 measurements on a full charge (4 hours charging time).
- > Performs roughness analysis conforming to international standards JIS '82 / JIS '94 / JIS '01 / ISO '97 /ANSI/VĎA.
- > Optional MicroSD card can store up to 500 measurement conditions, 10,000 measurement results and 500 image data.
- > Function restriction feature locks conditions to prevent erroneous measurements if settings are accidentally changed.

Accessing eLearning Course after purchase:

- 1. Contact our Inside Sales Rep to confirm Promo Package purchased.
- 2. Inside Sales Rep to verify your registration on My.Mitutoyo.com
- 3. Inside Sales Rep then provides a code for free access.

| Order No. | Spring Promo Price | List | Promo |
|-----------------|--|------------|------------|
| 178-561-12A-SPP | SJ-210 4mN (STANDARD DRIVE UNIT) INCH/MM | \$2,820.00 | \$2,232.00 |
| STF-210 | eLearning Course | \$30.00 | Included |

| Order No | Calibration Package | List | Promo |
|-----------------------------------|--|------------|------------|
| 178-561-12A-CP | SJ-210 4mN (STANDARD DRIVE UNIT) INCH/MM | \$3,409.00 | \$2,650.00 |
| 178-390 | FREE EXTRA DETECTOR | \$522.00 | Included |
| C178-602 Calibration Specimen fee | | \$67.15 | Included |
| STF-210 | eLearning Course | \$30.00 | Included |

| Order No | Data Collection Package | List | Promo |
|-------------------------------------|--|------------|------------|
| 178-561-12A-DC | SJ-210 4mN (STANDARD DRIVE UNIT) INCH/MM | \$3,770.00 | \$2,900.00 |
| 02AZD730G | U-WAVE TRANSMITTER | \$253.00 | Included |
| 02AZD790D U-WAVE connecting cable D | | \$126.00 | Included |
| 02AZD810D U-WAVE RECEIVER | | \$571.00 | Included |
| STF-210 | eLearning Course | \$30.00 | Included |

| Order No | Height Gage Package | List | Promo |
|----------------|--|------------|------------|
| 178-561-12A-HG | SJ-210 4mN (STANDARD DRIVE UNIT) INCH/MM | \$4,088.00 | \$3,500.00 |
| 570-413 | Digimatic Height Gage (HDSH18" CX) | \$1,150.00 | Included |
| 12AAA233 | Height Gage Adapter (INCH) | \$118.00 | Included |
| STF-210 | eLearning Course | \$30.00 | Included |

| Order No | Manual Column Stand Package | List | Promo |
|-----------------|--|------------|------------|
| 178-561-12A-MCS | SJ-210 4mN (STANDARD DRIVE UNIT) INCH/MM | \$3,834.00 | \$3,450.00 |
| 178-069 | Column Stand for SJ-210/310/410 | \$962.00 | Included |
| 12AAA221 | Magnetic Stand Adaptor (8mm DIA) | \$51.85 | Included |
| STF-210 | eLearning Course | \$30.00 | Included |







Calibration Certificate



Wireless Communication System



12AAA233









Soft Case Tool Kits

Durable Protective Cases

OFF NEW Products

New protective cases for your tools offer a modern alternative to our wooden cases. Versions include mechanical, standard Digimatic, or QuantuMike-based sets. QuantuMikes are just as accurate as standard Digimatic micrometers, but up to 4x faster.

Empty cases are also available as a new home for your existing tools!



64PKA288





CASE MOULDS FOR DIGIMATIC AND MECHANICAL TOOLS

LONG-LIFE ZIPPERS AND STAIN-RESISTANT COVER

2X MAGNET-BACKED SLOTS FOR HOLDING STEEL RULES, SPANNERS, THUMB DRIVES AND MORE







64PKA283

64PKA284



64PK A285

Soft Case Tool Kit Components for 64PKA283

| Part # | Description |
|----------|---|
| 103-135 | MIC, OUTSIDE, 0-1", 0.0001", FRICTION THIMBLE |
| 182-204 | STEEL RULE 6" 3R FLEXIBLE |
| 505-742J | DIAL CALIPER, 6", .1"/ REV |
| 64PMT183 | CASE FOR MECHANICAL TOOL KIT |

Soft Case Tool Kit Components for 64PKA284

| Part # | Description |
|----------|---|
| 103-177 | MIC, OUTSIDE, 0-1", 0.001", RATCHET STOP |
| 182-102 | STEEL RULE 6" 16R RIGID |
| 505-740J | DIAL CALIPER, 6", .2"/ REV |
| 64PMT183 | CASE FOR MECHANICAL TOOL KIT |

Soft Case Tool Kit Components for 64PKA285

| Part # | Description |
|------------|---|
| 293-340-30 | 1" RATCHET STOP MICROMETER (NO SPC) |
| 500-196-30 | DIGIMATIC CALIPER, 6"/150MM, NO OUTPUT |
| 64PMT182 | CASE FOR DIGIMATIC TOOL KIT |



64PKA286



64PKA287



64PKA288

Soft Case Tool Kit Components for 64PKA286

| | Part # | Description |
|--|------------|--|
| | 293-348-30 | 1" FRICTION THIMBLE MICROMETER (NO SPC) |
| | 500-196-30 | DIGIMATIC CALIPER, 6"/150MM, W/O OUTPUT |
| | 64PMT182 | CASE FOR DIGIMATIC TOOL KIT |

Soft Case Tool Kit Components for 64PKA287

| Part # | Description |
|------------|---|
| 293-185-30 | QUANTUMIKE MICROMETER, DIGIMATIC, 0-1", IP65, .00005", NO SPC |
| 500-196-30 | DIGIMATIC CALIPER, 6"/150MM, NO OUTPUT |
| 64PMT182 | CASE FOR DIGIMATIC TOOL KIT |

Soft Case Tool Kit Components for 64PKA288

| Part # | Description |
|------------|---|
| 293-180-30 | QUANTUMIKE MICROMETER, DIGIMATIC, 0-1", IP65, .00005", W/ SPC |
| 500-171-30 | DIGIMATIC CALIPER, 6"/150MM, W/ OUTPUT |
| 64PMT182 | CASE FOR DIGIMATIC TOOL KIT |

Soft Case Tool Packages

| Package # | Description | 2024 List Price | Promo Price |
|-----------|---|-----------------|-------------|
| 64PKA283 | TOOL PKG, MECHANICAL, INCH, W/ 6" DIAL CALIPER, 1" OUTSIDE MIC, 6" STEEL RULE, CASE | \$367.00 | \$330.30 |
| 64PKA284 | TOOL PKG, MECHANICAL, INCH, W/ 6" DIAL CALIPER, 1" MIC, 6" STEEL RULE, CASE | \$317.00 | \$285.30 |
| 64PKA285 | TOOL PKG, DIGIMATIC, INCH, W/ 1" MIC (RATCHET STOP TYPE), 6" CALIPER, CASE | \$468.00 | \$421.20 |
| 64PKA286 | TOOL PKG, DIGIMATIC, INCH, W/ 1" MIC (FRICTION THIMBLE TYPE), 6" CALIPER, CASE | \$468.00 | \$421.20 |
| 64PKA287 | TOOL PKG, DIGIMATIC, INCH, W/1" QUANTUMIKE, 6" CALIPER, CASE | \$483.00 | \$434.70 |
| 64PKA288 | TOOL PKG, DIGIMATIC, INCH, W/1" QUANTUMIKE, 6" CALIPER, CASE, WITH OUTPUT | \$515.00 | \$463.50 |

Protective Case Only

| Package # | Description | 2024 List Price | Promo Price |
|-----------|------------------------------|-----------------|-------------|
| 64PMT182 | CASE FOR DIGIMATIC TOOL KIT | \$58.75 | \$52.88 |
| 64PMT183 | CASE FOR MECHANICAL TOOL KIT | \$60.70 | \$54.63 |



Calibration period

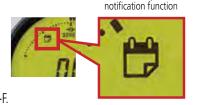
ID-C/ID-F Digimatic Indicators

High-performance ABS Digimatic Indicators

> 20 µinch/0.5 µm resolution.

> Large screen and analog bar.

> 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.



> Simple Calculation Function.

> New Digimatic S1 Output*. S1 is the new Mitutoyo bidirectional output format that enables reading and writing information to the gages such as sending a zero command, TIR reset, calibration date warnings, and the ability to poll the serial number for smoother measurement operation. Communication supported by new Input Tool and SPC cable.

| Order No. | Description | List | | | | | |
|----------------------|--|---------|--|--|--|--|--|
| 06AGL011 | SPC DIGIMATIC Cable, TYPE S1 (1M) | \$78.05 | | | | | |
| 264-020 | 264-020 USB INPUT TOOL | | | | | | |
| * SPC Cable and Inpu | * SPC Cable and Input Tool are both required | | | | | | |





Send data directly into existing forms

ITPak 3.0 Read/Write Data and set Parameters

> MeasurLink® 10.2 (see page 25) Data Management & SPC Software

0.5" ID-F MODEL

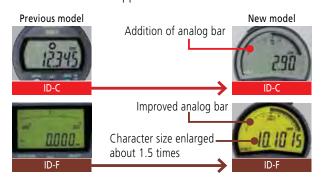
NOW AVAILABLE





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.



ID-C Series - Battery Operated

| Order No. | | | | Maximu | ım Permissib | le Error | Measuring for MPL (N) | | Net mass (g) | | | | | | |
|-----------|-----------|---------------|---|------------------------|--------------------------------|-----------------------------------|--------------------------|-------------|--------------|--------------|----------|----------|----------|----------|----------|
| With Lug | Flat Back | Range | Resolution | MPE _E | Hysteresis MPE _H | Repeatability MPE _R | | Interface | With Lug | Flat Back | List | Promo | | | |
| 543-702 | 543-702B | 0.5" / 12.7mm | | 0.00040#./ | | | 1.5 or less | d1/d2/S1 | 195 | 165 | \$501.00 | \$450.90 | | | |
| 543-707 | 543-707B | 0.5" / 12.7mm | 0.00002" / .00005" / 0.0001" / 0.0005" / 0.0005mm / 0.001mm | ± 0.00012" / 0.002mm | 0.000 | 0.00008" / | 0.4 to 0.7 | d1/d2/S1 | 190 | 160 | \$783.00 | \$704.70 | | | |
| - | 543-722B | 1" / 25.4mm | | | | 0.00008 / 0.002mm | | 1.8 or less | d1/d2/S1 | - | 195 | \$645.00 | \$580.50 | | |
| - | 543-732B | 2" / 50.8mm | / 0.01mm | ± 0.0002" / 0.005mm | | | 2.3 or less | d1/d2/S1 | - | 260 | \$840.00 | \$756.00 | | | |
| 543-712 | 543-712B | 0.5" / 12.7mm | | | | 0.004 | | | | 0.9 or less | d1/S1 | 190 | 160 | \$366.00 | \$329.40 |
| 543-717 | 543-717B | 0.5" / 12.7mm | | ± 0.001" / 0.02mm | 0.001" / | 0.0005" / | 0.2 to 0.5 | d1/S1 | 185 | 155 | \$587.00 | \$528.30 | | | |
| - | 543-727B | 1" / 25.4mm | | | 0.001 7 0.02mm | | 1.8 or less | d1/S1 | - | 190 | \$537.00 | \$483.30 | | | |
| - | 543-737B | 2" / 50.8mm | | ± 0.0015" / 0.04mm | | | 2.3 or less | d1/S1 | - | 245 | \$704.00 | \$633.60 | | | |

ID-F Series - AC Powered - Green/Red Backlit Display

| Order No. | | | | Maximum Pe | Measuring | | | | | |
|-----------|------------|----------------|--|----------------------|--------------------------------|-----------------------------------|-------------|-----------|----------|----------|
| With Lug | Flat Back | Range | Resolution | MPE _E | Hysteresis MPE _H | Repeatability MPE _R | for MPL (N) | Interface | List | Promo |
| 543-856-A | 543-856B-A | 0.5" / 12.7mm | 0.005mm / 0.001mm / | . 0.0001" / 0.0035~~ | | | 1.5 or less | d1/d2/S1 | \$675.00 | \$607.50 |
| - | 543-852A | 1" / 25.4mm | 0.003fffff / 0.001fffff / 0.01 mm / 0.00002" / | ± 0.0001" / 0.0025mm | 0.00008" / | 0.00008" / | 1.8 or less | d1/d2/S1 | \$787.00 | \$708.30 |
| - | 543-854A | 2" / 50.8mm | .00005" / 0.0001" / | ± 0.00016" / 0.004mm | 0.002mm | 0.002mm | 2.3 or less | d1/d2/S1 | \$894.00 | \$804.60 |
| - | 543-858A | 2 / 50.8111111 | 0.0005"/ 0.001" (selectable) | ± 0.00012" / 0.003mm | | | | d1/d2/S1 | \$912.00 | \$820.80 |

Dial Test Indicators



.000050" / 50µinch model now available!

- >One-piece movement assembly for improved durability & impact resistance.
- > Contact point length shown on dial face.
- > Certificate of Inspection included.
- > Shows results from both measuring directions.
- > Resilient crystal with high resistance to glare, scratches and impact.

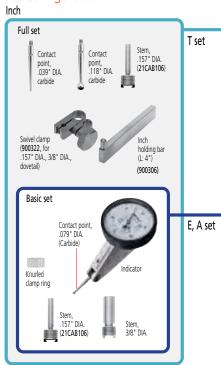
| Part # | Range | Graduations | Set Type | Face Color | List | Promo | Remarks |
|-------------|--------------------|-----------------|----------|--------------|------------|----------|-------------|
| Standa | rd | | | | | | |
| 513-407-10E | .008" | .00005" | Basic | White | \$220.00 | \$198.00 | Fine grads |
| 513-407-10T | .008" | .00005" | Full | White | \$258.00 | \$232.20 | Fine grads |
| 513-401-10E | .14mm | 0.001mm | Basic | Yellow | \$262.00 | \$235.80 | |
| 513-402-10E | .03" | .0005" | Basic | White | \$153.00 | \$137.70 | |
| 513-402-10T | .03" | .0005" | Full | White | \$182.00 | \$163.80 | |
| 513-403-10E | .008" | .0001" | Basic | White | \$199.00 | \$179.10 | |
| 513-403-10T | .008" | .0001" | Full | White | \$234.00 | \$210.60 | |
| 513-404-10E | 0.8mm | 0.01mm | Basic | Yellow | \$155.00 | \$139.50 | |
| 513-404-10A | 0.8mm | 0.01mm | Plus | Yellow | \$171.00 | \$153.90 | |
| 513-404-10T | 0.8mm | 0.01mm | Full | Yellow | \$183.00 | \$164.70 | |
| 513-405-10E | 0.2mm | 0.002mm | Basic | Yellow | \$173.00 | \$155.70 | |
| 513-405-10T | 0.2mm | 0.002mm | Full | Yellow | \$226.00 | \$203.40 | |
| 513-406-10E | .03"/0.7mm | .0005"/0.01mm | Basic | White/Yellow | \$180.00 | \$162.00 | Dual dial |
| 513-406-10T | .03"/0.7mm | .0005"/0.01mm | Full | White/Yellow | \$199.00 | \$179.10 | Dual dial |
| 513-409-10E | 0.2mm/.0076" | 0.002mm/.0001" | Basic | Yellow/White | \$232.00 | \$208.80 | Dual dial |
| 513-409-10T | 0.2mm/.0076" | 0.002mm/.0001" | Full | Yellow/White | \$235.00 | \$211.50 | Dual dial |
| 513-412-10E | .03" | .0005" | Basic | White | \$220.00 | \$198.00 | |
| 513-412-10T | .03" | .0005" | Full | White | \$254.00 | \$228.60 | |
| 513-415-10E | 1.0mm | 0.01mm | Basic | Yellow | \$165.00 | \$148.50 | Long stylus |
| 513-415-10H | 1.0mm | 0.01mm | Basic | Yellow | \$181.00 | \$162.90 | Long stylus |
| Ruby Tip | | | | | | | |
| 513-472-10E | .03" | .0005" | Basic | White | \$171.00 | \$153.90 | |
| 513-479-10E | .03" | .0005" | Basic | White | \$181.00 | \$162.90 | Long stylus |
| Standa | rd (20° tilted fac | ce) | | | | | |
| 513-442-10A | .06" | .0005" | Basic | White | \$208.00 | \$187.20 | |
| 513-442-10T | .06" | .0005" | Full | White | \$235.00 | \$211.50 | |
| 513-442-16A | .06" | .0005" | Basic | Black | \$208.00 | \$187.20 | |
| 513-442-16T | .06" | .0005" | Full | Black | \$235.00 | \$211.50 | |
| 513-446-16A | .06" | .0005" | Basic | Black | \$278.00 | \$250.20 | Long stylus |
| 513-446-16T | .06" | .0005" | Full | Black | \$313.00 | \$281.70 | Long stylus |
| 513-446-10A | .06" | .0005" | Basic | White | \$278.00 | \$250.20 | Long stylus |
| 513-446-10T | .06" | .0005" | Full | White | \$313.00 | \$281.70 | Long stylus |
| 513-443-10A | .016" | .0001" | Basic | White | \$262.00 | \$235.80 | |
| 513-443-10T | .016" | .0001" | Full | White | \$296.00 | \$266.40 | |
| Vertical: | dial is on the to | op of the frame | | | | | |
| 513-452-10E | .03" | .0005" | Basic | White | \$199.00 | \$179.10 | |
| 513-452-10T | .03" | .0005" | Full | White | \$220.00 | \$198.00 | |
| 513-453-10E | .008" | .0001" | Basic | White | \$237.00 | \$213.30 | |
| | dial is on the si | | 2.5.0 | | , ,==,,,00 | , | |
| 513-485-10E | 0.2mm | 0.002mm | Basic | Yellow | \$254.00 | \$228.60 | |

10% OFF

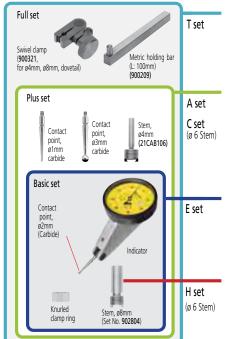


Contact point length is printed on dial face to avoid accuracy issues

Set Configuration



Metric



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.







| Order No. | Resolution | Range | Accuracy | Measuring Force | List | Promo |
|-------------|---|------------|------------------|-----------------|----------|----------|
| 543-342B-10 | .00005/.0001/.0005" (0.001/0.01mm) Selectable | .5"/12.7mm | ±.00010"/0.003mm | 1.5N or less | \$524.00 | \$471.60 |

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

SPC cable - 1m: 905338 2m: 905409



Installed on

optional bore gage probe (page 9)

Bore Gage ABSOLUTE Digimatic Indicator ID-C

- > 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

MeasurLink® ENABLED

Data Management Software by Mitutoyo



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

| Order No. | Resolution | Range | Accuracy | Remarks | List | Promo |
|-----------------|-------------------------------------|------------|------------------|-----------|----------|----------|
| Stem dia. 3/8", | 44-48 UNF Thread | | | | | |
| 543-302-10 | .00005/.0001/.0005" 0.001/0.01mm | .5"/12.7mm | ±.00010"/0.003mm | w/lug | \$524.00 | \$445.40 |
| 543-302B-10 | Selectable | .5"/12.7mm | ±.00010"/0.003mm | Flat-back | \$524.00 | \$445.40 |

SPC cable – 1m: 905338 2m: 905409



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

Prices effective September 9 through December 13, 2024

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 wellestablished 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

| tem dia. 3/8" #4-48 UNF Thread | | | | | | | | |
|--------------------------------|---------------------------|---------------|----------|----------|------------|------------|--|--|
| Order No. | Resolution | Range | Model | Accuracy | List | Promo | | |
| 543-562A | .00002", .00005", .0001", | 1.2" / 30.4mm | ID-H530E | 0.0015mm | \$1,040.00 | \$936.00 | | |
| 543-564A | 0.0005mm, 0.001mm | 2.4" / 60.9mm | ID-H560E | 0.0025mm | \$1,240.00 | \$1,116.00 | | |

SPC cable – 1m: 936937 2m: 965014



ABSOLUTE Digimatic Indicator ID-S

- > Employing the ABSOLUTE linear encoder, the ID-S always displays the spindle ABSOLUTE Position from the origin at power-on. Also, unlimited response speed eliminates overspeed errors.
- > Dust/water protection level: IP42 (IP53: 543-796B-10).
- > SPC data output

| SPC | 10 |
|---|----|
| ABSOLUTE [®] | U |
| MeasurLink® ENABL Data Management Software by Mitt | |



| Order No. | Resolution | Range | Accuracy | Measuring force | Remarks | List | Promo | | |
|----------------------------------|-----------------|--------------|----------|-----------------|--------------|----------|----------|--|--|
| Stem dia. 3/8", #4-48 UNF Thread | | | | | | | | | |
| 543-792-10 | .00005"/0.001mm | .5" / 12.7mm | ±.0001" | 1.5N or less | w/ lug back | \$322.00 | \$289.80 | | |
| 543-796-10 | .00005"/0.001mm | .5" / 12.7mm | ±.0001" | 2.5N or less | w/ lug-back | \$356.00 | \$320.40 | | |
| 543-793-10 | .0001"/0.001mm | .5" / 12.7mm | ±.0001" | 1.5N or less | w/ lug back | \$322.00 | \$289.80 | | |
| 543-783-10 | .0005"/0.01mm | .5" / 12.7mm | ±.0010" | 1.5N or less | w/ lug-back | \$209.00 | \$188.10 | | |
| 543-792B-10 | .00005"/0.001mm | .5" / 12.7mm | ±.0001" | 1.5N or less | w/ flat back | \$322.00 | \$289.80 | | |
| 543-796B-10 | .00005"/0.001mm | .5" / 12.7mm | ±.0001" | 2.5N or less | w/ flat-back | \$356.00 | \$320.40 | | |
| 543-793B-10 | .00005"/0.001mm | .5" / 12.7mm | ±.0001" | 1.5N or less | w/ flat back | \$322.00 | \$289.80 | | |
| 543-783B-10 | .0005"/0.01mm | .5" / 12.7mm | ±.0010" | 1.5N or less | w/ flat-back | \$209.00 | \$188.10 | | |

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Dial Indicators / Bore Gages

Series Two Dial Indicators

- > Improved impact- and oil-resistant materials are employed in the bezel. The improved shape of the crystal face helps with easier measurement readings.
- > High-strength, heat-treated stainless steel spindles for longevity.
- > Scratch- and chemical-resistant hard-coated crystals.
- > Increased rigidity in the bearing plate for reducing the retracing error (20%) and 4-screw mounting for greater impact resistance.
- > Inspection certificate included.
- > No through screw-holes on the frame for high oil- and dust-resistance. The bezel clamp (optional) can be attached either to the right or left side.



Revolutionary stem-bushing design for trouble-free stem clamping (longer clamping range; maxiumum tightening torque at the clamping point with M5 screw: 150N•cm).



| Order No. | Graduation | Range | Range/Rev | Туре | Dial Reading | Accuracy First 2.5 Rev/Overall | Force | List | Promo |
|-----------|------------|-------|-----------|-------|--------------|-----------------------------------|--------------|----------|----------|
| 2358A-10* | .0001" | .5" | .01" | w/lug | 0-10 | .0001 / .0008 | 2.0N or less | \$260.00 | \$234.00 |
| 2803A-10* | .0001" | .025" | .01" | w/lug | 0-5-0 | .0001 / .0001 | 2.5N or less | \$189.00 | \$170.10 |
| 2416A-10* | .001" | 1" | .1" | w/lug | 0-100 | .001 / .002 | 1.8N or less | \$166.00 | \$149.40 |
| 2424A-19* | .001" | 2" | 1" | w/lug | 0-100 | .001 / .003 | 2.5N or less | \$286.00 | \$257.40 |
| 2776A | .0005" | 1" | .05" | w/lug | 0-50 | .0005 / .002 | 2.5N or less | \$167.00 | \$150.30 |

^{*}Jeweled bearing model

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.
- > The grip minimizes the variation of measurements by reducing heat transfer from the operator's hand.



| Order No. | Range | Graduation | Anvils | Spacers | List | Promo |
|---------------|----------------|------------------------------|-------------------|---------|----------|----------|
| With Indicato | With Indicator | | | | | |
| 511-751-20 | .7 - 1.4" | | 9 | 2 | \$486.00 | \$437.40 |
| 511-752-20 | 1.4 - 2.5" | | 6 | 4 | \$473.00 | \$425.70 |
| 511-753-20 | 2.0 - 6.0" | .0001" | 11 (2" sub anvil) | 4 | \$517.00 | \$465.30 |
| 511-754-20 | 4.0 - 6.5" | (2923B-10) | 13 | 4 | \$683.00 | \$614.70 |
| 511-755-20 | 6.5 - 10" | | 6 | 7 | \$771.00 | \$693.90 |
| 511-756-20 | 10 - 16" | | 5 (3" sub anvil) | 7 | \$915.00 | \$823.50 |
| Without India | ator | | | | | |
| 511-731 | .7 - 1.4" | | 9 | 2 | \$309.00 | \$278.10 |
| 511-732 | 1.4 - 2.5" | Indicator | 6 | 4 | \$316.00 | \$284.40 |
| 511-733 | 2.0 - 6.0" | optional | 11 (2" sub anvil) | 4 | \$342.00 | \$307.80 |
| 511-734 | 4.0 - 6.5" | Protective Cover optional | 13 | 4 | \$511.00 | \$459.90 |
| 511-735 | 6.5 - 10" | (21DZA000) | 6 | 7 | \$599.00 | \$539.10 |
| 511-736 | 10 - 16" | | 5 (3" sub anvil) | 7 | \$752.00 | \$676.80 |



10% OFF

See Digimatic indicators made specifically for bore gages (page 6).

Prices effective September 9 through December 13, 2024

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.

Mechanical Holtests - Individual Units

| | *************************************** | | |
|-----------|---|------------|------------|
| Order No. | Description/Range | List | Promo |
| 368-021 | Holtest, 0.08" - 0.1" | \$1,730.00 | \$1,384.00 |
| 368-022 | Holtest, 0.1" - 0.12" | \$1,730.00 | \$1,384.00 |
| 368-023 | Holtest, 0.12" - 0.16" | \$1,380.00 | \$1,104.00 |
| 368-024 | Holtest, 0.16" - 0.2" | \$1,380.00 | \$1,104.00 |
| 368-025 | Holtest, 0.2" - 0.24" | \$1,380.00 | \$1,104.00 |
| 368-026 | Holtest, 0.24" - 0.28" | \$1,380.00 | \$1,104.00 |
| 368-261 | Holtest, 0.275" - 0.35" | \$686.00 | \$548.80 |
| 368-262 | Holtest, 0.35" - 0.425" | \$686.00 | \$548.80 |
| 368-263 | Holtest, 0.425" - 0.5" | \$686.00 | \$548.80 |
| 368-264 | Holtest, 0.5" - 0.65" | \$712.00 | \$569.60 |
| 368-265 | Holtest, 0.65" - 0.8" | \$712.00 | \$569.60 |
| 368-266 | Holtest, 0.8" - 1.0" | \$739.00 | \$591.20 |
| 368-267 | Holtest, 1.0" - 1.2" | \$739.00 | \$591.20 |
| 368-268 | Holtest, 1.2" - 1.6" | \$924.00 | \$739.20 |
| 368-269 | Holtest, 1.6" - 2.0" | \$973.00 | \$778.40 |
| 368-270 | Holtest, 2.0" - 2.5" | \$980.00 | \$784.00 |
| 368-271 | Holtest, 2.5" - 3.0" | \$1,060.00 | \$848.00 |
| 368-272 | Holtest, 3.0" - 3.5" | \$1,090.00 | \$872.00 |
| 368-273 | Holtest, 3.5" - 4.0" | \$1,140.00 | \$912.00 |
| 368-274 | Holtest, 4.0" - 5.0" | \$1,470.00 | \$1,176.00 |
| 368-275 | Holtest, 5.0" - 6.0" | \$1,660.00 | \$1,328.00 |
| 368-276 | Holtest, 6.0" - 7.0" | \$1,710.00 | \$1,368.00 |
| 368-277 | Holtest, 7.0" - 8.0" | \$1,770.00 | \$1,416.00 |
| 368-278 | Holtest, 8.0" - 9.0" | \$2,000.00 | \$1,600.00 |
| 368-279 | Holtest, 9.0" - 10" | \$2,250.00 | \$1,800.00 |
| 368-280 | Holtest, 10" - 11" | \$2,270.00 | \$1,816.00 |
| 368-281 | Holtest, 11" - 12" | \$2,330.00 | \$1,864.00 |
| | | | |

Mechanical Holtests - Complete Unit Sets

| Order No. | Description/Range | List | Promo | | |
|-----------|------------------------------|------------|------------|--|--|
| 368-916 | Holtest, Set, 0.275" - 0.5"* | \$2,540.00 | \$2,032.00 | | |
| 368-917 | Holtest, Set, 0.5" - 0.8"* | \$1,710.00 | \$1,368.00 | | |
| 368-918 | Holtest, Set, 0.8" - 2.0"* | \$3,910.00 | \$3,128.00 | | |
| 368-919 | Holtest, Set, 2.0" - 4.0"* | \$5,560.00 | \$4,448.00 | | |
| 368-920 | Holtest, Set, 4.0" - 8.0"* | \$8,530.00 | \$6,824.00 | | |
| 368-926 | Holtest, 2pc Set, .08"12"* | \$3,660.00 | \$2,928.00 | | |
| 368-927 | Holtest, 4pc Set, .12"28"* | \$5,830.00 | \$4,664.00 | | |





Measuring Deep Holes
An extension tube (optional accessory)
can be fitted to enable measurement of

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)



| Range | a | b | С |
|-----------------------|------|-----|------|
| 6 - 12mm / .2755" | 2 | _ | 2.5 |
| 12 - 20mm / .58" | 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 |



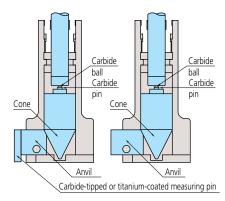
deep holes.

TiN coated contact points



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 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, .27535" | \$1,280.00 | \$1,024.00 |
| 468-262 | Digimatic Holtest, .35"425" | \$1,280.00 | \$1,024.00 |
| 468-263 | Digimatic Holtest, .4255" | \$1,290.00 | \$1,032.00 |
| 468-264 | Digimatic Holtest, 0.5" - 0.65" | \$1,390.00 | \$1,112.00 |
| 468-265 | Digimatic Holtest, 0.65" - 0.8" | \$1,390.00 | \$1,112.00 |
| 468-266 | Digimatic Holtest, 0.8" - 1" | \$1,440.00 | \$1,152.00 |
| 468-267 | Digimatic Holtest, 1.0 - 1.2" | \$1,440.00 | \$1,152.00 |
| 468-268 | Digimatic Holtest, 1.2" - 1.6" | \$1,470.00 | \$1,176.00 |
| 468-269 | Digimatic Holtest, 1.6" - 2.0" | \$1,480.00 | \$1,184.00 |
| 468-270 | Digimatic Holtest, 2" - 2.5" | \$1,610.00 | \$1,288.00 |
| 468-271 | Digimatic Holtest, 2.5" - 3" | \$1,610.00 | \$1,288.00 |
| 468-272 | Digimatic Holtest, 3" - 3.5" | \$1,630.00 | \$1,304.00 |
| 468-273 | Digimatic Holtest, 3.5" - 4" | \$1,650.00 | \$1,320.00 |
| 468-274 | Digimatic Holtest, 4" - 5" | \$2,150.00 | \$1,720.00 |
| 468-275 | Digimatic Holtest, 5" - 6" | \$2,220.00 | \$1,776.00 |
| 468-276 | Digimatic Holtest, 6" - 7" | \$2,350.00 | \$1,880.00 |
| 468-277 | Digimatic Holtest, 7" - 8" | \$2,440.00 | \$1,952.00 |
| 468-278 | Digimatic Holtest, 8" - 9" | \$2,620.00 | \$2,096.00 |
| 468-279 | Digimatic Holtest, 9" - 10" | \$2,670.00 | \$2,136.00 |
| 468-280 | Digimatic Holtest, 10" - 11" | \$2,770.00 | \$2,216.00 |
| 468-281 | Digimatic Holtest, 11" - 12" | \$2,880.00 | \$2,304.00 |

Digimatic Holtests – Interchangeable Head Sets

| - | 3 | | |
|-----------|--|------------|------------|
| Order No. | Range | List | Promo |
| 468-976 | Digimatic Holtest Head Set, 0.275" - 0.5"* | \$2,330.00 | \$1,864.00 |
| 468-977 | Digimatic Holtest, Head Set, 0.5" - 0.8"* | \$1,890.00 | \$1,512.00 |
| 468-978 | Digimatic Holtest, Head Set, 0.8" - 2"* | \$4,720.00 | \$3,776.00 |
| 468-979 | Digimatic Holtest, Head Set, 2" - 4"* | \$5,410.00 | \$4,328.00 |
| 468-980 | Digimatic Holtest, Head Set, 4" - 8"* | \$6,350.00 | \$5,080.00 |

Digimatic Holtests – Complete Unit Sets

| Order No. | Range | List | Promo |
|-----------|---|------------|------------|
| 468-986 | Digimatic Holtest, Unit-Set, 0.275" - 0.5"* | \$4,530.00 | \$3,624.00 |
| 468-987 | Digimatic Holtest, Unit-Set, 0.5" - 1"* | \$4,820.00 | \$3,856.00 |
| 468-988 | Digimatic Holtest, Unit-Set, 1" - 2"* | \$5,460.00 | \$4,368.00 |
| 468-989 | Digimatic Holtest, Unit-Set, 2" - 3"* | \$6,130.00 | \$4,904.00 |
| 468-990 | Digimatic Holtest, Unit-Set, 3" - 4"* | \$7,210.00 | \$5,768.00 |

Measuring Deep Holes

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







Complete-Unit Set



Interchangeable-Head Set

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.

MeasurLink® ENABLED

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" | _ | | \$1,660.00 | \$1,328.00 |
| 568-462 | 0.350" - 0.425" | ±5µm ±0.00025 in | 100mm (952322) | \$1,660.00 | \$1,328.00 |
| 568-463 | 0.425" - 0.500" | 20.00025 111 | | \$1,660.00 | \$1,328.00 |
| 568-464 | 0.50" - 0.65" | ±5µm | 1E0mm (0E2621) | \$1,700.00 | \$1,360.00 |
| 568-465 | 0.65" - 0.80" | ±0.00025 in | 150mm (952621) | \$1,700.00 | \$1,360.00 |
| 568-466 | 0.8" - 1.0" | | | \$1,700.00 | \$1,360.00 |
| 568-467 | 1.0" - 1.2" | | 150mm (952622) | \$1,760.00 | \$1,408.00 |
| 568-468 | 1.2" - 1.6" | | | \$1,940.00 | \$1,552.00 |
| 568-469 | 1.6" - 2.0" | | | \$1,940.00 | \$1,552.00 |
| 568-470 | 2.0" - 2.5" | ±6µm | | \$1,900.00 | \$1,520.00 |
| 568-471 | 2.5" - 3.0" | ±0.0003 in | | \$1,970.00 | \$1,576.00 |
| 568-472 | 3.0" - 3.5" | | 150mm (952623) | \$2,000.00 | \$1,600.00 |
| 568-473 | 3.5" - 4.0" | | 150111111 (952623) | \$2,000.00 | \$1,600.00 |
| 568-474 | 4.0" - 4.5" | | | \$2,100.00 | \$1,680.00 |
| 568-475 | 4.5" - 5.0" | | | \$2,220.00 | \$1,776.00 |

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. | \$5,750.00 | \$4,600.00 |
| 568-966 | 0.5" - 1" | 0.5-0.65", 0.65-0.8", 0.8-1" | 0.65" DIA., 0.8" DIA. | \$5,990.00 | \$4,792.00 |
| 568-967 | 1" - 2" | 1-1.2", 1.2-1.6", 1.6-2" | 1.2" DIA., 1.6" DIA. | \$6,260.00 | \$5,008.00 |
| 568-968 | 2" - 3" | 2-2.5", 2.5-3" | 2.5" DIA. | \$4,480.00 | \$3,584.00 |
| 568-969 | 3" - 4" | 3-3.5", 3.5-4" | 3.5" DIA. | \$4,970.00 | \$3,976.00 |

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. | \$2,560.00 | \$2,048.00 |
| 568-929 | 0.5" - 1" | 0.5-0.65", 0.65-0.8", 0.8-1" | 0.65" DIA., 0.8" DIA. | \$2,890.00 | \$2,312.00 |
| 568-930 | 1" - 2" | 1-1.2", 1.2-1.6", 1.6-2" | 1.2" DIA., 1.6" DIA. | \$3,540.00 | \$2,832.00 |
| 568-936 | 2" - 4" | 2-2.5", 2.5-3", 3-3.5", 3.5-4" | 2.5" DIA., 3.5" DIA. | \$5,090.00 | \$4,072.00 |

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



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

Scale type: continuous use
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 Set



Interchangeable-Head Set

PH-3515F Profile Projector and 2D Processor Packages

Heavy-Duty, Bench-Top Model with Horizontal Optical System featuring touch screen M2 geometric measuring display

- >ø14" screen, Horizontal Projector
- > 10" x 6" Travel T Slot table for accessories
- > Linear Glass Scales for accurate measurement
- > Profile and Fiber Optic Surface Illumination
- > Digital built-in angle counter
- > Maximum Load 45kg / 100lb
- > Available with M2 or QM Data 2D Processors

| Order No. | Description | List | Promo | | | |
|-------------------------|--|-------------|-------------|--|--|--|
| PH-3515 Main Uni | PH-3515 Main Unit & Digital Readout Packages 5% Off | | | | | |
| 172-868-11A-KA | PH-3515F Profile Projector with KA counter & Tray | \$13,300.00 | \$12,635.00 | | | |
| 172-898-11A-QM | PH-3515F Profile Projector with QM Data & Arm Mount | \$15,400.00 | \$14,630.00 | | | |
| 172-868-11A-M2 | PH-3515F Profile Projector with Touchscreen PC & M2 Software/Hardware | \$16,600.00 | \$15,770.00 | | | |
| 172-868-11A- QM-OPT | PH-3515F Profile Projector with QM Data, Arm Mount & Optoeye Edge Detection | \$17,900.00 | \$17,005.00 | | | |
| 172-868-11A-M2- EDGE | PH-3515F Profile Projector with Optical Edge Detection, Touchscreen PC & M2 Software/Hardware | \$18,200.00 | \$17,290.00 | | | |
| Machine Stand (C | Machine Stand (Optional) | | | | | |
| 64PMI308 | Machine Stand for PH Series | \$850.00 | - | | | |

(Includes installation and A2LA accredited calibration)

Compatible Digital-Read-Out (DRO) Devices

M2 Software & Hardware: PH-3515 & PJ-PLUS





M2 is a universal 2D coordinate measurement software which has become the preferred software for many optical comparator users due to its intuitive user interface and data collection procedures.

- > Software & All-In-One Touch Screen PC Included
- >Full Integration and A2LA Calibration conducted



KA-200 Counter: PH-3515 & PV-5110





Display unit for X & Y Linear Scales

- > ABSOLUTE and incremental modes (10 presets each)
- > 0.05-.0001mm / .02" .000005" in resolution
- > Calculator functionality

Automatic Edge Detection



Fiber Optic Edge Detection system integrated into M2 software via M2 Communication Unit.

Intuitive Edge Teach Functionality built into software.

Allows for continuous measurement of features, while storing data for post process analysis

PJ-Plus with M2 2D Processor Packages

The PJ-Plus is a new series of profile projectors offered by Mitutoyo. This system utilizes LED lighting and a fanless design making it ideal for harsh manufacturing facilities or job shops.

| , | | | | | | |
|---|---|----------------|-------------|-------------|--|--|
| Order No | Description | XY Stage | List | Promo | | |
| PJ-PLUS Main Units - | - 5% Off | | | | | |
| 302-801-10A | PJ-P1010A 4x4"/100x100m | 4x4"/100x100m | \$12,400.00 | \$11,780.00 | | |
| 302-802-10A | PJ-P2010A 8X4"/200x200mm | 8X4"/200x200mm | \$15,500.00 | \$14,725.00 | | |
| PJ-PLUS & M2 Packages - 5% Off | | | | | | |
| 302-801-10-M2- PJ-PLUS 4X4 - M2, Optical Edge Detection and Touchscreen | | 4x4"/100x100mm | \$18,700.00 | \$17,765.00 | | |
| 302-801-10-M2 | PJ-PLUS 4x4 - M2 and Touchscreen PC Package | | \$17,300.00 | \$16,435.00 | | |
| 302-802-10-M2- EDGE | PJ-PLUS 8x4 - M2, Optical Edge Detection and Touchscreen | 8x4"/200x100mm | \$21,900.00 | \$20,805.00 | | |
| 302-802-10-M2 PJ-PLUS 8x4 - M2 and Touchscreen PC Package 8x4 | | 8x4"/200x100mm | \$20,500.00 | \$19,475.00 | | |
| Machine Stand (Optional) | | | | | | |
| 64PMI167 | Machine Stand for PJ S | eries | \$788.00 | - | | |
| 2 | | | | | | |

Prices effective September 9 through December 13, 2024



MeasurLink ENABLED

An XY axis digital counter is built into the PJ-Plus

PV-5110 Vertical (Downward) Profile Projector (5% OFF Main Unit & 5% OFF DRO)

The PV-5110 Profile Projector is a downward optical axis projector fitted with a stable glass stage for delicate item inspection, ensuring accuracy and preventing damage. Its advanced optics and secure platform make it an optimal choice for precise applications, particularly with thin or delicate workpieces.

- >ø19.4" Screen, Vertical Projector.
- > Downward Optical Axis Provides improved oblique surface illumination.
- > LFD illumination.
- > Built-In Dual Oblique Surface Illumination for improved contrast.

| Order No. | Description | List | Promo | | | |
|---|----------------------------------|--------------|-------------|--|--|--|
| PV-5110 Main Unit & Digital Readout Interface Packages - 5% Off | | | | | | |
| 304-919-11A-KA | PV-5110 with KA Counter | \$23,200.00 | \$22,040.00 | | | |
| 304-919-11A-QM PV-5110 with QM Data | | \$25,580.00 | \$24,301.00 | | | |
| 304-919-11A-QM-OPT | PV-5110 with QM Data and Optoeye | \$27, 540.00 | \$26,163.00 | | | |

PLEASE NOTE: No stand or elevated surface is required.



Additional DRO

QM Data: PH-3515, PJ-PLUS, PV-5110 & PJ-H30

QM-Data200 interface features easy-to-use key operations and allows for measurement results to be visualized on its LCD Display. Plot Single Data Points





Return 2-Dimensional Graphic and Calculated Values

- > Built-In Guided Measurement Tutorials.
- > Programmable Measurement Procedures & Calculations.
- > Data Collection and USB Output.
- > Full Integration and A2LA Calibration conducted by Mitutoyo Field Service team.

MeasurLink® ENABLED The OM-Data200 unit features the powerful OM 2D coordinate measurement software pre-loaded onto our rugged user interface. The



PJ-H30 Vertical Profile Projector

The Mitutoyo PJ-H30 is unique given its ability to produce an uninverted image, which improves the intuitive operation as the projected image appears in the same orientation as the workpiece.

- > Optical system with high NA lenses provides bright and high contrast images
- > The three-lens mounting turret includes a 10X lens as standard
- > Built-In digital XY Counter

303-716-13A & 264-131-13A-PJH-OPT





303-717-13A PJ-H30A2010B



High-Accuracy Height Gage Linear Height LH-600F/FG



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

New Features:

- > Rotatable, adjustable 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) μ 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 | \$10,799.00 | \$9,360.00 |
| Promo031 | LH-600FG Inch/mm, Power Grip Model | 97/111111 (000111111)/ 30 (24) | .0000001/.000001/.00001/.0001" | \$11,299.00 | \$9,810.00 |

LH-600F 10% OFF PLUS Complimentary A2LA Accredited Calibration & Shipping

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.



Height (top) measurement



Shaft (top) measurèment



Hole (bottom) measurement



Height (bottom) measurement



Shaft (bottom) measùrement



Hole (top) measurement



Width (inside)



Circle (shaft) measurement



Circle (hole) measurement



Width (outside) measurement



Max.-Min. (top) measurement



(bottom) measurement

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

Advanced measurement functions



Part program measurement



2D measurement



Power

Power

Measurement settings



Measurement origin setting



Probe selection



Measurement origin switching



Home screen



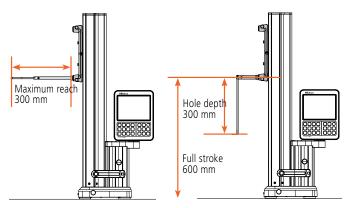
System settings

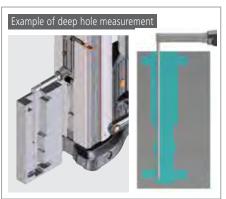


Data output

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 OR code below.







ABSOLUTE 1D Height Gage QM-Height Series

- > High-resolution ABSOLUTE linear encoder for position detection
- > High-accuracy: $\pm (2.4 + 2.1 \text{L} / 600) \mu \text{m}$
- > 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/NÓ-GO LÉD indicator
- > Digital and USB output: Supports Mitutoyo wireless SPC
- > 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/±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.







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



d2 Digimatic and USB outputs

improves data reliability and operational efficiency.

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



• 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

Prices effective September 9 through December 13, 2024

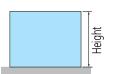
5% OFF Accessories

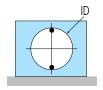
- > Measure diameters, gap distances, center-to-center distances, and more
- > Sub-display can show difference between current and previous measurement or distance from current measurement to origin
- > The origin can be set at the top of a surface plate, centerline, or any top or bottom surface within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

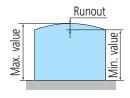


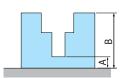


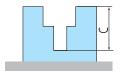
Measurement Examples







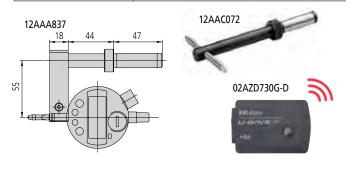




| Part No. | Range | Resolution | Remarks | List | Promo |
|-----------|--------------------|--|---------------------|------------|------------|
| 64PKA094C | 0 - 14"/ 0 - 350mm | | | \$4,580.00 | \$4,122.00 |
| 64PKA095C | 0 - 24"/ 0 - 600mm | 0.001mm / 0.0005mm / 0.0005" / 0.001" /coloctable) | | \$5,150.00 | \$4,635.00 |
| 64PKA129C | 0 - 14"/ 0 - 350mm | 0.001mm / 0.0005mm /.00005" / .0001" (selectable) | Pneumatic Flotation | \$5,150.00 | \$4,635.00 |
| 64PKA130C | 0 - 24"/ 0 - 600mm | | System | \$5,710.00 | \$5,139.00 |

Optional Accessories

| Order No. | Description | List | Promo |
|-------------|--|------------|------------|
| 12AAC072 | DEPTH PROBE | \$227.00 | \$215.65 |
| 12AAA837 | INDICATOR HOLDER (ACCEPTS 3/8" STEM) | \$165.00 | \$156.75 |
| 12AAA793 | PROBE EXTENSION HOLDER (3.3" / 85mm) | \$184.00 | \$174.80 |
| 226118 | SHANK WITH M3 THREAD SCREW | \$145.00 | \$137.75 |
| 957265 | 20MM DIA. DISK STYLUS FOR LINEAR HEIGHT | \$437.00 | \$415.15 |
| 957264 | 14MM DIA. DISK STYLUS FOR LINEAR HEIGHT | \$356.00 | \$338.20 |
| 12AAF669 | 10PI BALL CONTACT POINT(COAXIAL) | \$269.00 | \$255.55 |
| 957261 | 2MM DIA. BALL STYLUS FOR LINEAR HEIGHT | \$241.00 | \$228.95 |
| 517-814-10 | GRAPLATE 36X48" GRADE A | \$3,200.00 | \$3,040.00 |
| 517-964-10 | GRAPLATE STAND 36X48" | \$1,260.00 | \$1,197.00 |
| 517-808-10 | GRAPLATE 24X36" GRADE A | \$1,670.00 | \$1,586.50 |
| 517-956-10 | GRAPLATE STAND 24X36" | \$1,170.00 | \$1,111.50 |
| 06AFM380D | USB-ITN-D INPUT TOOL DIRECT CABLE | \$226.00 | \$214.70 |
| 02AZD730G-D | U-WAVE TRANSMITTER W/ CONNECTING CABLE (D) | \$378.00 | \$359.10 |
| 02AZD810D | U-WAVE-RECEIVER | \$571.00 | \$542.45 |







Calipers / Caliper Checker

Coolant-Proof Calipers

- > Sealed housing is IP67 rated, meaning it's resistant 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 ±.001" accuracy.
- > Automatic power-on/off.

Order No.

500-752-20

500-753-20

500-754-20

500-762-20

> Certificate of Inspection provided.





^{* ±.0015&}quot; accuracy fff U-WAVE Fit compatible

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

\$349.60

\$602.30

\$368.00

\$634 00









COOLANT PROOF™ (P)67

 ${\tt COOLANTPROOF} is the universal term of {\tt MitutoyoDigimatic}$ 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

10% OFF



0-8"/0-200mm

0-12"/0-300mm

| Order No. | Range | Accuracy | Resolution | List | Promo |
|------------|------------|----------|---------------|------------|------------|
| 552-312-10 | 0(.5")-18" | +/002" | .0005"/0.01mm | \$1,110.00 | \$999.00 |
| 552-313-10 | 0(.5")-24" | +/002" | .0005"/0.01mm | \$1,250.00 | \$1,125.00 |
| 552-314-10 | 0(1")-40" | +/002" | .0005"/0.01mm | \$2,240.00 | \$2,016.00 |
| 552-315-10 | 0(1")-60" | +/004" | .0005"/0.01mm | \$2,670.00 | \$2,403.00 |
| 552-316-10 | 0(1")-80" | +/005" | .0005"/0.01mm | \$4,180.00 | \$3,762.00 |

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



| 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" | \$5,180.00 | \$3,470.60 |

Prices effective September 9 through December 13, 2024

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.).

Calipers / Caliper Checker

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 the Mitutoyo 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.

MeasurLink® ENABLED
Data Management Software by Mitutoyo

ABSOLUTE AIOIS

| E I |
|-----|
| TI |
| |

| | Order No. Range | | Remarks | List | Promo | | |
|-----|-----------------------|----------------|-----------------------|------------|------------|--|--|
| | No SPC Outp | out Style | | | | | |
| | 500-195-30 | 0-4"/0-100mm | .075" Round Depth Bar | \$170.00 | \$161.50 | | |
| | 500-196-30 | 0-6"/0-150mm | | \$184.00 | \$174.80 | | |
| | 500-197-30 | 0-8"/0-200mm | | \$265.00 | \$251.75 | | |
| | 500-193-30 | 0-12"/0-300mm | | \$532.00 | \$505.40 | | |
| | With SPC Output Style | | | | | | |
| fit | 500-170-30 | 0-4"/0-100mm | .075" Round Depth Bar | \$203.00 | \$192.85 | | |
| fit | 500-171-30 | 0-6"/0-150mm | | \$215.00 | \$204.25 | | |
| | 500-172-30 | 0-8"/0-200mm | | \$284.00 | \$269.80 | | |
| | 500-173-30 | 0-12"/0-300mm | | \$621.00 | \$589.95 | | |
| | 500-505-10 | 0-18"/0-450mm | Without Thumb Roller | \$967.00 | \$918.65 | | |
| | 500-506-10 | 0-24"/0-600mm | Without Thumb Roller | \$1,060.00 | \$1,007.00 | | |
| | 500-507-10 | 0-40"/0-1000mm | Without Thumb Roller | \$2,050.00 | \$1,947.50 | | |

Tit 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 | | \$149.00 | \$141.55 |
| 505-738 | 0 -6" .100"/rev | Carbide-tipped jaws | \$243.00 | \$230.85 |
| 505-740J | 0 -6" .200"/rev | | \$136.00 | \$129.20 |
| 505-743J | 0 -8" .100"/rev | | \$217.00 | \$206.15 |
| 505-746 | 0 -12" .100/rev | | \$331.00 | \$314.45 |
| 505-749 | 0 -12" .200/rev | | \$309.00 | \$293.55 |
| 505-742-56J | 0 -6" .100"/rev | Black Dial Face | \$149.00 | \$141.55 |

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 |
|------------|------------|---------------------|----------|-----------------|----------|----------|
| fit | 573-701-20 | 0 - 6" / 0 - 150mm | ±.001" | .0005" / 0.01mm | \$548.00 | \$520.60 |
| fit | 573-702-20 | 0 - 8" / 0 - 200mm | ±.001" | .0005" / 0.01mm | \$628.00 | \$596.60 |
| fit | 573-704-20 | 0 - 12" / 0 - 300mm | ±.0015" | .0005" / 0.01mm | \$841.00 | \$798.95 |

fft 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.







| | Order No. | Kange | Accuracy | Resolution | LIST | PIOIIIO |
|-----|-------------|--------------------|----------|-----------------|----------|----------|
| fit | 573-721-20 | 0 - 6" / 0 - 150mm | ±.001" | .0005" / 0.01mm | \$479.00 | \$455.05 |
| fit | 573-725-20* | 0 - 6" / 0 - 150mm | ±.001" | .0005" / 0.01mm | \$596.00 | \$566.20 |

stended tips ## 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.



| | | | 9 | 573 | 3-291-30 | eon em [|
|-----|--------------------------|-----------------------|----------|--------------------------------------|----------|----------|
| | E | | | ink° ENABLED nt Software by Mitutoyo | SP | C |
| | Order No. | Range | Accuracy | Resolution | List | Promo |
| fit | 573-291-30 | 0 - 7" / 0 - 180mm | ±.002" | .0005" / 0.01mm | \$968.00 | \$919.60 |
| | fit U-WAVE Fit of | ompatible | | | | |

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







| Order No. | Range | Resolution | Accuracy | Flatness | Parallelism | List | Promo |
|------------|----------|-----------------|----------|-----------|-------------|----------|----------|
| 293-676-20 | 0 - 1.2" | .00005"/0.001mm | ±0.0001" | 0.000012" | 0.00008" | \$700.00 | \$665.00 |
| 293-677-20 | 1 - 2.2" | .00005"/0.001mm | ±0.0001" | 0.000012" | 0.00008" | \$764.00 | \$725.80 |

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 | \$178.00 | \$169.10 |
| 293-832-30 | 0 - 1" / 0 - 25.4mm | .00005" / 0.001mm | Friction Thimble | \$189.00 | \$179.55 |



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.





| | Order No. | Range | Resolution | Remarks | List | Promo |
|------------|------------------|------------------|---------------------|---------------------------------|--------------------|---------------------|
| fit | 293-330-30* | 0-1"/0-25.4mm | .00005"/0.001mm | Ratchet Stop | \$283.00 | \$268.85 |
| | 293-340-30 | 0-1"/0-25.4mm | .00005"/0.001mm | Ratchet Stop | \$260.00 | \$247.00 |
| | 293-344-30 | 0-1"/0-25.4mm | .00005"/0.001mm | Ratchet Thimble | \$260.00 | \$247.00 |
| | 293-349-30 | 0-1"/0-25.4mm | .0001"/0.001mm | Ratchet Thimble, Tenths Reading | \$260.00 | \$247.00 |
| fit | 293-331-30* | 1-2"/25.4-50.8mm | .00005"/0.001mm | Ratchet Stop w/Standard | \$333.00 | \$316.35 |
| | 293-341-30 | 1-2"/25.4-50.8mm | .00005"/0.001mm | Ratchet Stop w/Standard | \$286.00 | \$271.70 |
| | 293-345-30 | 1-2"/25.4-50.8mm | .00005"/0.001mm | Ratchet Thimble w/Standard | \$286.00 | \$271.70 |
| fit | 293-334-30* | 0-1"/0-25.4mm | .00005"/ 0.001mm | Ratchet Thimble | \$304.00 | \$288.80 |
| fit | 293-335-30* | 0-1"/0-25.4mm | .00005"/0.001mm | Friction Thimble | \$283.00 | \$268.85 |
| | *with SPC Output | fit U-V | VAVE Fit compatible | SPC cable with data switch – 1 | m: 05CZA662 | 2m: 05CZA663 |

SPC





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.

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

| Part No. | Description | List Price |
|------------|--|------------|
| PROMO029A | Package: MDH Mic, SPC Cable, USB Input Tool | \$1,920.00 |
| 293-130-10 | MDH Micrometer with high accuracy, high resolution output | \$1,920.00 |
| 05CZA662 | SPC CONNECTING CABLE (1M) | \$96.05 |
| 264-020 | USB INPUT TOOL | \$226.00 |



ABSOLUTE Digimatic Height Gages

Popular Mitutoyo single-beam height gages have been redesigned to be even easier to use, with larger displays, various hardware accessories, and multiple data options such as wired and wireless output, data loggers and more.

Features:

- > Durable Build Iron detector and base, steel beam and holder
- > Easy to use slider feed wheel
- > Multiple data equipment options
- > Other improvements: twist-off battery cap, 20% larger LCD, handy Data button



Shown with optional U-Wave Bluetooth® transmitter (see page 22 and connector 02AZD790F)

Shown with optional Test

Indicator and mounting

hardware (see page 5).









| Order No. | Range | Resolution | Functions | Drive Method | Data Output | Max. response speed | Battery Life | List | Promo |
|-----------|------------------|------------------|--|-----------------|----------------|---------------------|--------------|------------|------------|
| 570-412 | 0"-12"/0mm-300mm | | On/Off, Origin, | | | | Approx. 5 | \$860.00 | \$817.00 |
| 570-413 | 0"-18"/0mm-450mm | 0.0005" / 0/01mm | Zero/ABS, Hold/ Slider-feed Wheel Data, inch/mm (manual) conversion" | Digimatic d1 | C Unlimited | Years Under | \$1,150.00 | \$1,092.50 | |
| 570-414 | 0"-24"/0mm-600mm | | | (manual) | ul | | Normal Use | \$1,340.00 | \$1,273.00 |

Mitutoyo U-WAVE Bluetooth® Wireless Data Transmitters

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.



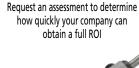
U-WAVE Bluetooth®

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.































U-WAVE-TMB/TCB*

| Order No. | Model | Measuring Instrument* | Remarks | List | Promo |
|--------------|------------|--|--|----------|----------|
| 264-624-IP-S | U-WAVE-TCB | 4", 6", 8", 12" standard caliper | Transmitter and Connection Unit | \$285.00 | \$256.50 |
| 264-624-IP | U-WAVE-TCB | 4", 6", 8", 12" IP67 caliper | Transmitter and Connection Unit | \$285.00 | \$256.50 |
| 264-626-IP-M | U-WAVE-TMB | Coolant-proof (IP65) micrometer | Transmitter and Connection Unit | \$285.00 | \$256.50 |
| 02AZF700-TMB | U-WAVE-TMB | 0.5" (12.5mm) Stroke for S1 Indicators | Transmitter and Connection Unit | \$320.00 | \$288.00 |
| 02AZG011-TMB | U-WAVE-TMB | 1" (25.4mm) Stroke or Larger for S1 Indicators | Transmitter, Bracket, and Connection Unit | \$385.00 | \$346.50 |

^{*} No U-WAVE Receiver required

Prices effective September 9 through December 13, 2024

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.

MeasurLink® ENABLED Data Management Software by Mitutoyo

U-WAVE-Fit (Transmitter)

| Order No. | Model Measuring Instrument* | | Remarks | List | Promo |
|--------------|-----------------------------|---|---|----------|----------|
| 264-620-IP-S | U-WAVE-TC | 4", 6", 8", 12" IP67 standard caliper | Transmitter and Connection Unit | \$285.00 | \$256.50 |
| 264-620-IP | U-WAVE-TC | 4", 6", 8", 12" IP67 caliper | Transmitter and Connection Unit | \$285.00 | \$256.50 |
| 264-622-IP-M | U-WAVE-TM | Coolant-proof (IP65) micrometer | Transmitter and Connection Unit | \$285.00 | \$256.50 |
| 02AZF700-TM | U-WAVE-TM | 0.5" (12.5mm) Stroke for S1 Indicators | Transmitter and Connection Unit | \$320.00 | \$288.00 |
| 02AZG011-TM | U-WAVE-TM | 1" (25.4mm) Stroke or Larger for S1 Indicators | Transmitter, Bracket, and Connection Unit | \$385.00 | \$346.50 |

^{*} Please contact Mitutoyo or distributor for further details

U-WAVE-R (Receiver)

| connected to PC connected | | er No. Remarks | Software | units that can be connected to PC | that can be connected | List | Promo |
|---|-----------|-----------------------------------|------------|-----------------------------------|--------------------------|----------|----------|
| 02AZD810D U-WAVE-R + Software U-WAVE PAK Up to 15 Up to 100 \$571.00 \$542. | 02AZD810D | ZD810D U-WAVE-R + Software | U-WAVE PAK | Up to 15 | Up to 100 | \$571.00 | \$542.45 |

- 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

MeasurLink® Quality Data Management Software

Monitor, analyze, collect, calibrate, report and improve.



Achieve Total Quality Management with the Total Quality MeasurLink® license. This is a single floating license that can be accessed by anyone and anywhere on the network with every single module. For the engineer(s) who wants total freedom to continuously improve their quality department. No annual fees.

| Order No. | Remarks | List | Promo |
|-----------|---|------------|------------|
| 64AAB855F | MeasurLink® V10 Single Floating License | \$3,110.00 | \$2,488.00 |

TOM License Includes:

- > Real-Time SPC
- > AQL Sampling
- > Advanced Data Analysis
- > Automated Reporting and Analysis
- > Data Collection Alerts
- > Gage Inventory Management
- > Gage Calibration
- > Gage R&R
- > Automated Ballooning
- > AS9102 First Article Reports
- > And more!

Solution for Battery Foil Thickness Measurement

The key to success:

High accuracy thickness measurement of thin foil and film samples

- > The combination of the Liternatic and the vacuum plate system provides high accuracy measurement of easily deformed material.
- > Liternatics 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 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®.





Vacuum Off



Vacuum On



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 | \$9,710.00 | \$8,739.00 |

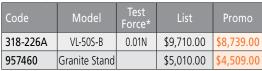
- Measuring accuracy (20°C) up to (0.5+L/100) μm L=arbitrary measuring length (mm)
- > Repeatability up to 0.05 μm
- *The ceramic ball contact included with Vacuum Packages will add 0.03N



Vacuum Package Add-ons

| | Code | Model | List | Promo |
|---|----------|--------------------------------------|------------|------------|
| 2 | 64PKA297 | 50x50mm Vacuum Package | \$4,300.00 | \$3,870.00 |
| | K543722 | Laser-activated Vacuum Package | \$9,350.00 | \$8,415.00 |

Separate Type Litematic Main Unit



- > Measuring accuracy (20°C) up to (0.5+L/100) µm L=arbitrary measuring length (mm)
- > Repeatability up to 0.05 µm
- *The ceramic ball contact included with Vacuum Packages will add 0.03N



Vacuum Package Add-ons

| Code | Model | List | Promo |
|----------|-----------------------------|------------|------------|
| 64PKA298 | 100x100mm Vacuum Package | \$5,340.00 | \$4,806.00 |

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 |
|----------|---|------------|----------|
| 542-190 | LG100-110, Range: .4"/10mm, Res: .00005"/1µm | \$630.00 | \$598.50 |
| 542-193 | LG100-125, Range: 1"/25mm, Res: .00005"/1µm | \$803.00 | \$762.85 |
| 542-196 | LG100-150, Range: 2"/50mm, Res: .00005"/1µm | \$973.00 | \$924.35 |
| 542-191 | LG100-0510, Range: .4"/10mm, Res: .00002"/0.5μm | \$687.00 | \$652.65 |
| 542-194 | LG100-0525, Range: 1"/25mm, Res: .00002"/0.5µm | \$860.00 | \$817.00 |
| 542-197 | LG100-0550, Range: 2"/50mm, Res: .00002"/0.5μm | \$1,030.00 | \$978.50 |
| 542-192 | LG100-0110, Range: .4"/10mm, Res: 5µinch/0.1µm | \$745.00 | \$707.75 |
| 542-195 | LG100-0125, Range: 1"/25mm, Res: 5µinch/0.1µm | \$917.00 | \$871.15 |

Linear Gage LG200 Series





| Order No | Description | List | Promo |
|----------|--------------------------------------|----------|----------|
| 542-081 | Main EJ Module Counter | \$545.00 | \$517.75 |
| 542-081A | Main EJ Module w/AC Components | \$630.00 | \$598.50 |
| 21HZA149 | USB Only Interface | \$400.00 | \$380.00 |
| 21HZA186 | CC-Link Module (Mitsubishi), and USB | \$888.00 | \$843.60 |
| 21HZA187 | PROFITNET Module | \$888.00 | \$843.60 |
| 21HZA188 | EtherNet/IP Module | \$922.00 | \$875.90 |
| 21HZA264 | EtherCat Module | \$884.00 | \$839.80 |

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/



Digimatic Scales

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.

| Order No. | Description | List | Promo |
|-----------|---|----------|----------|
| 053906B | Digimatic Quill Kit Complete with Brackets & Scale for Bridgeport Type Machines | \$356.00 | \$338.20 |





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

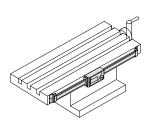
| Order No | Model | Range | Accuracy | Resolution | Туре | List | Promo |
|------------|----------|-----------------|----------------|-----------------|----------------------------|----------|----------|
| 572-210-30 | SD-4"DX | 0-4" / 0-100mm | .001" / 0.03mm | .0005" / 0.01mm | Horizontal Single-function | \$269.00 | \$255.55 |
| 572-211-30 | SD-6"DX | 0-6" / 0-150mm | .001" / 0.03mm | .0005" / 0.01mm | Horizontal Single-function | \$285.00 | \$270.75 |
| 572-212-30 | SD-8"DX | 0-8" / 0-200mm | .001" / 0.03mm | .0005" / 0.01mm | Horizontal Single-function | \$332.00 | \$315.40 |
| 572-213-10 | SD-12"D | 0-12" / 0-300mm | .002" / 0.04mm | .0005" / 0.01mm | Horizontal Single-function | \$641.00 | \$608.95 |
| 572-310-10 | SDV-6"D | 0-4" / 0-100mm | .001" / 0.03mm | .0005" / 0.01mm | Vertical Single-function | \$298.00 | \$283.10 |
| 572-311-10 | SDV-6"D | 0-6" / 0-150mm | .001" / 0.03mm | .0005" / 0.01mm | Vertical Single-function | \$316.00 | \$300.20 |
| 572-312-10 | SDV-8"D | 0-8" / 0-200mm | .001" / 0.03mm | .0005" / 0.01mm | Vertical Single-function | \$367.00 | \$348.65 |
| 572-313-10 | SDV-12"D | 0-12" / 0-300mm | .002" / 0.04mm | .0005" / 0.01mm | Vertical Single-function | \$705.00 | \$669.75 |



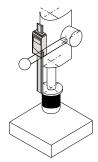
MeasurLink ENABLED Data Management Software by Mitutoy

Applications

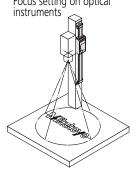
Machine table position



Drilling machine stroke position

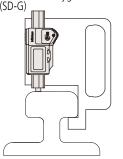


Focus setting on optical instruments^{*}

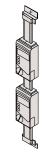


Special Applications

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



Detector head mechanism



Prices effective September 9 through December 13, 2024

Linear Encoders for Lathes, Grinders, and Mills

Mitutoyo Digital Readout Packages

Mounting hardware Included on all machine retrofit packages

\$200 PER PACKAGE





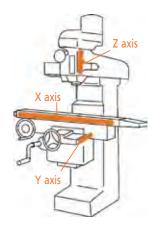
All DRO Packages Include:

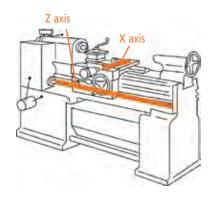
- >KA-200 Counter
- > KA-200 Counter tray/arm kit
- > High Resolution Linear Scales (down to .0001" or better!)
- > Bracket Kit(s)

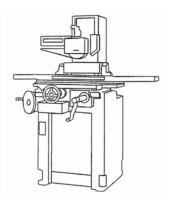


| Package Part No. | Description | X Travel | Y Travel | Z Travel | X Axis Type | Y Axis Type | Z Axis Type | List | Promo |
|------------------|----------------------------|----------|----------|----------|-------------|-------------|-------------|------------|------------|
| 64PKA058C | 12" X 30" DRO Mill Package | 30" | 12" | | AT715 | AT715 | | \$1,710.00 | \$1,510.00 |
| 64PKA059C | 12" X 36" DRO Mill Package | 36" | 12" | | AT715 | AT715 | | \$1,710.00 | \$1,510.00 |
| 64PKA060C | 14" X 30" DRO Mill Package | 30" | 14" | | AT715 | AT715 | | \$1,710.00 | \$1,510.00 |
| 64PKA062C | 16" X 36" DRO Mill Package | 36" | 16" | | AT715 | AT715 | | \$1,710.00 | \$1,510.00 |
| 64PKA063B | 16" X 40" DRO Mill Package | 40" | 16" | | AT715 | AT715 | | \$1,710.00 | \$1,510.00 |
| 64PKA039B | 6" X 28" Lathe Package | 6" | | 28" | AT113 | | AT715 | \$1,970.00 | \$1,770.00 |
| 64PKA035B | 8" X 40" Lathe Package | 8" | | 40" | AT113 | | AT715 | \$1,970.00 | \$1,770.00 |
| 64PKA042B | 10" X 40" Lathe Package | 10" | | 40" | AT113 | | AT715 | \$1,970.00 | \$1,770.00 |
| 64PKA046C | 12" X 40" Lathe Package | 12" | | 40" | AT113 | | AT715 | \$1,970.00 | \$1,770.00 |
| 64PKA050B | 12" X 60" Lathe Package | 12" | | 60" | AT113 | | AT715 | \$2,200.00 | \$2,000.00 |
| 64PKA052B | 14" X 40" Lathe Package | 14" | | 40" | AT113 | | AT715 | \$2,200.00 | \$2,000.00 |
| 64PKA057B | 16" X 60" Lathe Package | 16" | | 60" | AT113 | | AT715 | \$2,200.00 | \$2,000.00 |
| 64PKA026B | 6" X 12" Grinder Package | 6" | | 12" | AT113 | | AT113 | \$2,467.00 | \$2,267.00 |
| 64PKA028C | 8" X 12" Grinder Package | 8" | | 12" | AT113 | | AT113 | \$2,467.00 | \$2,267.00 |
| 64PKA029B | 8" X 14" Grinder Package | 8" | | 14" | AT113 | | AT113 | \$2,467.00 | \$2,267.00 |

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









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.
- > All hardness parameters set automatically via the touch screen.
- > Cylindrical and spherical surface corrections.
- > Auto conversion to most common hardness scales or tensil strength.



| Model No. | | 810-233-33A | 810-333-33A | | | | |
|--------------------|---|---|---|--|--|--|--|
| Order No. | | HR-530 | HR-530L | | | | |
| Hardness testing m | methods Rockwell / Rockwell Superficial / Brinell / Plastics Hardness | | | | | | |
| Initial Test Force | | 29.42 N (3kgf), 98.07 N (10kgf) | | | | | |
| | Superficial | 147.1 N (15kgf), 294.2 N | (30kgf), 441.3 M (45kgf) | | | | |
| Test Force (N) | Rockwell | 588.4 N (60kgf), 980.7 N | (100kgf), 1471 N (150kgf) | | | | |
| | Light Force Brinell | (30kgf), 306.5 N (31.25kgf), 612.9 N (62. | 2 N (15.625kgf), 245.2 N (25kgf), 294.2 N 5kgf), 980.7 N (100kgf), 1226 N (125kgf), 187.5kgf) | | | | |
| Test Force Control | | Automatic (load | d / hold / unload) | | | | |
| Maximum Specime | nt Size | Height: 9.8" (250mm) Depth: 5.9" (150mm) | Height: 15.5" (395mm) Depth: 5.9" (150mm) | | | | |
| External Data Outp | out | RS-232C, Dig | imatic, USB2.0 | | | | |
| External | 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) | | | | |
| Dimensions | Touch-Panel Display | 191 w x 147 d x 71 h mm (Color) | | | | | |
| Mass | | Approx. 60 kg | Approx. 69 kg | | | | |
| | List | \$16,600.00 | \$20,000.00 | | | | |
| | Promo | \$14,940.00 | \$18,000.00 | | | | |





ASTM Compliant HR Series Rockwell and Superficial Hardness Tester Packages Include:

- > Certified Blocks and Indenters
- > C and N Scale Indenter
- > 1/16" Carbide Ball Indenter
- > HRC30 Rockwell Test Block
- > HRC63 Rockwell Test Block
- > HRBW95 Rockwell Test Block
- > HR30N60 Rockwell Test Block
- > HR30TW70 Rockwell Test Block
- > Certificate stating conformance to ASTM E 18
- > Mitutoyo Installation and A2LA Calibration



HR-430MR includes only diamond indenter, C-scale indenter, HRC and HRBW blocks listed above

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 I | ndenter with Flat | |
| 64HAA100 | 64HAA119 | 64HAA101 | 64HAA119 |



For more information regarding compatible accessories such as fixtures, indenters, and calibration blocks use the QR Code!





A Complete Line of ASTM Compliant Rockwell Hardness Testing Machines















| Cambration included | HR-320MS | HR-430MR | HR-430MS | HR-530/HR-530L | HR-610A/HR-620A | HR-620B |
|---|-------------|-------------|-------------|--|--|-------------|
| Rockwell Scales | | Х | | | | |
| Rockwell and Superficial | Х | | Х | Х | Х | X |
| Dead Weight | Х | Х | Х | | | |
| Individual Hanging Weights | Х | | | | | |
| Dial Weight | | Х | Х | | | |
| Automatic break | | Х | Х | | | |
| Closed Loop | | | | Х | Х | Х |
| Digital Display | Х | Х | Х | Х | Х | Х |
| 7.1" Max Sample Height | Х | Х | Х | | | |
| 9.8" Max Sample Height | | | | HR-530 | Х | Х |
| 15.5" Max Sample Height | | | | HR-530L | | |
| 6.5" Max Depth | Χ | X | Х | | | |
| 5.9" Max Depth | | | | | | |
| 8.6" Max Depth | | | | Х | Х | Χ |
| CNC | | | | | | Χ |
| Motorized X Stage (Optional) | | | | | Х | Χ |
| Motorized Y Stage | | | | | | Х |
| Software Control and Analysis | | | | | | Χ |
| ASTM Compliant HR Series Rockwell & Rockwell Superficial Packages - All 10% Off | 810-192-31A | 810-193-21A | 810-194-31A | 810-233-33A (HR530) or 810-333- 33A (HR530L) | 810-512-23A (HR610A) or 810-522-23A (HR620A) | 810-527-21A |
| List | \$10,900.00 | \$12,400.00 | \$12,500.00 | \$16,600.00 / \$20,000.00 | \$28,100.00 / \$30,400.00 | \$48,800.00 |
| Promo | \$9,810.00 | \$11,160.00 | \$11,250.00 | \$14,940.00 / \$18,000.00 | \$25,290.00 / \$27,360.00 | \$43,920.00 |

Scalable Interfacing Options



HR-320MS, HR-430MR, HR-430MS Interface



HR-530, HR-530L, HR-610A & HR-620A Touchscreen Controller



HR-620B PC Interface, Utilizing AVPAK Software



Heavy Load Hardness Testers - HV Series

Highly Versatile 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 makes 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.

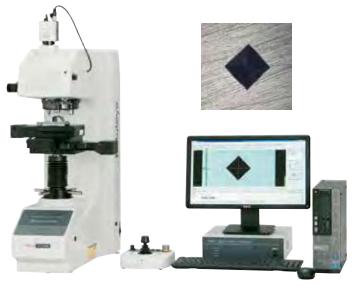
25% OFF





| Model | | | | | Test Force | Order No. | Body | List | Promo | | | | |
|--------|------|--------|--------|-------|------------|-----------|--------|-------|-------|------------|--------|-------------|-------------|
| | V.S* | HV1 | HV2 | HV3 | HV4 | HV5 | HV10 | HV20 | HV50 | | | | |
| HV-110 | N | 9.807 | 19.61 | 29.52 | 49.03 | 98.07 | 196.10 | 294.2 | 490.3 | 810-440-13 | A TYPE | \$25,700.00 | \$19,275.00 |
| | kgf | 1 | 2 | 3 | 5 | 10 | 20 | 30 | 50 | | | | |
| | V.S* | HV 0.3 | HV 0.5 | HV1 | HV2.5 | HV5 | HV10 | HV20 | HV30 | | | | |
| HV-120 | N | 2.942 | 4.903 | 9.807 | 24.51 | 49.03 | 98.07 | 196.1 | 294.2 | 810-445-13 | A TYPE | \$25,700.00 | \$19,275.00 |
| | kgf | 0.3 | 0.5 | 1 | 2.5 | 5 | 10 | 20 | 30 | | | | |

*V.S - Vickers Scale



Advanced models promise additional productivity improvements

HV-110/120 System B,D

- >B, 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.
- > D series testers add powered X-Y stages which enable automatic continuous testing. This allows extended multi-point testing, complex pattern creation and multiple workpiece 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!

| Model | | Test Force | | | | | | | | | Body | List | Promo |
|--------|------|------------|--------|-------|-------|-------|--------|-------|-------|----------|------------|-------------|-------------|
| | V.S* | HV1 | HV2 | HV3 | HV4 | HV5 | HV10 | HV20 | HV50 | | | | |
| HV-110 | N | 9.807 | 19.61 | 29.52 | 49.03 | 98.07 | 196.10 | 294.2 | 490.3 | 810-443A | B / D TYPE | \$34,000.00 | \$25,500.00 |
| | kgf | 1 | 2 | 3 | 5 | 10 | 20 | 30 | 50 | | | | |
| | V.S* | HV 0.3 | HV 0.5 | HV1 | HV2.5 | HV5 | HV10 | HV20 | HV30 | | | | |
| HV-120 | N | 2.942 | 4.903 | 9.807 | 24.51 | 49.03 | 98.07 | 196.1 | 294.2 | 810-448A | B / D TYPE | \$34,000.00 | \$25,500.00 |
| | kgf | 0.3 | 0.5 | 1 | 2.5 | 5 | 10 | 20 | 30 | | | | |

*V.S - Vickers Scale

^{*}Additional Components Required for a Complete System

^{*}Additional Components Required for a Complete System

Micro Vickers Hardness Testers - HM Series

- > HM Type A systems include a built-in measuring eyepiece for indentation analysis and accurate workpiece positioning
- Automatic Turret (Touch-screen controlled in Type A systems and software controlled via AVPAK in Type B and D systems)
- > Test force range 10g-1000g (HM-210) and .05-2000g (HM-220)
- >LED illumination
- > Type B and D systems include a camera for software analysis (Type A systems can use optional camera for digital imagery)
- > Type A and B systems use micrometer-controlled adjustable stages and Type D systems utilize a motorized XY Stage



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20% OFF MICRO VICKERS TESTERS!

| 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** |
| Order No | 64AAB305PA | 64AAB323PA | 64AAB380PA |
| Main Unit | HM-210A | HM-210B | HM210D |
| List | \$25,000.00 | \$41,200.00 | \$71,100.00 |
| Promo | \$20,000.00 | \$32,960.00 | \$56,880.00 |

^{**} PC sold separately

Portable Hardness Testers

Durometers (Digital and Analog)

For Rubber and Plastic Hardness Testing

tal and Analog)
Hardness Testing

| Order No | Model | Scale | Display | Graduation | Range | Indenter | List | Promo |
|------------|--------|---------|---------|------------|-------|-------------|------------|------------|
| 811-335-10 | HH-335 | Shore A | Analog | 1.0 | 10~90 | Blunt Taper | \$686.00 | \$617.40 |
| 811-336-10 | HH-336 | Shore A | Digital | 0.5 | 10~90 | Blunt Taper | \$1,470.00 | \$1,323.00 |
| 811-337-10 | HH-337 | Shore D | Analog | 1.0 | 20~90 | Sharp Point | \$686.00 | \$617.40 |
| 811-338-10 | HH-338 | Shore D | Digital | 0.5 | 20~90 | Sharp Point | \$1,470.00 | \$1,323.00 |

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.

| Order No. | Туре | List | Promo |
|------------|------------------|------------|------------|
| 810-298-10 | HH-411 Hardmatic | \$4,580.00 | \$4,122.00 |



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^{*}Additional packages available. Please contact your local Mitutoyo distributor or Mitutoyo sales representative.



MF 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







MeasurLink® ENABLED Data Management Software by Mituto

Want to take a closer look? Scan the QR code to make your product inquiry today!



Sample Packages

| Order No | Description | List | Promo |
|-----------------|--|-------------|-------------|
| 176-861-10M2PK1 | MF-A1010, LED, Monocular Tube with M2 System | \$22,400.00 | \$17,920.00 |
| 176-861-10M2PK2 | MF-A1010, LED, Binocular Tube with M2 System | \$23,500.00 | \$18,800.00 |
| 64PKA234A | M2 Retrofit Kit for MF/MF-U Microscopes | \$4,470.00 | \$3,576.00 |

^{*}Additional stage configurations and sizes available

MF-U Measuring Microscopes

- > Measuring accuracy that is highest in its class (and conforms to JIS B 7153)
- > Compatible with both brightfield and darkfield objective lenses
- > Manual or motorized turrets available dependent on model
- > Compatible with M2 retrofit Kit

| Model No. (XY stage size) | MF-UA2010D | |
|------------------------------|---|--|
| XY stage travel range | 8 x 4" / 200 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) | |
| 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 | |
| Floating function | X and Y axes with Quick-release mechanism | |
| XY stage top size | 13.78 x 11.02" / 350 x 280 mm | |
| Effective glass size | 9.84 x 5.09" / 250 x 150 mm | |
| Max. stage loading | 22lbs / 10kg | |
| Max. workpiece height | 6" / 150mm | |
| Order No. | 176-872-10 | |
| List | \$28,100.00 | |
| Promo | \$22,480.00 | |

^{*}Additional components required for a complete system

176-872-10 MF-UA2010 - with 64PKA234A M2 Software/Hardware





MeasurLink® ENABLED

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



Prices effective September 9 through December 13, 2024

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 which create an overall magnification of 30X. Magnifications can be changed from 20X 200X by using optional objectives and/or eyepieces.
- > .000050" Resolution Digimatic micrometer heads included.





MeasurLink® ENABLED

Data Management Software by Mitutovo



Newly designed LED illumination



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 | MOTI-CAM 4000, 8 MEGAPIXEL, 1/1.8" CMOS , USB/HDMI |
| 63AAA060 | .37x C-Mount Eyetube Adapter |

| 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 Maximum height of head workpiece | | 4.53" / 115mm | 4.21" / 107mm | | |
| Transmitted illumination | | Stepless brightness adjustment, White LED light source, with green filter | | | |
| unit | Surface illumination | Oblique single-source type, Stepless brightness adjustment, White LED light source | | | |
| Cross-travel stage | Measuring range | 2" x 2" / 50×50mm | 4" x 2" / 100×50mm (An optional 2"/50mm gage block is required to cover full range. A CERA block is recommended.) | | |
| | Usable area of the stage glass | 3.8" x 3.8" / 96×96mm | 6" x 3.8" / 154×96mm | | |
| Maximum stage glass loading | | 11 lbs. / 5kg | | | |
| Linear measurement method | | Micrometer heads included | | | |
| List | | \$6,410.00 | \$8,350.00 | | |
| Promo | | \$5,769.00 | \$7,515.00 | | |

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 | SMZ-143-N2LED |
|---------------------|----------------------|
| Order No. | 377-993A |
| Optical tube | Trinocular head |
| Total magnification | 10X - 40X |
| Eyepiece | Widefield WF10X/20mm |
| Objective | 1X - 4X |
| Working distance | 80mm |
| Field of view | 20mm - 5mm |
| Dimensions | 237x170x335mm |
| Mass | 6.2kg |
| | |

| Order No. | Description | List | Promo | |
|----------------------------------|---|------------|------------|--|
| Stereo Microscope Unit | | | | |
| 377-993A | SMZ143-N2LED Stereo Microscope | \$1,580.00 | \$1,422.00 | |
| Observational Camera Accessories | | | | |
| 377-481 | C-mount Video Adapter for SMZ143-N2LED | \$59.35 | - | |
| 64PMI252 | MOTI-CAM 4000, 8 MEGAPIXEL, 1/1.8" CMOS , USB/HDMI | \$1,650.00 | - | |

^{*377-481} and 64PMI252 purchased separately



Camera with software for digital viewing



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Aurora, Illinois; City of Industry, California; West Chester, Ohio

Aurora, Illinois: Calibration, Repair, Field Service, Contract Inspection

M³ Solution Centers (Showrooms): Locations (8 in total):

but also utilize the space to address their measurement challenges through demonstrations of our latest measuring instruments and technologies.

Total Number of Employees: Approximately 400

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