ASIMETO

ISO 17025
ASIMETO
CALIBRATION LAB
CERTIFIED

ISO 17025 CALIBRATED
2 YEAR WARRANTY

WWW.SOWATOOL.COM

ASIMETO

Empowering Possibilities

Precision is not only defined by degrees of exactness. It is defined by the vision and skill of engineers. By problems solved, challenges overcome, and reputations made. The real value of precision is the power it gives engineers to turn plans into reality.

Asimeto was founded in 2007 by renowned German metrologist Manfred Eisinger. Since then, the company has rapidly established a reputation for manufacturing high performance precision tools and solutions and delivering them at unexpectedly affordable prices.

Asimeto continues to win market share by applying German metrological design, American technological innovation, and Asian manufacturing competitiveness across a broad range of integrated precision solutions, distributed through a global network. Every tool is ISO 17025 certified for dependable accuracy and to ensure calibration is compliant with the regulatory requirements of each local market. Increasingly, Asimeto is the choice of engineers the world over including companies like Volkswagen, Guhring, and Boeing. We invite you to discover why.

To supplement the industry standard 12 month warranty an additional 12 month warranty is available by registering your individual purchase online at www.asimeto.com within 30 days from the date of purchase.

Appearances and Specifications

Appearances and specifications are subject to change without prior notice for product improvement.

RECALIBRATE YOUR EXPECTATIONS

Downtime, poor quality and rising costs are a few variables unacceptable in any manufacturing environment and you need to trust that your suppliers have your back.

At Sowa Tool, we take this responsibility very seriously and why we are really proud to introduce our new Asimeto North American Catalog. With your feedback, we have identified a mix of the most popular precision metrology tools used in aerospace, automotive, energy, and general manufacturing.

Every Asimeto tool we supply comes with an ISO 17025 calibration certificate so our customers can be confident that the measuring accuracy conforms to national specifications. Coupled with Asimeto's strong quality promise, we've lowered prices across hundreds of items to make sure our customers are receiving the highest possible value for their dollar. Additionally, we've made significant investments in local inventory to ensure these products are consistently and reliably in stock to support our customers all across North America. In fact, our goal at Sowa is to achieve 100% service level on every item in this catalog. While reaching this goal may sound difficult earning and keeping your trust as a valued supplier is our number one priority.

We know you have a choice on where to buy your favorite brands. We thank you for choosing Sowa Tool and Asimeto.

Asimeto Calibration Laboratory

ASIMETO Calibration Lab

The quality and measuring accuracy of all Asimeto precision tools are guaranteed by the Asimeto Calibration Laboratory. All tools are inspected for conformance to the Asimeto design specifications and are then processed through the Asimeto calibration laboratory. Only the latest state of the art calibration equipment has been selected, from the leading global manufacturers, to ensure that the calibration costs are contained by increasing throughput, without compromising measurement accuracy or repeatability.

The Asimeto Calibration Laboratory has designed and incorporated universal calibration software that applies the applicable accuracy standard to the specific destination market of the precision measuring tool. ASME, DIN, and JJG are all supported.

It all means precisely that the dedication and diligence of the Asimeto Calibration Laboratory assures you that the accuracy is within the specifications of your local standard.

China National Accreditation Service for Conformity Assessment

LABORATORY ACCREDITATION CERTIFICATE

(Registration No. CNAS L6296)

Calibration Laboratory of

Guangzhou Asimeto Measuring Instrument Co., Ltd.

Room 402, Building B, Fukang West Street, Yushu Industrial Zone,

Science Area, Luogang District, Guangzhou, Guangdong, China

is accredited to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories(CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence of calibration.

The scope of accreditation is detailed in the attached appendices bearing the same registration number as above. The appendices form an integral part of this certificate.

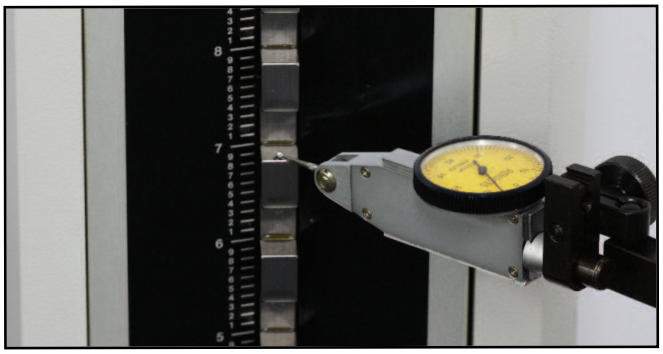
Date of Issue: 2013-07-22

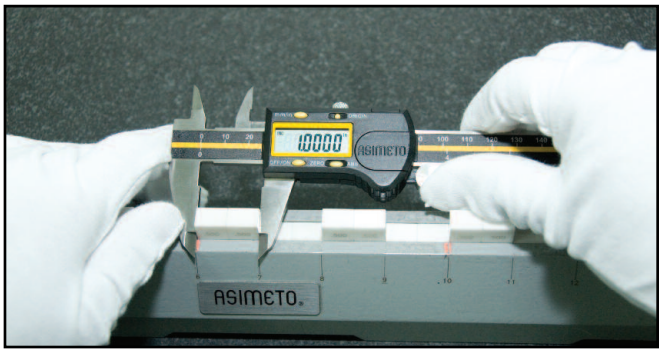
Date of Expiry: 2016-07-21

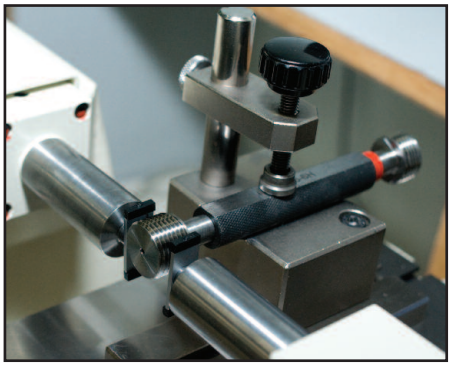
Date of Initial Accreditation: 2013-07-22

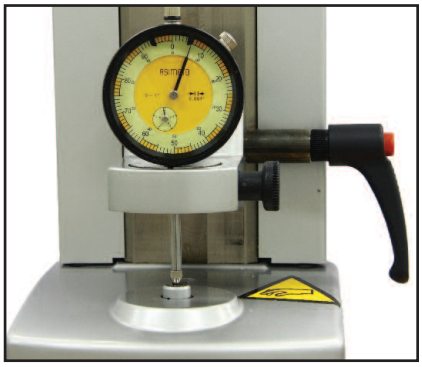
Date of Update: 2013-07-22

Signed on Behalf of China National Accreditation Service for Conformity Assessment









The Differences Between NIST and ISO Certification

NIST Traceable (National Institute of Standards and Technology)

A NIST certification means that a product has been tested against NIST's Standard Reference Materials (SRMs) and meets the organization's exact specifications.

The measurement is made using a standard reference artifact (in most cases a gauge block) that NIST has certified to be a specific size. Theoretically, this provides for an unbroken chain of measurement reference all the way back to a primary national standard. It does not, however, consider how that measurement is made. This gives rise to several questions:

1. Is the measurement made in a controlled environment, where temperature and humidity are tightly controlled within the tolerances required to make accurate measurements?
2. Have both the standard reference artifact and the product being measured been allowed to equilibrate in the measurement environment to ensure that both are stable at the time of measurement?
3. Is there a procedure for making the measurements?
4. Has the procedure been demonstrated to be repeatable in an R&R study?
5. Is the technician performing the measurement trained to operate the equipment properly?
6. Is the technician periodically tested to demonstrate continuing proficiency?
7. Is it possible to contact the company that supplied the traceable certificate to obtain a more detailed report certifying that the measurement is accurate?

ISO Certified (International Standards Organization)

ISO 17025 certification means not only that it has been tested against NIST's (in the US, or other countries Standards Institutes) SRM through an unbroken chain of calibrations, but also that the technician is qualified to perform this calibration using an accepted method of calibration and is monitored by an effective Quality Management System, and indicates the equipment used to perform this calibration has been calibrated through an unbroken chain to the SRMs.

This measurement is also made using a gauge block or other standard reference artifact, however the measurement takes place in an ISO 17025 accredited calibration laboratory. In addition, that laboratory is periodically audited by an ISO 17025 accrediting body to ensure all requirements are being met. ISO 17025 requires that all calibration laboratories adhere to the following:

1. Measurement is made in a controlled environment, where temperature and humidity are tightly controlled within the tolerances required to make accurate measurements.
2. Both the standard reference artifact and the product being measured are allowed to equilibrate in the measurement environment to ensure that both are stable at the time of measurement.
3. There is a written procedure for making the measurements.
4. The procedure has been demonstrated to be repeatable in an R&R study.
5. The technician performing the measurement is trained to operate the equipment properly.
6. The technician is periodically tested to demonstrate continuing proficiency.
7. The accredited calibration laboratory supplies a traceable certificate, with detailed report, certifying that the measurement is accurate.

All ISO certificates of calibration adhere to ISO 17025:2005 standards, including: trace numbers, date of calibration, CMC data (Calibration Measurement Capability) and certified inspector signature.

ABS
ABS/INC
UNIT
ON/OFF
SET

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Wireless Data Collection

Plug Wireless Output Device (7901001 or 7901002) into the measuring tool as shown below.
Wireless Input Device (7901003) plugs into a USB port on your computer.

Absolute Digital Caliper

HD Digital Caliper

Digital Micrometer

Digital Indicator

7901001

7901002

7901003

Data Output Cables

	Used For	PC Interface	Data	Product Series	Code No.
	ABS Digital Calipers	USB	Dot Data Format	7307-XX-3	**7900054**
	Digital Micrometers	USB	Dot Data Format	7105-XX-5	**7900054**
	Heavy Duty Digital Calipers	USB	Dot Data Format	7315-XX-6	**7900054**
	IP65 Digital Indicators	USB	Dot Data Format	7407-XX-3	**7900070**

Wireless Data Transfer

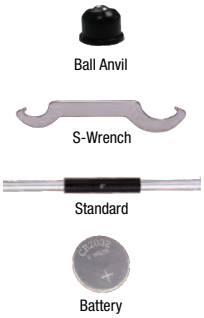
	Used For	Function	Frequency	Code No.
	ABS Digital Calipers Digital Micrometers Heavy Duty Digital Calipers	Output	2.4G	**7901001**
	IP65 Digital Indicators	Output	2.4G	**7901002**
	ABS Digital Calipers Digital Micrometers Heavy Duty Digital Calipers IP65 Digital Indicators	Input	2.4G	**7901003**

IP65 Digital Outside Micrometers - Data Output

- Resolution
  Digital: 0.00005"/ 0.001mm
  Scale: 0.0001"
- Flatness: 0.000012"/0.3µm
- Dual Ratchet combines both the Ratchet Stop and Friction Thimble
- Data output cable: 7900054
- Wireless data transfer output: 7901001
- Upon switch-on the display will read the actual absolute measuring position
- Automatic On/Off to maximize battery life
- Inch/Metric conversion
- Absolute or incremental measuring modes
- Carbide tipped measuring faces
- Protection level IP65
- Grey painted steel frame

7105015

7105639



STANDARD ACCESSORIES

- CR2032 Battery, Ball Anvil, S-Wrench, Standard (over 1" range)
- Warranty Card, Calibration Certificate, Instruction Manual

Inch		Metric		
Range	**Accuracy**	**Range**	**Accuracy**	**Code No.**
0-1"	±0.0001"	0-25mm	±0.002mm	**7105015**
1-2"	±0.0002"	25-50mm	±0.002mm	**7105025**
2-3"	±0.0002"	50-75mm	±0.003mm	**7105035**
3-4"	±0.0002"	75-100mm	±0.003mm	**7105045**
4-5"	±0.0002"	100-125mm	±0.003mm	**7105055**
5-6"	±0.0002"	125-150mm	±0.003mm	**7105065**
SET				
Range	**Quantity**	**Range**		
0-3"	3	0-75mm		**7105639**

Digital Outside Micrometers

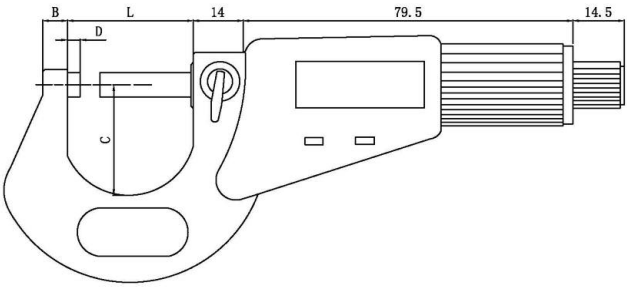
- Resolution: 0.00005"/ 0.001mm
- Carbide tipped measuring faces
- Spindle dia.: 0.25"
- Painted frame
- Ratchet friction thimble
- Inch/Metric conversion
- Absolute or incremental measuring modes
- Automatic On/Off to maximize battery life

7116011

STANDARD ACCESSORIES

- CR2032 Battery, Ball Anvil, Standard (over 1" range)
- Warranty Card, Calibration Certificate, Instruction Manual

Inch		Metric		
Range	**Accuracy**	**Range**	**Accuracy**	**Code No.**
0-1"	±0.0001"	0-25mm	±0.004mm	**7116011**
1-2"	±0.0002"	25-50mm	±0.004mm	**7116021**
2-3"	±0.0002"	50-75mm	±0.005mm	**7116031**



Range	C	L	B	D
Inch/Metric	mm	mm	mm	mm
0-1"/0-25mm	24 (0.945")	32 (1.260")	6 (0.236")	3 (0.118")
1-2"/25-50mm	32 (1.260")	57 (2.244")	8 (0.315")	3 (0.118")
2-3"/50-75mm	45 (1.772")	82 (3.228")	8 (0.315")	3 (0.118")

Outside Micrometers

- Graduation: 0.0001"
- Flatness: 0.000024"
- Carbide tipped measuring faces
- Ratchet Stop
- Grey painted steel frame
- Locking clamp

7101013

7101667

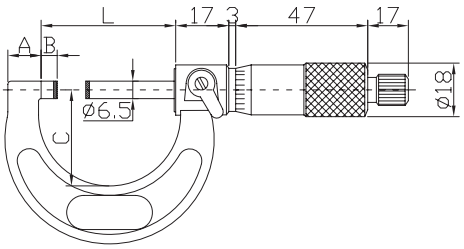
S-Wrench

Standard

STANDARD ACCESSORIES

- S-Wrench, Standard (over 1"range)
- Warranty Card, Calibration Certificate, Instruction Manual

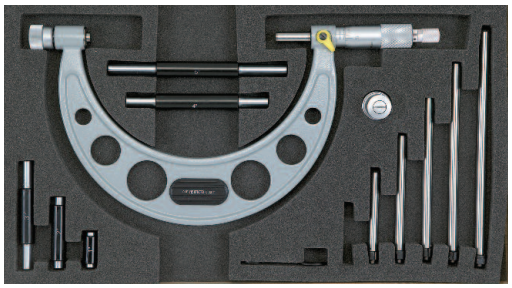
Inch			
Range	**Graduation**	**Accuracy**	**Code No.**
0-1"	0.0001"	±0.0001"	**7101013**
1-2"	0.0001"	±0.0002"	**7101023**
2-3"	0.0001"	±0.0002"	**7101033**
3-4"	0.0001"	±0.0002"	**7101043**
4-5"	0.0001"	±0.0002"	**7101053**
5-6"	0.0001"	±0.0002"	**7101063**
6-7"	0.0001"	±0.0002"	**7101073**
7-8"	0.0001"	±0.0002"	**7101083**
8-9"	0.0001"	±0.0002"	**7101093**
9-10"	0.0001"	±0.0003"	**7101103**
10-11"	0.0001"	±0.0003"	**7101113**
11-12"	0.0001"	±0.0003"	**7101123**
SETS			
Range			**Code No.**
0-3"	0.0001"		**7101637**
0-6"	0.0001"		**7101667**
0-12"	0.0001"		**7101727**
6-12"	0.0001"		**7101827**



Range	A	B	C	L
Inch	**mm**	**mm**	**mm**	**mm**
0-1"	9 (0.354")	3 (0.118")	28 (1.102")	32 (1.260")
1-2"	14 (0.551")	3 (0.118")	38 (1.496")	57 (2.244")
2-3"	14.5 (0.571")	3 (0.118")	49 (1.929")	82 (3.228")
3-4"	15 (0.591")	3 (0.118")	60 (2.362")	107 (4.213")
4-5"	16.5 (0.650")	3 (0.118")	73 (2.874")	133 (5.236")
5-6"	16.5 (0.650")	3 (0.118")	85 (3.346")	158 (6.220")
6-7"	19.4 (0.764")	3 (0.118")	104 (4.094")	183 (7.205")
7-8"	19.4 (0.764")	3 (0.118")	117 (4.606")	209 (8.228")
8-9"	19.4 (0.764")	3 (0.118")	130 (5.118")	234 (9.213")
9-10"	19.4 (0.764")	3 (0.118")	142 (5.591")	260 (10.236")
10-11"	19.4 (0.764")	3 (0.118")	155 (6.102")	285 (11.220")
11-12"	19.4 (0.764")	3 (0.118")	168 (6.614")	310 (12.205")

Interchangeable Anvil Outside Micrometers

- Graduation: 0.001”
- Flatness: 0.00004"
- Carbide tipped measuring faces
- Grey painted steel frame for models up to 12"
- Grey welded pipe frame for models over 12" models
- Interchangeable anvils provide wider measuring ranges
- Locking clamp
- Ratchet Stop



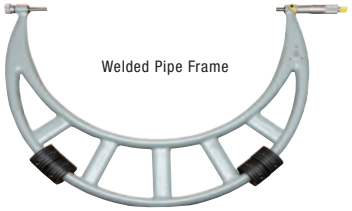
7111061

S-Wrench

Torque Wrench

Standard

Guiding Rings

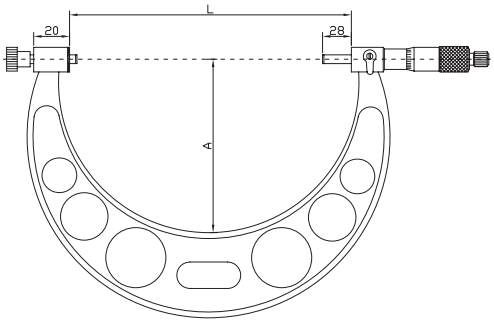


Welded Pipe Frame

STANDARD ACCESSORIES

- S-Wrench, Standards, Interchangeable Anvils, Torque Wrench, 2 Guiding Rings
- Warranty Card, Calibration Certificate, Instruction Manual

Range	Accuracy	Anvils	Standards	
in.	in.			Code No.
0-6"	±0.0002"	6 pcs	5 pcs	**7111061**
6-12"	±0.0003"	6 pcs	6 pcs	**7111121**
12-16"	±0.0004"	4 pcs	2 pcs	**7111161**
16-20"	±0.0005"	4 pcs	2 pcs	**7111201**
20-24"	±0.0006"	4 pcs	2 pcs	**7111241**
24-28"	±0.0006"	4 pcs	2 pcs	**7111281**
28-32"	±0.0007"	4 pcs	2 pcs	**7111321**
32-36"	±0.0008"	4 pcs	2 pcs	**7111361**
36-40"	±0.0008"	4 pcs	2 pcs	**7111401**



Range	A	L
Inch	mm	mm
0-6"	82 (3.228")	158 (6.220")
6-12"	165 (6.496")	308 (12.126")
12-16"	224 (8.819")	409 (16.102")
16-20"	275 (10.827")	509 (20.039")
20-24"	321 (12.638")	609 (23.976")
24-28"	371 (14.606")	709 (27.913")
28-32"	426 (16.772")	809 (31.850")
32-36"	476 (18.740")	909 (35.787")
36-40"	576 (22.677")	1009 (39.724")

Note: The individual anvils are matched as a set with the frame. The accuracy can not be guaranteed if used with a different frame.

3 Point Internal Micrometers

- Resolution:
  Digital models: 0.00005" / 0.001mm
  Mechanical models: 0.0002"
- Protection level IP65 (digital models)
- Ratchet stop
- Setting Ring for origin point setting
- Measuring contact points are designed to allow measurements near to the bottom of blind holes
- Additional extensions can be added to increase the measuring depth
- Measuring surfaces are carbide

7208281

7209261

Extension Rod

Setting Ring

Wrench

Battery

Screwdriver

STANDARD ACCESSORIES

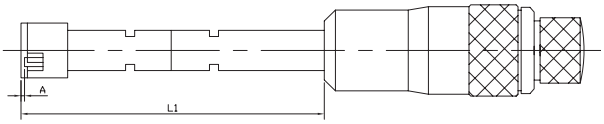
- LR44 Battery (digital models), Screwdriver, Extension Rod, Wrench, Setting Ring
- Warranty Card, Calibration Certificate, Instruction Manual

Digital

Inch			Metric					Digital
Range	Accuracy	Setting Ring	Range	Accuracy	L1	A	Extension Rod	Code No.
0.5-0.65"	±0.00016"	0.65"	12-16mm	±0.004mm	80mm (3.150")	0.5mm (0.020")	150mm (5.906")	**7208241**
0.65-0.8"	±0.00016"	0.65"	16-20mm	±0.004mm	80mm (3.150")	0.5mm (0.020")	150mm (5.906")	**7208251**
0.8-1"	±0.00016"	1"	20-25mm	±0.004mm	90mm (3.543")	0.5mm (0.020")	150mm (5.906")	**7208261**
1-1.2"	±0.00016"	1"	25-30mm	±0.004mm	90mm (3.543")	0.5mm (0.020")	150mm (5.906")	**7208271**
1.2-1.6"	±0.00016"	1.6"	30-40mm	±0.004mm	97mm (3.819")	0.5mm (0.020")	150mm (5.906")	**7208281**
1.6-2"	±0.0002"	1.6"	40-50mm	±0.005mm	97mm (3.819")	0.5mm (0.020")	150mm (5.906")	**7208291**
2-2.5"	±0.0002"	2.5"	50-63mm	±0.005mm	114mm (4.488")	0.5mm (0.020")	150mm (5.906")	**7208301**
2.5-3"	±0.0002"	2.5"	62-75mm	±0.005mm	114mm (4.488")	0.5mm (0.020")	150mm (5.906")	**7208311**
3-3.5"	±0.0002"	3.5"	75-88mm	±0.005mm	114mm (4.488")	0.5mm (0.020")	150mm (5.906")	**7208321**
3.5-4"	±0.0002"	3.5"	87-100mm	±0.005mm	114mm (4.488")	0.5mm (0.020")	150mm (5.906")	**7208331**

Mechanical

Inch						Mechanical
Range	Accuracy	Setting Ring	L1	A	Extension Rod	Code No.
0.5-0.65"	±0.00016"	0.65"	80mm (3.150")	0.5mm (0.020")	150mm (5.906")	**7209241**
0.65-0.8"	±0.00016"	0.65"	80mm (3.150")	0.5mm (0.020")	150mm (5.906")	**7209251**
0.8-1"	±0.00016"	1"	90mm (3.543")	0.5mm (0.020")	150mm (5.906")	**7209261**
1-1.2"	±0.00016"	1"	90mm (3.543")	0.5mm (0.020")	150mm (5.906")	**7209271**
1.2-1.6"	±0.00016"	1.6"	97mm (3.819")	0.5mm (0.020")	150mm (5.906v)	**7209281**
1.6-2"	±0.0002"	1.6"	97mm (3.819")	0.5mm (0.020")	150mm (5.906")	**7209291**
2-2.5"	±0.0002"	2.5"	114mm (4.488")	0.5mm (0.020")	150mm (5.906")	**7209301**
2.5-3"	±0.0002"	2.5"	114mm (4.488")	0.5mm (0.020")	150mm (5.906")	**7209311**
3-3.5"	±0.0002"	3.5"	114mm (4.488")	0.5mm (0.020")	150mm (5.906")	**7209321**
3.5-4"	±0.0002"	3.5"	114mm (4.488")	0.5mm (0.020")	150mm (5.906")	**7209331**



Inside Micrometers

- Resolution:
  Digital models: 0.00005" / 0.001mm
  Mechanical models: 0.001"
- Designed for the measurement of intricate internal characteristics
- Solid carbide pins for measurement contact points
- Caliper style jaws are made of high grade tool steel
- Satin chrome finished
- 0.2-1.2" and 1-2" range are supplied with Setting Ring
- Ratchet stop
- Protection level IP65 (digital models)

7207011

7203021

STANDARD ACCESSORIES

- LR44 Battery (digital models), S-Wrench, Setting Ring (2" and under sizes)
- Warranty Card, Calibration Certificate, Instruction Manual

Setting Ring

S-Wrench

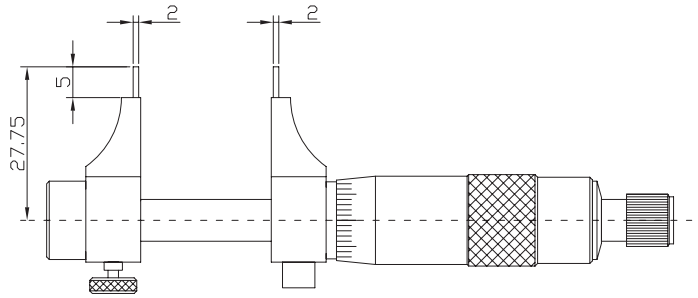
Battery

Digital

Inch			Metric				Inch
Range	Resolution	Accuracy	Range	Resolution	Accuracy	Jaw Style	Code No.
0.2-1.2"	0.00005"	±0.0001"	5-30mm	0.001mm	±0.004mm	Pin	**7207011**
1-2"	0.00005"	±0.0002"	25-50mm	0.001mm	±0.004mm	Caliper	**7207021**
2-3"	0.00005"	±0.0002"	50-75mm	0.001mm	±0.005mm	Caliper	**7207031**
3-4"	0.00005"	±0.0002"	75-100mm	0.001mm	±0.005mm	Caliper	**7207041**

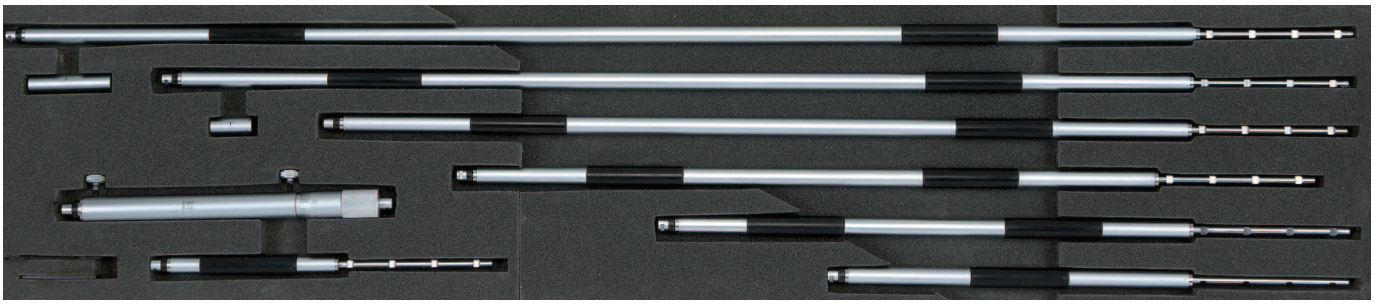
Mechanical

Inch				
Range	Graduation	Accuracy	Jaw Style	Code No.
0.2-1.2"	0.001"	±0.0001"	Pin	**7203011**
1.0-2.0"	0.001"	±0.0002"	Caliper	**7203021**
2.0-3.0"	0.001"	±0.0002"	Caliper	**7203031**
3.0-4.0"	0.001"	±0.0002"	Caliper	**7203041**



Inside Micrometers - Interchangeable Rod Type

- Rods marked with its measuring range
- Satin chrome finish throughout
- All contact points hardened for extra long tool life
- With locking clamp
- Zero point can be readjusted by rotating the micrometer head sleeve
- Carbide tipped measuring faces



7242401

STANDARD ACCESSORIES

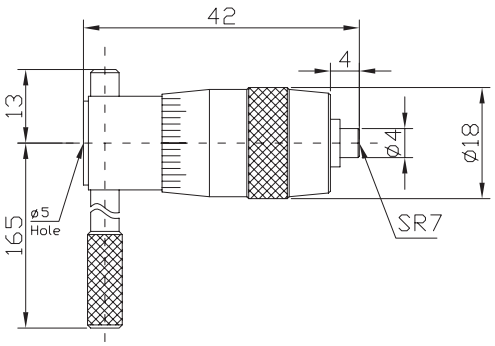
- Micrometer Head, Extension Rods, S-Wrench, Y-Wrench
- Warranty Card, Calibration Certificate, Instruction Manual

S-Wrench

Y-Wrench

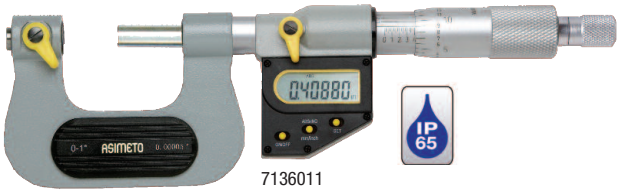
Range	Head Travel	Graduation	Spacing Collar	Diameter of Rods	Note	Code No.
1-2"	0.25"	0.001"	0.250"	0.248"	1" Mic head & 2 Rods	**7242021**
2-12"	0.50"	0.001"	0.500"	0.248"	2" Mic head & 10 Rods	**7242121**
8-40"	1.00"	0.001"	1", 2"	0.355"	8" Mic head & 8 Rods	**7242401**

Note: Individual rods are matched with micrometer and should not be interchanged with other sets



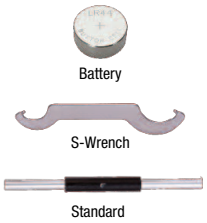
Screw Thread Micrometers

- Resolution:
  Digital reading: 0.00005" / 0.001mm
  Scale on digital models: 0.0001"
  Scale on mechanical models: 0.001"
- Grey painted steel frame
- Absolute or incremental measuring modes
- For measuring various screw threads
- Non-rotating spindle
- Ratchet stop for digital models
  Ratchet thimble for mechanical models
- Protection level IP65
- Inch/Metric conversion
- Upon switching on the display will read the actual absolute measuring position
- Automatic On/Off to maximize battery life
- With locking clamp



7136011

7132011



STANDARD ACCESSORIES

- LR44 Battery (digital models), S-Wrench, Standard (over 1" range)
- Warranty Card, Calibration Certificate, Instruction Manual
- Anvils sold separately (see below)

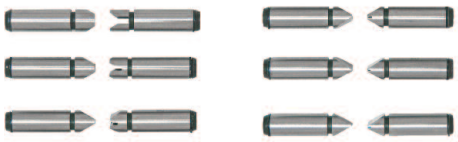
Digital

Inch		Metric		
Range	Accuracy	Range	Accuracy	Code No.
0-1"	±0.0001"	0-25mm	±0.004mm	**7136011**
1-2"	±0.0002"	25-50mm	±0.004mm	**7136021**

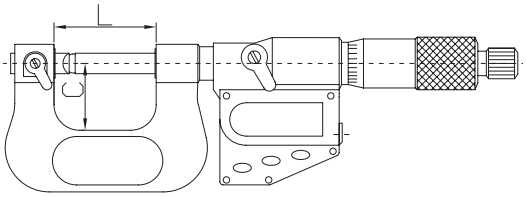
Mechanical

Inch		
Range	Accuracy	Code No.
0-1"	±0.0001"	**7132011**
1-2"	±0.0002"	**7132021**
2-3"	±0.0002"	**7132031**
3-4"	±0.0002"	**7132041**

Anvils for 60° ISO screw



Pitch	Notes	Code No.
0.4-7.0mm/64-3.5TPI	Set of 6 pairs	**7130600**
0.4-0.5mm/64-48TPI	1 pair	**7130610**
0.6-0.9mm/44-28TPI	1 pair	**7130620**
1.0-1.75mm/24-14TPI	1 pair	**7130630**
2.0-3.0mm/13-9TPI	1 pair	**7130640**
3.5-5.0mm/8-5TPI	1 pair	**7130650**
5.5-7.0mm/4.5-3.5TPI	1 pair	**7130660**



Range	L	C
Inch/Metric	mm	mm
0-1"/0-25mm	42 (1.654")	26 (1.024")
1-2"/25-50mm	67 (2.638")	38 (1.496")
2-3"	92 (3.622")	50 (1.969")
3-4"	117.6 (4.630")	62 (2.441")

Digital Blade Micrometers

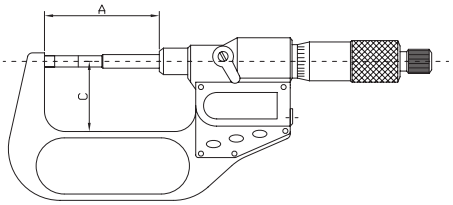
- Resolution:
  Digital: 0.00005" / 0.001mm
  Scale: 0.0001"
- Carbide tipped measuring faces
- Ratchet stop
- For measuring the groove diameter of shafts, keyways, and other hard to reach portions
- Non-rotating spindle
- Automatic On/Off to maximize battery life
- Grey painted steel frame
- Inch/Metric conversion
- Upon switching on the display will read the actual absolute measuring position
- Absolute or incremental measuring modes
- Protection level IP65

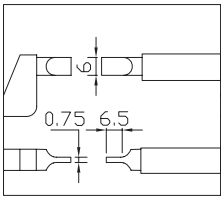
7117011

STANDARD ACCESSORIES

- LR44 Battery, S-Wrench, Standard (over 1" range)
- Warranty Card, Calibration Certificate, Instruction Manual

Inch		Metric		
Range	**Accuracy**	**Range**	**Accuracy**	**Code No.**
0-1"	±0.0001"	0-25mm	±0.003mm	**7117011**
1-2"	±0.0002"	25-50mm	±0.003mm	**7117021**
2-3"	±0.0002"	50-75mm	±0.003mm	**7117031**
3-4"	±0.0002"	75-100mm	±0.004mm	**7117041**





Range	A	C
Inch	**mm**	**mm**
0-1"	57 (2.244")	32 (1.260")
1-2"	82 (3.228")	44.5 (1.752")
2-3"	107 (4.213")	57 (2.244")
3-4"	132.6 (5.220")	69.5 (2.736")

Digital Disc Micrometers

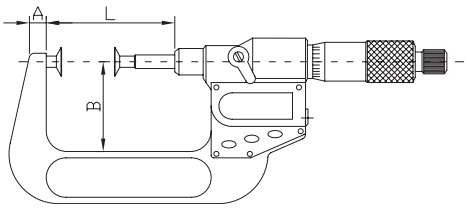
- Resolution:
  Digital: 0.00005" / 0.001mm
  Scale: 0.0001"
- Grey painted steel frame
- Ratchet stop
- Sizes over 1" come with Standard
- For measuring gears and paper thickness
- Non-rotating spindle
- Automatic On/Off to maximize battery life
- Absolute or incremental measuring modes
- Inch/Metric conversion
- Upon switching on the display will read the actual absolute measuring position
- Protection level IP65

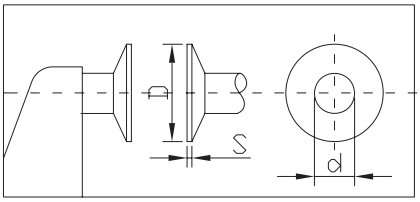
7145021

STANDARD ACCESSORIES

- LR44 Battery, S-Wrench, Standard (over 1" range)
- Warranty Card, Calibration Certificate, Instruction Manual

Inch		Metric		Inch
Range	**Accuracy**	**Range**	**Accuracy**	**Code No.**
0-1"	±0.0001"	0-25mm	±0.005mm	**7145011**
1-2"	±0.0002"	25-50mm	±0.005mm	**7145021**
2-3"	±0.0002"	50-75mm	±0.006mm	**7145031**
3-4"	±0.0002"	75-100mm	±0.006mm	**7145041**



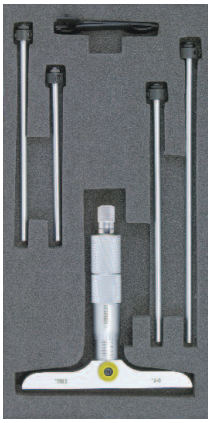


Range	A	B	L	D	S	d
Inch/Metric	**mm**	**mm**	**mm**	**mm**	**mm**	**mm**
0-1"/0-25mm	8 (0.315")	32 (1.260")	43 (1.693")	20 (0.787")	0.7 (0.028")	8 (0.315")
1-2"/25-50mm	8 (0.315")	44.5 (1.752")	68 (2.677")	20 (0.787")	0.7 (0.028")	8 (0.315")
2-3"/50-75mm	8 (0.315")	57 (2.244")	93 (3.661")	20 (0.787")	0.7 (0.028")	8 (0.315")
3-4"/75-100mm	10 (0.394")	70 (2.756")	118.5 (4.665")	20 (0.787")	0.7 (0.028")	8 (0.315")

Depth Micrometers

- Resolution:
  Digital models: 0.00005" / 0.001mm
  Mechanical models: 0.001"
- Protection level IP65
- Ratchet stop
- The integrity of the measurements are maintained throughout the total range of the measuring rods. However the measuring rods must be kept as a set and may not be interchangeable with other depth micrometer sets
- The measurement mode of Absolute or Incremental is displayed when turned on
- The battery life is maximized with the automatic On/Off feature
- Inch/Metric conversion

7205043


7201043

S-Wrench

Y-Wrench

Hex Wrench

Torque Wrench

Battery

STANDARD ACCESSORIES

- LR44 Battery (digital models), Rods, Y-Wrench, S-Wrench, Hex Wrench (mechanical models), Torque Wrench (mechanical models)
- Warranty Card, Calibration Certificate, Instruction Manual

Digital

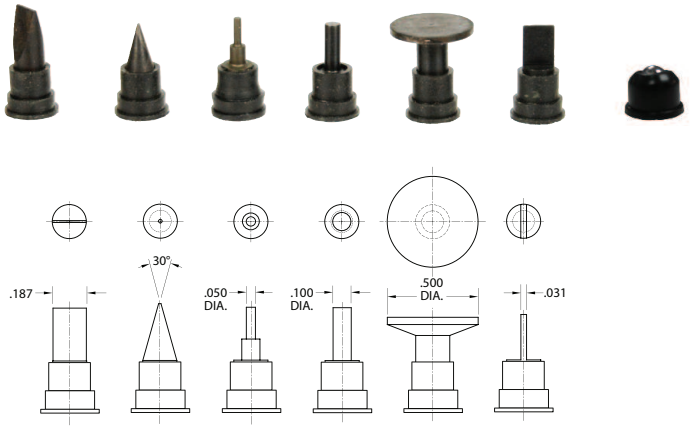
Inch		Metric				Code No.
Range	Accuracy	Range	Accuracy	Base Length	Rods	Flat End
0-4"	±0.0002"	0-100mm	±0.005mm	63mm (2.480")	4 pcs	**7205041**
0-6"	±0.0002"	0-150mm	±0.005mm	63mm (2.480")	6 pcs	**7205061**
0-4"	±0.0002"	0-100mm	±0.005mm	101.5mm (3.996")	4 pcs	**7205043**
0-6"	±0.0002"	0-150mm	±0.005mm	101.5mm (3.996")	6 pcs	**7205063**

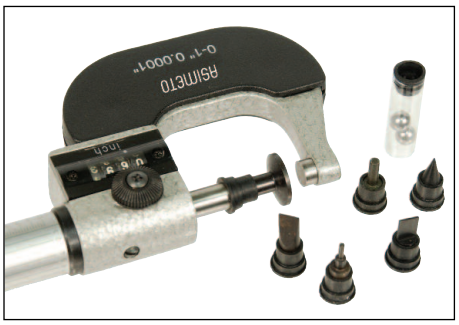
Mechanical

Inch				Code No.
Range	Accuracy	Base Length	Rods	Flat End
0-4"	±0.0002"	63mm (2.480")	4 pcs	**7201041**
0-6"	±0.0002"	63mm (2.480")	6 pcs	**7201061**
0-4"	±0.0002"	101.5mm (3.996")	4 pcs	**7201043**
0-6"	±0.0002"	101.5mm (3.996")	6 pcs	**7201063**

Micrometer Anvil Attachment Set

- A must accessory for every micrometer
- Each anvil is 1/2" long, comes with reinforced holding boot, and will fit on any 1-12" micrometer
- Anvils are hardened steel with black oxide finish
- Fits 0.235" and 0.250" spindle diameters





7 pcs Set Code No. : 7146700	
Individuals	**Description**
Knife	30 degrees
Comparator	30 degrees
Super Spline	0.050" face
Spline	0.100" face
Disc	0.500" face
Blade	0.300" thick
Ball Attachment	0.200"

Micrometer Stand

- These stands are designed to allow bench top use with hand micrometers
- Painted cast iron base

Micrometer Stand	
Description	**Code No.**
Painted Cast Iron Base	**7109021**

Micrometer Standards

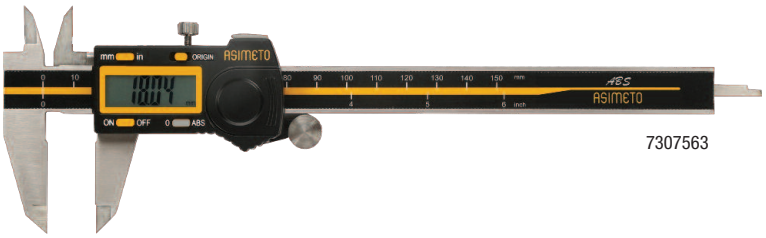
- Used for zero point setting of outside micrometers
- Heat insulating handle to prevent heat expansion due to body temperature
- Flat measuring face for up to 11" size standards
  Spherical measuring face for over 12" size standards

Standards			
Size	**Accuracy**	**Diameter**	**Code No.**
1"	±0.00005"	7mm (0.276")	**7110011**
2"	±0.0001"	7mm (0.276")	**7110021**
3"	±0.0001"	7mm (0.276")	**7110031**
4"	±0.0001"	8mm (0.315")	**7110041**
5"	±0.00015"	8mm (0.315")	**7110051**
6"	±0.00015"	8mm (0.315")	**7110061**
7"	±0.00015"	8mm (0.315")	**7110071**
8"	±0.00015"	8mm (0.315")	**7110081**
9"	±0.00020"	8mm (0.315")	**7110091**
10"	±0.00020"	8mm (0.315")	**7110101**
11"	±0.00020"	8mm (0.315")	**7110111**
12"	±0.00025"	16mm (0.630")	**7110121**
13"	±0.00025"	16mm (0.630")	**7110131**
14"	±0.00025"	16mm (0.630")	**7110141**
15"	±0.00025"	16mm (0.630")	**7110151**
16"	±0.00025"	16mm (0.630")	**7110161**
17"	±0.00025"	16mm (0.630")	**7110171**
18"	±0.00025"	16mm (0.630")	**7110181**
19"	±0.00030"	16mm (0.630")	**7110191**
20"	±0.00030"	16mm (0.630")	**7110201**
21"	±0.00030"	16mm (0.630")	**7110211**
23"	±0.00030"	16mm (0.630")	**7110221**

ASIMETO

Absolute Digital Calipers - Data Output

- Resolution: 0.0005" / 0.01mm
- The caliper will be ready for measurements as soon as it is switched on with the LCD screen displaying the actual slider position. There is no need to set the zero position each time the caliper is used as the origin setting is retained even when the caliper is switched off
- Absolute or incremental measuring modes available
- Inch/Metric conversion
- A thumb wheel is provided for easy use
- Data output cable: 7900054
- Wireless data transfer output: 7901001



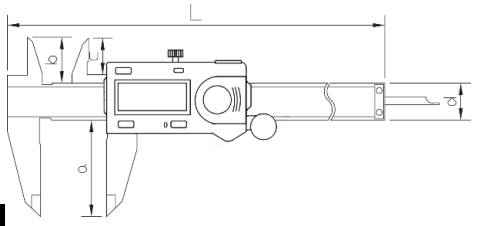
7307563

STANDARD ACCESSORIES

- CR2032 Battery
- Warranty Card, Calibration Certificate, Instruction Manual

Battery

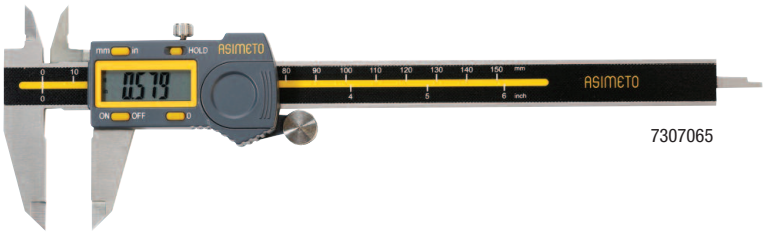
Inch		Metric		
Range	Accuracy	Range	Accuracy	Code No.
0-6"	±0.001"	0-150mm	±0.02mm	**7307563**
0-8"	±0.0015"	0-200mm	±0.03mm	**7307583**
0-12"	±0.0015"	0-300mm	±0.03mm	**7307623**



Range	L	a	b	c	d
Inch/Metric	mm	mm	mm	mm	mm
0-6"	236 (9.291")	40 (1.575")	21 (0.827")	16.5 (0.650")	16 (0.630")
0-8"	286 (11.260")	50 (1.969")	24 (0.945")	19.5 (0.768")	16 (0.630")
0-12"	400 (15.748")	60 (2.362")	25 (0.984")	20.5 (0.807")	17 (0.669")

Digital Calipers

- Resolution: 0.0005" / 0.01mm
- The origin position is retained through the On/Off cycle
- Inch/Metric conversion
- A thumb wheel is provided for easy use



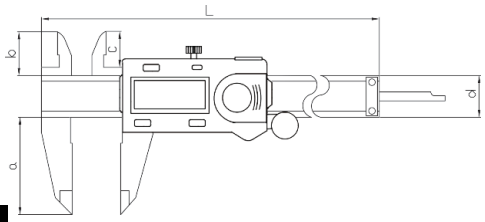
7307065

STANDARD ACCESSORIES

- CR2032 Battery
- Warranty Card, Calibration Certificate, Instruction Manual

Battery

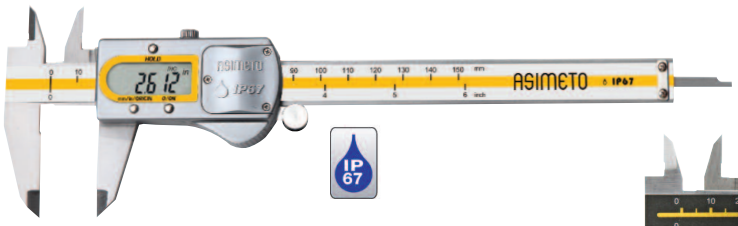
Inch		Metric		
Range	Accuracy	Range	Accuracy	Code No.
0-6"	±0.001"	0-150mm	±0.02mm	**7307065**
0-8"	±0.0015"	0-200mm	±0.03mm	**7307085**
0-12"	±0.0015"	0-300mm	±0.03mm	**7307125**



Range	L	a	b	c	d
Inch/Metric	mm	mm	mm	mm	mm
0-6"	236 (9.291")	40 (1.575")	21 (0.827")	16.5 (0.650")	16 (0.630")
0-8"	286 (11.260")	50 (1.969")	24 (0.945")	19.5 (0.768")	16 (0.630")
0-12"	400 (15.748")	60 (2.362")	25 (0.984")	20.5 (0.807")	17 (0.669")

IP67 Coolant Proof Digital Calipers

- Resolution: 0.0005" / 0.01mm
- Absolute function, there is no need to set the zero
- Absolute or incremental measuring modes
- Metal Housing design will allow the caliper to be used in normal workshop conditions and is resistant to coolant, water, dust or oil
- Conforms to the IP67 rating
- Hold function for easy reading
- Inch/Metric conversion
- Big Screen design allows for very easy reading while also remaining resistant to coolant, water, dust or oil
- Auto power On/Off
- Power: 3V lithium battery
- With Thumb Wheel



7305062

7305065

Screwdriver

Battery

STANDARD ACCESSORIES

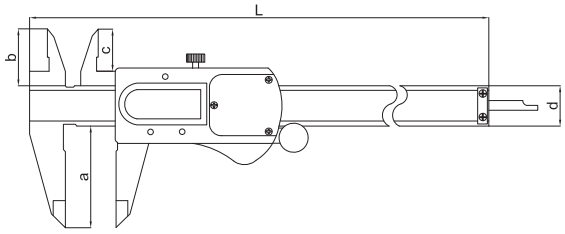
- CR2032 Battery, Screwdriver
- Warranty Card, Calibration Certificate, Instruction Manual

Metal Housing

Inch		Metric		
Range	Accuracy	Range	Accuracy	Code No.
0-6"	±0.001"	0-150mm	±0.02mm	**7305062**
0-8"	±0.0015"	0-200mm	±0.03mm	**7305082**
0-12"	±0.0015"	0-300mm	±0.03mm	**7305122**

Big Screen

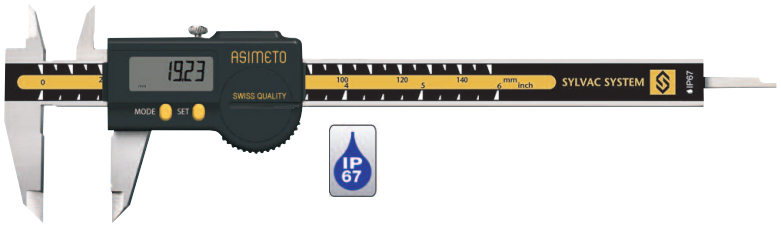
Inch		Metric		
Range	Accuracy	Range	Accuracy	Code No.
0-6"	±0.001"	0-150mm	±0.02mm	**7305065**
0-8"	±0.0015"	0-200mm	±0.03mm	**7305085**
0-12"	±0.0015"	0-300mm	±0.03mm	**7305125**



Range	L	a	b	c	d
Inch/Metric	mm	mm	mm	mm	mm
0-6"	236 (9.291")	40 (1.575")	21 (0.827")	16.5 (0.650")	16 (0.630")
0-8"	286 (11.260")	50 (1.969")	24 (0.945")	19.5 (0.768")	16 (0.630")
0-12"	400 (15.748")	60 (2.362")	25 (0.984")	20.5 (0.807")	16 (0.630")

IP67 Coolant Proof Digital Caliper - Sylvac System

- Resolution: 0.0005" / 0.01mm
- Conforms to the IP67 ratings
- Inch/Metric conversion
- Auto power On/Off
- Sylvac system



Battery

STANDARD ACCESSORIES

- CR2032 Battery
- Warranty Card, Calibration Certificate, Instruction Manual

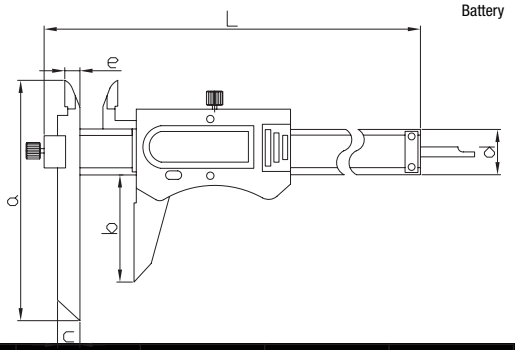
Inch		Metric		
Range	Accuracy	Range	Accuracy	Code No.
0-6"	±0.001"	0-150mm	±0.02mm	**7301060**

Digital Calipers With Adjustable Measuring Jaws

- Resolution: 0.0005" / 0.01mm
- The stationary jaw on the beam is designed with vertical movement for the purpose of measuring various steps of different heights
- Inch/Metric conversion
- Zero-setting at any position

7317060

Battery



STANDARD ACCESSORIES

- CR2032 Battery
- Warranty Card, Calibration Certificate, Instruction Manual

Inch		Metric		L	a	b	c	d	e	
Range	Accuracy	Range	Accuracy	mm	mm	mm	mm	mm	mm	Code No.
0-6"	±0.0015"	0-150mm	±0.04mm	239 (9.409")	110 (4.331")	40 (1.575")	10 (0.394")	16 (0.630")	7 (0.276")	**7317060**
0-12"	±0.0020"	0-300mm	±0.05mm	389 (15.315")	130 (5.118")	60 (2.362")	10 (0.394")	16 (0.630")	7 (0.276")	**7317120**

Heavy Duty Absolute Digital Calipers - Data Output

- Resolution: 0.0005" / 0.01mm
- Designed with fine adjustment to allow precise movement of the slider
- Internal measurement jaws are rounded to provide accurate measurement of internal diameters
- Minimum internal diameter measurement capability of 20mm
- Six buttons
- Zero setting at any position
- Absolute or incremental measuring modes
- Inch/Metric conversion
- Data output cable: 7900054
- Wireless data transfer output: 7901001

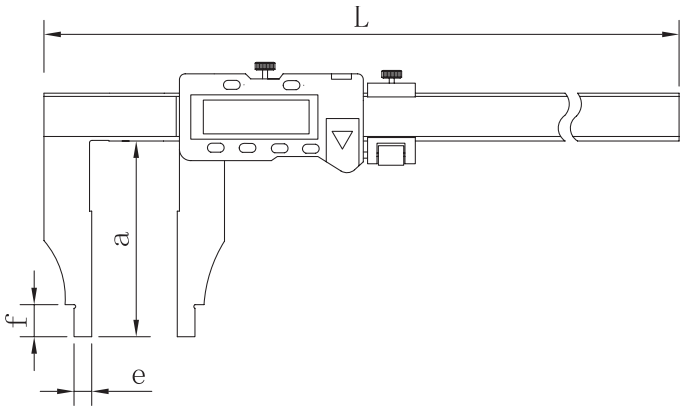
7315126

Battery

STANDARD ACCESSORIES

- CR2032 Battery
- Warranty Card, Calibration Certificate, Instruction Manual

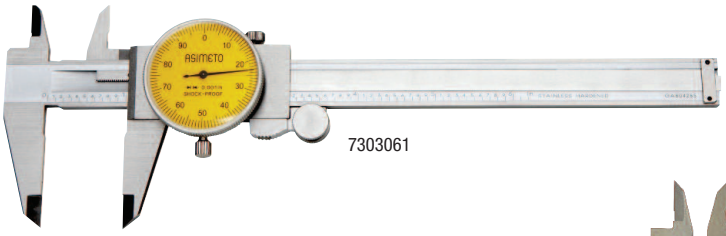
Inch		Metric				
Range	Resolution	Range	Resolution	Accuracy	Jaw Length	Code No.
0-12"	0.0005"	0-300mm	0.01mm	±0.04mm	90mm (3.543")	**7315126**
0-24"	0.0005"	0-600mm	0.01mm	±0.05mm	100mm (3.937")	**7315246**
0-40"	0.0005"	0-1000mm	0.01mm	±0.07mm	150mm (5.906")	**7315406**



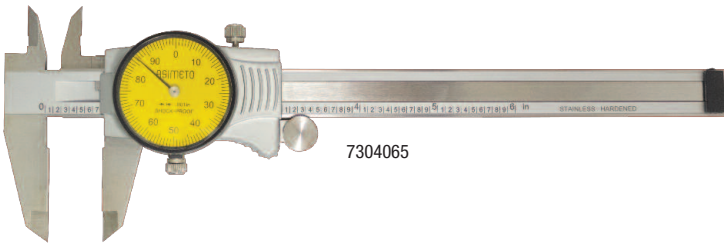
Range	L	a	d	e	f
Inch/Metric	mm	mm	mm	mm	mm
0-12"/0-300mm	470 (18.504")	90 (3.543")	25 (0.984")	10 (0.394")	18 (0.709")
0-24"/0-600mm	730 (28.740")	100 (3.937")	25 (0.984")	10 (0.394")	18 (0.709")
0-40"/0-1000mm	1230 (48.425")	150 (5.906")	32 (1.260")	10 (0.394")	25 (0.984")

Dial Calipers

- Graduation: 0.001"
- Stainless steel models have all measuring surfaces surface-hardened
- Preloaded dual pinions eliminate backlash and provide better repeatability
- Thumb roller included
- Aluminum models: Sturdy Aluminum ergonomic diecast housing can be used without damage in the harshest of manufacturing environments, including situations with hot steel chips
- Shock proof



7303061



7304065

STANDARD ACCESSORIES

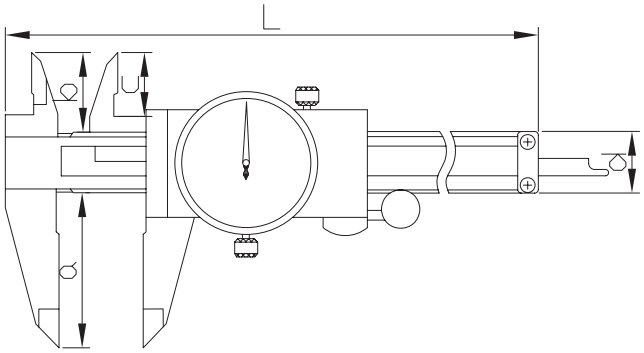
- Warranty Card, Calibration Certificate, Instruction Manual

Stainless Steel

Inch			
Range	Range Per Rev.	Accuracy	Code No.
0-6"	0.100"	±0.001"	**7303061**
0-8"	0.100"	±0.0015"	**7303081**
0-12"	0.100"	±0.0015"	**7303121**

Aluminum Diecast

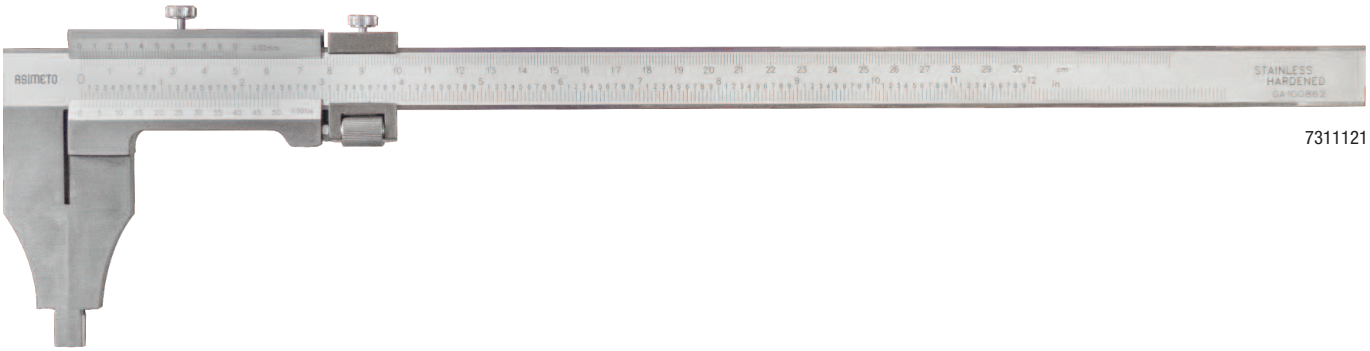
Inch			
Range	Range Per Rev.	Accuracy	Code No.
0-6"	0.100"	±0.001"	**7304065**
0-8"	0.100"	±0.0015"	**7304085**
0-12"	0.100"	±0.0015"	**7304125**



Range	L	a	b	c	d
Inch	mm	mm	mm	mm	mm
0-6"	234 (9.213")	40 (1.575")	21 (0.827")	16.5 (0.650")	16 (0.650")
0-8"	290 (11.417")	50 (1.969")	23.5 (0.925")	19 (0.748")	17 (0.669")
0-12"	393 (15.472")	64 (2.520")	24.5 (0.965")	20 (0.787")	17 (0.669")

Heavy Duty Vernier Calipers

- Graduation:
  Lower Scale: 0.001"
  Upper Scale: 0.02mm
- Stainless steel
- Designed with fine adjustment to allow precise movement of the slider
- Internal measurement jaws are rounded to provide accurate measurement of internal diameters
- Minimum internal diameter measurement capability of:
  10mm for 300mm/12" range
  20mm for over 450mm/18" range

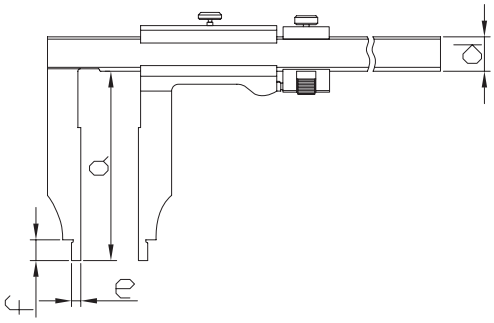


7311121

STANDARD ACCESSORIES

- Warranty Card, Calibration Certificate, Instruction Manual

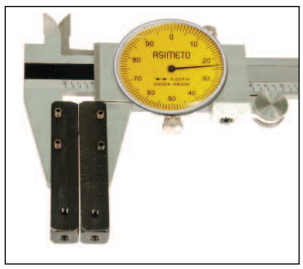
Range	Graduation	Range	Graduation			
Lower	Lower	Upper	Upper	Accuracy	Jaw Length	Code No.
0-12"	0.001"	0-300mm	0.02mm	±0.0015"	75mm (2.953")	**7311121**
0-18"	0.001"	0-450mm	0.02mm	±0.0020"	100mm (3.937")	**7311181**
0-24"	0.001"	0-600mm	0.02mm	±0.0020"	100mm (3.937")	**7311241**
0-40"	0.001"	0-1000mm	0.02mm	±0.0030"	150mm (5.906")	**7311401**
0-60"	0.001"	0-1500mm	0.02mm	±0.0040"	200mm (7.874")	**7311601**
0-80"	0.001"	0-2000mm	0.02mm	±0.0050"	200mm (7.874")	**7311801**

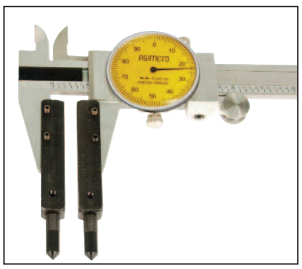


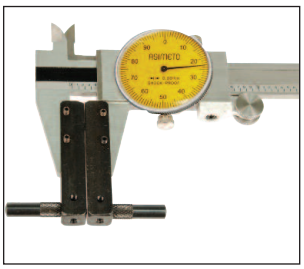
Range	L	a	d	e	f
Inch/Metric	mm	mm	mm	mm	mm
0-12" / 0-300mm	450 (17.717")	75 (2.953")	20 (0.787")	5 (0.197")	12 (0.472")
0-18" / 0-450mm	685 (26.969")	100 (3.937")	25 (0.984")	10 (0.394")	25 (0.984")
0-24" / 0-600mm	835 (32.874")	100 (3.937")	32 (1.260")	10 (0.394")	25 (0.984")
0-40" / 0-1000mm	1235 (48.622")	150 (5.906")	32 (1.260")	10 (0.394")	25 (0.984")
0-60" / 0-1500mm	1820 (71.654")	200 (7.874")	42 (1.654")	10 (0.394")	25 (0.984")
0-80" / 0-2000mm	2270 (89.370")	200 (7.874")	42 (1.654")	10 (0.394")	25 (0.984")

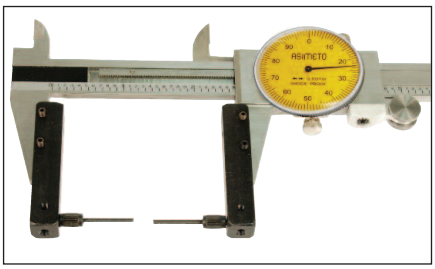
Universal Caliper Accessory Kit

- The original caliper jaw attachment accessory
- The square bodies attach to the jaws of any 4", 6", 8" caliper. Threaded holes are located in the front, both sides, and the bottoms of the bodies, allowing the use of the points on any side
- Measures slots, grooves, shoulders, holes, pockets, and takes ID and OD measurements
- Steel, Black Oxide finish





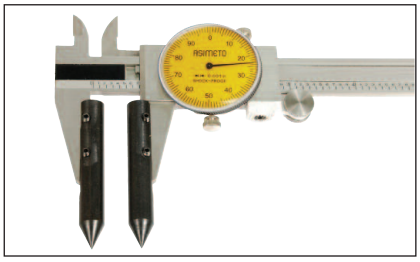


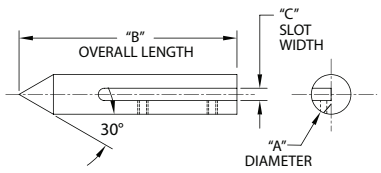


Code No.: 7300110		
Kit contains:	**Qty**	**Description**
Universal Caliper Bodies	1 pair	3/8" square x 2" length. Slot for caliper jaws is 0.147" wide. 4-40 holes for set screws fasten the body to the caliper jaw
Flat Points	1 pair	3/16" diameter x 0.810" length. 4-48 threads
Cone Points	1 pair	3/16" diameter x 0.810" length. 4-48 threads
Stem Points	1 pair	3/16" body diameter, 0.084" stem diameter x 0.820" length. 4-48 threads
Ball Points	1 pair	3/16" diameter x 0.810" length. 4-48 threads

Centerline Gauges

- Measures centerline distances
- Easily attaches to Dial, Vernier, and Digital Calipers
- 60º conical points
- Hardened Steel with Black Oxide finish
- Attaches in seconds with set screws
- Supplied in high-impact tubes with Allen wrench
- User friendly instructions

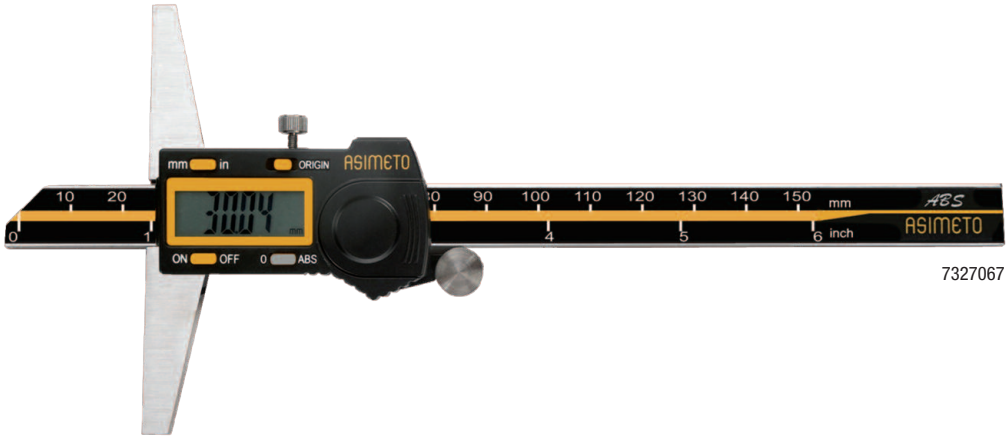




Used With	Min Measuring	A	B	C	Code No.
4", 6", and 8" Calipers	3/8"	0.375"	2.313"	0.127"	**7300130**
12" Calipers	1/2"	0.500"	2.762"	0.144"	**7300140**

Absolute Digital Depth Calipers - Data Output

- Resolution: 0.0005" / 0.01mm
- Both of the measuring surfaces are precision ground for accuracy
- Absolute function: there is no need to set the zero position
- Absolute and incremental measuring modes available
- Inch/Metric conversion
- Data output cable: 7900054
- Wireless data transfer output: 7901001



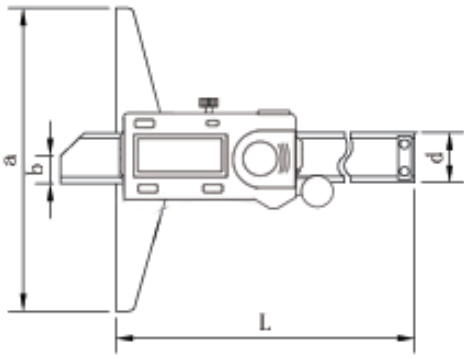
7327067

Battery

STANDARD ACCESSORIES

- CR2032 Battery
- Warranty Card, Calibration Certificate, Instruction Manual

Inch			Metric			Inch
Range	Graduation	Accuracy	Range	Graduation	Accuracy	Code No.
0-6"	0.0005"	±0.001"	0-150mm	0.01mm	±0.02mm	**7327067**
0-8"	0.0005"	±0.0015"	0-200mm	0.01mm	±0.03mm	**7327087**
0-12"	0.0005"	±0.0015"	0-300mm	0.01mm	±0.04mm	**7327127**



Range	Dimensions			
Inch/Metric	L	a	b	d
0-6"/0-150mm	230mm (9.055")	100mm (3.937")	6mm (0.236")	14.5mm (0.571")
0-8"/0-200mm	280mm (11.023")	100mm (3.937")	6mm (0.236")	14.5mm (0.571")
0-12"/0-300mm	380mm (14.961")	100mm (3.937")	6mm (0.236")	14.5mm (0.571")

Absolute Digital Single Hook Depth Calipers - Data Output

- Resolution: 0.0005" / 0.01mm
- The stationary measuring surface on the beam protrudes at right angles (measuring hook) to allow for the measurement of depths, internal groove positions, and other intricate characteristics
- Measurements can be taken on either side of the measuring hook
- All measuring surfaces are hardened
- Data output cable: 7900054
- Wireless data transfer output: 7901001

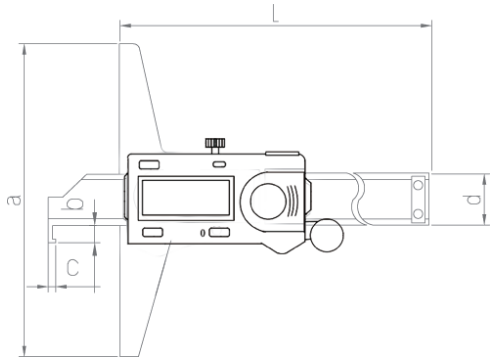
7322067

Battery

STANDARD ACCESSORIES

- CR2032 Battery
- Warranty Card, Calibration Certificate, Instruction Manual

Inch			Metric			
Range	Resolution	Accuracy	Range	Resolution	Accuracy	Code No.
0-6"	0.0005"	±0.001"	0-150mm	0.01mm	±0.02mm	**7322067**
0-8"	0.0005"	±0.0015"	0-200mm	0.01mm	±0.03mm	**7322087**
0-12"	0.0005"	±0.0015"	0-300mm	0.01mm	±0.04mm	**7322127**



Range	Dimensions				
Inch/Metric	L	a	b	c	d
0-6"/0-150mm	230mm (9.055")	100mm (3.937")	5mm (0.197")	2mm (0.079")	14.5mm (0.571")
0-8"/0-200mm	280mm (11.023")	100mm (3.937")	5mm (0.197")	2mm (0.079")	14.5mm (0.571")
0-12"/0-300mm	380mm (14.961")	100mm (3.937")	5mm (0.197")	2mm (0.079")	14.5mm (0.571")

Depth Gauges - Interchangeable Rod Type

- Resolution:
  Digital models: 0.0005"/ 0.01mm
  Dial models: 0.001"
- The total measuring range is accomplished with threaded depth rods in 1" intervals
- The base surface is precisely finished and hardened for accurate repeatable measurements
- Inch/Metric conversion for digital models

7475040

7473043

STANDARD ACCESSORIES

- CR2032 Battery (digital models), Interchangeable Rods
- Warranty Card, Calibration Certificate, Instruction Manual

Battery

Digital Model

Inch			Metric						
Range	Resolution	Accuracy	Range	Resolution	Accuracy	Stroke	Rods	Base Length	Code No.
0-4"	0.0005"	±0.001"	0-100mm	0.01mm	0.02mm	12.7mm	10 pcs	63 x 17mm	**7475040**

Dial Models

Range	Resolution	Accuracy	Stroke	Rods	Base Length	Code No.
0-4"	0.001"	±0.002"	1"	4 pcs	2.5" x 0.63"	**7473041**
0-4"	0.001"	±0.002"	1"	4 pcs	4" x 0.63"	**7473043**

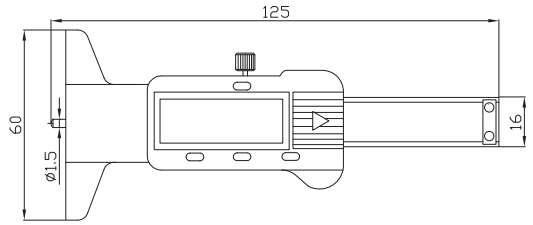
Digital Tire Depth Gauge

- Resolution: 0.0005" / 0.01mm
- The origin point is retained throughout the life of the battery
- Inch/Metric conversion
- Spherical end anvil

STANDARD ACCESSORIES

- LR44 Battery
- Warranty Card, Calibration Certificate, Instruction Manual

Battery



Inch		Metric			
Range	Accuracy	Range	Accuracy	Base Length	Code No.
0-1.2"	±0.0015"	0-30mm	±0.03mm	60mm (2.362")	**7321010**

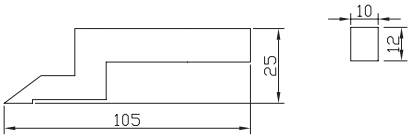
Single Beam Digital Height Gauges With Hand Wheel

- Resolution: 0.0005" / 0.01mm
- Large LCD display
- Hand wheel design for fine adjustment
- Inch/Metric conversion at any position
- Zero setting on any position
- Carbide tipped scriber provided
- Manual power On/Off

STANDARD ACCESSORIES

- LR44 Battery, Carbide Tipped Scriber With Clamp
- Warranty Card, Calibration Certificate, Instruction Manual

Battery



Inch		Metric		
Range	Accuracy	Range	Accuracy	Code No.
0-12"	±0.0015"	0-300mm	±0.04mm	**7626120**
0-18"	±0.0015"	0-450mm	±0.04mm	**7626180**
0-24"	±0.0020"	0-600mm	±0.05mm	**7626240**

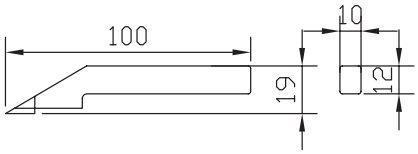
Single Beam Digital Height Gauges

- Resolution: 0.0005" / 0.01mm
- Origin memory eliminates the need to zero the reading each time the height gauge is turned on
- Can be used with a test indicator and holder for precise measurement
- Inch/Metric conversion
- The fine-adjustment allows the slider to be precisely positioned
- The base is designed with a thermal heat isolation hand grip

STANDARD ACCESSORIES

- LR44 Battery, Carbide Tipped Scriber With Clamp
- Warranty Card, Calibration Certificate, Instruction Manual

Battery



Inch		Metric		
Range	Accuracy	Range	Accuracy	Code No.
0-12"	±0.0015"	0-300mm	±0.04mm	**7625120**
0-24"	±0.0020"	0-600mm	±0.07mm	**7625240**

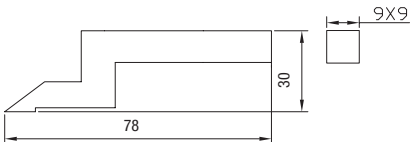
Double Beam Digital Height Gauges With Hand Wheel

- Resolution: 0.001" / 0.01mm
- Designed with hand wheel micro-adjustable rack and pinion for precision positioning
- Can be used with a test indicator and holder for precise measurement
- High precision, measurement more accurate
- Zero setting at any position
- Manual power On/Off
- Metric/Inch conversion
- Large LCD display

STANDARD ACCESSORIES

- LR44 Battery, Carbide Tipped Scriber With Clamp
- Warranty Card, Calibration Certificate, Instruction Manual

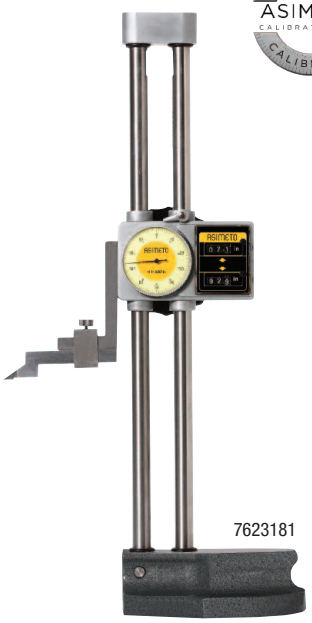
Battery



Inch		Metric		
Range	Accuracy	Range	Accuracy	Code No.
0-12"	±0.001"	0-300mm	±0.02mm	**7627120**
0-18"	±0.0015"	0-450mm	±0.03mm	**7627180**
0-24"	±0.0015"	0-600mm	±0.03mm	**7627240**

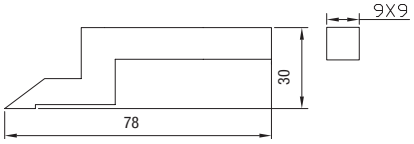
Double Beam Digit Counter Height Gauges w/ Hand Wheel

- Graduation: 0.001" / 0.01mm.
- Position is displayed by a combination of the digit counter and the dial
- Hand wheel design for both coarse and fine adjustments
- Digit counter graduation: Inch 0.1"
- The digit counters provide bi-directional positioning and the capability of setting zero at any position



STANDARD ACCESSORIES

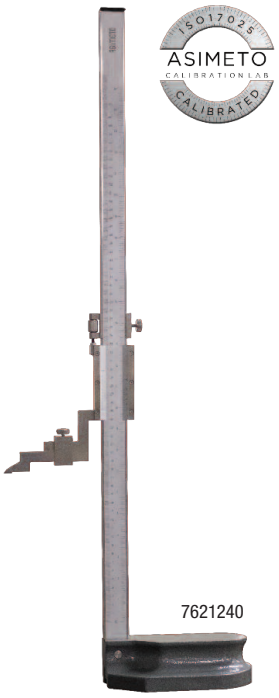
- Carbide Tipped Scriber With Clamp
- Warranty Card, Calibration Certificate, Instruction Manual



Inch		Metric		
Range	Accuracy	Range	Accuracy	Code No.
0-12"	±0.0015"	0-300mm	±0.04mm	**7623121**
0-18"	±0.0020"	0-450mm	±0.05mm	**7623181**
0-24"	±0.0020"	0-600mm	±0.07mm	**7623241**

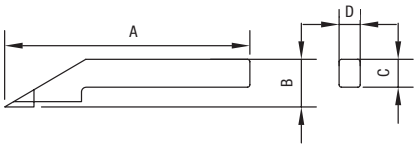
Vernier Height Gauges

- Graduation: 1/128" / 0.05mm
- The fine-adjustment allows the slider to be precisely positioned
- Matte chrome finish
- Stainless steel design
- The base is designed with a thermal heat isolation hand grip



STANDARD ACCESSORIES

- Carbide Tipped Scriber With Clamp
- Warranty Card, Calibration Certificate, Instruction Manual



Range			
	Graduation	Accuracy	Code No.
0-12"/0-300mm	1/128" / 0.05mm	±0.0015"	**7621120**
0-24"/0-600mm	1/128" / 0.05mm	±0.0020"	**7621240**

Range	Dimensions			
	A	B	C	D
0-12" / 0-300mm	97mm (3.819")	32mm (1.260")	15mm (0.590")	11mm (0.433")
0-24" / 0-600mm	97mm (3.819")	32mm (1.260")	15mm (0.590")	11mm (0.433")

IP Ratings

First Digit: Solids

The first digit indicates the level of protection that the enclosure provides against access to hazardous parts (e.g., electrical conductors, moving parts) and the ingress of solid foreign objects.

Level	Protected Against	Effective Against
0	Not protected	No protection against contact and ingress of objects
1	>50mm	Any large surface of the body, such as the back of the hand, but no protection against deliberate contact with a body part.
2	>12.5mm	Fingers or similar objects.
3	>2.5mm	Tools, thick wires, etc.
4	>1mm	Most wires, screws, etc.
5	Dust Protected	Ingress of dust is not entirely prevented, but it must not enter in sufficient quantity to interfere with the satisfactory operation of the equipment; complete protection against contact.
6	Dust Tight	No ingress of dust; complete protection against contact.

Second Digit: Liquids

Protection of the equipment inside the enclosure against harmful ingress of water.

Level	Protected Against	Effective Against
0	Not protected	–
1	Dripping water	Dripping water (vertically falling drops) shall have no harmful effect.
2	Dripping water when tilted up to 15°	Vertically dripping water shall have no harmful effect when the enclosure is tilted at an angle up to 15° from its normal position.
3	Spraying water	Water falling as a spray at any angle up to 60° from the vertical shall have no harmful effect.
4	Splashing water	Water splashing against the enclosure from any direction shall have no harmful effect.
5	Water jets	Water projected by a nozzle (6.3mm) against enclosure from any direction shall have no harmful effects.
6	Powerful water jets	Water projected in powerful jets (12.5mm nozzle) against the enclosure from any direction shall have no harmful effects.
7	Immersion up to 1m	Ingress of water in harmful quantity shall not be possible when the enclosure is immersed in water under defined conditions of pressure and time (up to 1m of submersion).
8	Immersion > 1m	The equipment is suitable for continuous immersion in water under conditions which shall be specified by the manufacturer. Normally, this will mean that the equipment is hermetically sealed. However, with certain types of equipment, it can mean that water can enter but only in such a manner that it produces no harmful effects.

IP65 Absolute Digital Indicators - Data Output

- Absolute or incremental measuring modes
- Tolerance measurement feature allows for the upper and lower tolerance for maximum and minimum
- Inch/Metric conversion
- Flat back (attached) and lug back supplied
- 3/8" stem diameter
- 360 deg. screen rotation
- Data output cable: 7900070
- Wireless data transfer output: 7901002

7407023

7407013

Lug Back

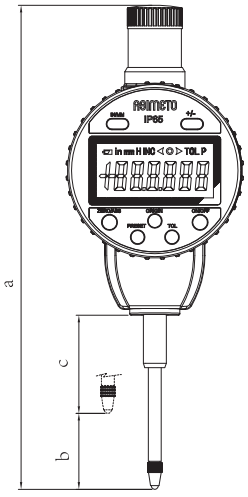
Battery

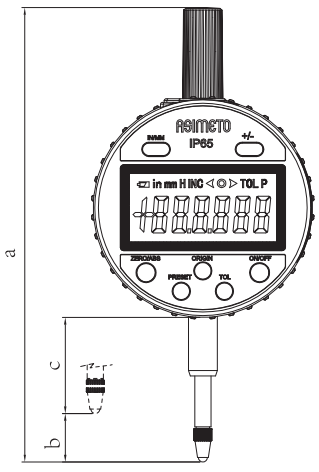
Lifting Lever

STANDARD ACCESSORIES

- Lug Back, CR2032 Battery, Lifting Lever (1" and over)
- Warranty Card, Calibration Certificate, Instruction Manual

Inch			Metric			
Range	**Resolution**	**Accuracy**	**Range**	**Resolution**	**Accuracy**	**Code No.**
0-0.5"	0.0005"	±0.0008"	0-12.5mm	0.01mm	±0.02mm	**7407013**
0-1"	0.0005"	±0.0012"	0-25mm	0.01mm	±0.02mm	**7407023**
0-2"	0.0005"	±0.0012"	0-50mm	0.01mm	±0.02mm	**7407033**





Range	A	B	C
	mm	mm	mm
0-0.5"/0-12.5mm	126.5 (4.980")	13.5 (0.531")	26.8 (1.055")
0-1"/0-25mm	169 (6.654")	26.5 (1.043")	34.3 (1.350")
0-2"/0-50mm	246 (9.685")	52 (2.047")	33.7 (1.327")

Digital Indicators

- The maximum, minimum, or runout value can be displayed during measurement
- Tolerance measurement feature allows for the upper and lower tolerance for maximum and minimum
- Inch/Metric conversion
- Absolute or incremental measuring modes
- Flat back (attached) and lug back supplied
- 3/8" stem diameter

7405951

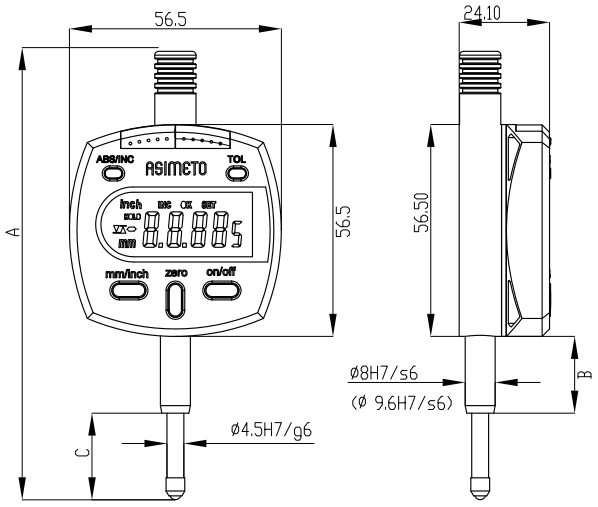
Lug Back

Battery

STANDARD ACCESSORIES

- Lug Back, CR2032 Battery
- Warranty Card, Calibration Certificate, Instruction Manual

Inch			Metric			
Range	**Resolution**	**Accuracy**	**Range**	**Resolution**	**Accuracy**	**Code No.**
0-.5"	0.0005"	±0.0008"	0-12.5mm	0.01mm	±0.02mm	**7405951**
0-1"	0.0005"	±0.0012"	0-25mm	0.01mm	±0.03mm	**7405011**
0-2"	0.0005"	±0.0012"	0-50mm	0.01mm	±0.03mm	**7405021**



Range	A	B	C
	mm	mm	mm
0-0.5"/0-12.5mm	122 (4.803")	26 (1.024")	24 (0.945")
0-1"/0-25mm	174 (6.850")	47 (1.850")	41 (1.614")
0-2"/0-50mm	248 (9.764")	71 (2.795")	61 (2.402")

AGD1 Dial Indicator

- Graduation: 0.001"
- Dial face dia.: 1.65" / 42mm
- Jeweled bearings
- Flat back (attached) and lug back supplied

STANDARD ACCESSORIES

- Lug Back
- Warranty Card, Calibration Certificate, Instruction Manual

Lug Back

Range	Graduation	Range / Rev.	Dial Reading	Accuracy	Code No.
Stem diameter 3/8"					
0.25"	0.001"	0.1"	0-100	±0.001"	**7401061**

Straight Metric Indicator Stem Bushing

- Accepts 8mm stem, converts to 3/8" diameter stem
- Straight bushing, no head
- 0.500" length
- Nickel plated brass

Description	Code No.
0.500" Stem Bushing	**7500320**

Dial Indicator Extension Rods

- Use to gain extra length
- 7/32" diameter points
- Stainless Steel

	Inch	
Length	**Thread**	**Code No.**
1/2"	4-48	**7477107**
3/4"	4-48	**7477117**
1"	4-48	**7477127**
1-1/4"	4-48	**7477137**
1-1/2"	4-48	**7477147**
1-3/4"	4-48	**7477157**
2"	4-48	**7477167**
2-1/2"	4-48	**7477177**
3"	4-48	**7477187**
4"	4-48	**7477197**
6"	4-48	**7477207**
Set		
One each of 1", 2", 3"	4-48	**7477038**

Axial Support Bracket

- Used for mounting Indicators with dovetails or rods
- 3/8" diameter body for secure clamping
- Bends in many directions

Shank Dia.	Overall Length	Code No.
3/8"	5.375”	**7500260**

ASIMETO

AGD2 Dial Indicators

- Graduation: 0.0001" / 0.0005" / 0.001"
- Easy to read dial face: Ø2.20"
- Jeweled bearings
- Internal tolerance marker
- Flat back (attached) and lug back supplied
- With counter pointer
- IP54 water proof series: with sealed housing & water resistant ring
- Stem diameter: 3/8"

7402265

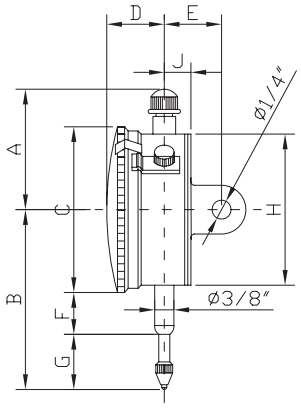
7402267

STANDARD ACCESSORIES

- Lug Back
- Warranty Card, Calibration Certificate, Instruction Manual

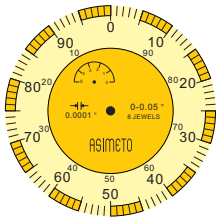
Lug Back

Range	Graduation	Range / Rev.	Dial Reading	Accuracy	Code No.
0.05"	0.0001"	0.01"	0-100	±0.0001"	**7402011**
0.05"	0.0001"	0.01"	0-50-0	±0.0001"	**7402013**
0.25"	0.001"	0.1"	0-100	±0.002"	**7402061**
0.25"	0.001"	0.1"	0-50-0	±0.002"	**7402063**
0.25"	0.0005"	0.05"	0-25-0	±0.0015"	**7402065**
0.50"	0.001"	0.1"	0-100	±0.002"	**7402121**
0.50"	0.001"	0.1"	0-50-0	±0.002"	**7402123**
0.50"	0.0005"	0.05"	0-50	±0.002"	**7402125**
1"	0.001"	0.1"	0-50-0	±0.002"	**7402263**
1"	0.0005"	0.05"	0-50	±0.002"	**7402265**
2"	0.001"	0.1"	0-100	±0.004"	**7402511**
IP54 Water Proof Series					
0.4" (Stem Dia. 3/8")	0.001"	0.1"	0-100	±0.002"	**7402267**
0.4" (Stem Dia. 3/8")	0.0005"	0.05"	0-50	±0.0015"	**7402269**



Range	A	B	C	D	E	F	G	H	J
Inch									
0-0.05"	1.76"	2.39"	2.28"	0.64"	0.76"	0.69"	0.56"	2.11"	0.32"
0-0.25"	1.48"	2.54"	2.28"	0.64"	0.76"	0.69"	0.71"	2.11"	0.32"
0-0.5"	1.48"	2.74"	2.28"	0.64"	0.76"	0.69"	0.91"	2.11"	0.32"
0-1"	1.48"	3.21"	2.28"	0.64"	0.76"	0.69"	1.38"	2.11"	0.32"
0-2"	4.73"	5.5"	2.28"	0.7"	0.76"	2"	2.34"	2.11"	0.32"

AGD2 Dial Indicators



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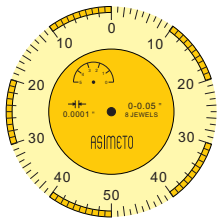

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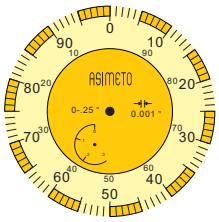

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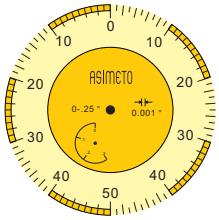

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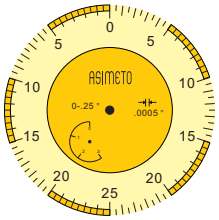

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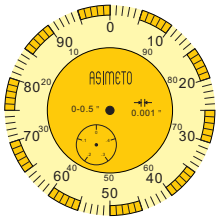

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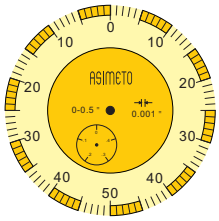

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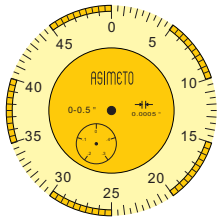

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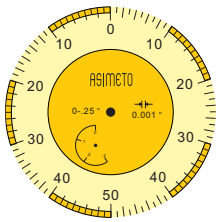

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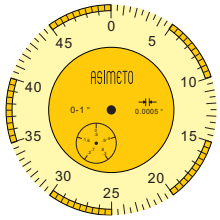

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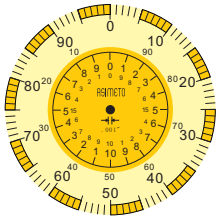


7402511

Universal Dovetail Indicator Holder

- 1/4" shank diameter with 3" reach
- This spring loaded holder locks in any of (4) 90 degree quadrants, and allows many variable angles of holding
- Brass contact will not scar indicator
- Fits all dovetail equipped indicators
- Stainless Steel

Description	Code No.
Indicator Holder	**7500410**

Dial Test Indicators

- Jeweled bearings
- Comes with Ø3/8" dovetail stem
- Easy to read yellow face
- Horizontal and vertical models available
- Ruby contact point
- Dial face dia.: 1.26"

STANDARD ACCESSORIES

- Warranty Card, Calibration Certificate, Instruction Manual

Vertical

Horizontal

Full Set

Carbide tipped point
2mm dia.

Steel point
1mm dia.

Stem
0.157" dia.

Knurled
Clamping Ring

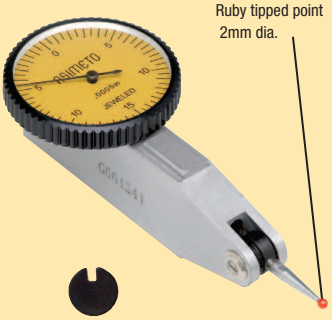
Swivel Clamp
3/8" & 0.157" dia.

Holding Bar
0.25" x 0.5" x 4"

Base Set

Stem
3/8" dia.

Knurled
Clamping Ring

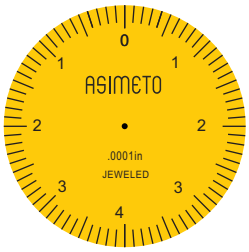


Wrench

					Base Set	Full Set
Range	**Graduation**	**Dial Reading**	**Accuracy**	**Note**	**Code No.**	**Code No.**
0.008"	0.0001"	0-4-0	±0.0001"	Horizontal	**7501783**	**7501787**
0.03"	0.0005"	0-15-0	±0.0005"	Horizontal	**7501733**	**7501738**
0.008"	0.0001"	0-4-0	±0.0001"	Vertical	**7501785**	**-**
0.03"	0.0005"	0-15-0	±0.0005"	Vertical	**7501735**	**-**
0.03"	0.0005"	0-15-0	±0.0005"	Horizontal / Long Point (1")	**7501736**	**-**

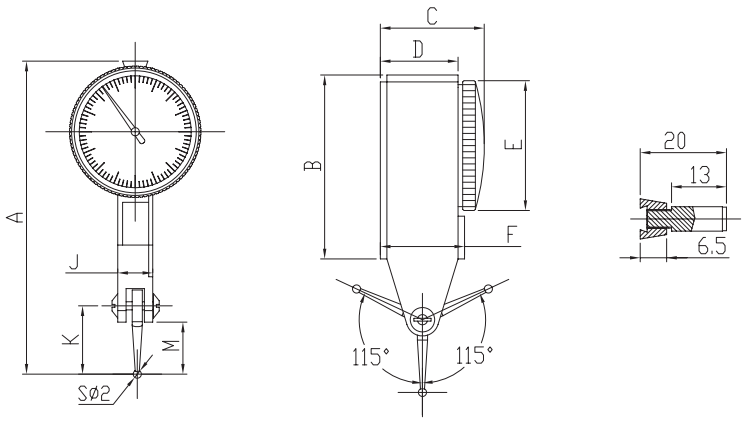
Dial Test Indicators

7501733
7501735
7501736
7501738

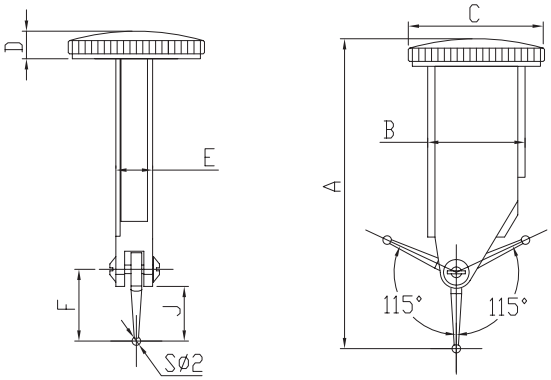


7501783
7501785
7501787

Horizontal



Vertical



Graduation	A	B	C	D	E	F	J	K	M
Vertical									
0.0001"	71 (2.795")	44 (1.732")	25 (0.984")	17 (0.669")	32 (1.260")	19 (0.748")	8.5 (0.335")	15 (0.591")	11 (0.433")
0.0005"	78.6 (3.094")	45 (1.772")	27 (1.063")	19 (0.748")	32 (1.260")	21 (0.827")	8.5 (0.335")	18 (0.709")	14 (0.551")
Horizontal									
0.0001"	69 (2.717")	23 (0.906")	32 (1.260")	8 (0.315")	8.5 (0.335")	15 (0.591")	11 (0.433")	-	-
0.0005"	76 (2.992")	23 (0.906")	32 (1.260")	8 (0.315")	8.5 (0.335")	17 (0.669")	13 (0.512")	-	-

Extended Range Dial Test Indicators

- Jeweled bearing design and resistant to magnetic fields
- Stem diameter: 3/8"
- Ruby contact point swivels 230 degrees
- Horizontal and vertical models are available

7503061

7503561

7504563

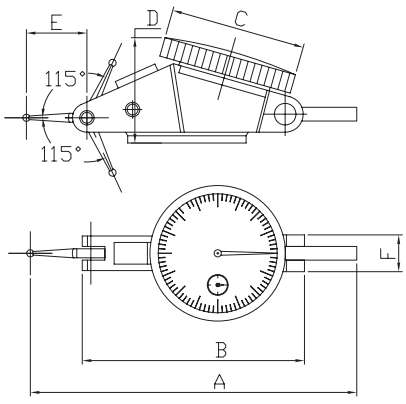
STANDARD ACCESSORIES

- Wrench
- Warranty Card, Calibration Certificate, Instruction Manual

Wrench

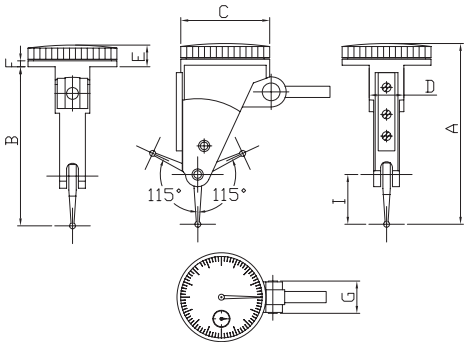
					30mm Dia.	38mm Dia.
Range	**Graduation**	**Dial Reading**	**Accuracy**	**Note**	**Code No.**	**Code No.**
0.060"	0.001"	0-15-0	±0.0012"	Horizontal	**7503061**	**-**
0.060"	0.0005"	0-15-0	±0.0012"	Horizontal	**7503561**	**7504561**
0.060"	0.001"	0-15-0	±0.0012"	Vertical	**7503063**	**-**
0.060"	0.0005"	0-15-0	±0.0012"	Vertical	**7503563**	**7504563**

Horizontal



A	B	C	D	E	F
91mm 3.58"	64mm 2.52"	30/38mm 1.18"/1.50"	36mm 1.42"	19.7mm 0.78"	12.3mm 0.48"

Vertical



A	B	C	D	E	F	G
66mm 2.60"	57.5mm 2.26"	30/38mm 1.18"/1.50"	12mm 0.47"	8.5mm 0.33"	20mm 0.79"	12.3mm 0.48"

Extended Range Dial Test Indicator Sets

SET #1

- Doubles the range of most of indicators
- Jeweled movement
- Easy to read dial
- Range: 0 – 0.060"

7504811

STANDARD ACCESSORIES

- Calibration certificate, instruction manual, warranty card, wrench
- Height Gauge Bar (1/4" x 1/2") w/Swivel Clamp w/ 5/32", 7/32", 1/4" holes
- Axial support w/ 3/8" stem and dovetail
- Reduction sleeve 3/8" to 5/32"
- Two dovetail stems, 3/8" & 5/32"
- Three contact points: 0.04" (hardened steel), 0.08", 0.12" (Tungsten Carbide) x 5/8" long

Range	Graduation	Dial Dia.	Accuracy	Indicator Code No.	Set Code No.
0.060"	0.0005"	1.5"	±0.0012"	**7504561**	**7504811**
0.060"	0.0005"	1.0"	±0.0012"	**7503561**	**7504813**
0.060"	0.001"	1.0"	±0.0012"	**7503061**	**7504815**

SET #2

- Doubles the range of most of indicators
- Jeweled movement and easy to read dial
- Supplied with Xtra-Mag magnetic base
- Range: 0– 0.060"
- Graduation: 0.0005"
- Dial Reading 0-15-0, Dial Dia.: 1-5/16"
- 5/32" Stem, dovetail on front and back

7504821

STANDARD ACCESSORIES

- Calibration certificate, instruction manual, warranty card, wrench
- Xtra-Mag magnetic base with 2 universal ball sockets
- Micro-fine adjustment screw
- 3-9/16" extension arm
- Two dovetail stems: 3/8" & 5/32"
- Three contact points: 0.04" (hardened steel), 0.08", 0.12" (Tungsten Carbide) x 5/8" long

Range	Graduation	Dial Dia.	Accuracy	Indicator Code No.	Set Code No.
0.060"	0.0005"	1.5"	±0.0012"	**7504561**	**7504821**

Contact Points For Test Indicators

			Steel	Carbide	Ruby
Indicator Range	Tip Dia.	Length	Code No.	Code No.	Code No.
0.03"/ 0.0005"	1mm (0.039")	14mm (0.551")	**7500611**	-	-
	2mm (0.079")	14.5mm (0.571")	**7500621**	**7500622**	**7500623**
	3mm (0.118")	15mm (0.591")	**7500631**	**7500632**	-
0.008"/ 0.0001"	3mm (0.118")	15mm (0.591")	**7500731**	**7500732**	-
0.06"/ 0.001" 0.06"/ 0.0005"	1mm (0.039")	18.5mm (0.728")	**7500811**	-	-
	2mm (0.079")	19mm (0.748")	**7500821**	**7500822**	**7500823**
	3mm (0.118")	19.5mm (0.768")	**7500831**	**7500832**	-

Dovetail Stem Sets For Test Indicators

Knurled Clamping Ring

Size	Code No.
3/8"	**7500311**
5/32"	**7500313**

Swivel Clamps For Test Indicators

Description	Code No.
For 3/8" & 5/32" dia. Dovetail Stem	**7500251**
For 8mm & 6mm dia. Dovetail Stem	**7500252**

Holding Bars For Test Indicators

7500210

7500213

Size	Code No.
0.25" x 0.5", Length: 4"	**7500213**
9 x 9mm, Length: 50mm	**7500210**
9 x 9mm, Length: 100mm	**7500212**

Centering Holders For Test Indicators

• Allows large diameter cylinders or holes to be centered

Description	Code No.
8mm dia. stem	**7500350**
0.25" dia. stem	**7500351**

Articulating Arm Magnetic Bases

- Accepts test indicators with dovetail clamping mechanism
- Dial gauges can be held by the 3/8" or 8mm diameter stem or by the lug backing plate
- Arm has 3 articulating joints that can be locked with the single hand knob
- The rotary knob switches natural magnet on or off
- The precision surfaces and the bottom V are securely fastened to the ferrous work piece or machine table when the rotary knob is in the on position
- 7602011 does not have fine adjustment

7602021

Magnetic Power	Magnetic Base	Height	Dia. of Hole					Code No.
	(L X W X H)			L1	L2	L3	Slot	
30 kgf	40x30x35mm	215mm (8.46")	3/8" / 8mm	65mm (2.56")	55mm (2.17")	60mm (2.36")	6.5mm (0.26")	**7602011**
80 kgf	60x50x55mm	350mm (13.78")	3/8" / 8mm	120mm (4.72")	105mm (4.13")	60mm (2.36")	6.5mm (0.26")	**7602021**
80 kgf	60x50x55mm	440mm (17.32")	3/8" / 8mm	160mm (6.30")	140mm (5.51")	75mm (2.95")	6.5mm (0.26")	**7602031**
130 kgf	117x50x55mm	690mm (27.17")	3/8" / 8mm	345mm (13.58")	230mm (9.06")	60mm (2.36")	6.5mm (0.26")	**7602051**

Hydraulic Magnetic Bases

- Accepts test indicators with dovetail clamping mechanism
- Dial gauges can be held by the 3/8" or 8mm diameter stem or by the lug backing plate
- The rotary knob switches natural magnet on or off
- The precision surfaces and the bottom V are securely fastened to the ferrous work piece or machine table when the rotary knob is in the on position

7603010

Magnetic Power	Magnetic Base	Height	Dia. of Hole		Code No.
	(L X W X H)			Slot	
80 kgf	60x50x55mm	385mm (15.16")	3/8" / 8mm	6.5mm (0.26")	**7603010**
100 kgf	73x50x55mm	685mm (26.97")	3/8" / 8mm	6.5mm (0.26")	**7603020**

Permanent Magnetic Base

- With permanent magnetic base, without On/Off switch
- Dovetail groove included

Magnetic Power	Main Body	Main Stem Length	Dia. of Hole		Code No.
			Hole	Slot	
17 kgf	Ø30x25mm	85mm (3.346")	8mm (0.315")	6mm (0.236")	**7601120**

Standard Magnetic Bases

- Accepts test indicators with dovetail clamping mechanism
- Dial gauges can be held by the 3/8" or 8mm diameter stem or by the lug backing plate
- The rotary knob switches natural magnet on or off
- The precision surfaces and the bottom V are securely fastened to the ferrous work piece or machine table when the rotary knob is in the on position
- 7601021 with Fine Adjustment

7601011

7601021

Magnetic Power	Magnetic Base	Main Stem		Sub Pole			Remark	Inch
	(L X W X H)	Dia.	Length	Dia.	Length	Dia. of hole		Code No.
80 kgf	60x50x55mm	12mm (0.47")	176mm (6.93")	10mm (0.39")	165mm (6.50")	3/8" / 8mm		**7601011**
80 kgf	60x50x55mm	12mm (0.47")	176mm (6.93")	10mm (0.39")	150mm (5.91")	3/8" / 8mm	with fine adjustment	**7601021**

Magnetic Bases

7600011

Magnetic Power	Dimension	Thread Size	Code No.
60kgf	60x50x55mm	M8	**7600011**
80kgf	60x50x55mm (metal switch)	M8	**7600012**

Dial Bore Gauges

- Dynamic carbide contact point
- 0.24-0.4"/6-10mm range is with fixed anvils
  0.4-0.74"/10-18mm range is with plate guide and fixed anvils
  0.7-1.4"/18-35mm range is with canister and fixed anvils
  Over 1.4"/35mm range is with wheel guide and inserting anvils

STANDARD ACCESSORIES

- Spacers, Anvils, and Sub-Anvils (refer to the table)
- Warranty Card, Instruction Manual, Calibration Certificate

0.24"-0.4"

0.4"-0.74"
Plate Guide

0.7"-1.4"
Canister Guide

Over 1.4"
Wheel Guide

7483221

Range	Graduation	Dial Travel	Accuracy	Number of Anvils	Number of Spacers	Number of Sub-Anvils	Probe Depth	Code No.
Inch								
0.24-0.4"	0.0001"	0.05" (AGD2)	±0.0002"	9	-	-	2"	**7483111**
0.4-0.7"	0.0001"	0.05" (AGD2)	±0.0003"	9	1	-	4"	**7483121**
0.7-1.5"	0.0001"	0.05" (AGD2)	±0.0003"	10	2	-	6"	**7483211**
1.4-2.4"	0.0001"	0.05" (AGD2)	±0.0003"	6	4	-	6"	**7483221**
2-6"	0.0001"	0.05" (AGD2)	±0.0003"	11	4	1	6"	**7483311**
6-10"	0.0001"	0.05" (AGD2)	±0.0003"	6	6	1	16"	**7483321**
10-16"	0.0001"	0.05" (AGD2)	±0.0003"	6	6	2	16"	**7483331**

Adjustment Anvils

Range	Anvils Range (in)											
	Qty.	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11
0.24" - 0.4"	9	0.24	0.26	0.28	0.3	0.32	0.34	0.36	0.38	0.4		
0.4" - 0.7"	9	0.4	0.44	0.48	0.52	0.58	0.62	0.64	0.68	0.7		
0.7" - 1.5"	10	0.7	0.78	0.86	0.94	1.02	1.1	1.18	1.26	1.34	1.42	
1.4" - 2.4"	6	1.4	1.6	1.8	2	2.2	2.4					
2" - 6"	11	2	2.2	2.4	2.6	2.8	3	3.2	3.4	3.6	3.8	4
6" - 10"	6	6	6.4	6.8	7.2	7.6	8					
10" - 16"	6	10	10.4	10.8	11.2	11.6	12					

Spacers & Sub-Anvils

	Spacer Dimensions (in)							Sub-Anvils (in)		
Range	Spacer Qty.	#1	#2	#3	#4	#5	#6	Extension Rod Qty.	#1	#2
0.24-0.4"										
0.4-0.7"	1	0.02								
0.7-1.5"	2	0.02	0.04							
1.4-2.4"	4	0.02	0.04	0.08	0.12					
2-6"	4	0.02	0.04	0.08	0.12			1	2	
6-10"	6	0.02	0.04	0.08	0.1	0.2	0.3	1	2	
10-16"	6	0.02	0.04	0.08	0.1	0.2	0.3	2	2	4

Bevel Steel Squares

- Made of precision ground hardened stainless steel
- Accuracy according to DIN875

7639230

		Bevel Type	
Inch Size	**Metric Size**	**Squareness**	**Code No.**
2" x 1.6"	50 x 40mm	00	**7639210**
3" x 2"	75 x 50mm	00	**7639220**
4" x 2.75"	100 x 70mm	00	**7639230**
6" x 4"	150 x 100mm	00	**7639240**
8" x 5"	200 x 130mm	00	**7639250**

Die Maker's Square Set

- Use for precise miniature layouts
- Hardened and ground with very fine finish extremely accurate
- Set includes: 3 hardened beveled edge squares; 3/4", 1-1/4", 2-3/8" plus 1- 1/2" triangular straight edge with handle complete in a fitted case
- Straight edge sides are machined in the middle for clearance of burs and dirt

Specifications of Squares:

Beam	Blade
1-15/16"	2-15/16"
1-1/8"	1-9/16"
3/4"	1"

Description	Included	Code No.
Die Maker's Square Set	3 beveled edge squares, 1 triangular straight edge	**7606670**

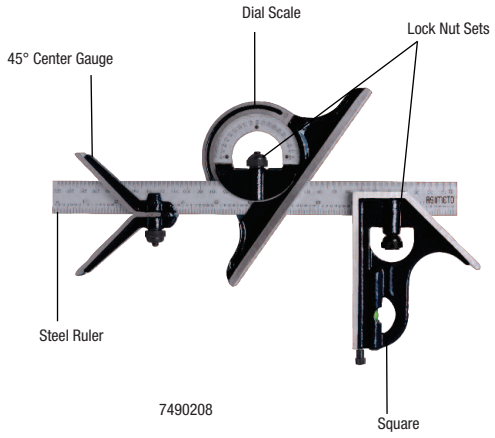
Telescoping Gauges

- Spring-loaded plunger expands within the bore (or groove), allowing determination of the internal diameter
- With a knurled clamp

	Inch				
Model	**Range**	**Depth**	**Code No.**	**Depth**	**Code No.**
A	5/16" - 1/2"	4.2"	**7487011**	12"	**7487013**
B	1/2" - 3/4"	4.4"	**7487021**	12"	**7487023**
C	3/4" - 1-1/4"	4.4"	**7487031**	12"	**7487033**
D	1-1/4" - 2-1/8"	5.85"	**7487041**	12"	**7487043**
E	2-1/8" - 3-1/2"	5.85"	**7487051**	12"	**7487053**
F	3-1/2" - 6"	5.85"	**7487061**	12"	**7487063**
SETS					
6 pcs (A, B, C, D, E, F)	5/16"-6"		**7487869**		

Combination Square Sets

- Graduation:
  Protractor: 1°
  Blade: E/M 1mm, 64ths, 32nds, 1/2mm
  : 4R 8ths, 16ths, 32nds, 64ths
- Blades are hardened and tempered for durability
- Square head has level and pointed attachment for hand scribing
- Micro-fine blade graduations
- Gauge heads are hardened cast finished in baked enamel with exception of the measurement faces



Description	Blade Length	Code No.
4 pc Set (With E/M ruler)	12"/300mm	**7490208**
4 pc Set (With 4R ruler)	12"	**7490218**

Description	Code No.
45º Centre Gauge	**7490250**
Dial Scale Protractor Head	**7490260**
Square Head	**7490270**
Lock Nut Set	**7490220**
12” Steel Rule - 4R	**7490210**
12”/300mm Steel Rule - E/M	**7910051**

Thread Pitch Gauges

7605520

- Each individual gauge is stamped with the thread pitch size
- See chart below for different thread forms

Metric Screw Pitch Gauges (60°)

Range	No. of Leaves	Composition of Leaves	Code No.
0.25 - 2.5mm	28	0.25 - 0.90mm by 0.05mm , 1 - 2mm x 0.1mm step , plus 1.25, 1.75, 2.5mm	**7605500**
0.35 - 6mm	22	0.35, 0.4, 0.45, 0.5, 0.6, 0.7, 0.75, 0.8, 1, 1.25, 1.5, 1.75, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6mm, and 60° angle gauge	**7605510**
0.4 - 7mm	21	0.4, 0.5, 0.7, 0.75, 0.8, 0.9, 1, 1.25, 1.5, 1.75, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7mm	**7605520**
0.4 - 7mm	18	0.4, 0.5, 0.75, 1, 1.25, 1.5, 1.75, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7mm	**7605530**

Unified Screw Pitch Gauges (60°)

Range	No. of Leaves	Composition of Leaves	Code No.
4 - 42 TPI	30	4, 4-1/2, 5, 5-1/2, 6, 7, 8, 9, 10, 11, 11-1/2, 12, 13, 14, 15, 16, 18, 20, 22, 24, 26, 27, 28, 30, 32, 34, 36, 38, 40, 42 TPI	**7605502**
4 - 84 TPI	51	4, 4-1/2, 5, 5-1/2, 6, 7, 8, 9, 10, 11, 11-1/2, 12, 13, 14, 15, 16, 18, 20, 22, 24, 26, 27, 28, 30 - 84 by 2 , TPI	**7605512**

Metric and Unified Screw Pitch Gauges (60°)

Range	No. of Leaves	Composition of Leaves	Code No.
0.4 - 7mm 4 - 42 TPI	51	7605520 and 7605502	**7605508**

Digital Protractors - Level Type

- This protractor provides an immediate digital reading of any angle in a full circle with 0°-90°-0°-90°-0° readings. The machined Aluminum frame is rigid and light with a precise platform that allows the sensor and its microprocessor circuit to provide high accuracy throughout the entire 360° range
- Four 90° quadrants for display purposes
- Calibrates in minutes without any special fixtures
- HOLD button for freezing a reading in an unreadable position
- ZERO button allows 2 measuring modes, Standard and Alternate Reference
- V-grooves on top and bottom for use on curved surfaces
- Angle displayed upright regardless of protractor position
- Item 7490162 comes with magnet on base, which is helpful for fixing

7490160

Battery

STANDARD ACCESSORIES

- CR2032 Battery, Warranty Card, Instruction Manual

Code No.	7490160 / 7490162
Range	360°
Resolution	0.1°
Operating Temp. Range	23°F-122°F/-5°C-50°C
Power	3V, Lithium cell
Accuracy	±0.1°
Size	152x63.8x60mm
Weight	343g

Precision Parallel Sets

- Hardened and ground high grade alloy steel
- Hardness 52-58 HRC
- 6" length
- Height specifications consistent within each pair
- Absolute heights are nominal
- Supplied in durable molded plastic case

7607080

	Description	Thickness	Parallelism	Paired Accuracy	Width Accuracy	Length Accuracy	Code No.
8 Pair Parallel Set	7/8" to 1-3/4" in 1/8" increments	1/2"	±0.0003"	±0.0003"	±0.0008"	±0.0006"	**7607080**
9 Pair Parallel Set	3/4" to 1-3/4" in 1/8" increments	1/4"	±0.0002"	±0.0002"	±0.0008"	±0.0006"	**7607090**
10 Pair Parallel Set	1/2" to 1-5/8" in 1/8" increments	1/8"	±0.0002"	±0.0002"	±0.0008"	±0.0006"	**7607100**
10 Pair Parallel Set	1/2" to 1-5/8" in 1/8" increments	1/32"	±0.0002"	±0.0002"	±0.0008"	±0.0006"	**7607101**

Ultra Precision Wavy Parallel Set

- Made of high quality spring steel, hardened, stress relieved, and precision ground
- Parallel within ±0.0002", paired ±0.0002"
- Includes 9 pairs 4-1/4" long with the following heights: 1/2, 5/8, 3/4, 7/8, 1, 1-1/8, 1-1/4, 1-3/8, 1-1/2"
- Shims can be compressed, which proves useful in the holding of thin parts

Description	Code No.
Ultra Precision Wavy Parallel Set	**7607660**

ASIMETO

Rectangular Gauge Block Sets

- Individual serial numbers on each block, regardless of grade
- A complete certificate of calibration traceable to the N.I.S.T. or P.T.B. showing the deviation of each block
- Mirror polished surfaces provide superior wringing characteristics

Inch

				Steel
Blocks Per Set	**Blocks Included In Set**	**Grade**	**Former Grade**	**Code No.**
81 (ASME)	1 Block: 0.050" 10 Blocks: 0.1000"- 0.1009" x 0.0001" step 49 Blocks: 0.101"- 0.149" x 0.001" step 17 Blocks: 0.150"- 0.950" x 0.050" step 4 Blocks: 1.000"-4.000" x 1.000" step	0	2	**7650010**
		AS-1	3	**7650011**
		AS-2	B	**7650012**
36 (ASME)	1 Block: 0.050" 10 Blocks: 0.1000"- 0.1009" x 0.0001" step 9 Blocks: 0.101"- 0.109" x 0.001" step 9 Blocks: 0.110"- 0.190" x 0.010" step 4 Blocks: 0.200"- 0.500" x 0.100" step 3 Blocks: 1", 2", 4"	0	2	**7650020**
		AS-1	3	**7650021**
		AS-2	B	**7650022**

Metric 1 mm base set

			Steel
Blocks Per Set	**Blocks Included In Set**	**Grade**	**Code No.**
88 (ASME / DIN /JIS / GB)	1 Blocks: 1.0005mm 9 Blocks: 1.001- 1.009mm x 0.001mm step 49 Blocks: 1.01- 1.49mm x 0.01mm step 19 Blocks: 0.5 - 9.5mm x 0.5mm step 10 Blocks: 10 - 100mm x 10mm step	1	**7650181**

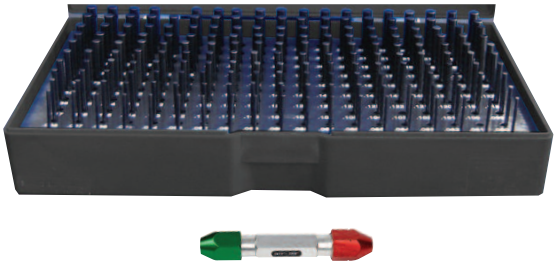
Precision Inspection Gauge Ball Sets

- Meets all grade 25 AFBMA standards
- Chrome alloy steel, hardened to 63 HRC
- Surface finish to 1.5 micro-inches
- Within 0.0001"/0.0025mm of actual size
- Spherical accuracy within 0.000025"/0.0006 mm

7679901

	Quantity	Description	Code No.
Ball Set - Inches	26 Pair	1/8"-5/32"x64ths, 3/16"-3/4"x32nds, 13/16"-1"x16ths	**7679901**
Ball Set - Metric	25 Pair	1mm to 25 mm in 1 mm increments	**7679900**

Pin Gauge Sets



- For quick and accurate measurements. Measure hole sizes, slot widths, calculate distances between holes, use as Go/NoGo gauging, etc.
- Each set includes pin gauge holder
- Furnished in attractive molded plastic case
- Class ZZ guaranteed to 0.0002"/0.005 mm tolerance limit
- Inspected with equipment which has been calibrated and is traceable to NIST
- Marked with size and direction of tolerance on gauge over 0.060"/1.5 mm
- Hardened drill rod 60-62 HRC, 2 inches long
- 10 micron finish or better
- Black Oxide coating prevents corrosion and shows gauge wear
- Certificate of accuracy included

			Accuracy: +0.0002" -0"	Accuracy: -0.0002" +0"
Qty	Range	Surface	Code No.	Code No.
50	0.011" - 0.060" x 0.001" step	Bright Finish	**7697010**	**7697012**
190	0.061" - 0.250" x 0.001" step	Bright Finish	**7697020**	**7697022**
250	0.251" - 0.500" x 0.001" step	Bright Finish	**7697030**	**7697032**
125	0.501" - 0.625" x 0.001" step	Bright Finish	**7697040**	**7697042**
125	0.626" - 0.750" x 0.001" step	Bright Finish	**7697050**	**7697052**

Pin Gauge Handles

- Comfortable, ergonomically designed handle for pin gauge
- Can be used with GO pin (green) on one end, NO GO pin (red) on opposite end

Gauge Size Range	Code No.
0.011" - 0.060"	**7697410**
0.061" - 0.250"	**7697411**
0.251" - 0.500"	**7697412**
0.501" - 0.625"	**7697413**
0.626" - 0.750"	**7697414**

Thread Measuring Wire Set

- 48 wires — 16 different sizes
- Measures all threads from 3 - 48 threads per inch
- Measures all metric threads from 0.5 mm to 6 mm
- Also measures ACME threads
- Laminated chart included

Description	Code No.
Thread Measuring Set	**7697300**

ASIMETO

Rockwell Type Hardness Tester

- For testing the hardness of various materials to determine the Rockwell hardness to scales A, B, and C
- Unit is designed with mechanical loads for precise hardness readings
- Conforms to the requirements of ASTM E18, ISO 6508-2, and GB/T 230.2 standards
- Readings provided to a minimum resolution 0.5HR

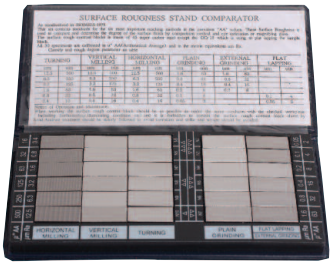
STANDARD ACCESSORIES

• Diamond cone penetrator	1 pc
• V-notch anvil	1 pc
• Small flat anvil	1 pc
• Large flat anvil	1 pc
• Rockwell standard	5 pcs
• 1/16" steel ball penetrator	1 pc
• Instruction manual	1 pc

Range	Test Force	Test Height	Throat Depth	Code No.
20-88HRA, 20-100HRB, 20-70HRC	588.4, 980.7, 1471N (60, 100, 150kgf)	170mm	135mm	**7640010**

Surface Roughness Standards Set

- Set of 30 specimens, 7/8" x 3/8" electro formed, solid nickel
- Used for the visual comparison of surface roughness



Code No.		7506010
Qty.	**Contents**	**Roughness**
2 pcs	Flat Lapping	0.05; 0.1µm (2; 4µ")
4 pcs	Reaming	0.2; 0.4; 0.8; 1.6µm (8; 16; 32; 63µ")
6 pcs	Grinding	0.05; 0.1; 0.2; 0.4; 0.8; 1.6µm (2; 4; 8; 16; 32; 63µ")
6 pcs	Horizontal Milling	0.4; 0.8; 1.6; 3.2; 6.3; 12.5µm (16; 32; 63; 125; 250; 500µ")
6 pcs	Vertical Milling	0.4; 0.8; 1.6; 3.2; 6.3; 12.5µm (16; 32; 63; 125; 250; 500µ")
6 pcs	Turning	0.4; 0.8; 1.6; 3.2; 6.3; 12.5µm (16; 32; 63; 125; 250; 500µ")

Impact Hardness Tester

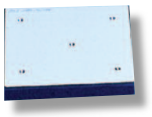
- Large screen (128×64 dot matrix LCD), allows for clear display of all functions and parameters
- Hardness test can be taken at any angle including inverted
- A wide measuring range supports the hardness of all metallic materials. Hardness results are directly displayed in HRB, HRC, HV, HB, HS, HL hardness scales
- Six impact devices are available for special application with automatic impact device recognition
- Diameter of carbide ball: 3mm
- Large capacity memory storage of 500 sub groups. Stored information including single measured value, mean value, test data, impact direction, impact times, material, and hardness scale are available
- Five languages are supported: English, French, German, Italian, and Spanish
- Upper and lower limit can be preset. An audio alarm will automatically sound when the reading is outside of the preset limits
- Battery voltage information is displayed including the charge status
- Calibration function is available
- USB1.1 port allows for information to be uploaded directly to a PC
- High speed thermal printer allows for the readings to be immediately printed
- 6V Ni-MH rechargeable battery are supplied. The batteries can be charged with the integrated charger. Up to 150 hours of continuous operation battery life between charges (eL off and no printing)
- Automatic power off after five minutes

STANDARD ACCESSORIES

• Impact device	1 pc
• Hardness test block	1 pc
• Small support ring	1 pc
• Cleaning brush	1 pc
• Battery charger	1 pc
• Paper for printing	1 pc
• Manual	1 pc
• DataPro software	1 pc
• Communication cable	1 pc

Range	Accuracy	Application Range	Impact Devices	Impact Capacity	Code No.
(170-960) HLD (17-68.5) HRC (19-651) HB	HLD: ±5 HRC: ±1 HB: ±4	Test normal smooth, flat surfaces	D	11 Nmm	**7640171**

Hardness Test Block



Description	Range of Hardness	Dimension	Weight	Code No.
Rockwell Standardized Block	80 - 88 HRA 85 - 95 HRB 20 - 30 HRC 35 - 55 HRC 60 - 70 HRC	60 x 40 x 10mm (2.36 x 1.57 x 0.39")	0.19kg	**7640810**

Hardness Tester Penetrator Sets

7640830

Description	Specification	Code No.
Penetrators for Rockwell Hardness Tester	120° diamond cone penetrator Ø1.588mm (1/16") steel ball penetrator	**7640830**
Penetrators for Brinell Hardness Tester	Ø2.5, 5, 10mm tungsten carbide ball penetrators	**7640840**

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SOWA METALWORKING SOLUTIONS

Sowa Tool & Machine Co. Ltd.
500 Manitou Drive
Kitchener, Ontario
N2C 1L3

Western Canada Branch
9649-49th Ave
Edmonton, AB
T6E 5Z5

Ohio Branch
416 W. Dussel Drive
Maumee, Ohio
43537

Toll Free: 1-800-265-8221
Phone: (519) 748-5750
Fax: (519) 748-9304
sales@sowatool.com
www.sowatool.com

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