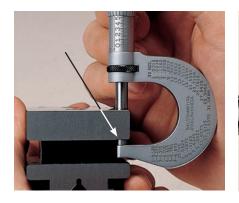
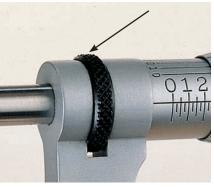


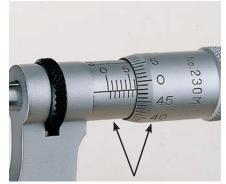
STARRETT RELIABLE PRECISION MICROMETER DESIGN AND MANUFACTURING FEATURES



Tapered frame – a Starrett original feature – permits measurements in narrow slots and tight places. Standard with Starrett.



Ring-type lock nut convenient to use. Permits locking of spindle at any reading.



Easy to read with distinct black figures against satin-chrome finish.



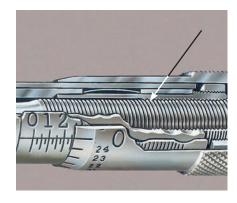
Staggered graduations, advanced design, a Starrett original feature. Quick reading figures on inch reading micrometers. Every graduation numbered for quick, positive identification. Easy to read with distinct black figures against satin-chrome finish.



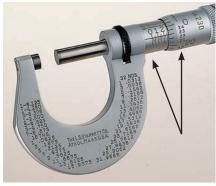
Staggered graduations, advanced design, a Starrett original feature. Quick reading figures on inch reading dent of "feel."



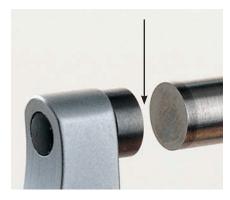
Ratchet stop/speeder for consistent measurements and to speed opening or closing of tool.



Extra Hard Threads with Extreme Lead Accuracy. Special high carbon steel gives harder threads which are hardened, stabilized, and precision ground from the solid to ensure long and accurate life.



Balanced design; plus no-glare satin chrome finish makes the tool easy to hold and read, as well as resistant to stains, corrosion and wear.



Micro-Lapped "Mirror" Finish on the measuring faces – a Starrett original feature that ensures more accurate measurements. Available with carbide faces or hardened, high-carbon steel faces.



MICROMETER QUALITY AND ACCURACY

Product quality and accuracy cannot be valid unless referenced to a quality and accuracy standard.

All Starrett precision measuring tool standards meet or exceed accuracy and performance specifications of national and international standards and are traceable to the National Institute of Standards and Technology.

The Starrett Company does not rely on statistical sampling inspection. Every precision measuring tool is individually inspected.

All Starrett micrometers have the same accurate heads as outlined in the chart. Inaccuracies because of size can be minimized if the tools are set accurately to standard, and measurements are carried out in a similar position with similar pressure.

How to Adjust Starrett Micrometers

Adjustments to Starrett Micrometers are rarely needed; however, if it becomes necessary, they can be readily adjusted in two easy operations as follows:



1. If any play should develop in the spindle screw threads due to wear of the spindle nut after long use, first back off the thimble, insert the spanner wrench in the slot of the adjusting nut and tighten just enough to eliminate play. Illustration shows how easily this is done.



2. After carefully cleaning all dirt or grit from the measuring faces of anvil and spindle, bring them together and insert the spanner wrench in the small slot of the sleeve. Then turn the sleeve until the line on the sleeve coincides with the zero line on the thimble as shown.

Starrett Micrometer Accuracy Standards (Unless Otherwise Noted on the Catalog Page)

туре	Kange	Readout	Accuracy			
	1"	.001"	±.0001"			
Mechanical	1"	.0001"	±.00005"			
Wechanical	25mm	0.01mm	±0.002mm			
	25mm	0.001mm	±0.002mm			
Flootronio	1"	.00005"	±.0001"			
Electronic	25mm	0.001mm	±0.002mm			
Key to Starrett Micrometer Numbering System						

Prefixes Reverse Reading S Micrometer Set Τ .0001" Reading ٧ 0.001mm or 0.002mm Reading, as specified Suffixes F Friction Thimble L Lock Nut M Metric Ν Non-Rotating Р Plain R Ratchet Stop S Speeder TN Threaded Hub and Check Nut W/SLC Standard Letter of Certification Χ Micro-lapped Carbide Measuring Faces Ζ With Case ZZ Case Only

MEASURING TIPS FROM OUR EXPERIENCE

- Most obvious to everyone is to keep the work to be measured and the micrometer anvil and spindle faces clean.
- For very fine measurements, the micrometer should be set to zero or to a standard by your "feel", by the friction thimble, or by the ratchet, whichever you will be using.
- The most popular micrometer option has been the ratchet speeder because it does three things well: it speeds opening and closing, it applies uniform pressure from the ratchet, and it allows for using the thimble for individual "feel".
- The speeder is helpful because it takes forty turns to cover the range of a typical English-reading tool and fifty turns to cover the range of a metric-reading tool.
- Large micrometers especially should be set to a standard in the same approximate position in which they will be used, that is, vertical or horizontal, to minimize any frame flexure influence.

- Too much speed in approaching the work will result in an inaccurate measurement.
- If the micrometer has been set to a flat standard, you can get approximately .0001" (0.0025mm) difference when measuring over a round because the same pressure is being applied to a point or line contact.
- Carbide or hardened steel measuring faces are a matter of choice. Carbide wears longer but many craftsmen think they get a better "feel" with highly finished steel measuring surfaces.
- Insulating pads on micrometers are a matter of personal preference. With the Starrett balanced micrometer design, there is no need for insulation. Insulation from hand heat is usually more beneficial on long sections, such as end measuring rods.



HOW TO READ A STARRETT MICROMETER

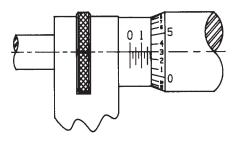
GRADUATED IN THOUSANDTHS OF AN INCH .001"

The pitch of the screw thread on the spindle is 40 threads per inch. One revolution of the thimble advances the spindle face toward or away from the anvil face precisely 1/40" or .025 inches.

The reading line on the sleeve is divided into 40 equal parts by vertical lines that correspond to the number of threads on the spindle. Therefore, each vertical line designates 1/40" or .025 inches. Lines vary in length for easy reading. Every fourth line, which is longer than the others, designates a hundred thousandth. For example: the line marked "1" represents .100" and the line marked "2" represents .200", etc.

The beveled edge of the thimble is divided into 25 equal parts with each line representing .001" and every line numbered consecutively. Rotating the thimble from one of these lines to the next moves the spindle longitudinally 1/25 of .025", or .001". Rotating two divisions represents .002", etc. Twenty-five divisions indicate a complete revolution of .025" or 1/40 of an inch.

To read the micrometer in thousandths, multiply the number of vertical divisions visible on the sleeve by .025", and to this add the number of thousandths indicated by the line on the thimble which coincides with the reading line on the sleeve.





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LARIVII EL.	
The "1" line on sleeve is visible, representing	.100"
There are 3 additional lines visible,	
each representing .025"; 3 x .025"	= .075
Line "3" on the thimble coincides with the reading line on the sleeve,	
each line representing .001"; 3 x .001"	= <u>.003"</u>
The micrometer reading is	178"

GRADUATED IN TEN-THOUSANDTHS OF AN INCH .0001"

Starrett micrometers graduated in ten-thousandths of an inch read like micrometers graduated in thousandths, except that an additional reading in ten-thousandths is obtained from a vernier scale on the sleeve.

The vernier consists of ten divisions on the sleeve, which occupy the same space as nine divisions on the thimble (Fig. B). Therefore, the difference between the width of one of the ten spaces on the vernier and one of the nine spaces on the thimble is one-tenth of a division on the thimble, or one ten-thousandth (.0001").

To read a ten-thousandths micrometer, first obtain the thousandths reading, then see which of the lines on the vernier coincides with a line on the thimble. If it is the line marked "1" on the sleeve, add one ten-thousandth, if it is the line marked "2", add two ten-thousandths, etc.

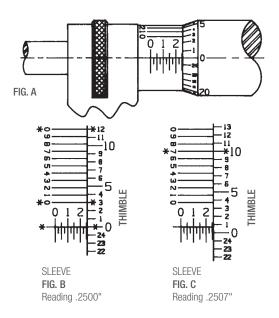


FIGURE C - READING .2507"

The "2" line on sleeve is visible, representing	.200"
There are two additional lines visible, each representing .025"	.050"
The reading line on the sleeve lies between the "0" and "1" on the thimble indicating that a vernier reading must be added	
The "7" line is the only line on the vernier that coincides with a line on	
the thimble, representing 7 x .0001"	= $.0007''$
The micrometer reading is	.2507"





GRADUATED IN HUNDREDTHS OF A MILLIMETER

0.01MM

The screw head pitch is one-half millimeter (0.5mm). One revolution of the thimble advances the spindle face toward or away from the anvil face precisely 0.5mm.

The reading line on the sleeve is graduated above the line in millimeters (1.0mm) with every fifth millimeter being numbered. Each millimeter is also divided in half (0.5mm) below the reading line. Two revolutions of the thimble to advances the spindle 1.0mm.

The beveled edge of the thimble is divided into fifty equal parts, with each line representing 0.01mm and every fifth line being numbered. Rotating the thimble from one of these lines to the next moves the spindle longitudinally 0.01mm; rotating two divisions represents 0.02mm, etc.

To read the micrometer, add the number of millimeters and half-millimeters visible on the sleeve to the number of hundredths of a millimeter indicated by the thimble graduation indicated by the reading line.

GRADUATED IN TWO-THOUSANDTHS OF A MILLIMETER

0.002MM

Metric vernier micrometers graduated in 0.002mm are used like those graduated in hundredths of a millimeter (0.01mm), except that an additional reading in two-thousandths of a millimeter (0.002mm) is obtained from a vernier scale on the sleeve.

The vernier consists of five divisions on the sleeve, which occupy the same space as nine divisions on the thimble (Fig. B). Therefore, the difference between the width of one of the five spaces on the vernier and one of the nine spaces on the thimble is one-fifth or two-tenths of a division on the thimble, or two-thousandths (0.002mm).

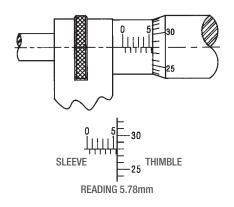
To read a 0.002mm micrometer, first obtain the hundredth of a millimeter (0.01mm) reading, then see which of the lines on the vernier coincides with a line on the thimble. If it is the line marked "2" add 0.002mm, if it is the line marked "4" add 0.004mm, etc.

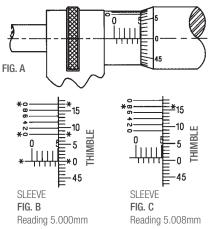
GRADUATED IN ONE-THOUSANDTH OF A MILLIMETER 0.001MM

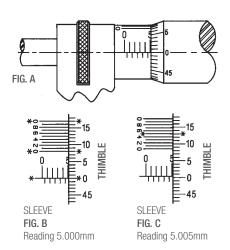
Reading a 0.001mm micrometer is exactly like reading a 0.002mm micrometer except that there are ten divisions on the vernier occupying the same space as nine divisions on the thimble (Fig. B). Therefore, the difference between the width of one of the spaces on the vernier and one of the nine spaces on the thimble is one-tenth of a division on the thimble, or one-thousandth (0.001mm).

First obtain the hundredth of a millimeter (0.01mm) reading. Next, see which of the lines on the vernier coincides with a line on the thimble. If it is the first line add

0.001mm to the reading, if it is the second line add 0.002mm, etc. Only every second vernier line is numbered on a 0.001mm reading tool because of space congestion.







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EXAMPLE.	
The 5mm sleeve graduation is visible	5.00mm
One additional 0.5mm line is visible on	
the sleeve	0.50mm
Line 28 on the thimble coincides with the	
reading line on the sleeve, so	
28 x 0.01mm	= <u>0.28mm</u>
The micrometer reading is	5.78mm

FIGURE C - READING 5.008mm

The 5mm sleeve graduation is visible	5.000mm
No additional lines on the sleeve	
are visible	0.000mm
The reading line on the sleeve lies between	
zero and the first line on the thimble,	
indicating that a vernier reading must	
be aded	
Line 8 on the vernier is the only line that	<u>0.008mm</u>
coincides with a line on the thimble	
The micrometer reading is	5.008mm

FIGURE C - READING 5.005mm

1	The 5mm sleeve graduation is visible,	
	representing	5.000mm
1	No additional lines on the sleeve are visible	0.000mm
	The reading line on the sleeve lies between	
	zero and the first line on the thimble,	
	indicating that a vernier reading must be	
-	added	
1	Line 5 on the vernier is the only line that	
	coincides with a line on the thimble	0.005mm
1	The micrometer reading is	5.005mm



ELECTRONIC MICROMETERS

795 ELECTRONIC MICROMETERS (WITH OUTPUT)



0-4"/0-100MM

796 ELECTRONIC MICROMETERS (WITHOUT OUTPUT)



0-4"/0-100MM

795 and 796 Electronic Micrometers provide an IP67 level of protection against coolant, water, chips, dirt, dust, and other contaminants in hostile shop environments.

The 795 includes an RS232 output port for data transmission and works well with Starrett DataSure® Wireless Data Collection Systems. The 796 has all of the features of the 795 except that is does not include output.

These full-featured electronic micrometers are built with customary Starrett quality and workmanship.

The family of 795 and 796 Electronic Micrometers are now available with measuring capacities to 4" (100mm).

FEATURES AND SPECIFICATIONS

- Large, easy-to-read (.275"/7mm), high-contrast LCD digital readout
- IP67 level of protection against coolant, water, dust and dirt
- Starrett no-glare satin chrome finish on thimble and sleeve
- Balanced, tapered frame for comfortable and accurate measuring
- Extremely hard, and stable one piece spindle, the heart of our accuracy and smooth operating onepiece friction thimble
- Two 3-volt batteries included for more than one year of normal usage
- Automatic OFF after 20 minutes of nonuse
- Inch/millimeter conversion
- Measurement HOLD button
- Ability to zero tool at any position as well as retain and return to the true zero reading of the micrometer
- Resolution: .00005" (0.001mm)
- Accuracies: ±.0001" (±.002mm)
- 795 Micrometers include RS232 output
- Output data to Starrett SPC Plus hardware and software and to PCs
- Works well with Starrett DataSure Wireless Data Collection Systems









Friction Thimble, Spindle Loc Thimble Inch Grads.		ndle Lock, Shell and	e Lock, Shell and Ratchet Stop, Lock Nut, Sh Inch Grads.			Friction Thimble, Spindle Lock, Shell and Thimble Metric Grads.	
Range	Cat. No.	EDP	Cat. No.	EDP	Cat. No.	EDP	
0-1" and 0-25mm	795XFL-1	67827	795XRL-1	69085	795MEXFL-25	69077	
1-2" and 25-50mm	795XFL-2	69074	795XRL-2	69086	795MEXFL-50	69078	
2-3" and 50-75mm	795XFL-3	69075	795XRL-3	69087	795MEXFL-75	69079	
3-4" and 75-100mm	795XFL-4	69076	795XRL-4	69088	795MEXFL-100	69080	
796 Electronic Micro	ometers without outpu	t					
0-1" and 0-25mm	796XFL-1	67828	796XRL-1	69089	796MXFL-25	69084	
1-2" and 25-50mm	796XFL-2	69081	796XRL-2	69090			
2-3" and 50-75mm	796XFL-3	69082	796XRL-3	69091			
3-4" and 75-100mm	796XFL-4	69083	796XRL-4	69092			
795 Electronic Micro	ometer Accessories						
1m Shielded Cable to	Starrett 795	PT62680-1	62021				
2m Shielded Cable to	Starrett 795	PT62680-2	62022				
3m Shielded Cable to	Starrett 795	PT62680-3	62023				
Adaptor from PT6268 PT62680-3 to PC (RS		PT61768	66454				
DataSure® End Node		1500-3A-2N	12531				
Two 3-volt Batteries, 0	CR2032	PT99492	65650				
Sets							
Range		Cat. No.	EDP	Description			
0-3" and 0-75mm		S795AXFLZ	69910	Electronic Micrometer	Set, includes 795XFL-1	, 795XFL-2 and 795XF	
0-4" and 0-100mm		S795BXFLZ	69911	Electronic Micrometer 795XFL-4	Set, includes 795XFL-1	, 795XFL-2, 795XFL-3	
0-3" and 0-75mm		S796AXRLZ	69912	Electronic Micrometer	Set, includes 796XRL-1	, 796XRL-2 and 796XF	
0-4" and 0-100mm		S796BXRLZ	69913	Electronic Micrometer and 796XRL-4	Set, includes 796XRL-1	, 796XRL-2, 796XRL-3	

All 795 and 796 Micrometers include a protective case. All except 1" and 0-25mm sizes furnished with standards.



IP PROTECTION

An IP number is composed of two numbers, the first referring to protection against solid objects and the second against liquids.

First number 6: Totally protected against dust

Second number 7: Protection against submersion in water under standardized conditions of pressure for 30 minutes

All 795 and 796 Micrometers include IP67 protection





ELECTRONIC MICROMETERS

3732 ELECTRONIC MICROMETERS (WITHOUT OUTPUT)

0-6"/0-150MM

The 3732 Electronic Micrometer is a full-featured precision measuring tool built with customary Starrett quality and workmanship. The 3732 includes a large, easy-to-read, high contrast LCD digital readout for clear readings. With its automatic OFF functionality, smooth friction thimble for uniform pressure, and balanced frame design, the 3732 provides comfortable and accurate measuring.

EDP			Resolutio	11	Accuracy	
	Inch	Approx. mm	Inch	mm	Inch	mm
12268	0-1"	0-25.4	0.00005	0.001	± 0.0001	± 0.002
12269	1-2"	25.4-50.8	0.00005	0.001	± 0.0001	+ 0.003
12270	2-3"	50.8-76.2	0.00003	0.001	± 0.0001	± 0.003
12271	3-4"	76.2-101.6	0.00005	0.001	$\pm~0.00015$	± 0.004
12272	4-5"	101.6-127	0.0001	0.001	. 0.00015	+ 0.004
12273	5-6"	127-152.4	0.0001	0.001	± 0.00013	± 0.004
Microme	ter Sets w	ithout Output				
12726	0-1" to 3-4"	0-25.4 to 76.2- 101.6	0 to 4 Inch Set of Four Micrometers in metal case			
12727	0-1" to 5-6"	0-25.4 to 101.6- 152.4	0 to 6 Incl case	n Set of Six	Micrometers	in metal
Microme	ters witho	ut Output				
EDP	mm	Approx. Inch	mm	Inch	mm	Inch
12274	0-25	0984	0.001	0.00005	± 0.002	± 0.000
12275	25-50	.984-1.968	0.001	0.00005	. 0.002	+ 0.000
12276	50-75	1.968-2.953	0.001	0.00003	± 0.003	± 0.000
12277	75-100	2.953-3.937	0.001	0.00005	± 0.004	± 0.000
12278	100-125	3.937-4.921	0.001	0.0001	+ 0.004	+ 0.000
12279	125-150	4.921-5.905	0.001	0.0001	⊥ 0.004	± 0.000
Accesso	ries					
	12270 12271 12272 12273 Microme 12726 12727 Microme EDP 12274 12275 12276 12277 12278 12278	12270 2-3" 12271 3-4" 12272 4-5" 12273 5-6" Micrometer Sets w 12726 0-1" to 3-4" 12727 0-1" to 5-6" Micrometers witho EDP mm 12274 0-25 12275 25-50 12276 50-75 12277 75-100 12278 100-125 12279 125-150 Accessories	12270 2-3" 50.8-76.2 12271 3-4" 76.2-101.6 12272 4-5" 101.6-127 12273 5-6" 127-152.4 Micrometer Sets without Output 12726 0-1" to 3-4" 101.6 12727 0-1" to 5-6" 0-25.4 to 76.2-152.4 Micrometers without Output 12727 0-1" to 5-6" 0-25.4 to 101.6-152.4 Micrometers without Output EDP mm Approx. Inch 12274 0-25 0984 12275 25-50 .984-1.968 12276 50-75 1.968-2.953 12277 75-100 2.953-3.937 12278 100-125 3.937-4.921 12279 125-150 4.921-5.905	12270 2-3" 50.8-76.2 0.00005 12271 3-4" 76.2-101.6 0.00005 12272 4-5" 101.6-127 0.0001 12273 5-6" 127-152.4 0.0001 12726 0-1" to 0-25.4 to 76.2- 0 to 4 Inclease 12727 0-1" to 0-25.4 to 101.6- 0 to 6 Inclease 12727 0-6" 152.4 0.001 12727 0-1" to 0-25.4 to 101.6- 0 to 6 Inclease 12727 0-1" to 0-25.4 to 101.6- 0 to 6 Inclease 12727 0-1" to 0-25.4 to 101.6- 0 to 6 Inclease 12727 0-1" to 0-25.4 to 101.6- 0 to 6 Inclease 12727 0-1" to 0-25.4 to 101.6- 0 to 6 Inclease 12727 0-1" to 0-25.4 to 101.6- 0 to 6 Inclease 12227 0-25 0-984 0.001 12227 0-25 0-984 0.001 12227 0-25 0-984-1.968 12227 0-25 0.984-1.968 12227 0-25 0.984-1.968 12227 0-25 0.984-1.968 12227 0-25 0.984-1.968 12227 0-25 0.984-1.968 12227 0-25 0.984-1.968 12227 0-25 0.001 12228 0-25-150 0.993-3.937 12229 0.001 12229 0.001	12270 2-3" 50.8-76.2 0.00005 0.001 12271 3-4" 76.2-101.6 0.00005 0.001 12272 4-5" 101.6-127 0.0001 0.001 12273 5-6" 127-152.4 0.0001 0.001 12726 0-1" to 0-25.4 to 76.2- 0 to 4 lnch Set of Foliage Case 101.6 0.001 12727 0-1" to 0-25.4 to 101.6 0 to 6 lnch Set of Six case 152.4 0.001 12727 0-1" to 0-25.4 to 101.6 0 to 6 lnch Set of Six case 152.4 0.001 12727 0-1" to 0-25.4 to 101.6 0 to 6 lnch Set of Six case 152.4 0.001 12727 0-1" to 0-25.4 to 101.6 0 to 6 lnch Set of Six case 152.4 0.001 12727 0-1" to 0-25.4 to 101.6 0 to 6 lnch Set of Six case 152.4 0.001 12278 10-25 0-984 0.001 0.00005 12276 50-75 1.968-2.953 0.001 0.00005 12277 75-100 2.953-3.937 0.001 0.00005 12278 100-125 3.937-4.921 0.001 0.0001 Accessories	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

FEATURES AND SPECIFICATIONS

- Automatic OFF after 30 minutes of nonuse
- .250" (6.35mm) spindle diameter
- No-glare black wrinkle finish on frame
- No-glare satin chrome finish on thimble and sleeve
- Ring-type knurled lock nut for quick and sure locking
- English/Metric models feature inch graduations on shell and thimble
- Metric/English (ME) models have mm graduations on shell and thimble
- Instant inch/millimeter conversion
- Measurement HOLD button
- Ability to zero tool at any position
- Ability to retain and return to the true zero reading of the micrometer
- PRESET button to install any reading at any position
- Includes one 3-volt battery for over one year of normal usage
- Includes fitted plastic case





ELECTRONIC MICROMETERS

733 ELECTRONIC MICROMETERS (WITH OUTPUT)

0-24"/0-600MM

- Same features as the 3732, plus output jack allows data transmission, either through a traditional wire or by connecting to a Starrett DataSure[®] Wireless Data Collection System end node
- Wide variety of sizes up to 24" with output

733 Electronic Micrometers with Standard Inch Graduations						
Range		Resolution				
Inch	Approx. mm	Inch	mm	Cat. No.	EDP	
0 1	0 - 25.4	.00005	0.001	733XFL-1	64239	
0 - 1	0 - 25.4	.00003	0.001	733XFL-1 W/SLC	66905	
1 - 2	25.4 - 50.8			733XFLZ-2	64241	
2 - 3	50.8 - 76	.00005	0.001	733XFLZ-3	64242	
3 - 4	76 - 101			733XFLZ-4	64243	
4 - 5	101 - 127	.0001	0.001	733XFLZ-5	64244	
5 - 6	127 - 152	.0001	0.001	733XFLZ-6	64245	
6 - 7	152 - 178			733XFLZ-7	64246	
7 - 8	178 - 203			733XFLZ-8	64247	
8 - 9	203 - 228			733XFLZ-9	64248	
9 - 10	228 - 254			733XFLZ-10	64249	
10 - 11	254 - 279			733XFLZ-11	64250	
11 - 12	279 - 305			733XFLZ-12	64251	
12 - 13	305 - 330			733XFLZ-13	64415	
13 - 14	330 - 355			733XFLZ-14	64416	
14 - 15	355 - 381	.0001	0.001	733XFLZ-15	64417	
15 - 16	381 - 406	.0001	0.001	733XFLZ-16	64418	
16 - 17	406 - 432			733XFLZ-17	64419	
17 - 18	432 - 457			733XFLZ-18	64420	
18 - 19	457 - 482			733XFLZ-19	64421	
19 - 20	482 - 508			733XFLZ-20	64422	
20 - 21	508 - 533			733XFLZ-21	64423	
21 - 22	533 - 559			733XFLZ-22	64424	
22 - 23	559 - 584			733XFLZ-23	64425	
23 - 24	584 - 609			733XFLZ-24	64426	

733 Electro	nic Micrometers wi	th Standa	rd Millime	eter Graduations	
Range		Resoluti	on		
mm	Approx. Inch	mm	Inch	Cat. No.	EDP
0 - 25	0984	0.001	.00005	733MEXFL-25	65440
25 - 50	.984 - 1.968			733MEXFLZ-50	65441
50 - 75	1.968 - 2.950	0.001	.00005	733MEXFLZ-75	66079
75 - 100	2.950 - 3.930			733MEXFLZ-100	66080
100 - 125	3.930 - 4.920	0.001	.0001	733MEXFLZ-125	66081
125 - 150	4.920 - 5.900	0.001	.0001	733MEXFLZ-150	66082
150 - 175	5.900 - 6.890			733MEXFLZ-175	66083
175 - 200	6.890 - 7.870			733MEXFLZ-200	66084
200 - 225	7.870 - 8.850			733MEXFLZ-225	66085
225 - 250	8.850 - 9.840			733MEXFLZ-250	66086
250 - 275	9.840 - 10.820			733MEXFLZ-275	66087
275 - 300	10.820 - 11.810			733MEXFLZ-300	66088
300 - 325	11.810 - 12.790			733MEXFLZ-325	66089
325 - 350	12.790 - 13.770			733MEXFLZ-350	66090
350 - 375	13.770 - 14.760	0.001	.0001	733MEXFLZ-375	66091
375 - 400	14.760 - 15.740	0.001	.0001	733MEXFLZ-400	66092
400 - 425	15.740 - 16.730			733MEXFLZ-425	66093
425 - 450	16.730 - 17.710			733MEXFLZ-450	66094
450 - 475	17.710 - 18.700			733MEXFLZ-475	66095
475 - 500	18.700 - 19.680			733MEXFLZ-500	66096
500 - 525	19.680 - 20.660			733MEXFLZ-525	66097
525 - 550	20.660 - 21.650			733MEXFLZ-550	66098
550 - 575	21.650 - 22.630			733MEXFLZ-575	66099
575 - 600	22.630 - 23.620			733MEXFLZ-600	66100

All except 1" and 0-25mm sizes furnished with standards.

ΔΙΙ	evcent	1"	Size	furnished	with	standards
MII	cycchr		2170	IUIIIISIICU	VVILII	stariuarus



733 Electronic Micrometer Accessories								
Description	Cat. No.	EDP						
Protective case for 733 Micrometers	957	66565						
Deluxe padded case for 25mm 733 Micrometers	949	63874						
Computer cable to PC	733SCKB	69888						
Cable to computer running SPC Data Collection Software	733SCU	69898						
Connection to 7612 or 7613 Multiplexier	733SCM	69893						
One 3-Volt Battery CR2450 for 733 Micrometers	PT61120	65446						

733 Micrometer Specifications					
Description	Inch	mm			
Resolution through 4" (100mm)	.00005"	0.001mm			
Resolution over 4" (100mm)	.0001"	0.001mm			
Accuracy*	±.0001"	±0.002mm			

^{*} Accuracies above 1" (25mm) are as good as setting to a gage because the mechanical and electronic components are the same on all ranges.





DIGITAL MICROMETERS

5216 DIGITAL MICROMETER SET

0-3"

Set of three digital micrometers – furnished with ratchet stop, lock nut, and standards, in case.

- Set consists of three micrometers: 0-1", 1-2", and 2-3"
- .001" is read directly from the counter
- .0001" is read from the sleeve
- Clear, easily read numbers
- Balanced frame design and extremely hard and stable one-piece spindle

S216 Digital Micrometer Set				
Cat. No.	EDP			
ST216AXRLZ	66526			



216, 216M DIGITAL MICROMETERS



0-12"/0-300MM

This is the 216 Mechanical Digital Micrometer – simple to use even by the inexperienced. The anvil and spindle are sized at .250" (6.35mm).

READABILITY FEATURES

- · Clear, easily read numbers reduce errors
- · No-glare black finish on the frame
- Starrett no-glare satin chrome finish on thimble and sleeve
- .001" or .01mm is read directly from the counter
- .0001" or .001mm is read from the vernier scale on the micrometer sleeve

EASE-OF-HANDLING FEATURES

- Balanced frame design for comfortable and accurate measuring
- Ring-type knurled lock nut for quick and sure locking
- A choice of smooth friction thimble for uniform pressure on the 1-4" sizes or the combination ratchet and speeder for uniform pressure and quicker adjustment on all sizes
- Gracefully designed tapered frame for use in narrow slots and tight places

ACCURACY AND LONG-LIFE FEATURES

Extremely hard and stable one-piece spindle (the heart of our accuracy)





216, 216M DIGITAL MICROMETERS

			Ratchet Stop and I	ock Nut	Friction Thimble a	nd Lock Nut	Plain	
Graduations	Range	Measuring Faces	Cat. No.	EDP	Cat. No.	EDP	Cat. No.	EDP
.001"	0-1"	Steel	216RL-1	55953	216FL-1	55954	216P-1	55952
.001		Carbide	216XRL-1	55955	216XFL-1	55956		
	1-2"		216RL-2	56153	216FL-2	56257		
	2-3"		216RL-3	56205	216FL-3	56206		
001"	3-4"	Steel	216RL-4	56208	216FL-4	56209		
	4-5"		216RL-5	63470				
	5-6"		216RL-6	63471				
	6-7"		216XRL-7	63628				
	7-8"		216XRL-8	63629				
001"	8-9"	Carbide	216XRL-9	63630				
001	9-10"	Ourbido	216XRL-10	63631				
	10-11"		216XRL-11	63632				
	11-12"		216XRL-12	63633				
	0-1"		T216XRL-1	55959	T216XFL-1	55960		
			T216XRL-1 W/SLC	66904	T216XFL-1 W/SLC	66903		
	1-2"		T216XRL-2	56156	T216XFL-2	56157		
	2-3"		T216XRL-3	63491	T216XFL-3	63634		
	3-4"		T216XRL-4	63492	T216XFL-4	63635		
	4-5"		T216XRL-5	63493				
0001"	5-6"	Carbide	T216XRL-6	63494				
	6-7"		T216XRL-7	63495				
	7-8"		T216XRL-8	63496				
	8-9"		T216XRL-9	63497				
	9-10"		T216XRL-10	63498				
	10-11"		T216XRL-11	63499				
	11-12"		T216XRL-12	63500				

Cases Only for 216 and 216M Digital Micrometers					
Fits Microme	ter Range				
inch	mm	Cat. No.	EDP		
0-1"	0-25mm	942	55961		
1-2"	25-50mm	216ZZ-2	56171		
2-3"	50-75mm	922	55222		
3-4"	75-100mm	952	55223		
4-5"	100-125mm	953	55224		
5-6"	125-150mm	954	55225		
6-7"	150-175mm	930	55276		
7-8"	175-200mm	931	55277		
8-9"	200-225mm	932	55278		
9-10"	225-250mm	933	55279		
10-11"	250-275mm	934	55280		
11-12"	275-300mm	935	55281		

		Measuring	Ratchet Stop and	d Lock Nut	Friction Thimble and Lock Nut	
Graduations	Range	Faces	Cat. No.	EDP	Cat. No.	EDP
	0-25mm		216MXRL-25	55983	216MXFL-25	55984
	25-50mm		216MXRL-50	65602		
	50-75mm		216MXRL-75	65603		
	75-100mm		216MXRL-100	65604		
	100-125mm		216MXRL-125	64351		
0.01mm	125-150mm	Carbide	216MXRL-150	64352		
0.0111111	150-175mm	Carbine	216MXRL-175	64353		
	175-200mm		216MXRL-200	64354		
	200-225mm		216MXRL-225	64355		
	225-250mm		216MXRL-250	64356		
	250-275mm		216MXRL-275	64357		
	275-300mm		216MXRL-300	64358		
	0-25mm		V216MXRL-25	56037	V216MXFL-25	56036
0.001mm	25-50mm	Carbide	V216MXRL-50	64348		
0.001111111	50-75mm	Carpide	V216MXRL-75	64349		
	75-100mm		V216MXRL-100	64350		





232, 232M Outside Micrometers

0-1/2"/0-12.5MM



These micrometers are the 1/2" (13mm) companions of the top-of-the-line 230 Micrometers. The spindle and anvil are sized at .200" (5mm).

FEATURES AND SPECIFICATIONS

- Starrett satin chrome finish no glare resists rust
- Advanced sleeve design with staggered lines and distinct figures for precise and easy readability
- Convenient decimal equivalents on inch tools
- Rigid one-piece frame of drop forged steel
- Extremely hard and stable one-piece spindle (the heart of our accuracy)
- Quick and easy adjustment
- Balanced frame and thimble design ensure easy handling and better readability
- Ring-type knurled lock nut for quick and sure locking
- Combination ratchet and speeder for uniform pressure and quicker adjustment
- Gracefully designed tapered frame for use in narrow slots and tight places

232 and 232M Outside Micrometers						
Cat. No.	EDP	Range	Graduation			
232RL	50953		.001"			
T232RL	50955	0-1/2"	.0001"			
T232XRL	50968		.0001			
232MRL	50954	0-13mm	0.01mm			
V232MXRL	64231	0-1311111	0.002mm			
Attractive, Protective Case for 232 and 232M Outside Micrometers						
921	921 55213 Case for 1/2" (13mm) Micrometers					



230, 230M Outside Micrometers

0-1"/0-25MM



This is the jewel of precision micrometers used by skilled workmen worldwide. The spindle and anvil are sized at .235" (6mm) to reach places most micrometers cannot reach.

FEATURES AND SPECIFICATIONS

- Same as our 232 Outside Micrometers plus quick-reading figures – every thousandth numbered on inch tools
- Same as our 232 Outside Micrometers with a choice of smooth friction thimble for uniform pressure or the combination ratchet and speeder for uniform pressure and quicker adjustment

Cat. No.	EDP	Graduation
230P	50932	
230RL	50935	.001"
230FL	50938	
T230RL	50943	
T230XRL	50944	
T230XRL W/SLC	64401	.0001"
T230FL	50946	.0001
T230XFL	50947	
T230XFL W/SLC	66916	
V230MXRL	56017	0.001mm
V230MXFL	56016	0.001111111
Deluxe Padded Case	e for 230 and 23	80M Outside Micrometers
910	55397	Case for 1" (25mm) Micrometers





2, 2M Outside Micrometers

1-2"/25-50MM



These micrometers are the 2" (50mm) companions of the top-ofthe-line 230 Micrometer.

The spindle and anvil are sized at .235" (6mm) to reach places other micrometers cannot.

READABILITY FEATURES

- Starrett satin chrome finish no glare resists rust
- Advanced sleeve design with staggered and distinct figures for precise and easy readability
- Convenient decimal equivalents on inch tools

EASE-OF-HANDLING FEATURES

- Balanced frame and thimble design ensure easy handling and better readability
- · Ring-type knurled lock nut for quick and sure locking
- A choice of smooth friction thimble for uniform pressure or the combination ratchet and speeder for uniform pressure and quicker adjustment
- Gracefully designed tapered frame for use in narrow slots and tight places

ACCURACY AND LONG-LIFE FEATURES

- · Rigid one-piece frame of drop forged steel
- Extremely hard and stable one-piece spindle (the heart of our accuracy)
- Appropriate 1" or 25mm gage block standard furnished with micrometers

2 and 2M Outside Micrometers						
Cat. No.	EDP	Range	Graduation			
T2XRL	50024	1-2"	.0001"			
T2XFL	50025	1-2	.0001			
2MXRL	50026	25-50mm	0.01mm			
V2MXRL	63793	20-0011111	0.001mm			
2A and 2MA Outs	ide Micrometer					
2ARL	50027	0-2"	.001"			
2MARL	50029	0-50mm	0.01mm			
Deluxe Padded C	Deluxe Padded Case for 2, 2A, 2M and 2MA Outside Micrometers					
Cat. No.	EDP	Description				
912	55399	Case for 2" and 50mm Micrometers				



2Λ , $2M\Lambda$ Outside Micrometers with Λ ttachment



0-2"/0-50MM

These micrometers are versions of the 2 and 2M that include an attachment to handle measurements from 0-1" or 0-25mm, thereby extending the total range from 0-2" or 50mm.

Easily and quickly attached to the anvil of the micrometer, it is only necessary to tighten a locking screw to make the conversion. The anvil extension is hardened, ground and lapped. No-glare satin chrome finish.







231, 231M MICROMETERS WITH INSULATED FRAMES



0-1"/0-25MM

This is a slightly heavier micrometer with thermal insulators mounted on the frame front and rear. This spindle and anvil are sized at .250" (6.35mm).

READABILITY FEATURES

- Starrett satin chrome finish no glare resists rust
- Advanced sleeve design with staggered lines and distinct figures for precise and easy readability
- Quick-reading figures every thousandth numbered on inch tools

EASE-OF-HANDLING FEATURES

- Balanced frame and thimble design ensure easy handling and better readability
- Ring-type knurled lock nut for quick and sure locking
- A combination ratchet and speeder for uniform pressure and quicker adjustment on all sizes
- Gracefully designed tapered frame for use in narrow slots and tight places

ACCURACY AND LONG-LIFE FEATURES

- · Rigid one-piece frame of drop forged steel
- Extremely hard and stable one-piece spindle (the heart of our accuracy)
- · Quick and easy adjustment

231 and 231M Micrometers (0-1" Range)							
Cat. No.	EDP	Range	Graduation				
T231XRL	63967	0-1"	.0001"				
V231MXRL	63969	0-25mm	0.001mm				
Deluxe Padded	Deluxe Padded Case for 231 and 231M Micrometers						
Cat. No.	EDP	Description					
942	55961	Case for 1" (25)	mm) Micrometers				



221 HI-PRECISION MICROMETER



0-1"

- Permits direct readings in ten-thousandths of an inch (.0001") without a vernier, plus automatic control of spindle pressure
- Black graduated inner thimble and sleeve reading in thousandths and red graduated outer thimble and sleeve with large, widely spaced graduations which give direct readings in tenthousandths

READABILITY FEATURES

- Exclusive constant pressure mechanism eliminates "feel" and ensures constant spindle pressure for all readings
- Starrett satin chrome finish no glare resists rust
- Advanced sleeve design with staggered lines and distinct figures for precise and easy readability
- Convenient decimal equivalents on inch tools

EASE-OF-HANDLING FEATURES

- Balanced frame and thimble design for easy handling and better readability
- Ring-type knurled lock nut for quick and sure locking
- Gracefully designed tapered frame for use in narrow slots and tight places

- Rigid one-piece frame of drop forged steel
- Extremely hard and stable one-piece spindle (the heart of our accuracy)
- · Quick and easy adjustment

221 Hi-Precision Micrometer (0-1" Range)						
Cat. No.	EDP	Graduation				
T221XL	50754	.0001"				
Deluxe Padded Case	Deluxe Padded Case for 221 Hi-Precision Micrometer					
Cat. No. EDP Description						
910	55397	Case for 1" (25mm) Micrometers				







STAINLESS STEEL MICROMETERS

1230, 1230M STAINLESS STEEL MICROMETERS

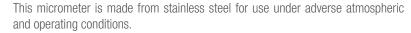
0-1"/0-25MM



1212, 1212M STAINLESS STEEL MICROMETERS

1-2"/25-50MM

910



1230 and 1230M S	Stainless Steel Mic	crometers		
Cat. No.	EDP	Range	Graduation	
1230XRL	53196	0-1"	.001"	
T1230XRL	53197	U-1	.0001"	
V1230MXRL	64263	0-25mm	0.001mm	
1212 and 1212M S	Stainless Steel Mic	crometers		
1212XRL	53178	1-2"	.001"	
T1212XRL	53179	1-2	.0001"	
V1212MXRL	64264	25-50mm	0.001mm	
Deluxe Padded Cases for 1212 and 1212M Stainless Steel Micrometers				
Cat. No.	EDP	Description		

Case for 1" (25mm) Micrometers

55397

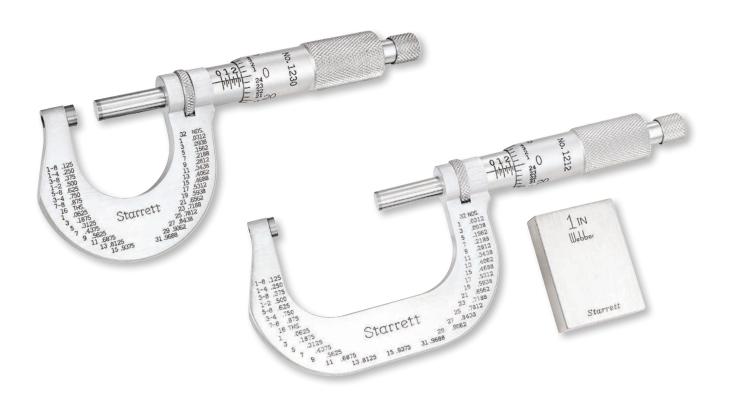
READABILITY FEATURES

- Satin finish stainless steel no glare rust and stain resistant
- Advanced sleeve design with staggered lines and distinct figures for precise and easy readability
- Convenient decimal equivalents on inch tools

EASE-OF-HANDLING FEATURES

- Balanced frame and thimble design ensure easy handling and better readability
- Ring-type knurled lock nut for quick and sure locking
- The combination ratchet and speeder for uniform pressure and quicker adjustment
- Gracefully designed tapered frame for use in narrow slots and tight places

- Rigid one-piece frame of drop forged steel
- Extremely hard and stable one-piece spindle (the heart of our accuracy)
- Quick and easy adjustment
- Gage block standard supplied for 1-2" micrometer







^{912 55399} Case for 2" (50mm) Micrometers
1" and 25mm Models sent in fitted case. 2" and 50mm Models packed one in a box without case.

1-6"/25-150MM

Starrett design and finish

polished steel ribs and hub



226, 226M OUTSIDE MICROMETERS

• Rugged construction and extremely attractive design

• For craftsmen who want a precision micrometer with a distinctive

• Strong ribbed frame with smooth black enamel finish and

OUTSIDE **M**ICROMETERS





0-6"/0-150MM

These sets are recommended for mechanics, automotive service and machine shops, toolrooms, inspection departments, and wherever gaging involves a wide range of measurements. Furnished in an attractive, protective cases to keep micrometer and standards readily accessible.

READABILITY FEATURES

- Starrett satin chrome finish no glare resists rust
- Advanced sleeve design with staggered lines and distinct figures for precise and easy readability
- Quick-reading figures every thousandth numbered on inch tools

EASE-OF-HANDLING FEATURES

- Balanced frame and thimble design ensure easy handling and better readability
- Ring-type knurled lock nut for quick and sure locking

- Rugged frame ribbed for extra strength
- Extremely hard and stable one-piece spindle (the heart of our accuracy)
- Quick and easy adjustment

226 Outside N	licrometers (.001	' Graduation)		
	Ratchet Stop an	d Lock Nut	Standard (extra))
Range	Cat. No.	EDP	Cat. No.	EDP
0-1"	226RL-1	12209		
1-2"	226RL-2	50820	234B-1	51017
2-3"	226RL-3	50825	234B-2	51019
3-4"	226RL-4	50830	234B-3	51021
4-5"	226RL-5	50835	234B-4	51023
5-6"	226RL-6	50840	234B-5	51025
226 Outside N	licrometers, Carb	ide Faces (.0	001" Graduation)	
0-1"	T226XRL-1	12211		
1-2"	T226XRL-2	50903	234B-1	51017
2-3"	T226XRL-3	50904	234B-2	51019
3-4"	T226XRL-4	50905	234B-3	51021
4-5"	T226XRL-5	50906	234B-4	51023
5-6"	T226XRL-6	50907	234B-5	51025
226M Outside	Micrometers, Car	bide Faces (0.001mm Gradua	tion)
0-25mm	V226MXRL-25	12212		
25-50mm	V226MXRL-50	64265	234MB-25	51018
50-75mm	V226MXRL-75	64266	234MB-50	51020
75-100mm	V226MXRL-100	64267	234MB-75	51022
100-125mm	V226MXRL-125	64268	234MB-100	51024
125-150mm	V226MXRL-150	64269	234MB-125	51026
Micrometer C	ases for 226 and 2	226M Outside	e Micrometers	
Description			Cat. No.	EDP
for 1" (25mm)			910	55397
for 2" (50mm)		913	55400	
for 3" (75mm)		922	55222	
for 4" (100mm)		952	55223
for 5" (125mm)		953	55224
for 6" (150mm)		954	55225

S226 and S226M Micrometer Sets					
Range	Cat. No.	EDP	Graduation	Set Description	
0-3"	S226ARLZ ST226AXRLZ	50854 56448	.001" .0001"	Includes 1", 2" and 3" Micrometers, Two Standards, Adjusting Wrench	
0-6"	S226BRLZ ST226BXRLZ	50862 56798	.001"	Includes 1", 2", 3", 4", 5" and 6" Micrometers, Set of Five Standards, Adjusting Wrench	
0-75mm	SV226MAXRLZ	65237	0.001mm	Includes 25mm, 50mm and 75mm Micrometers, Two Standards, Adjusting Wrench	
0-150mm	SV226MBXRLZ	65238	0.001mm	Includes 25mm, 50mm, 75mm, 100mm, 125mm and 150mm Micrometers, Set of Five Standards, Adjusting Wrench	
Cases Onl	y for S226 and	S226M I	Micrometer (Sets	
Cat. No.	EDP	Descrip	otion		
955	55226	Case for 0-3" and 0-75mm Micrometer Sets			
956	55227	Case fo	r 0-6" and 0-	150mm Micrometer Sets	





436.1 Outside Micrometers

0-6"



These are the most popular precision micrometers used by skilled workmen worldwide. They are accurate, rugged, and easy to use.

The 0-6" and 0-150mm sizes have rugged spindles and anvils at .250" (6.35mm) diameter.

No one in the world has a list of micrometers that caters to individual taste like Starrett. If you don't see what you want please ask for it.

436.1 Outside Micron	neters (0-1" Range)	436.1 Outside Micrometers (1-2" Range)			
Cat. No.	EDP	Cat. No.	EDP	Graduation	
436.1P-1	67990	436.1P-2	68001		
436.1XP-1	67991				
436.1RL-1	67993	436.1RL-2	68002	.001"	
436.1XRL-1	67994	436.1XRL-2	68003	.001	
436.1XRL-1 W/SLC	67995				
436.1FL-1	67996	436.1FL-2	68004		
T436.1XP-1	67992				
T436.1XRL-1	67997	T436.1XRL-2	68005		
T436.1XRL-1 W/SLC	67998	T436.1XRL-2 W/SLC	68006	.0001"	
T436.1XFL-1	67999	T436.1XFL-2	68007		
T436.1XFL-1 W/SLC	68000	T436.1XFL-2 W/SLC	68008		
436.1 Outside Micron	neters (2-3" Range)	436.1 Outside Micron	neters (3-4" Ra	inge)	
436.1P-3	68009				
436.1RL-3	68010	436.1RL-4	68017	.001"	
436.1XRL-3	68011	436.1XRL-4	68018	.001	
436.1FL-3	68012				
T436.1XRL-3	68013	T436.1XRL-4	68019		
T436.1XRL-3 W/SLC	68014	T436.1XRL-4 W/SLC	68020	.0001"	
T436.1XFL-3	68015	T436.1XFL-4	68021		
T436.1XFL-3 W/SLC	68016	T436.1XFL-4 W/SLC	68022		
436.1 Outside Micron		436.1 Outside Micron		inge)	
436.1RL-5	68023	436.1RL-6	68029	.001"	
436.1XRL-5	68024	436.1XRL-6	68030		
T436.1XRL-5	68025	T436.1XRL-6	68031		
T436.1XRL-5 W/SLC	68026	T436.1XRL-6 W/SLC	68032	.0001"	
T436.1XFL-5	68027	T436.1XFL-6	68033		
T436.1XFL-5 W/SLC	68028	T436.1XFL-6 W/SLC	68034		

FEATURES AND SPECIFICATIONS

- Starrett satin chrome finish no glare resists rust
- Advanced sleeve design with staggered lines and distinct figures for precise and easy readability
- Balanced frame and thimble design ensure easy handling
- Ring-type knurled lock nut for quick and sure locking
- Smooth friction thimble for uniform pressure, the combination ratchet and speeder for uniform pressure and quicker adjustment, or a plain micrometer that depends on your own "feel"
- Gracefully designed tapered frame for use in narrow slots and tight places
- Rigid steel frame ribbed for extra strength on sizes through 6" (150mm)
- Extremely hard and stable one-piece spindle (the heart of our accuracy)
- Quick and easy adjustment



Sent in fitted plastic case.





436 Outside Micrometers



6-24"

Same balanced design as the smaller sizes but proportioned to these larger sizes with .300" (7.6mm) anvil and spindle diameters for ease of use on larger work.

All the same features as the 0-6" and 0-150mm ranges 436.1 Micrometers, except:

- Larger sizes are furnished with combination ratchet and speeder for uniform pressure and quicker adjustment
- Rigid and stable special cast iron frame with perforations for lightness and ribbed for strength and stability

436 Outside Micro	meters		
Cat. No.	EDP	Range	Graduation
436RL-7	51684		.001"
436XRL-7	51698	6-7"	.001
T436XRL-7	51702		.0001"
436RL-8	51712		.001"
436XRL-8	51726	7-8"	
T436XRL-8	51730		.0001"
436RL-9	51740		.001"
436XRL-9	51754	8-9"	
T436XRL-9	51758		.0001"
436RL-10	51768	0.40"	.001"
436XRL-10	51782	9-10"	000411
T436XRL-10	51786		.0001"
436RL-11	51796	10 1111	.001"
436XRL-11 T436XRL-11	51810 51814	10-11"	.0001"
436RL-12	51824		.0001
436XRL-12	51838	11-12"	.001"
T436XRL-12	51842	11 12	.0001"
436XRI 7-13	51871	12-13"	.0001
436XRLZ-14	51872	13-14"	
436XRLZ-15	51873	14-15"	
436XRLZ-16	51874	15-16"	
436XRLZ-17	51875	16-17"	
436XRLZ-18	51876	17-18"	00411
436XRLZ-19	51877	18-19"	.001"
436XRLZ-20	51878	19-20"	
436XRLZ-21	51879	20-21"	
436XRLZ-22	51880	21-22"	
436XRLZ-23	51881	22-23"	
436XRLZ-24	51882	23-24"	

7-12" models sent without case, packed one each to a	box.
13-24" models are furnished in a case at no extra cha	rge.



Standards for Inc	ch Micromet	ters
Cat. No.	EDP	Description
234B-1	51017	1" Standard for 2" Micrometers
234B-2	51019	2" Standard for 3" Micrometers
234B-3	51021	3" Standard for 4" Micrometers
234B-4	51023	4" Standard for 5" Micrometers
234B-5	51025	5" Standard for 6" Micrometers
234B-6	51027	6" Standard for 7" Micrometers
234B-7	51029	7" Standard for 8" Micrometers
234B-8	51031	8" Standard for 9" Micrometers
234B-9	51033	9" Standard for 10" Micrometers
234B-10	51035	10" Standard for 11" Micrometers
234B-11	51037	11" Standard for 12" Micrometers
234B-12	51039	12" Standard for 13" Micrometers
234A-13	50993	13" Standard for 14" Micrometers
234A-14	50995	14" Standard for 15" Micrometers
234A-15	50997	15" Standard for 16" Micrometers
234A-16	50999	16" Standard for 17" Micrometers
234A-17	51001	17" Standard for 18" Micrometers
234A-18	51003	18" Standard for 19" Micrometers
234A-19	51005	19" Standard for 20" Micrometers
234A-20	51007	20" Standard for 21" Micrometers
234A-21	51009	21" Standard for 22" Micrometers
234A-22	51011	22" Standard for 23" Micrometers
234A-23	51013	23" Standard for 24" Micrometers
Holster and Case	s for Inch a	nd Millimeter Micrometers
914	64165	Leather Holster for 1" (25mm) Micrometers
910	55397	Case for 1" (25mm) Micrometers
913	55400	Case for 2" (50mm) Micrometers
922	55222	Case for 3" (75mm) Micrometers
952	55223	Case for 4" (100mm) Micrometers
953	55224	Case for 5" (125mm) Micrometers
954	55225	Case for 6" (150mm) Micrometers
930	55276	Case for 7" (175mm) Micrometers
931	55277	Case for 8" (200mm) Micrometers
932	55278	Case for 9" (225mm) Micrometers
933	55279	Case for 10" (250mm) Micrometers
934	55280	Case for 11" (275mm) Micrometers
935	55281	Case for 12" (300mm) Micrometers





436.1M, 436.2M, 436M Outside Micrometers

0-600MM

Same basic design features as inch models

Standards fo	r Millime	eter Micrometers
Cat. No.	EDP	Description
234MB-25	51018	25mm Standard for 50mm Micrometers
234MB-50	51020	50mm Standard for 75mm Micrometers
234MB-75	51022	75mm Standard for 100mm Micrometers
234MB-100	51024	100mm Standard for 125mm Micrometers
234MB-125	51026	125mm Standard for 150mm Micrometers
234MB-150	51028	150mm Standard for 175mm Micrometers
234MB-175	51030	175mm Standard for 200mm Micrometers
234MB-200	51032	200mm Standard for 225mm Micrometers
234MB-225	51034	225mm Standard for 250mm Micrometers
234MB-250	51036	250mm Standard for 275mm Micrometers
234MB-275	51038	275mm Standard for 300mm Micrometers
234MB-300	51040	300mm Standard for 325mm Micrometers
234MA-325	50994	325mm Standard for 350mm Micrometers
234MA-350	50996	350mm Standard for 375mm Micrometers
234MA-375	50998	375mm Standard for 400mm Micrometers
234MA-400	51000	400mm Standard for 425mm Micrometers
234MA-425	51002	425mm Standard for 450mm Micrometers
234MA-450	51004	450mm Standard for 475mm Micrometers
234MA-475	51006	475mm Standard for 500mm Micrometers
234MA-500	51008	500mm Standard for 525mm Micrometers
234MA-525	51010	525mm Standard for 550mm Micrometers
234MA-550	51012	550mm Standard for 575mm Micrometers
234MA-575	51014	575mm Standard for 600mm Micrometers
Holster and (Cases fo	r Inch and Millimeter Micrometers
Cat. No.	EDP	Description
914	64165	Leather Holster for 1" (25mm) Micrometers
910	55397	Case for 1" (25mm) Micrometers
913	55400	Case for 2" (50mm) Micrometers
922	55222	Case for 3" (75mm) Micrometers
952	55223	Case for 4" (100mm) Micrometers
953	55224	Case for 5" (125mm) Micrometers
954	55225	Case for 6" (150mm) Micrometers
930	55276	Case for 7" (175mm) Micrometers
931	55277	Case for 8" (200mm) Micrometers
932	55278	Case for 9" (225mm) Micrometers
933	55279	Case for 10" (250mm) Micrometers
934	55280	Case for 11" (275mm) Micrometers
935	55281	Case for 12" (300mm) Micrometers

436.1M & 436M Outsi	de Micrometers		
Cat. No.	EDP	Range	Graduation
436.1MP-25	68047		
436.1MRL-25	68048		0.01mm
436.2MXRL-25	12755	0-25mm	0.0
436.1MXFL-25	68050		
V436.2MXRL-25	12766		0.001mm
436.1MRL-50	68052	05 50	0.01mm
436.1MXRL-50	68053	25-50mm	0.001
V436.1MXRL-50 436.1MRL-75	68054		0.001mm
436.1MXRL-75	68055 68056	50-75mm	0.01mm
V436.1MXRL-75	68057	30-7 SHIIII	0.001mm
436.1MRL-100	68058		
436.1MXRL-100	68059	75-100mm	0.01mm
V436.1MXRL-100	68060		0.001mm
436.1MRL-125	68061		0.01mm
436.1MXRL-125	68062	100-125mm	
V436.1MXRL-125	68063		0.001mm
436.1MRL-150	68064	405.450	0.01mm
436.1MXRL-150	68065	125-150mm	0.004
V436.1MXRL-150	68066	150 175	0.001mm
436MXRL-175 436MXRL-200	51706 51734	150-175mm 175-200mm	
436MXRL-225	51762	200-225mm	
436MXRL-250	51702	225-250mm	
436MXRL-275	51818	250-275mm	
436MXRL-300	51846	275-300mm	
436MXRLZ-325	64301	300-325mm	
436MXRLZ-350	64302	325-350mm	
436MXRLZ-375	64303	350-375mm	0.04
436MXRLZ-400	64304	375-400mm	0.01mm
436MXRLZ-425	64305	400-425mm	
436MXRLZ-450	64306	425-450mm	
436MXRLZ-475	64307	450-475mm	
436MXRLZ-500	64308	475-500mm	
436MXRLZ-525	64309	500-525mm	
436MXRLZ-550	64310	525-550mm	
436MXRLZ-575	64311	550-575mm	
436MXRLZ-600	64312	575-600mm	

25-150mm models sent in fitted plastic case. 175-300mm models sent without case, packed one each to a box. 325-600mm models are furnished in a case at no extra charge.





MICROMETER SETS



S436.1, S436 MICROMETER SETS WITH STANDARDS, IN Λ TTRACTIVE, PROTECTIVE CASES



0-24"

Recommended for mechanics, automotive service and machine shops, toolrooms, inspection departments, and wherever gaging involves a wide range of measurements. All sets come with attractive, protective cases which keep micrometers and standards together, readily accessible.

For further information on each type of micrometer, refer to the listing on the previous pages.

Standards 1	OF 5430.	i and 5436 Micrometer Sets	With SLC"	
Cat. No.	EDP	Description	Cat. No.	EDP
S234C	50852	Set of Two Standards Only		
S234D	51897	Set of Three Standards Only		
S234E	50860	Set of Five Standards Only	S234E W/SLC*	66878
S234G	51929	Set of Eleven Standards Only	S234G W/SLC*	66877
S234F	51917	Set of Six Standards Only	S234F W/SLC*	66879
S234J	64146	Set of Twelve Standards Only		
Cases for S	436.1 an	d S436 Micrometer Sets		
Cat. No.	EDP	Description		
955	55226	Case Only for S436A Sets		
936	55295	Case Only for S436B Sets		
956	55227	Case Only for S436C Sets		
938	55298	Case Only for S436E Sets		
937	55297	Case Only for S436D Sets		
S436FZZ	64339	Case Only for S436F Sets		

^{*} Includes redemption card for Standard Letter of Certification (SLC).

S436.1 Micromet	5436.1 Micrometer Sets						
Cat. No.	EDP	Range	Graduation	Set Description			
S436.1ARLZ S436.1AXRLZ	68035 68036	0.011	.001"	Fach Cat Includes: 111 Oil and Oil Micromotors with Tue Chandards			
ST436.1AXRLZ ST436.1AXFLZ	68037 68038	0-3"	.0001"	Each Set Includes: 1", 2" and 3" Micrometers, with Two Standards			
S436.1BRLZ S436.1BXRLZ	68039 68040	0-4"	.001"	Each Set Includes: 1", 2", 3" and 4" Micrometers, with Three Standards			
ST436.1BXRLZ ST436.1BXFLZ	68041 68042	0-4	.0001"	Each Set includes. 1, 2, 3 and 4 inicionieters, with finee Standards			
S436.1CRLZ S436.1CXRLZ	68043 68044	0-6"	.001"	Each Set Includes: 1", 2", 3", 4", 5" and 6" Micrometers, with Five Standards			
ST436.1CXRLZ ST436.1CXFLZ	68045 68046		.0001"				
S436 Micrometer	Sets						
S436ERLZ S436EXRLZ	51931 52012	0-12"	.001"	Each Set Includes: 1", 2", 3", 4", 5", 6", 7", 8", 9", 10", 11" and 12" Micrometers, with Eleven Standards			
ST436EXRLZ	52030		.0001"				
S436DRLZ S436DXRLZ	51919 64463	6-12"	.001"	Each Set Includes: 7", 8", 9", 10", 11" and 12" Micrometers, with Six Standards			
ST436DXRLZ	64465		.0001"				
S436FXRLZ	64466	12-24"	.001"	Set Includes: 13", 14", 15", 16", 17", 18", 19", 20", 21", 22", 23" and 24" Micrometers, with Twelve Standards			

Box type cases available for sets 0-6", 6-12", 12-24" with 6, 12, or 24 micrometers and flat type cases available for sets 0-3" or 0-4" with 3 or 4 micrometers.





MICROMETER SETS

S436.1M, S436M MICROMETER SETS WITH STANDARDS, IN Λ TTRACTIVE, PROTECTIVE CASES



0-600MM

Recommended for mechanics, automotive service and machine shops, toolrooms, inspection departments, and wherever gaging involves a wide range of measurements. All sets come with attractive, protective cases which keep micrometers and standards together, readily accessible.

For further information on each type of micrometer, refer to its listing on the previous pages.

S436.1M Micrometer Sets					
Cat. No.	EDP	Range	Graduation	Set Description	
S436.1MARLZ	68067		0.01mm	5 1 0 11 1 1 05 50	
S436.1MAXRLZ	68068	0-75mm	0.01111111	Each Set Includes: 25mm, 50mm and 75mm Micrometers, with Two Standards	
SV436.1MAXRLZ	68069		0.001mm	7 3mm Wildometers, with two standards	
S436.1MBRLZ	68070		0.01mm	Each Set Includes: 25mm, 50mm, 75mm	
S436.1MBXRLZ	68071	0-100mm	0.01111111	and 100mm Micrometers with Three	
SV436.1MBXRLZ	68072		0.001mm	Standards	
S436.1MCRLZ	68073		0.01mm	Each Set Includes: 25mm, 50mm,	
S436.1MCXRLZ	68074	0-150mm	0.01111111	75mm, 100mm, 125mm and 150mm	
SV436.1MCXRLZ	68075		0.001mm	Micrometers, with Five Standards	
S436M Micromet	er Sets				
CAOCMEVDI 7	E0014	0.000	0.01	Set Includes: 25, 50, 75, 100, 125, 150,	
S436MEXRLZ	52014	0-300mm	0.01mm	175, 200, 225, 250, 275 and 300mm Micrometers, with Eleven Standards	
				Set Includes: 175, 200, 225, 250, 275	
S436MDXRLZ	64461	150-300mm	0.01mm	and 300mm Micrometers, with Six Standards	
				Set Includes: 325, 350, 375, 400, 425, 450, 475, 500, 525, 550, 575	
S436MFXRLZ	64462	300-600mm	0.01mm	and 600mm Micrometers, with Twelve Standards	

Box type cases available for sets 0-150mm, 150-300mm, 300-600mm with 6, 12, or 24 micrometers and flat type
cases available for sets 0-75mm or 0-100mm with 3 or 4 micrometers.

Standards for S436.1M and S436M Micrometer Sets					
Cat. No.	EDP	Description			
S234MC	51893	Set of Two Standards Only			
S234MD	51901	Set of Three Standards Only			
S234ME	51913	Set of Five Standards Only			
S234MF	51925	Set of Six Standards Only			
S234MG	51937	Set of Eleven Standards Only			
S234MJ	64467	Set of Twelve Standards Only			
Cases for S	6436.1M an	d S436M Micrometer Sets			
Cat. No.	EDP	Description			
955	55226	Case Only for S436MA Sets			
936	55295	Case Only for S436MB Sets			
956	55227	Case Only for S436MC Sets			
938	55298	Case Only for S436ME Sets			
937	55297	Case Only for S436MD Sets			
S436FZZ	64339	Case Only for S436MF Sets			

ANVIL MICROMETERS

224, 224M INTERCHANGEABLE ANVIL MICROMETERS



0-24"/0-600MM

Unusual flexibility, plus a wide range of measurement makes the 224 Satin-Chrome Micrometers very popular in machine or automotive repair shops and for all applications requiring a versatile micrometer.

Each micrometer is equipped with a series of easily interchangeable anvils, thus providing the full range in steps of 1" or 25mm with a single micrometer. Suitable wrenches are furnished to make necessary adjustments.

These larger sizes have .300" (7.6mm) anvil and spindle diameters for ease of use on larger work.

224, 224M Interchangeable Anvil Micrometers						
		With Ratchet Stop In Case	o, Lock Nut,			
Range	Graduation	Cat. No.	EDP	234 Standards Furnished		
0-4"		224AARLZ	50770	1", 2", 3"		
2-6"		224ARLZ	50772	2", 3", 4", 5"		
6-9"		224BRLZ	50774	6", 7", 8"		
6-12"	.001"	224GRLZ	50776	6", 7", 8", 9", 10", 11"		
9-12"	.001	224CRLZ	50778	9", 10", 11"		
12-16"		224DRLZ	50780	12", 13", 14", 15"		
16-20"		224ERLZ	50782	16", 17", 18", 19"		
20-24"		224JRLZ	50784	20", 21", 22", 23"		
0-100mm		224MAARLZ	50771	25, 50, 75mm		
50-150mm		224MARLZ	50773	50, 75, 100, 125mm		
150-300mm	0.01mm	224MGRLZ	50777	150, 175, 200, 225, 250, 275mm		
300-400mm	0.01111111	224MDRLZ	50781	300, 325, 350, 375mm		
400-500mm		224MERLZ	50783	400, 425, 450, 475mm		
500-600mm		224MJRLZ	50785	500, 525, 550, 575mm		

READABILITY FEATURES

- Starrett satin chrome finish no glare resists rust
- Advanced sleeve design with staggered lines and distinct figures for precise and easy readability
- Large thimble diameter with distinct figures

EASE-OF-HANDLING FEATURES

- Balanced frame and thimble design ensure easy handling and better readability
- Ring-type knurled lock nut for quick and sure locking
- Combination ratchet and speeder for uniform pressure and quicker adjustment

- Rigid and stable special cast iron frame with appropriate perforations for lightness and ribbed for strength and stability
- Extremely hard and stable one-piece spindle (the heart of our accuracy)
- · Quick and easy sleeve adjustment







ANVIL MICROMETERS

714, 714M ELECTRONIC INTERCHANGEABLE ANVIL **O**UTSIDE **M**ICROMETERS (WITH OUTPUT)



0-24"/0-600MM

This micrometer is the same as our 224 Micrometers except that it has an electronic READABILITY FEATURES readout and the following extra features and benefits:

714 Electronic Interchangeable Anvil Micrometers With Standard Inch Graduations on Shell
and Thimble

Range		Resolution			
Inch	Approx. mm	Inch	mm	Cat. No.	EDP
0 - 4"	0 - 101mm	.00005"	0.001mm	714AAFLZ	64427
2 - 6"	51 - 152mm			714AFLZ	64428
6 - 9"	152 - 228mm			714BFLZ	64429
6 - 12"	152 - 305mm			714GFLZ	64430
9 - 12"	228 - 305mm	.0001"	0.001mm	714CFLZ	64431
12 - 16"	305 - 406mm			714DFLZ	64432
16 - 20"	406 - 508mm			714EFLZ	64433
20 - 24"	508 - 609mm			714JFLZ	64434

714M Electronic Interchangeable Anvil Micrometers With Standard Millimeter Graduations on **Shell and Thimble**

Range		Resolution			
mm	Approx. Inch	mm	Inch	Cat. No.	EDP
0 - 100mm	0 - 3.930"	0.001mm	.00005"	714MEAAFLZ	66108
50 - 150mm	1.968 - 5.900"			714MEAFLZ	66109
150 - 300mm	5.900 - 11.810"			714MEGFLZ	66111
300 - 400mm	11.810 - 15.740"	0.001mm	.0001"	714MEDFLZ	66112
400 - 500mm	15.740 - 19.680"			714MEEFLZ	66113
500 - 600mm	19.680 - 23.620"			714MEJFLZ	66110

Cable Informat	ion for 714 and 714	4M Electronic Interchangeable Anvil Micrometers
Part No.	EDP	Description
PT61963	66636	Computer Interface Cable Complete to PC (RS232C)
PT61768	66454	Adaptor from PT22938 Cable to PC (RS232C)
PT22938	64059	Shielded Cable to 761/772 Starrett Modules and PT61768 Adaptor
PT61120	65446	One 3-Volt Battery CR2450

Adjusting wrenches furnished with each tool.

Micrometer furnished in protective case with 234 Standards.

- Large, right-sized, high-contrast LCD digital readout is easy to read and reduces errors
- Resolution .00005" and 0.001mm
- Conventional inch or millimeter graduations standard
- Starrett no-glare satin chrome finish on thimble and sleeve

ACCURACY AND LONG-LIFE FEATURES

- One 3-volt battery furnished for dependable power and over one year's normal usage
- Automatic OFF after 30 minutes of nonuse

FULL-FUNCTION ACTION FEATURES

- Instant inch/millimeter conversion
- "ME" millimeter models will turn on in the millimeter mode after installation of a new battery
- Measurement HOLD button
- Ability to zero tool at any position
- Ability to retain and return to the true zero reading of the micrometer
- PRESET button to install any reading at any
- Ability to install minimum and maximum limits
- Output data to Starrett SPC Plus hardware and software and to PCs
- Works well with Starrett DataSure® Wireless Data Collection Systems





Tubular Micrometers

724, 724M TUBULAR BOW TYPE MICROMETERS WITH INTERCHANGEABLE ANVILS



12-60"/300 -1500MM

These micrometers are made for better precision measurement of large outside dimensions. They provide perfect balance, sensitive feel, ease of handling, and less measuring effort due to their advanced tubular design. Frames are built of special steel formed to exacting tubular design specifications and welded by a carefully controlled process. This produces a hollow tubular frame of the lightest weight, extreme rigidity, and standard coefficient of expansion.

Because of the interchangeable anvils, the 724 is well suited for diversified gaging and provides a wide range of measurement in steps of 1 inch or 25mm.

The micrometer head is large and well balanced with .300" (7.6mm) diameter anvil and spindle and with larger bearing surfaces on the threads.

724 Tubular Bow Type Micrometers						
		With Lock Nut,	In Case			
Range Inch	Graduation	Cat. No.	EDP	234 Standards Furnished		
12-18"		724LZ-18	52994	12", 13", 14", 15", 16", 17"		
18-24"		724LZ-24	52995	18", 19", 20", 21", 22", 23"		
24-30"		724LZ-30	52996	25", 27", 29"		
30-36"	001"	724LZ-36	52997	31", 33", 35"		
36-42"	.001"	724LZ-42	52998	37", 39", 41"		
42-48"		724LZ-48	52999	43", 45", 47"		
48-54"		724LZ-54	53000	49", 51", 53"		
54-60"		724LZ-60	53001	55", 57", 59"		
724M Tubular Box	v Type Microm	eters				
300-450mm		724MLZ-450	64318	300, 325, 350, 375, 400, 425mm		
450-600mm		724MLZ-600	64319	450, 475, 500, 525, 550, 575mm		
600-750mm		724MLZ-750	64320	625, 675, 725mm		
750-900mm	0.01mm	724MLZ-900	64321	775, 825, 875mm		
900-1050mm	0.01111111	724MLZ-1050	64322	925, 975, 1025mm		
1050-1200mm		724MLZ-1200	64323	1075, 1125, 1175mm		
1200-1350mm		724MLZ-1350	64324	1225, 1275, 1325mm		
1350-1500mm		724MLZ-1500	64325	1375, 1425, 1475mm		

Adjusting wrenches furnished with each tool.

Furnished with 234 Standards in attractive, protective case.

READABILITY FEATURES

- Starrett satin chrome finish no glare resists rust
- Advanced sleeve design with staggered lines and distinct figures for precise and easy readability
- · Large thimble diameter with distinct figures

EASE-OF-HANDLING FEATURES

- Balanced frame and thimble design for easy handling and better readability
- Ring-type knurled lock nut for quick and sure locking

- Hollow tubular frame design combining lightest possible weight with rigidity
- Extremely hard and stable one-piece spindle (the heart of our accuracy)
- Standards with insulated grips
- It is recommended that these micrometers be checked with standards in the approximate position (vertical or horizontal) that they will be used. We do not recommend .0001" or 0.001mm readings on these micrometers.Larger sizes, carbide faces and ratchet stop are available on special order.







Tubular Micrometers

736, 736M TUBULAR BOW TYPE MICROMETERS WITH FIXED ANVIL

12-30"/300-750MM

This micrometer, available on special order, is similar to the 724 Micrometer. All features are identical to the 724, except that it has a fixed anvil, and is furnished in inch and millimeter sizes from 12-30" and 25mm increments from 300-750mm.

Order by catalog number and range through our Special Order Department. Example: 736LZ-28 (this orders a micrometer with a 27-28" range with lock nut and standard, in an attractive, protective case.)

READABILITY FEATURES

- Starrett satin chrome finish no glare resists
- Advanced sleeve design with staggered lines and distinct figures for precise and easy readability
- Large thimble diameter with distinct figures

EASE-OF-HANDLING FEATURES

- Balanced frame and thimble design ensure easy handling and better readability
- Ring-type knurled lock nut for guick and sure locking

ACCURACY AND LONG-LIFE FEATURES

- Extremely hard and stable one-piece spindle (the



ULTRALIGHT "C" FRAME GAGES

Rigid honeycomb aluminum diameter gage weighs five times less than solid frame gages. Unit shown has interchangeable anvils for 36-42" range. The gage is used as a dial indicator snap gage set to produce nominal dimension, or as an indicating micrometer. The micrometer head with .0001" graduations and the .0005" dial indicator ensure quick, accurate readings.

Ultralights are available from 24-72" (600-1800mm) I.D. or O.D. and can be designed for up to 72" (1800mm) throat depth for thickness measurement.



MICROMETER STANDS

3206 Outside Micrometer Stand

- This stand converts outside micrometers to a sturdy bench gage for batch inspection of small parts
- Useful as a handy bench vise or assembly fixture
- Gripping surfaces are two nylon pads which are replaceable
- Ball joint construction allows head to be positioned as much as 30° off perpendicular in any direction
- Positive lock on the base
- Base dimension is 6-3/8" long x 3-1/2" wide x 3/4" thick (162mm long x 89mm wide x 19mm thick)
- Tilting head clamping capability is 3/4" (19mm) thick x 1" (25mm) throat depth
- Accommodates all Starrett 1/2" (13mm) and 1" (25mm) outside micrometers, 2 and 2A 2" outside micrometers and 210, 220, 483, 485, 569 special purpose outside micrometers

3206 Outside Micrometer Stand					
Cat. No.	EDP	Description			
3206	68917	Outside Micrometer Stand			





SPECIAL FUNCTION MICROMETERS

SPECIAL FUNCTION **M**ICROMETERS

Throughout its history, The L.S. Starrett Company has manufactured a multitude of special hand tools and gages for thousands of customers in many different industries. Illustrated on these first two pages are typical examples of Starrett special toolmaking. The following pages show special function tools that we make as regular items because they are commonly used in industry.

Special toolmaking activities coordinated under the direction of special order sales engineers who oversee each order from the time it is entered until shipment is made. Complete manufacturing facilities and engineering counsel are available.

Customers are invited to submit drawings and specifications for prompt quotation. Please direct these to the attention of:

The L.S. Starrett Company Special Order Department 121 Crescent Street Athol, MA 01331-1915

MICROMETER HEAD SPEEDS GAGING

A specially shaped micrometer frame, to access an I.D. on an odd shaped part, is equipped with the Starrett 204 Quick-Adjusting Micrometer Head. This tool greatly increases the speed with which measurements can be taken. Pressing a button on the thimble allows the spindle to slide along its axis to any position within its range. Releasing the button re-engages the spindle threads, and thimble rotation is then used for final size adjustment. The 204 Micrometer Head can be mounted on frames designed to suit your particular applications. Quotations and a concept print for your application can be obtained by submitting a product drawing with the thickness dimension(s) circled to:

The L.S. Starrett Co. Special Gage Division 121 Crescent Street Athol, MA 01331-1915.

SPECIAL 725 DEEP THROAT TUBULAR MICROMETER

With sliding, interchangeable anvils and locking lever, 7-1/2" (185mm) depth, 0-6" (0-150mm) range.





Starrett can manufacture extra large micrometers, like this special 724 Micrometer of tubing type construction, range 72-78" (1800-1950mm), with interchangeable anvils.



MULT-ANVIL MICROMETERS

220, 220M Mul-T-Anvil Micrometers

0-2"/0-50MM



This tool was a new development in micrometer design and patent is held by Starrett. This micrometer will handle a wide variety of measurements impossible to obtain with regular micrometers, such as measuring the wall thickness of tubing, cylindrical walls from a hole or slot to an edge, many hard-to-reach locations, and the thickness of screw heads, shoulder lengths, etc.

This micrometer can be furnished with .0001" graduations, but we recommend .001" or 0.01mm for easier and more accurate readings. The Starrett Company, with our years of experience, recommends this because the anvils on this type of tool are not backed up by a frame as in a regular micrometer and could bend slightly.

220 Mul-T-Anvil Micrometers with Round and Flat Anvils and Carbide Faced Spindle						
		Ratchet Stop, Lock Nut		Friction Thimb	le, Lock Nut	
Range	Graduation	Cat. No.	EDP	Cat. No.	EDP	
0-1"	.001"	220XRL-1	66430	220XFL-1	50746	
0-25mm	0.01mm	220MXRL-25	65050			
Deluxe Case Only		220ZZ-1	55209			
	220M Mul-T-Anvil Micrometers With Round and Flat Anvils, Carbide Faced Spindle and 234B-1" or 234MB-25mm End Measuring Rod or Standard					
1-2"	.001"	220XRL-2	66432	220XFL-2	66433	
25-50mm	0.01mm	220MXRL-50	66434			
Deluxe Case Only		220ZZ-2	55210			

V-Anvil only: Order PT13017, EDP 71399

^{2&}quot; and 50mm models packed one in a box without case.



EASE-OF-HANDLING FEATURES

- Balanced frame and thimble design ensure easy handling, better readability
- Ring-type knurled lock nut for quick and sure locking
- A choice of friction thimble or combination ratchet/ speeder for uniform pressure
- Interchangeable anvils are rigidly held in the vise type frame and quickly interchanged by a single lock screw adjustment
- Two hardened anvils furnished round anvil approximately .120" diameter (3mm) and flat anvil approximately .125" (3mm) and .060" (1.5mm) thick
- "V" Anvil for measuring thickness of screw heads and shoulder lengths available separately
- Accommodates special anvils up to 5/16" (8mm) thick
- Can be used as a height gage by removing the vise iaw

READABILITY FEATURES

- Starrett satin chrome finish no glare resists rust
- Advanced sleeve design with staggered lines and distinct figures for precise and easy readability
- Quick-reading figures every thousandth numbered on inch tools

- Rigid one-piece frame of drop forged steel
- Extremely hard and stable one-piece spindle (the heart of our accuracy)
- Quick and easy adjustment
- Tool is accurate to \pm .0002" or \pm 0.004mm





^{1&}quot; and 25mm models sent in fitted case.

Mul-T-Anvil Micrometers

790, 790M Electronic Multi- Λ nvil Micrometers (with output)

0-1"/0-25MM

Same as our 220 Micrometer with electronic readout.

790 Electronic Multi-Anvil Micrometers with Standard Inch Graduations on Shell and Thimble With Round and Flat Anvils					
Cat. No.	EDP	Description			
790AFL-1	64048	0-1"/0-25mm Range			
790M Electronic Multi-Anvil Micrometers with Standard Millimeter Graduations on Shell and Thimble With Round and Flat Anvils					
790MEAFL-25	66071	0-25mm/0-1" Range			
Cable Information	on				
733SCKB	69888	Computer cable to PC			
733SCU	69898	Cable to computer running SPC Data Collection Software			
733SCM	69893	Connection to 7612 or 7613 Multiplexier			
PT61120	65446	One 3-Volt Battery CR2450			



READABILITY FEATURES

- Large LCD digital readout is easy to read and reduces errors
- Resolution .00005" and 0.001mm
- Conventional inch or millimeter graduations standard
- Attractive no-glare black wrinkle finish on the frame
- Starrett no-glare satin chrome finish on thimble and sleeve

ACCURACY AND LONG-LIFE FEATURES

- One 3-volt battery furnished for over a year of normal usage
- Automatic OFF after 30 minutes of nonuse
- Tool is accurate to \pm .0002" or \pm 0.004mm

FULL-FUNCTION ACTION FEATURES

- Instant inch/millimeter conversion
- "ME" millimeter model will turn on in the millimeter mode after installation of a new battery
- Measurement HOLD button
- Ability to zero tool at any position
- Ability to retain and return to the true zero reading of the micrometer
- PRESET button to install any reading at any position
- Ability to install minimum and maximum limits
- Output data to Starrett SPC Plus hardware and software and to PCs
- Works well with Starrett DataSure[®] Wireless Data Collection Systems



SHEET METAL MICROMETERS

222, 222M SHEET METAL MICROMETERS

0-1"/0-25MM



These micrometers reach over the edge of sheet metal and take measurements away from the edge toward the center. Also for other gaging jobs where a deep throat micrometer is needed. Rounded anvil on 1" (25mm) size gives a point contact for more accurate gaging; flat anvil is also available. The 1/2" and 13mm micrometers have satin chrome frames; 1" and 25mm micrometer frames have black wrinkle finish.

222 Sheet Metal Micrometers, 2" Throat Depth (0-1/2" Range)						
EDP	Anvil	Graduation				
50756	Flat	.001"				
50757	Flat	.001"				
meters, 6" Throat Depth	(0-1" Range)					
50762	Rounded	.001"				
50763	Flat	.001"				
rometers, 50mm Throat	Depth (0-13mm Range)					
50758	Flat	0.01mm				
rometers, 150mm Throa	t Depth (0-25mm Range)				
66435	Rounded	0.01mm				
66436	Flat	0.01mm				
Case for 222 and 222M Sheet Metal Micrometers						
55212	Case for 222 Micrometers					
	EDP 50756 50757 meters, 6" Throat Depth 50762 50763 rometers, 50mm Throat 50758 rometers, 150mm Throa 66435 66436 Sheet Metal Micrometers	EDP Anvil 50756 Flat 50757 Flat meters, 6" Throat Depth (0-1" Range) 50762 Rounded 50763 Flat rometers, 50mm Throat Depth (0-13mm Range) 50758 Flat rometers, 150mm Throat Depth (0-25mm Range) 66435 Rounded 66436 Flat Sheet Metal Micrometers				

0-1" range and 0-25mm range micrometers sent with rounded anvil unless otherwise ordered. Packed one in a box without case.

READABILITY FEATURES

- Starrett satin chrome finish no glare resists rust
- Advanced sleeve design with staggered lines and distinct figures for precise and easy readability
- Convenient decimal equivalents on Inch tools

EASE-OF-HANDLING FEATURES

- Balanced frame and thimble design ensure easy handling and better readability
- Combination ratchet and speeder for uniform pressure and quicker adjustment
- Ring-type knurled lock nut for quick and sure locking (on 1/2" and 13mm range models)

- Rigid one-piece frame of drop forged steel, ribbed for strength and stability
- Extremely hard and stable one-piece spindle (the heart of our accuracy)
- Quick and easy adjustment







SHEET METAL MICROMETERS

764 ELECTRONIC SHEET METAL MICROMETERS (WITH OUTPUT)

0-1"/0-25MM

This micrometer is the same as our 222 Micrometer, except that it has an electronic readout and is available in the 1" (25mm) and 25mm ranges. Rounded anvil gives a point contact for more accurate gaging; flat anvil also available.

764 Electronic Sheet Metal Micrometers, 6" Throat Depth with Standard Inch Graduations on Shell and Thimble						
Cat. No.	EDP	Description				
764AXFL	66445	0-1"/0-25mm Range, Round Anvil				
764BXFL	66525	0-1"/0-25mm Range, Flat Anvil				
	764M Electronic Sheet Metal Micrometers, 150mm Throat Depth with Standard Millimeter Graduations on Shell and Thimble					
764MEAXFL	66446	0-25mm/0-1" Range, Round Anvil				
Cable Inform	nation for 7	'64 and 764M Electronic Sheet Metal Micrometers				
Part No.	EDP	Description				
PT61963	66636	Computer Interface Cable Complete to PC (RS232C)				
733SCKB	69888	Computer cable to PC				
733SCU	69898	Cable to computer running SPC Data Collection Software				
733SCM	69893	Connection to 7612 or 7613 Multiplexier				

Packed one in a box without case.

READABILITY FEATURES

- Large, right-sized, high-contrast LCD digital readout is easy to read and reduces errors
- Resolution: .00005" and 0.001mm
- Conventional inch or millimeter graduations standard
- Attractive no-glare black wrinkle finish on the frame
- Starrett no-glare satin chrome finish on thimble and sleeve

ACCURACY AND LONG-LIFE FEATURES

- One 3-volt battery furnished for over a year of normal usage
- Automatic OFF after 30 minutes of nonuse

FULL-FUNCTION ACTION FEATURES

- Instant inch/millimeter conversion
- "ME" millimeter model will turn on in the millimeter mode after installation of a new battery
- Measurement HOLD button
- Ability to zero tool at any position
- Ability to retain and return to the true zero reading of the micrometer
- PRESET button to install any reading at any position
- Ability to install minimum and maximum limits
- RS232 data output port
- Works well with Starrett DataSure® Wireless Data Collection Systems





Tube Micrometers

569, 569M TUBE MICROMETERS

0-1"/0-25MM

For measuring the wall thickness of tubing and other parts with cylindrical walls. Also for measuring from a hole to an edge (note minimum hole sizes in table). Rigid steel "half" frame with smooth black enamel finish. Anvil diameter = 0.185".

READABILITY FEATURES

- Starrett satin chrome finish no glare resists rust
- Advanced sleeve design with staggered lines and distinct figures for precise and easy readability
- Convenient decimal equivalents on inch tools

EASE-OF-HANDLING FEATURES

 Balanced frame and thimble design ensure easy handling and better readability

ACCURACY AND LONG-LIFE FEATURES

- Rigid steel frame ribbed for strength and stability
- Extremely hard and stable one-piece spindle (the heart of our accuracy)
- Quick and easy adjustment

569 Tube Micrometers (0-1" Range)						
Cat. No.	EDP	Graduation	Minimum Hole Size	Description		
569AXP	66437	.001"	3/16"	Carbide Faced Spindle		
569BXP	66439	.001	3/8"	Carbide Faced Spindle		
569M Tube	569M Tube Micrometers (0-25mm Range)					
569MAXP	66438	0.01mm	4.8mm	Carbide Faced Spindle		
569MBXP	66440	0.0111111	9.5mm	Carbide Faced Spindle		
Deluxe Cas	Deluxe Case for 569 and 569M Tube Micrometers					
Cat. No.	EDP	Description				
910	55397	Deluxe case only for the 569				

Special anvils also can be furnished, priced on application. Sent in fitted case.



769 ELECTRONIC TUBE MICROMETERS (WITH OUTPUT)

0-1"/0-25MM

This micrometer is the same as our 569 with an electronic readout and the following additional features and benefits:

READABILITY FEATURES

- Large LCD digital readout is easy to read and reduces errors
- Resolution: .00005" and 0.001mm
- Conventional inch or millimeter graduations standard
- Attractive no-glare black wrinkle finish on the frame
- Starrett no-glare satin chrome finish on thimble and sleeve

ACCURACY AND LONG-LIFE FEATURES

- One 3-volt battery furnished for over a year of normal usage
- Automatic OFF after 30 minutes of nonuse

FULL-FUNCTION ACTION FEATURES

- Instant inch/millimeter conversion
- "ME" model turns on in millimeter mode after battery installation
- Measurement HOLD button
- Ability to zero tool at any position
- Ability to retain and return to the true zero reading of the micrometer
- PRESET button to install any reading at any position
- Ability to install minimum and maximum limits
- RS232 data output port
- Works well with Starrett DataSure® Wireless Data Collection Systems

769 Electronic Tube Micrometers, Standard Inch Graduations				
Cat. No.	EDP	Description		
769AXFL	66447	0-1"/0-25mm Range, Carbide Faced Spindle		
769 Electron	769 Electronic Tube Micrometers, Standard Millimeter Graduations			
769MEAXFL	66448	0-25mm/0-1" Range, Carbide Faced Spindle		
Cable Information for 769 Electronic Tube Micrometers				
PT61963	66636	Computer Interface Cable Complete to PC (RS232C)		
733SCKB	69888	Computer cable to PC		
733SCU	69898	Cable to computer running SPC Data Collection Software		
733SCM	69893	Connection to 7612 or 7613 Multiplexier		







CRANKSHAFT MICROMETERS

436-3 1/2, 436M-88 AUTOMOTIVE CRANKSHAFT MICROMETERS

1-1/2-3-1/2"/38-88MM

This micrometer is designed for automotive work and especially for crankshaft measuring. It is also well suited for all other work within its capacity. It measures the diameter of the journal bearing and main bearing of most crankshafts since the micrometer has a range from 1-1/2" (38mm) -3-1/2" (88mm).

436-3 1/2 Automotive Crankshaft Micrometers (1-1/2 – 3-1/2" Range)			
Cat. No.	EDP	Graduation	
T436RLS-3 1/2	65493	.0001"	
436M-88 Automotive Crankshaft Micrometers (38-88mm Range)			
V436MRLS-88	65600	0.002mm	
Case for 436-3 1/2 and 436M-88 Automotive Crankshaft Micrometers			
733ZZ-4	66139	Protective Case	

Carbide measuring faces available on special order. Specify "X" after catalog number.



READABILITY FEATURES

- Starrett satin chrome finish no glare resists rust
- Advanced sleeve design with staggered lines and distinct figures for precise and easy readability
- Quick-reading figures every thousandth numbered on inch tools
- The reading point is on the under side of the sleeve, plainly visible while measuring. It's a very useful feature when measuring between webs.

EASE-OF-HANDLING FEATURES

- Balanced frame and thimble design ensure easy handling and better readability
- Ring-type knurled lock nut for quick and sure locking
- Combination ratchet and speeder for uniform pressure and guicker adjustment
- Gracefully designed tapered frame for use in narrow slots and tight places
- 2" (50mm) range
- 2-5/8" (66mm) throat depth

- Rigid one-piece frame of drop forged steel, ribbed for extra strength
- Extremely hard and stable one-piece spindle (the heart of our accuracy)
- Appropriate standard included





458, 458M Automotive Disc Brake Micrometers

.300-2"/7.6-50MM

- Measures depth of wear grooves in disc of brake systems
- 3" (75mm) frame with a 3-1/2" (88mm) depth to allow additional reach
- Flat carbide spindle and a carbide anvil with a 60° point

READABILITY FEATURES

- Starrett satin chrome finish no glare resists rust
- Advanced sleeve design for precise, easy readability
- Quick-reading figures every thousandth numbered on inch tools

EASE-OF-HANDLING FEATURES

- Balanced frame and thimble design ensure easy handling and better readability
- Combination ratchet and speeder for uniform pressure and quicker adjustment
- Gracefully designed tapered frame for use in narrow slots and tight places
- 3-1/2" (88mm) throat depth

ACCURACY AND LONG-LIFE FEATURES

- Rigid one-piece steel frame
- Extremely hard and stable one-piece spindle (the heart of our accuracy)
- Carbide measuring face on the spindle and carbide "V" anvil
- · Quick and easy adjustment

.300-2" Range				
Range	Graduation	Cat. No.	EDP	
.300-1.300"	.001"	458AXR	67534	
		458AXRS*	67535	
1-2"	.001"	458BXR	67536	
1-2		458BXRS*	67537	
7.6-50mm Range				
7.6-33mm	0.01mm	458MAXR	67538	
		458MAXRS**	67539	
25-50mm	0.01mm	458MBXR	67540	
		458MBXRS**	67541	

^{*} with 26852-0 Gage Block Standard.

^{**} with 26853-0 Gage Block Standard.



260, 260M GROOVE MICROMETERS

INCH/MM

Quickly and easily measures widths of internal or external grooves and lands.

READABILITY FEATURES

- Starrett satin chrome finish no glare resists rust
- Advanced sleeve design with staggered lines and distinct figures for precise and easy readability
- Quick-reading figures every thousandth numbered on inch tools

EASE-OF-HANDLING FEATURES

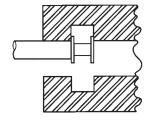
- Balanced design to ensure easy handling and better readability
- Has a reach of 1-5/8" (41mm) maximum hole depth
- Each measuring disc is 9/32" (7mm) diameter and .025" (0.63mm) thick
- Will measure groove widths .050-1.050" (1.27-26.6mm)
- Will measure land widths from 0-1" and 0-25mm

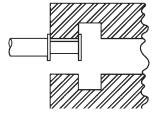
- Extremely hard and stable one-piece spindle (the heart of our accuracy)
- Hardened, ground, and lapped measuring discs
- Quick and easy adjustment
- This tool is accurate to $\pm .0004$ " or ± 0.01 mm

260 and 260M Groove Micrometer					
			Range		Max. Hole
Cat. No.	EDP	Graduation	Groove Widths*	Land Widths	Depth
260Z	67987	.001"	.050"-1.050"	0-1.000"	1 5/8"
260MZ	67988	0.01mm	1.27-26.27mm	0-25mm	41mm

 $^{^{\}star}$ Add .050" to 260Z (1.27mm to 260MZ) micrometer reading.











223, 223M PAPER GAGE MICROMETERS

0-11/32"/0-8.75MM

This micrometer is designed for use in paper mills, printing shops, paper warehouses, rubber plants, etc. for accurately, quickly measuring the thickness of paper, cardboard, chipboard, rubber, plastics, and other similar products, up to 11/32" (8.75mm).

223 and 223M Paper Gage Micrometers (0-11/32"/0-8.75mm Range)			
Cat. No.	EDP	Graduation	
223RL	50768	.001"	
223MRL	64336	0.01mm	
Case for 223 Paper Gage Micrometers			
Cat. No.	EDP	Description	
921	55213	Protective Case	

READABILITY FEATURES

- Starrett satin chrome finish no glare resists rust
- Advanced sleeve design with staggered lines and distinct figures for precise and easy readability
- Convenient decimal equivalents on inch tool

EASE-OF-HANDLING FEATURES

- Balanced frame and thimble design ensure easy handling and readability
- Ring-type knurled lock nut for quick and sure locking
- Combination ratchet and speeder for uniform pressure and quick adjustment
- Anvil and spindle faces are 7/16" (11mm) diameter to prevent compressing the material being measured and to ensure accurate readings
- The floating anvil automatically adjusts itself to any surface condition
- Convenient finger-holding ring is also provided

- Rigid one-piece frame of drop forged steel
- Extremely hard and stable one-piece spindle (the heart of our accuracy)
- Quick and easy adjustment





486, 486M BLADE TYPE MICROMETERS WITH NON-ROTATING SPINDLE

0-12"/0-150MM

Here is another special function Starrett micrometer. It is designed for fast and accurate measurements of circular form tools, diameter and depth of narrow grooves, slots, keyways, recesses, and depths between lands and fins.

486 Blade Type Micrometers (0-12" Range)				
Range	Graduation	Cat. No.	EDP	
0-1"		486P-1	52499	
1-2"		486P-2	52501	
2-3"		486P-3	52503	
3-4"		486P-4	52505	
4-5"		486P-5	52507	
5-6"	.001"	486P-6	52509	
6-7"		486P-7	67094	
7-8"		486P-8	67095	
8-9"		486P-9	67096	
9-10"		486P-10	67097	
10-11"		486P-11	67098	
11-12"		486P-12	67099	
486M Blade Type Micrometers (0-150mm Range)				
0-25mm		486MP-25	64257	
25-50mm		486MP-50	64258	
50-75mm	0.01mm	486MP-75	64259	
75-100mm		486MP-100	64260	
100-125mm		486MP-125	64261	
125-150mm		486MP-150	64262	

Cases for 486 and 486M Blade Type Micrometers			
Range	Cat. No.	EDP	
1", 25mm	913	55400	
2", 50mm	922	55222	
3", 75mm	952	55223	
4", 100mm	953	55224	
5", 125mm	954	55225	
6", 150mm	930	55276	

READABILITY FEATURES

- Starrett satin chrome finish no glare resists rust
- Advanced sleeve design with staggered lines and distinct figures for precise and easy readability

EASE-OF-HANDLING FEATURES

- Speeder for guicker adjustment on all sizes
- Non-rotating spindle prevents blade from turning in narrow slots or rolling off shoulder
- The blades are .030" (0.8mm) thick
- Blades will measure to 5/16" (8mm) depths

- Rigid steel frame ribbed for extra strength on sizes through 6" (150mm)
- Extremely hard and stable one-piece spindle (the heart of our accuracy)
- Quick and easy adjustment

Cases for 486 & 486M Blade Type Micrometers			
Range	Cat.	EDP	
7", 175mm	931	55277	
8", 200mm	932	55278	
9", 225mm	933	55279	
10", 250mm	934	55280	
11", 275mm	935	55281	
12", 300mm	436ZZ-13	55282	





786 ELECTRONIC BLADE-TYPE MICROMETERS WITH NON-ROTATING SPINDLE (WITH OUTPUT)

0-5"/0-125MM

This micrometer is the same as our 486 with electronic readout and the following additional features:

786 Electronic Blade-Type Micrometers with Standard Inch Graduations on Shell and Thimbl						
Range		Resolution				
Inch	Approx. mm	Inch	mm	Cat. No.	EDP	
0 - 1"	0-25.4mm			786P-1	65225	
1 - 2"	25.4-51mm	0000511	0.001mm	786P-2	65226	
2 - 3"	51-76mm	.00005"		786P-3	65227	
3 - 4"	76-101mm			786P-4	65228	
4 - 5"	101-127mm	.0001"	0.001mm	786P-5	65229	

786 Electronic Blade-Type Micrometers with Standard Millimeter Graduations on Shell and Thimb							
Range		Resolution					
mm	Approx. Inch	mm	Inch	Cat. No.	EDP		
0 - 25mm	0984"			786MEP-25	66118		
25 - 50mm	.984-1.968"			786MEP-50	66126		
50 - 75mm	1.968-2.950"	0.001mm	.00005"	786MEP-75	66127		
75 - 100mm	2.950-3.930"			786MEP-100	66128		
100 - 125mm	3.930-4.920"			786MEP-125	66129		
100 - 12311111	3.930-4.920			700IVIEF-123			

Cable Information for 786 Electronic Blade-Type Micrometers			
Part No.	EDP	Description	
733SCKB	69888	Computer cable to PC	
733SCU	69898	Cable to computer running SPC Data Collection Software	
733SCM	69893	Connection to 7612 or 7613 Multiplexier	
PT61120	65446	One 3-Volt Battery CR2450	

Attractive, protective case available by ordering 733ZZ and one size larger than the micrometer. Example: For 786P-2, order 733ZZ-3.

READABILITY FEATURES

- Large LCD digital readout is easy to read and reduces errors
- Conventional inch or millimeter graduations standard
- Attractive no-glare black wrinkle finish on the frame
- Starrett no-glare satin chrome finish on thimble and sleeve

ACCURACY AND LONG-LIFE FEATURES

- One 3-volt battery furnished for over a year of normal usage
- Automatic OFF after 30 minutes of nonuse

FULL-FUNCTION ACTION FEATURES

- Instant inch/millimeter conversion
- "ME" millimeter models will turn on in the millimeter mode after installation of a new battery
- Measurement HOLD button
- Ability to zero tool at any position
- Ability to retain and return to the true zero reading of the micrometer
- PRESET button to install any reading at any position
- Ability to install minimum and maximum limits
- RS232 data output port
- Works well with Starrett DataSure[®] Wireless Data Collection Systems





DISC-Type MICROMETERS

256. 256M DISC-TYPE MICROMETERS WITH ROTATING OR NON-ROTATING SPINDLES

0-3"/0-75MM

These tools are used to measure the thickness of work sections such as ribs, lands, fins, cutting edges on form tools, and chordal thickness of gear teeth. Because of their large anvil and spindle faces, the 1" and 25mm sizes are also useful for measuring the thickness of sheet materials like paper, cardboard, rubber, and plastics.

256 Disc-Type Micrometers (.001" Graduation)						
Range	Cat. No.	EDP				
0-1"	256RL-1	51236				
0-1"	256PN-1	56469				
1-2"	256RL-2	55940				
2-3"	256RL-3	55941				
256M Disc-Type Micrometers (0.01mm Graduation)						
0-25mm	256MRL-25	51238				
0-25mm	256MPN-25	56470				
25-50mm	256MRL-50	55942				
50-75mm	256MRL-75	55943				
Cases for 256 and 256M Disc-Type Micrometers						
Description	Cat. No.	EDP				
Deluxe case for 1" and 25mm micrometers	910	55397				
Deluxe case for 2" and 50mm micrometers	912	55399				
Deluxe case for 3" and 75mm micrometers	922	55222				

READABILITY FEATURES

- Starrett satin chrome finish no glare resists
- Advanced sleeve design with staggered lines and distinct figures for precise and easy readability
- Quick-reading figures every thousandth numbered on inch tools
- Convenient decimal equivalents on 1" and 2" reading tools

EASE-OF-HANDLING FEATURES

- Balanced frame and thimble design ensure easy handling and better readability
- Ring-type knurled lock nut for quick and sure locking
- The combination ratchet and speeder for uniform pressure and quicker adjustment on all sizes
- Gracefully designed tapered frame for use in narrow slots and tight places
- Anvil and spindle discs are 1/2" (12.7mm) diameter tapering to .015" (0.4mm) edge thickness making it possible to enter narrow grooves and recesses
- Available in the 1" and 25mm sizes with rotating or non-rotating spindle

- Rigid one-piece frame of drop forged steel
- Extremely hard and stable one-piece spindle (the heart of our accuracy)
- · Quick and easy adjustment
- Starrett workmanship
- This tool is accurate to $\pm .00015$ " or ± 0.003 mm measuring over the whole surface and ±.0002" or ±0.004mm measuring on the edges





DISC-TYPE MICROMETERS

756 ELECTRONIC DISC-TYPE MICROMETER WITH ROTATING SPINDLE (WITH OUTPUT)

0-1"/0-25MM

The same as our 256 with an electronic readout and the following additional features and benefits:

756 Electronic Disc-Type Micrometer						
Cat. No.	EDP	Description				
756FL-1	64042	0-1"/0-25mm range, with standard inch graduations on shell and thimble				
756M Electro	nic Disc-1	ype Micrometer				
756MEFL-25 66134 0-25mm/0-1" range, with standard millimeter graduations on shell a thimble		0-25mm/0-1" range, with standard millimeter graduations on shell and thimble				
Cable Informa	tion for 7	56 and 756M Electronic Disc-Type Micrometers				
Part No.	EDP	Description				
733SCKB	69888	Computer cable to PC				
733SCU	69898	Cable to computer running SPC Data Collection Software				
733SCM	69893	Connection to 7612 or 7613 Multiplexier				
PT61120	65446	One 3-Volt Battery CR2450				
Case for 756 and 756M Electronic Disc-Type Micrometers						
949	63874	Protective case				



READABILITY FEATURES

- Large, right-sized, high-contrast LCD digital readout is easy to read and reduces errors
- Resolution: .00005" and 0.001mm
- Conventional inch or millimeter graduations standard
- Attractive no-glare black wrinkle finish on the frame
- Starrett no-glare satin chrome finish on thimble and sleeve

ACCURACY AND LONG-LIFE FEATURES

- One 3-volt battery furnished for dependable power and over one year's normal usage
- Automatic OFF after 30 minutes of nonuse
- Anvil and spindle discs are 1/2" (12.7mm) diameter tapering to 0.15" (0.4mm) edge thickness making it possible to enter narrow grooves and recesses
- Tool is accurate to ±.00015" or ±0.003mm measuring over the whole surface and ±.0002" or ±0.004mm measuring on the edge

FULL-FUNCTION ACTION FEATURES

- Instant inch/millimeter conversion
- "ME" millimeter model will turn on in the millimeter mode after installation of a new battery
- Measurement HOLD button
- Ability to zero tool at any position
- Ability to retain and return to the true zero reading of the micrometer
- PRESET button to install any reading at any position
- Ability to install minimum and maximum limits
- RS232 data output port
- Works well with Starrett DataSure[®] Wireless Data Collection Systems



576, 576M, 577, 577M, 211 MICROMETERS

WITH ROUNDED ANVILS

0-1/2"/0-13MM; 0-1"/0-25MM

These three micrometers are all extremely useful for measuring the wall thickness of parts such as solid and split bearings, tubing, sleeves, collars, rings, various cylinders, and also measuring from the inside of a hole to an edge. All three have a rounded anvil which contacts the inside curved surface and a flat spindle for contacting the outside of the work, thus producing single point contact. This permits accurate gaging of curved surface thickness in thousandths of an inch or hundredths of a millimeter.

576, 577 and 211 Micrometers (0-1" Range)						
Cat. No.	EDP	Range	Graduation			
576XR	66441	0-1/2"				
577XP	66443	0-1"	.001"			
211XP	66428	0-1"				
576M and 577M l	Micrometers (0-25)	mm Range)				
576MXR	66442	0-13mm	0.01mm			
577MXP	66444	0-25mm	0.01111111			
Cases for 576, 57	6M, 577, 577M and	211 Micrometers				
Cat. No.	EDP	Description				
910	55397	Attractive protective case for 211 and 577 Micrometers				
921	55213	Attractive protective cas	e for 576 Micrometers			

Ball Attachment 247 used for rounded anvil effect is also available for other standard micrometers.

\square APACITY:

- The 576 can get into holes as small as 5/16 of an inch (8mm) and measure up to 1/2 inch (13mm)
- The 577 can get into holes as small as 3/8 of an inch (9.5mm) and measure up to 1 inch (25mm)
- The 211 can get into holes as small as 5/8 of an inch (16mm) and measure up to 1 inch (25mm)

READABILITY FEATURES

- Starrett satin chrome finish no glare resists
- Advanced sleeve design with staggered lines and distinct figures for precise and easy readability
- Convenient decimal equivalents on inch tools

EASE-OF-HANDLING FEATURES

- Balanced frame and thimble design ensure easy handling and readability
- Gracefully designed tapered frame for narrow slots and tight places

- Rigid steel frames
- Extremely hard and stable one-piece spindle (the heart of our accuracy)
- Quick and easy adjustment







788 ELECTRONIC MICROMETERS WITH ROUNDED \wedge NVIL (WITH OUTPUT)

0-1"/0-25MM

This micrometer is similar to our 211, except that it has an electronic readout and the following extra features and benefits:

788 and 788M Electronic Micrometers						
Cat. No.	EDP	Description				
788XFL	66449	0-1"/0-25mm range, with standard inch graduations on shell and thimble				
788MEXFL 66450 0-25mm/0-1" range, with standard millimeter graduations on shell and thimble						
Cable Inforr	nation for	r 788 Electronic Micrometers				
Part No.	EDP	Description				
733SCKB	69888	Computer cable to PC				
733SCU	69898	Cable to computer running SPC Data Collection Software				
733SCM	69893	Connection to 7612 or 7613 Multiplexier				
PT61120	65446	One 3-Volt Battery CR2450				
Case for 78	8 and 788	BM Electronic Micrometers				
949	63874	Case for 788 Micrometers				

READABILITY FEATURES

- Large, high-contrast LCD digital readout reduces errors
- Resolution: .00005" and 0.001mm
- Conventional inch or millimeter graduations standard
- Attractive no-glare black wrinkle finish on the frame
- Starrett no-glare satin chrome finish on thimble and sleeve

ACCURACY AND LONG-LIFE FEATURES

- One 3-volt battery furnished for dependable power and over one year's normal usage
- Automatic OFF after 30 minutes of nonuse

FULL-FUNCTION ACTION FEATURES

- Instant inch/millimeter conversion
- "ME" millimeter model will turn on in the millimeter mode after installation of a new battery
- Measurement HOLD button
- Ability to zero tool at any position
- Ability to retain and return to the true zero reading of the micrometer
- PRESET button to install any reading at any position
- Ability to install minimum and maximum limits
- RS232 data output port
- Works well with Starrett DataSure® Wireless Data Collection Systems





205 STEEL MILL MICROMETER

0-1"

This micrometer is specially designed for gaging hot metal sheet in steel mills and has many features for safer, faster, and more accurate measurements. Micrometer has rugged construction throughout, and is attached to a convenient wooden handle, correctly shaped for a firm grip. Allows measurements to be made while the micrometer can be comfortably held at a safe distance from the hot metal.

READABILITY FEATURES

- Starrett satin chrome finish no glare resists rust
- Advanced sleeve design with staggered lines and distinct figures for precise and easy readability
- Quick-reading figures every thousandth numbered on inch tools
- Convenient decimal equivalents on inch tools
- Extra long bevel on thimble with heavy cut graduations

EASE-OF-HANDLING FEATURES

- Both spindle and anvil are beveled to easily slide onto the work
- Large, reversible wing lock nut is easy to lock or release, even when wearing heavy gloves
- Rugged frame construction and heavy duty spindle of .270" diameter

ACCURACY AND LONG-LIFE FEATURES

- Rigid one-piece frame of drop forged steel
- Extremely hard and stable one-piece spindle (the heart of our accuracy)
- Quick and easy adjustment by either the anvil or by a simple sleeve adjustment

247 Micro	247 Micrometer Ball Attachments, .200" Diameter Balls						
Cat. No.	EDP	Description					
247A	51174	For 2, 226 (old style), 230 and 577 Micrometers and 263 Micrometer Heads, .235" diameter Anvil and Spindle					
247B For 224A, 224AA and 436 Micrometers, .270" diameter and and spindle							
247C	51176	For 232 Micrometers and 463 Micrometer Heads, .200" diameter anvil and spindle					
247D	51177	For 216, 226 (new style), 231, 436.1, 733, 795, 796, 3732, 1212 and 1230 Micrometers, .250" diameter anvil and spindle					
247E	51178	For 224B through J, 238, 239, 436 Micrometers and 663 Micrometer Heads, .300" diameter anvil and spindle					
247M Mic	rometer	Ball Attachments, 5mm Diameter Balls					
247MA	51179	For 2M and 230M Micrometers and 263M Micrometer Heads, 6mm diameter anvil and spindle					
247MB	51180	For 436M Micrometers, 6.8mm diameter anvil and spindle					
247MD 56691 For 216M and 436.1M Micrometers, 6.35mm diameter an and spindle							
247ME	56692	For 224MB through J, 238M, 436M Micrometers and 663M Micrometer Heads, 7.6mm diameter anvil and spindle					

247, 247M MICROMETER BALL ATTACHMENTS

INCH/MM

Outside micrometers and micrometer heads having spindle sizes listed below can be instantly converted for measuring wall thickness of tubing, split and full bearings, sleeves and other parts with rounded surfaces by means of the 247 Ball Attachment.

FEATURES

- Easily applied by snapping on to end of either anvil or spindle, thus permitting two attachments to be used together
- Balls are hardened, measure .200" and 5mm in diameter, and move freely in the retainer, insuring positive contact with anvil and spindle
- The diameters, .200" or 5mm, of each ball used must be subtracted from the micrometer reading
- All metal construction

205 Steel M	205 Steel Mill Micrometer				
Cat. No.	EDP	Range	Graduation	Description	
205HL	50730	0-1"	.001"	Lock nut, with handle	







575, 575M, 585, 585M SCREW THREAD MICROMETERS FOR MEASURING PITCH DIAMETER

0-1"/0-25MM; 1-2"/25-50MM

These micrometers have a pointed spindle and a double V-anvil, both shaped to contact the screw thread as shown in the drawing. The micrometer reading therefore gives the pitch diameter.*

575 and 585 Screw Thread Micrometers (.001" Graduation)						
Range, Threads Per inch	Capacity, Pitch Diameter	Cat. No.	EDP			
7-9		575AP	56159			
10-13		575BP	56160			
14-18	0-1"	575CP	56161			
20-24	0-1	575DP	56162			
28-30		575EP	56163			
32-40		575FP	56164			
4 1/2 - 6		585AP	56165			
7-9		585BP	56166			
10-13	1-2"	585CP	56167			
14-18	1-2	585DP	56168			
20-24		585EP	56169			
28-30		585FP	56170			

575M and 585M Screw Thre	ad Micrometers (0.01mm Graduation)		
Range, Pitch in mm	Capacity, Pitch Diameter	Cat. No.	EDP
3-4		575MAP	56321
2-2.5		575MBP	56322
1.25-1.75	0-25mm	575MCP	56323
0.75-1	0-2311111	575MDP	56324
0.5-0.7		575MEP	56325
0.35-0.45		575MFP	56326
4.5-6		585MAP	56327
3-4	25-50mm	585MBP	56328
2-2.5	25-5011111	585MCP	56329
1.25-1.75		585MDP	56330
Cases			
Description		Cat. No.	EDP

910

912

55397

55399

Attractive protective case for 585
Swivel anvil available on special order – also in capacities over 2" (50mm).

575 sent in fitted case.

585 packed one in a box without case.

Attractive protective case for 575

READABILITY FEATURES

- Starrett satin chrome finish no glare resists rust
- Advanced sleeve design with staggered lines and distinct figures for precise and easy readability
- Decimal equivalents on inch tools

EASE-OF-HANDLING FEATURES

- Balanced frame and thimble design for easy handling and better readability
- Gracefully designed tapered frame for use in narrow slots and tight places
- Furnished with fixed (non-rotating) anvil, but swivel anvils available on special order
- Available in capacity over 2" or 50mm (special order)

ACCURACY AND LONG-LIFE FEATURES

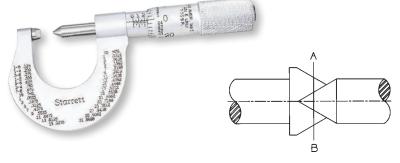
- One-piece frame of drop forged steel
- Extremely hard and stable one-piece spindle (the heart of our accuracy)
- Quick and easy adjustment
- Design allows 50% to 75% contact with the thread to be measured, thereby insuring contact with the pitch diameter at all times
- Design also ensures against contact with the root area of the thread
- Tools are accurate to ±.0002" or 0.004mm

575 AND 585 - INCH

For measuring American Unified National series and Unified J series screw threads. 585 micrometers come with a one-inch standard at no extra cost.

575M AND 585M - METRIC

For measuring I.S.O. metric and MJ screw threads. 585M micrometers come with a 25mm standard at no extra cost.



With the 575AP 0-1", pitch diameter is read directly in inches, since the line AB corresponds to the 0 reading.



^{*} MEASURING TIP: These tools are accurate for general purposes, especially if set to a thread plug gage of the size to be measured.

THREAD COMPARATOR MICROMETERS

210, 210M SCREW THREAD COMPARATOR MICROMETERS

0-7/8"/0-22MM

This micrometer is ideal for quick comparisons of thread accuracy in screw cutting operations, measuring in small grooves or recesses where regular micrometers cannot be used, and for many other applications.

NOTE: Does not measure pitch diameter. For such measurements, 575 or 585 Thread Micrometers are recommended.

READABILITY FEATURES

- Starrett satin chrome finish no glare resists rust
- Advanced sleeve design with staggered lines and distinct figures for precise and easy readability
- Convenient decimal equivalents on inch reading tools

EASE-OF-HANDLING FEATURES

- Balanced frame and thimble design ensure easy handling and better readability
- Gracefully designed tapered frame for narrow slots and tight places

ACCURACY AND LONG-LIFE FEATURES

- Rigid steel frame
- Extremely hard and stable one-piece spindle (the heart of our accuracy)
- The 210 has 60° conical anvil and spindle faces with 1/64" (0.4mm) flats on the ends of the points
- Quick and easy adjustment

210 and 210M Screw Thread Comparator Micrometers (0-7/8" Range)					
Cat. No.	EDP	Range	Graduation		
210AP	50731	0-7/8"	.001"		
210MAP	64334	0-22mm	0.01mm		
Case for 210 and 2	210M Screw Thread	Comparator Micro	neters		
Cat. No. EDP Description					
910 55397 Attractive protective case			case		



760 ELECTRONIC SCREW THREAD COMPARATOR MICROMETER (WITH OUTPUT)

0-1"/0-25MM

Same features as our 210 with electronic readout and the following additional features and benefits:

READABILITY FEATURES

- Large LCD digital readout is easy to read and reduces errors
- Resolution: .00005" and 0.001mm
- Conventional inch or millimeter graduations standard
- Attractive no-glare black wrinkle finish on the frame
- Starrett no-glare satin chrome finish on thimble and sleeve

ACCURACY AND LONG-LIFE FEATURES

- One 3-volt battery furnished for over a year of normal usage
- Automatic OFF after 30 minutes of nonuse

FULL-FUNCTION ACTION FEATURES

- Instant inch/millimeter conversion
- "ME" millimeter model turns on in millimeter mode after battery installation
- Measurement HOLD button
- Zero tool at any position and return to true zero reading
- PRESET button to install any reading at any position
- Ability to install minimum and maximum limits
- RS232 data output port
- Works well with Starrett DataSure® Wireless Data Collection Systems

760 and 760	M Electron	nic Screw Thread Comparator Micrometer
Cat. No.	EDP	Description
760FL	64051	$0\mbox{-}1\mbox{"}/0\mbox{-}25\mbox{mm}$ range, standard inch graduations on shell and thimble
760MEFL	66135	0-25mm/0-1" range, standard millimeter graduations on shell and thimble $$
Case for 760	and 760N	l Electronic Screw Thread Comparator Micrometers
731ZZ-2	65163	Attractive protective case
Cable Informa Micrometers	ation for 76	io and 760M Electronic Screw Thread Comparator
Part No.	EDP	Description
733SCKB	69888	Computer cable to PC
733SCU	69898	Cable to computer running SPC Data Collection Software
733SCM	69893	Connection to 7612 or 7613 Multiplexier
PT61120	65446	One 3-Volt battery CR2450





483, 483M, 485 V-ANVIL MICROMETERS

.093-2"/2-25MM | .078-1"

Used to check out-of-roundness from centerless grinding or other machining operations. Also used for measuring odd fluted taps, milling cutters, and reamers.

READABILITY FEATURES

- Direct measuring of three and five-fluted tools
- Starrett satin chrome finish no glare resists rust
- Advanced sleeve design for precise and easy readability
- Quick-reading figures every thousandth numbered on inch tools

EASE-OF-HANDLING FEATURES

- Balanced frame and thimble design ensure easy handling and readability
- · Ring-type knurled lock nut for quick and sure locking
- Combination ratchet and speeder for uniform pressure and quick adjustment

ACCURACY AND LONG-LIFE FEATURES

- Rigid one-piece frame of drop forged steel
- Extremely hard and stable one-piece spindle (the heart of our accuracy)
- · Carbide facing on spindle and anvils for extra long wear
- · Quick and easy adjustment

483, 483M and 485 V-Anvil Micrometers				
Cat. No.	EDP	Range	Graduation	No. of Flutes it will Measure
T483XRL-1	52491	.093-1"	.0001"	3
T483XRL-2	52494	1-2"	.0001"	3
T485XRL	52497	.078-1"	.0001"	5
483MXRL-25	56046	2-25mm	0.01mm	3
485MXRL	56047	2-2311111	0.01111111	5
Cases for 483,	483M and	485 V-Anvil	Micrometers	
Cat. No.	EDP	Description	l	
939	55331	Attractive protective case for 1" and 25mm sizes		
483ZZ-2	55332	Attractive protective case for 2" size		



225, 225M WIRE MICROMETERS

0-.400"/0-10MM

This is another regularly offered special function Starrett micrometer designed to measure diameter of wire up to .400" (10mm).

READABILITY FEATURES

- Starrett satin chrome finish no glare resists rust
- Advanced sleeve design with staggered lines and distinct figures for precise and easy readability
- Quick-reading figures every thousandth numbered on inch tools

EASE-OF-HANDLING FEATURES

- Smooth friction thimble for uniform pressure
- Hex body which stops the micrometer from rolling over when placed on a flat surface
- The throat is flat to support the wire when measuring
- The anvil and spindle extend below the flat surface

- Extremely hard and stable one-piece spindle (the heart of our accuracy)
- · Quick and easy adjustment

225 Wire Micrometers (0400" Range)			
Cat. No.	EDP	Graduation	
T225F	50814	.0001"	
225M Wire Micrometers (0-10mm Range)			
V225MF	64255	0.001mm	





207, 207M, 208, 208M STAINLESS STEEL CAN SEAM MICROMETERS

207 and 208 Can Seam Micrometers are made of stainless steel and designed to measure the thickness and depth of can seams.

The 207 Micrometer is used to measure the seam at outside bottom edge of dome on top of aerosol cans. The 208 Micrometer is used to measure thickness of seam at top and bottom of flat-topped cans. The 208D Micrometer is used to measure thickness and depth of all standard can seams.

READABILITY FEATURES

- Satin finish stainless steel no glare rust and stain resistant
- Advanced sleeve design with staggered lines and distinct figures for precise and easy readability
- Quick-reading figures every thousandth numbered on inch

EASE-OF-HANDLING FEATURES

 The 207 has a snub nose which permits measuring aerosol type cans

ACCURACY AND LONG-LIFE FEATURES

- Extremely hard and stable one-piece spindle (the heart of our accuracy)
- Quick and easy adjustment

207 and 208 Stainless Steel Can Seam Micrometers (0375" Range)					
Cat. No.	EDP	Graduation	Description		
207Z	56173		Snub nose for aerosol cans		
208Z	56175	.001"	Without depth gage		
208DZ	56176		With depth gage (.200" range)		
207M and 2	207M and 208M Stainless Steel Can Seam Micrometers (0-9.5mm Range)				
207MZ	64337		Snub nose for aerosol cans		
208MZ	64338	0.01mm	Without depth gage		
208MDZ	63191		With depth fage (5mm range)		

Depth range on 208D is .200". Depth range on 208MD is 5mm.



209, 209M CAN CURL MICROMETERS

0-.500"/0-12.5MM

The 209 features a special rest foot and finger ring for consistent measurement of the curl thickness on aerosol cans with 1" (25mm) diameter domed tops.

READABILITY FEATURES

- Starrett satin chrome finish no glare resists rust
- Advanced sleeve design with staggered lines and distinct figures for precise and easy readability
- Quick-reading figures every thousandth numbered on inch
- · Convenient decimal equivalents on inch tools

EASE-OF-HANDLING FEATURES

- Balanced frame and thimble design ensure easy handling and better readability
- Ring-type knurled lock nut for quick and sure locking
- Combination ratchet and speeder for uniform pressure and quicker adjustment
- Finger ring for ease of measuring

- Special rest foot to locate the tool for good accuracy
- Extremely hard and stable one-piece spindle (the heart of our accuracy)
- Quick and easy adjustment

209 Can Curl Micrometers (0500" Range)				
Cat. No.	EDP	Graduation		
209RL	56473	.001"		
209M Can Curl Micrometers (0-12.5mm Range)				
209MRL	64364	0.01mm		







228 HUB MICROMETER

0-1"

The 228 Hub Micrometer is an ideal tool for precision measuring of hub thickness, for insertion through small holes to measure thickness, and for many other related uses. Micrometer has a specially designed shallow frame which makes it possible to easily pass through a 3/4" (19mm) hole.

228 Hub Micrometer (0-1" Range)				
Cat. No.	EDP	Graduation		
228XRL	50921	.001"		
Case	Case			
Cat. No.	EDP	Description		
228ZZ	55228	Deluxe case for 228 Hub Micrometer		

READABILITY FEATURES

- Starrett satin chrome finish no glare resists rust
- Advanced sleeve design with staggered lines and distinct figures for precise and easy readability
- Quick-reading figures every thousandth numbered on inch tools

EASE-OF-HANDLING FEATURES

- Balanced frame and thimble design ensure easy handling and better readability
- Ring-type knurled lock nut for quick and sure locking
- Combination ratchet and speeder for uniform pressure and quicker adjustment

- Rigid one-piece frame of drop forged steel
- Extremely hard and stable one-piece spindle (the heart of our accuracy)
- Quick and easy adjustment





261L, 261ML MICROMETER HEADS WITH NON-ROTATING SPINDLES

0-1/2"/0-13MM

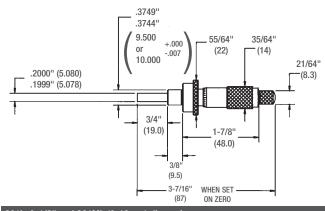
Because the spindle does not rotate, these tools are useful in driving positioning tables directly without an intermediate connecting device. They are also useful in gaging jobs where scratches on the work surface cannot be tolerated or where there is risk of distortion when spindle meets work — as in measuring soft or elastic materials. Spindle wear is also reduced since there is no rotational friction as its face contacts the work.

- Ring-type lock nut for quick and sure locking at any setting
- A speeder for quicker adjustment this is not a ratchet stop. The tool is dependent on your own "feel"

261L Micrometer Heads (0-1/2" Range)				
Cat. No. EDP Graduation Description				
261L	55944	.001"	Speeder, lock nut	
261ML Micrometer Heads (0-13mm Range)				
261ML* 64346 0.01mm Specify clamping diameter (9.5mm or 10mm)				

^{* 9.5}mm clamping diameter sent unless otherwise specified.





261L, 0-1/2" and 261ML (0-13mm) dimensions

MICROMETER HEADS

The following pages show the full line of Starrett standard micrometer heads that have been designed and developed over the years working with the needs of our customers. The micrometer heads are invaluable for use on electronic equipment, machine tools, fixtures, special gaging and other equipment where precise movement and adjustment are required.

Dimensional specifications are available upon request.

Special features are described with each tool, but all of these tools have these features that benefit the user:

- Starrett satin chrome finish no glare resists rust on all reading surfaces
- Advanced sleeve design with staggered lines and distinct figures for precise and easy readability
- Quick-reading figures on all inch reading tools
- Extremely hard and stable one-piece spindle (the heart of our accuracy and long life)
- Micro-lapped measuring face for flatness and squareness
- Quick and easy adjustment

SPECIAL HEADS

In addition to standard micrometer heads, Starrett has also designed and manufactured many special types of micrometer heads for widely diversified applications requiring micrometer accuracy in settings and adjustments. These special heads are designed to exact specifications for specialized usage with wavemeters and other equipment in the electronics industry, machine tools, fixtures, special gages, tools, and all special mountings. They can be furnished to suit your particular requirements in a wide choice of sizes, range and graduations.

We design and build to your special need, so if you don't see what you want, please ask for it.

For quotations or recommendations, write: The L.S. Starrett Co. Special Order Department 121 Crescent Street Athol. MA 01331





464P MICROMETER HEADS

0-1/4"

460A, 460MA MICROMETER HEADS

0-1/4"/0-6.5MM

460B, 460MB MICROMETER HEADS

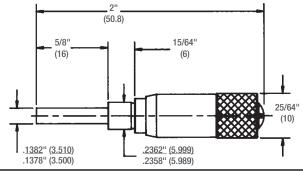
0-1/2"/0-13MM

These are plain micrometer heads with no lock nut or ratchet.

464P, 460A, 460MA, 460B and 460MB Micrometer Heads				
Range	Graduation	Cat. No.	EDP	
0-1/4"	.001"	464P	56657	
0-1/4"	.001"	460A	64444	
0-6.5mm	0.01mm	460MA	64445	
0-1/2"	.001"	460B	64446	
0-13mm	0.01mm	460MB	64447	

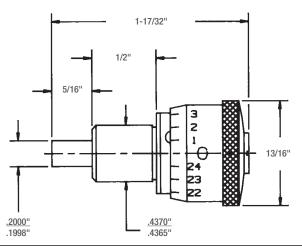


460B



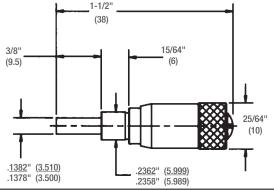
460B, 0-1/2" and 460MB (0-13mm) dimensions





464P, 0-1/4" dimensions





460A, 0-1/4"and 460MA (0-6.5mm) dimensions

463 MICROMETER HEADS

0-1/2"/0-13MM

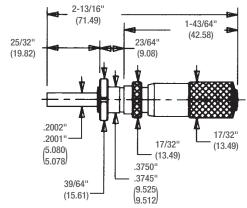
1463 STAINLESS STEEL MICROMETER HEADS

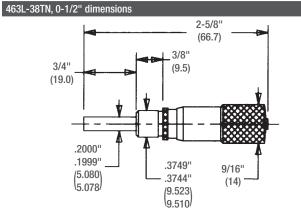
0-1/2"/0-13MM

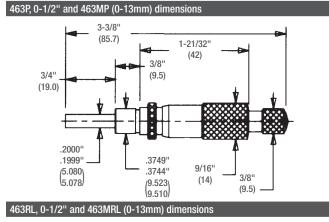
The 463 and 1463 Micrometer head are exactly the same, except that the 1463 is made from rust-resistant stainless steel. The reading surfaces are satin finished stainless steel for easy readability. Heads are available with the features below:

- Either combination ratchet and speeder for uniform pressure and quicker adjustment, or plain micrometer heads that depend on your own feel
- Ring-type lock nut for quick and sure locking at any setting
- · Reverse reading, if needed
- Plain or carbide spindle faces

463 and 1463 Mi	icrometer Heads		
Range	Graduation	Cat. No.	EDP
		463P	52440
		463P-38TN	67112
		463L	52442
		463XL	52451
0-1/2"	.001"	463L-38TN	67113
		463RL	52443
		463XRL	64687
		RV463RL	57073
		RV463XRL	64688
		T463P	52446
		T463L	52448
0-1/2"	.0001"	T463XL	64689
		T463RL	52449
		T463XRL	65052
		463MP	52444
0-13mm	0.01mm	463MRL	52452
		463MXRL	64691
0-13mm	0.002mm	V463MRL	65053
0-1311111	0.00211111	RV463MRL	60845
0-1/2"	.001"	1463RL	53207
U-1/2	.0001"	T1463RL	53209
0-13mm	0.002mm	V1463MRL	64344













762 ELECTRONIC MICROMETER HEADS WITH ROTATING OR NON-ROTATING SPINDLES (WITH OUTPUT)

0-2"/0-50MM

READABILITY FEATURES

- Large digital readout is easy to read, reducing errors
- Conventional inch or millimeter graduations standard
- · Attractive black wrinkle finish on frame
- Starrett no-glare satin chrome finish on thimble and sleeve

EASE-OF-HANDLING FEATURES

- Ring-type knurled lock nut
- Smooth friction thimble for uniform pressure on regular heads and combination ratchet and speeder on non-rotating heads

ACCURACY AND LONG-LIFE FEATURES

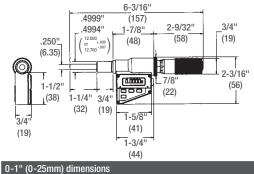
- Extremely hard and stable one-piece spindle (the heart of our accuracy)
- One 3-volt battery furnished for over a year of normal usage
- Auto OFF after 30 minutes of nonuse

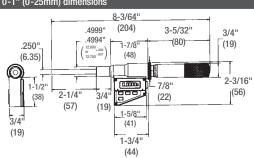
FULL-FUNCTION ACTION FEATURES

- Inch/millimeter conversion
- "ME" millimeter models turn on in millimeter mode after battery installation
- Measurement HOLD button
- Ability to zero tool at any position
- Ability to retain and return to the true zero reading of the micrometer
- PRESET button to install any reading at any position
- RS232 data output port
- Works well with Starrett DataSure® Wireless Data Collection Systems

	762 Micrometer Specifications		
	Inch	mm	
Resolution	.00005"	0.001mm	
Accuracy	±.0001" per Inch	±0.003mm per 25mm	







0-2" (0-50mm) dimensions

762 Electronic Micrometer Heads with Standard Inch Graduations on Shell and Thimble				
Range	Description*	Cat. No.	EDP	
	Friction thimble, lock nut, carbide face	762XFL	65058	
0-1"/0-25mm	Ratchet stop, lock nut, carbide face, non-rotating spindle	762NXRL	65060	
0-2"/0-50mm	Friction thimble, lock nut, carbide face	762XFL-2	65062	
762M Electronic Micrometer Heads with Standard				

Millimeter Graduations on Shell and Thimble				
0-25mm/0-1"	Friction thimble, lock nut, carbide face	762MEXFL-25	66077	
0-50mm/0-2"	Friction thimble, lock nut, carbide face	762MEXFL-50	66137	

Cable Information for 762 and 762M Electronic Micrometer Heads		
Description	Part No.	EDP
Computer cable to PC	733SCKB	69888
Cable to computer running SPC Data Collection Software	733SCU	69898
Connection to 7612 or 7613 Multiplexier	733SCM	69893
One 3-Volt Battery CR2450	PT61120	65446

^{*1/2&}quot; (12.7mm) clamping diameter sent unless otherwise specified.



363, 363M DIGITAL MICROMETER HEADS

0-1"/0-25MM

READABILITY FEATURES

- Clear, easily read numbers reduce errors
- No-glare black finish on the frame
- Starrett no-glare satin chrome finish on thimble and sleeve
- .001" or 0.01mm is read directly from the counter
- Reverse reading, if needed

EASE-OF-HANDLING FEATURES

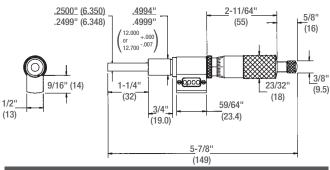
- Ring-type knurled lock nut for quick and sure locking
- Choice of smooth friction thimble for uniform pressure or combination ratchet and speeder for uniform pressure and quicker adjustment

ACCURACY AND LONG-LIFE FEATURES

 Extremely hard and stable one-piece spindle (the heart of our accuracy)

363 Digital Micrometer Heads (0-1" Range)		
Cat. No.	EDP	Graduation
363L	56297	
363RL	56298	.001"
363FL	56299	.001
RV363RL	57072	
363M Digital Micrometer Heads (0-25mm Range)		
363ML*	56302	
363MRL*	56303	0.01mm
363MFL*	56304	

^{*} Specify clamping diameter (12 or 12.7mm). 12.7mm sent unless otherwise ordered.



363RL, 0-1" and 363MRL (0-25mm) dimensions

63, 63M Long Range Micrometer Heads

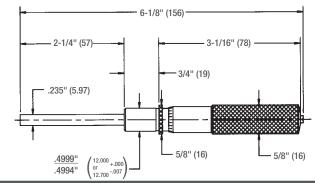
0-2"/0-50MM

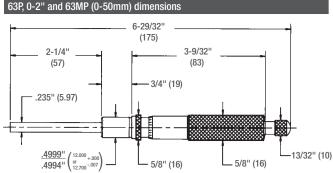
When long spindle travel is required, the 63 Micrometer heads provide a range that will handle most applications, such as in electronic equipment, machine tools, special gages, tooling, etc.

- With or without ring-type lock nut for quick and sure locking
- With or without the combination ratchet and speeder for uniform pressure and quicker adjustment

63 Micrometer Heads (0-2" Range)		
Cat. No.	EDP	Graduation
63P	50305	.001"
63L	50306	.001"
63RL	50307	.001"
T63P	50308	.0001"
T63RL	50309	.0001"
63M Micrometer Heads (0-50mm Range)		
63MRL*	55939	0.01mm
V63MRL*	64343	0.002mm

 $^{^{\}star}$ 0-25mm models specify clamping diameter 12mm or 12.7mm. 12.7mm sent unless otherwise ordered.





63RL, 0-2" and 63MRL (0-50 mm) dimensions









263 AND 1263 MICROMETER HEADS

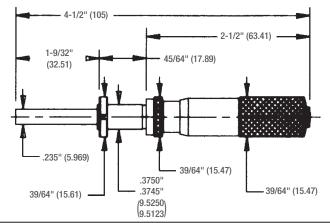
0-1"/0-25MM

- Reading surfaces satin-finished for easy readability
- No-glare, satin chrome finish on the 263, rust-resistant, stainless steel on the 1263
- Available with reverse reading, if needed
- Ring-type knurled lock nut for quick and sure locking
- Choice of smooth friction thimble for uniform pressure, combination ratchet and speeder for uniform pressure and quicker adjustment, or a plain micrometer head that depends on your own "feel"
- Spindle face available plain or with carbide
- Furnished with 1/2" (12.7mm) or 3/8" (9.5mm) diameter clamping surface

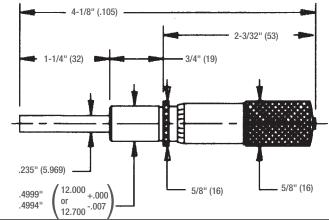
263 and 263M Micrometer Heads			
Range	Graduation	Cat. No.	EDP
		263P	51251
		263P-38	67108
		263P-38TN	67110
		263L	51253
0-1"	.001"	263XL	51265
0-1	.001	263L-38	67109
		263L-38TN	67111
		263RL	51254
		263FL	51256
		RV263RL	57071
		T263P	51258
0-1"	.0001"	T263L	51260
0-1		T263XL	65054
		T263RL	51261
		263MP*	51275
0-25mm	0.01mm	263ML*	51276
0-2311111	0.0111111	263MRL*	51257
		263MXL*	65055
		V263MRL*	55962
0-25mm	0.001mm	RV263MRL*	64948
		V263MXRL*	65056

1263 and 1263M Stainless Steel Micrometer Heads			is
Range	Graduation	Cat. No.	EDP
0-1"	.001"	1263L	53200
0-1	.001	1263RL	53201
0-1"	.0001"	T1263RL	53203
0-25mm	0.001mm	V1263MRL*	64345

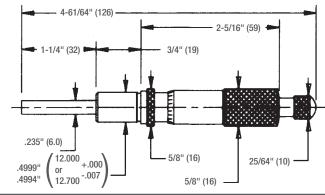
^{* 0-25}mm models specify clamping diameter 12 or 12.7mm. 12.7mm sent unless otherwise ordered.



263L-38TN, 0-1" dimensions



263P, 0-1" and 263MP (0-25mm) dimensions



263RL, 0-1" and 263MRL (0-25mm) dimensions



663, 663M HEAVY DUTY MICROMETER HEADS

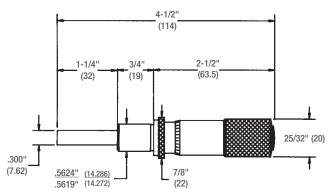
0-1"/0-25MM

The 663 is similar to the 263 but features heavy duty construction with a larger diameter spindle, clamping surface and thimble.

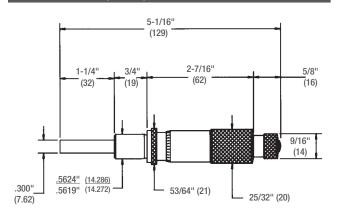
- Available with lock nut and the combination ratchet and speeder for uniform pressure and quicker adjustment, or a plain micrometer head with lock nut only
- Ring-type lock nut for quick and sure locking

663 Heavy Duty Micrometer Heads (0-1" Range)		
EDP	Graduation	
52772	.001"	
52773	.001	
52777	.0001"	
52778	.0001	
	EDP 52772 52773 52777	

663M Heavy Duty Micrometer Heads (0-25mm Range)		
663MRL	52774	0.01mm
V663MRL	64342	0.001mm



663L, 0-1" and 663ML (0-25mm) dimensions



663RL, 0-1" and 663MRL (0-25mm) dimensions



262, 262M MICROMETER HEADS WITH NON-ROTATING SPINDLES

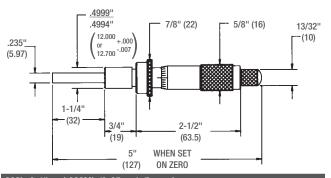
0-1"/0-25MM

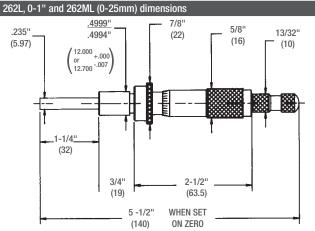
Because the spindle does not rotate, this tool is useful in driving positioning tables directly without an intermediate connecting device. It is also useful in gaging jobs where scratches on the work surface cannot be tolerated, or where there is risk of distortion when spindle meets work — as in measuring soft or elastic materials. Spindle wear is also reduced, since there is no rotational friction when its face contacts the work.

- Ring-type lock nut for quick and sure locking at any setting
- Available with or without the combination ratchet and speeder for uniform pressure and quicker adjustment

262 Micrometer Heads (0-1" Range)		
Cat. No.	EDP	Graduation
262L	55945	.001"
262RL	55946	.001
262M Micrometer Heads (0-25mm Range)		
262ML*	64347	0.01mm
262MRL*	65051	0.01111111

0-25mm models specify clamping diameter 12mm or 12.7mm. 12.7mm sent unless otherwise ordered.





262RL, 0-1" and 262MRL (0-25mm) dimensions







465, 465M, 468, 468M DIRECT-READING, LARGE MICROMETER HEADS

0-2"/0-50MM

These large micrometer heads are designed for use with electronic equipment requiring ultra-fine adjustment for machine tools, fixtures, special gages and tools, special mountings, or wherever micrometer accuracy in setting and adjustment is required.

Another highly useful feature is the spindle adjustment, which permits adjusting the spindle length approximately $\pm 1/16"$ (1.5mm). If the spindle is to be located against a definite stop and a different zero position is required, first loosen the cap screw in the end of the thimble, position the spindle to the desired location, then holding the spindle in position, rotate the thimble to zero and retighten the cap screw. In achieving this adjustable feature, we have still retained our positive taper-lock large thimble bearing.

The 468 Micrometer heads are exactly the same as the 465, except that they have double figures in red and black on the sleeve and thimble, permitting reading both ways with the spindle moving in either direction. This feature is invaluable on many instruments and microwave applications.





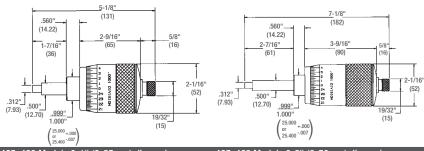
T468XSP-1 with double figures in red and black on sleeve and thimble for reading both ways.

READABILITY, ACCURACY AND LONG-LIFE FEATURES:

- 2-1/16" (52mm) thimble diameter with widely spaced .0001" or 0.002mm graduations for direct reading
- All graduations are direct reading no vernier lines to match
- All reading surfaces have Starrett satin chrome finish as the no-glare background for the sharp lines and figures
- All graduations on sleeves and thimbles have advanced styling with staggered graduations for easy reading
- The spindle is carbide faced for long life
- Thimble and sleeve are made of aluminum to reduce weight
- Furnished with a speeder (not a ratchet) for quicker adjustment
- Extremely hard and stable one-piece spindle for accuracy and long-life
- Micro-lapped measuring face for flatness and squareness
- Quick and easy adjustment

465 Mircometer Heads			
Cat. No.	EDP	Range	Graduation
T465XSP-1	67121	0-1"	.0001"
T465XSP-2	67122	0-2"	.0001
465MXSP-25*	67123	0-25mm	0.002mm
465MXSP-50*	67124	0-50mm	0.00211111
468 Micromete	r Heads		
T468XSP-1	67125	0-1"	.0001"
T468XSP-2	67126	0-2"	.0001
468MXSP-25*	67127	0-25mm	0.002mm
468MXSP-50*	67128	0-50mm	0.00211111

^{*} Metric models specify clamping diameter 25 or 25.4mm. 25.4mm sent unless otherwise ordered.



465, 468 Models 0-1" (0-25mm) dimensions

465, 468 Models 0-2" (0-50mm) dimensions

469, 469M LARGE, SUPER-PRECISION MICROMETER HEADS

0-1"/0-25MM

These are our most accurate micrometer heads. They are also available on special order with double graduations in red and black on the sleeve and thimble, permitting readings both ways with the spindle moving in either direction.

These micrometer heads have a 4-1/16" (103mm) thimble diameter and are graduated to .0001", .000050", 0.001mm, or 0.002mm for direct reading. They also have staggered graduations for easy counting and reading of lines. Spindle is carbide faced for long life.

1-7/16" (36)	5-1/2" — (140) — 2-19/32" — (66)	5/8" (16)
7/8" (22) .500" (12.70) .999" 1.000" (25.000 +.000) 25.400007	3 2 2 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4-1/16" (103) 19/32" (15)

469, 0-1" and 469m (0-25mm) dimensions

EDP	Graduation	
07400		
67129	.000050"	
67130	.0001"	
469M Large, Super-Precision Micrometer Heads (0-25mm Range)		
67131	0.001mm	
67132	0.002mm	
	67130 Precision Micrometer 67131	

^{*} Metric models specify clamping diameter 25 or 25.4mm. 25.4mm sent unless otherwise ordered.

Also available on special order with double graduations for reading both ways with spindle moving in either direction.



BENCH MICROMETERS

777 ELECTRONIC BENCH MICROMETERS (WITH OUTPUT)

0-1"/0-25MM

The 777 Electronic Bench Micrometer is especially suited for precision measurements where the work must be brought to the gage.

Work is staged between the anvil and spindle on an adjustable table, which can be raised to a selected height and locked in position by turning a knurled thumb screw on back of the base. Made of cast iron with black wrinkle finish, the base is heavily proportioned to sustain gage accuracy and assure stability in use. It stands on three machined pads.

With Standard	With Standard Inch Graduations on Shell and Thimble			
Cat. No.	EDP	Description		
777XFLZ	67135	0-1"/0-25mm Range		
With Standard	d Millimeter	Graduations on Shell and Thimble		
777MEXFLZ	67136	0-25mm/0-1" Range		
Cable Informa	Cable Information			
Part No.	EDP	Description		
733SCKB	69888	Computer cable to PC		
733SCU	69898	Cable to computer running SPC Data Collection Software		
733SCM	69893	Connection to 7612 or 7613 Multiplexier		
PT61120	65446	One 3-Volt Battery CR2450		



READABILITY FEATURES

- Large, right-sized, high-contrast LCD digital readout is easy to read and reduces errors
- Conventional inch or millimeter graduations standard
- Attractive no-glare black wrinkle finish on the frame

EASE-OF-HANDLING FEATURES

- Ring-type knurled lock nut for quick and sure locking
- Smooth friction thimble for uniform pressure

ACCURACY AND LONG-LIFE FEATURES

- Extremely hard and stable one-piece spindle
- The spindle and anvil are carbide faced for long life
- One 3-volt battery furnished for dependable power and over one year's normal usage
- Automatic OFF after 30 minutes of nonuse
- Starrett workmanship

FULL-FUNCTION ACTION FEATURES

- Instant inch/millimeter conversion
- "ME" millimeter model will turn on in the millimeter mode after installation of a new battery
- Measurement HOLD button
- Ability to zero tool at any position
- Ability to retain and return to the true zero reading of the micrometer
- PRESET button to install any reading at any position
- Ability to install minimum and maximum limits
- RS232 data output port
- Works well with DataSure® Wireless Data Collection Systems



Bench Micrometers

673. 673M DIRECT-READING BENCH MICROMETERS

0-2"/0-50MM

The 673 Bench Micrometer is a high precision instrument, ideal for bench use either in a shop environment or inspection laboratory. It can be used as a comparator measuring to fifty-millionths of an inch (.000050") or two-thousandths of a mm (0.002mm) or for direct measuring to .0001" or 0.002mm. Work lengths up to 2" or 50mm can be measured.

- The base is a heavy, rigid casting, incorporating at the left end a movable anvil which actuates a linear, friction-free motion transfer mechanism between the anvil and the indicator. This assures high accuracy.
- The large thimble diameter, approximately 3" (77mm), makes possible widely spaced graduations that are easy to read without a vernier scale reference
- Advanced, staggered design and quick reading graduations in combination with Starrett no-glare satin chrome finish on both thimble and sleeve also contribute to easier, faster readings
- The head is furnished with a speeder and has a special ring-type lock nut which firmly holds the spindle at any setting without distortion
- Another useful feature is the adjustable work table centered beneath the anvil and spindle. Work can be accurately aligned between the anvil and spindle by adjusting the table to the proper height and locking it in position.
- The spindle and anvil are carbide faced for long life
- This bench micrometer can also be used with the 776 Electronic Gage Amplifier by using the 673A Adaptor for the 715-2 Cartridge-Type Electronic Gaging Head to read to tenmillionths of an inch (.000010") or 0.0001mm

673 and 6	673M Dir	ect-Reading I	Bench Microm	neters		
	Range Graduation					
Cat. No.	EDP	Micrometer Head	Dial Indicator	Micrometer Head	Dial Indicator	Work Table
673XZ	67191	0-2"	.006" (0-3-0)	.0001"	.000050"	2-1/4" dia. and 7/8" vertical adjustment
673MXZ	67192	0-50mm	0.2mm (0-10-0)	0.002mm	0.002mm	57mm dia. and 22mm vertical adjustment
673A	52891	Adaptor for 7	15-2 Cartridge	Type Electronic	c Gaging Head	

Anvil Pressure Adjustment - 8 oz. to 3 lb (0.23 to 1.36kg)



How to Use for Direct MEASURE AND AS A COMPARATOR

For direct measuring, the micrometer head is set to zero and the dial indicator is set to zero by the bezel adjustment. Any workpiece within the 2" (50mm) range can then be measured by the micrometer head in ten-thousandths of an inch (.0001" or 0.002mm). The indicator must read zero for each measurement.

If used as a comparator, first set the head and the indicator to zero as previously explained. Then adjust the micrometer head to the desired dimension to be checked. After retracting the anvil, work is placed on the table between anvil and spindle and the anvil is then released so anvil and spindle contact the work. Plus or minus deviation from the nominal work size is then read from the dial indicator in fifty-millionths of an inch (.000050") or 0.002mm.





END MEASURING RODS

Precision End Measuring Rods and Inside Micrometers

The following pages show our varied line of precision end measuring rods and inside micrometers. The variations are fixed-range or adjustable-range micrometers and solid or tubular measuring rods.



Unless otherwise noted under the individual tools, all have these features:

- Balanced design for better feel and accurate measurement
- All contact points are hardened and ground for better accuracy and long life
- Satin chrome finish on all micrometer heads and reading surfaces that resist rust and also make for easy reading by providing a no-glare background for the sharp lines and figures
- Hardened and stabilized spindle for accuracy and long life
- Advanced sleeve design with staggered lines and distinct figures for precise and easy readability
- · Quick and easy adjustment
- Starrett workmanship
- Inside Micrometers 121, 124, 823 and 824 by design have a firmer rotation than regular micrometers. This is to limit the tendency of the micrometer head to rotate when withdrawn from the workpiece.

MEASURING TIPS FOR INSIDE MEASUREMENTS

Whether to use a two-point or three-point contact measuring tool is usually a matter of preference, but there are some differences.

A two-point contact rod-type inside micrometer shown in this section is usually lighter, easier to handle, and more versatile over long ranges from approximately 6-107" (150-2700mm). Any two-point contact micrometer, regardless of range, can probe a hole better to find the geometry of that hole than a three-point contact.

Most three-point contact tools have setting rings to ensure accuracy. If you desire very close tolerance work with two-point contact inside micrometers, it is recommended that they be set to a ring gage or to an outside micrometer.

A three-point contact micrometer shown in the Bore Gages section has an advantage in that it can be seated in position more quickly than a two-point contact tool. Usually these tools can also be read to a finer accuracy. The three-point tool will tell the maximum true diameter that can enter the hole a little faster than a two-point contact tool.

Micrometer heads used in these tools are accurate to \pm .0001" or 0.002mm, but overall accuracy on tools that add rods is dependent on good practice and technique.

To ensure accuracy, these practices should be followed:

- Always make sure that there are no specks of dirt between the clamping surfaces of the rods and micrometer heads
- Tighten all rods uniformly, not too tight, not too loose, but a fairly firm assembly
- Assemble long sections vertically or, with support, horizontally
- Because temperature can affect long rods used in these tools, they should be assembled in the same environment in which they will be used

For additional information, refer to the Bore Gage Section.



END MEASURING RODS

234, 234M END MEASURING RODS WITH SPHERICAL ENDS

1-24"/25-600MM

These rods or "standards" are for checking and setting micrometers of 2" capacity and larger, and are also used on machine tools for comparing gages, checking precision measuring tools, for measuring parallel surfaces, and many other types of work.

They are made of special tool steel in rod form with ends hardened and accurately lapped to a spherical radius.

Available plain or with insulated handles to minimize expansion by heat when held in the hand. 1-6" (25-150mm) sizes are 1/4" (6.3mm) diameter; 7-11" (175-275mm) sizes, 3/8" (9.5mm) diameter; 12-24" (300-600mm) sizes are 7/16" (11mm) diameter.

NOTE: These standards are the ones used for all micrometers furnished with standards. Larger sizes available on special order.

Standards fo	or S436.1 8	S436 Micrometer Sets	With SLC	
Cat. No.	EDP	Description	Cat. No.	EDP
S234C	50852	Set of two standards only		
S234D	51897	Set of three standards only		
S234E	50860	Set of five standards only	S234E W/SLC	66878
S234G	51929	Set of eleven standards only	S234G W/SLC	66877
S234F	51917	Set of six standards only	S234F W/SLC	66879
S234J	64146	Set of twelve standards only		
Standards fo	or S436.1M	& S436M Micrometer Sets		
Cat. No.	EDP	Description		
S234MC	51893	Set of two standards only		
S234MD	51901	Set of three standards only		
S234ME	51913	Set of five standards only		
S234MF	51925	Set of six standards only		
S234MG	51937	Set of eleven standards only		
S234MJ	64467	Set of twelve standards only		

234 End Measu	234 End Measuring Rods							
	With Insulating	Handle	Without Insulat	ing Handle				
Length	Cat. No.	EDP	Cat. No.	EDP				
1"	234A-1	50969	234B-1	51017				
2"	234A-2	50971	234B-2	51019				
3"	234A-3	50973	234B-3	51021				
4"	234A-4	50975	234B-4	51023				
5"	234A-5	50977	234B-5	51025				
6"	234A-6	50979	234B-6	51027				
7"	234A-7	50981	234B-7	51029				
8"	234A-8	50983	234B-8	51031				
9"	234A-9	50985	234B-9	51033				
10"	234A-10	50987	234B-10	51035				
11"	234A-11	50989	234B-11	51037				
12"	234A-12	50991	234B-12	51039				
13"	234A-13	50993						
14"	234A-14	50995						
15"	234A-15	50997						
16"	234A-16	50999						
17"	234A-17	51001						
18"	234A-18	51003						
19"	234A-19	51005						
20"	234A-20	51007						
21"	234A-21	51009						
22"	234A-22	51011						
23"	234A-23	51013						
24"	234A-24	51015						

234M End Mea	234M End Measuring Rods								
	With Insulating	Handle	Without Insulat	ting Handle					
Length	Cat. No.	EDP	Cat. No.	EDP					
25mm	234MA-25	50970	234MB-25	51018					
50mm	234MA-50	50972	234MB-50	51020					
75mm	234MA-75	50974	234MB-75	51022					
100mm	234MA-100	50976	234MB-100	51024					
125mm	234MA-125	50978	234MB-125	51026					
150mm	234MA-150	50980	234MB-150	51028					
175mm	234MA-175	50982	234MB-175	51030					
200mm	234MA-200	50984	234MB-200	51032					
225mm	234MA-225	50986	234MB-225	51034					
250mm	234MA-250	50988	234MB-250	51036					
275mm	234MA-275	50990	234MB-275	51038					
300mm	234MA-300	50992	234MB-300	51040					
325mm	234MA-325	50994							
350mm	234MA-350	50996							
375mm	234MA-375	50998							
400mm	234MA-400	51000							
425mm	234MA-425	51002							
450mm	234MA-450	51004							
475mm	234MA-475	51006							
500mm	234MA-500	51008							
525mm	234MA-525	51010							
550mm	234MA-550	51012							
575mm	234MA-575	51014							
600mm	234MA-600	51016							







INSIDE MICROMETERS

128. 128M COMBINATION HEAD WITH INSIDE MICROMETER

The combination head for inside micrometers combines the precision of a dial indicator sensor and the linear accuracy of a micrometer. This combination of indicator and micrometer reduces the need for operator "feel" and provides faster readings with increased reliability.

This head is interchangeable with the 128 End Rods and extension combinations.

For direct measurements, the dial indicator hand and the telltale hand must both register zero before reading the micrometer. As a comparator, the micrometer is first set to the nominal dimension and \pm deviation from zero is read from the dial indicator. The gage should be rocked to obtain a minimum reading on the indicator. Out-of-roundness can also be checked - any variation being shown by the indicator.

For inch-reading tools, the head can be adjusted within a range of 2". It extends the overall range by an additional 5". The special 81-138J Jeweled Non-Shock Indicator is graduated .0005", range \pm .040" and reads 0-40 on both the plus and minus dials.

For millimeter-reading tools, the head can be adjusted within a range of 50mm. This extends the overall range an additional 125mm. The special 81-181J Jeweled Non-Shock Indicator is graduated 0.01mm, range ±1mm and reads 0-100mm on both the plus and minus dials.

The 10" (250mm) master should be used vertically with the shoulder on the indicator end of the head, seated squarely, as shown in photo.

128 and 128M Combination Head with Inside Micrometer Sets					
Cat. No.	EDP	Description			
128	64381	Inch-reading combination head with setting master			
128M	68117	Millimeter-reading combination head with setting master			

128, 128M SETS

6-294"/150-7350MM

Each set consists of a satin-chrome micrometer head which can be used in combination with any one or more of a series of rigid, tubular steel measuring rods to obtain the required length.



lead page of this section, the 128 Sets have these additional features:

- For inside measurements from 6-294" (150-7350mm) (longer sizes are also available on special order)
- Interchangeable tubular steel measuring rods and extension rods are lightweight with extreme rigidity. Rods screw into each other and seat against hardened ground and lapped surfaces necessary for high accuracy. Rod diameter 5/8" (16mm).
- Rods are provided with insulated handles to minimize expansion from hand heat. All rods marked with length
- · All rod anvil contacts are hardened and ground
- · All measuring rod anvil contacts are adjustable (plain extension rods are not adjustable)
- · Adjustable, ground steel supporting collars (placed in "V" grooves when used in the horizontal position)



128 and 128M Mic								
Range with Micrometer Head	Movement of Screw	Grad.	Description	Range with Combination Head	Cat. No.	EDP		
6-78"	2"	.001"	With (1) 4-6" head, (1) each 2", 4", 6", 8", 10", 12" rods, (1) 12" ext., (2) 24" ext.	11-83"	128AZ	64375		
6-150"	2"	.001"	With (1) 4-6" head, (1) each 2", 4", 6", 8", 10", 12" rods, (1) 12" ext., (5) 24" ext.	11-155"	128BZ	64376		
6-294"	2"	.001"	With (1) 4-6" Head, (1) each 2", 4", 6", 8", 10", 12" rods, (1) 12" ext., (11) 24" ext.	11-299"	128CZ	64377		
150-1950mm	50mm	0.01mm	With (1) 100-150mm head, (1) ea. 50, 100, 150, 200, 250, 300mm rods, (1) 300mm ext., (2) 600mm ext.	300-2100mm	128MAZ	64378		
150-3750mm	50mm	0.01mm	With (1) 100-150mm head, (1) ea. 50, 100, 150, 200, 250, 300mm rods, (1) 300mm ext., (5) 600mm ext.	300-3900mm	128MBZ	64379		
150-7350mm	50mm	0.01mm	With (1) 100-150mm head, (1) ea. 50, 100, 150, 200, 250, 300mm rods, (1) 300mm ext., (11) 600mm ext.	300-7500mm	128MCZ	64380		





MICROMETER SETS

124, 124M Solid-Rod Inside MICROMETER SETS

2-32"/50-800MM

These are the most popular inside micrometers because of their lightness, ease of use, and range. They are very useful for measuring inside diameters of cylinders and rings, measuring parallel surfaces, etc.

The desired range is obtained by assembling rods and spacing collars to the micrometer head. Measuring rods are provided with a shoulder that is set accurately in the micrometer head and locked in position. When assembling rods to the A and B heads, the reading line on the micrometer head should be lined up with the marking on each rod (except for the 2-3" and the 50-75mm rods).

Rod diameters are approximately 1/4" (6mm) on the A and B sizes, and approximately 11/32" (8.5mm) on the C size. Each rod has individual length adjustment for the anvil by means of special wrenches furnished.

- Measuring rods are solid and assembled on one side of the micrometer head
- Insulated rods marked with length
- Hardened and ground anvils on rods, adjustable for length. Head anvil is hardened and ground
- Quick-reading figures every thousandth numbered on inch reading tools
- · Convenient handle is available to provide reach for use in deep holes. Handle screws into the micrometer head in place of the dummy screw, which is opposite a rod lock screw. Distance from the end of the handle to the center line is 6-1/4" (158mm).









Н1	2/	Head

124 Solid-Rod Inside Micrometer Sets (.001" Graduation)							
				Without 0	ase	With Case	
Range	Screw Movement	Measuring Rods	Spacing Collars	Cat. No.	EDP	Cat. No.	EDP
2-8"	1/2"	6	One 1/2"	124A	50540	124AZ	50542
2-12"	1/2"	10	One 1/2"	124B	50544	124BZ	50546
8-32"	1"	4	One 1" Two 2"	124C	50548	124CZ	50550
2-32"	1/2 and 1" (2 heads)	Set 124A and 124C		124D	50552	124DZ	50554
124M Solid-R	od Inside Micromete	er Sets (0.01mm Gra	duation)				
50-200mm	13mm	6	One 12mm	124MA	50541	124MAZ	56141
50-300mm	13mm	10	One 12mm	124MB	50545	124MBZ	56142
200-800mm	25mm	4	One 25mm Two 50mm	124MC	50549	124MCZ	56143
50-800mm	13 and 25mm (2 heads)	Comprised of sets 12 and 124MC	24MA	124MD	50553	124MDZ	56144
Accessory for 124 and 124M Solid-Rod Inside Micrometer Sets							
Description	Description Cat. No. EDP						
6-1/4" (158mr	m) handle					124H	50556





MICROMETER SETS

823, 823M TUBULAR INSIDE MICROMETER SETS

1-1/2-40"/40-1000MM

The 823 Micrometers are highly useful tools for internal linear measurements such as measuring cylinders, rings, setting calipers, comparing gages and measuring parallel surfaces.

The extension rods are made of steel tubing, light in weight, yet extremely rigid. Rods are approximately 3/8" (9.5mm) diameter to meet the requirements of mechanics who prefer this larger diameter. By removing the hardened and ground anvil ends (end caps) of the micrometer head, the rods may be attached to either or both ends of the micrometer as preferred. Each rod may be individually adjusted for wear by the hardened and ground anvil at the end.

- Tubular measuring rods are lightweight, yet extremely rigid. Rods are insulated, with the exception of 1/2" (13mm) and 1" (25mm) sizes.
- · Each rod is marked with length
- Hardened and ground anvils on rods are adjustable for length. Head anvil is hardened and ground.
- Interchangeable anvils on both 1/2" (13mm) and 1" (25mm) heads
- Quick reading figures every thousandth numbered on inch reading tools
- Lock nut furnished on 1" (25mm) heads
- 5-1/2" (140mm) long, convenient handle furnished on A, B, F micrometers may be clamped where it will provide correct balance and reach





823AZ 1-1/2-8" set with tool, rods, handle and wrenches

823 Tubular In	823 Tubular Inside Micrometer Sets (.001" Graduation)							
Range	Movement of Screw	Description	Cat. No.	EDP				
1-1/2-8"	1/2"	With 5 rods and handle	823AZ	53050				
1-1/2-12"	1/2	With 8 rods and handle	823BZ	53052				
4-24"		With 7 rods	823CZ	53054				
4-32"	1"	With 8 rods	823DZ	53055				
4-40"		With 10 rods	823EZ	53056				
1-1/2-32"	1/2 and 1" (2 heads)	With 10 rods and handle	823FZ	53058				
823M Tubular	823M Tubular Inside Micrometer Sets (0.01mm Graduation)							
40-200mm	12mm	With 6 rods and handle	823MAZ	53051				
40-300mm	13mm	With 8 rods and handle	823MBZ	53053				
100-1000mm	25mm	With 10 rods	823MEZ	53057				

Each set furnished in attractive, protective case with assembly instructions for various measurements.









INSIDE MICROMETERS

121 Long Range Tubular Inside Micrometer Sets

32-107"

The 121 Tubular Inside Micrometers are designed for large internal measurements beyond the capacity of most other micrometers. Each set consists of a micrometer head mounted at the end of a tubular holder in which measuring rods can be inserted and adjusted to the desired size. Final size reading in thousandths of an inch (.001") is obtained using the micrometer head.

Rods and holder are made of steel tubing, light in weight, yet very rigid. Each rod is accurately graduated with inch divisions, which are set to the size desired by a line on the holder, and firmly held by a large, knurled clamping nut. The collet has a design that insures an extremely tight grip on the rods at any setting.

FEATURES

- Insulated rod holder to eliminate expansion by heat when hand held
- Attractive nickel-plated finish; satin-chrome finish on micrometer head reading surfaces
- Rods are accurately graduated in inches micrometer head in thousandths of an inch
- Hardened and ground anvils. All rod anvils are adjustable.
- Quick, easy adjustment for micrometer screw

121 Long	121 Long Range Tubular Inside Micrometer Sets (.001" Graduation)							
Range	Movement of Screw	Description	Cat. No.	EDP				
32-57"		With 1 graduated measuring rod	121AZ	50492				
32-82"	1"	With 2 graduated measuring rods and 1 extension rod	121BZ	50493				
32-107"		With 3 graduated measuring rods and 2 extension rods	121CZ	50494				

Each set furnished in attractive, protective case.



824, 824M Fixed Range Inside Micrometers and Sets

2-12"/50-150MM

For those who prefer inside micrometers without interchangeable rods, Starrett offers this series of fixed range inside micrometers. The 824 and 824M can be ordered individually or in sets. All 824 and 824M Micrometers feature:

- Insulating handles on all sizes minimize possible expansion by heat when hand held
- Lock nuts (except 824AA and 824MAA)
- · Adjustable contacts on thimble end
- Adjustable sleeve for head accuracy

824 Inside Micrometers (.001" Graduation)						
	Movement of					
Range	Screw	Cat. No.	EDP			
2-3"		824AA	56665			
3-4"		824A	56666			
4-5"		824B	56667			
5-6"		824C	56668			
6-7"	1"	824D	56669			
7-8"	1	824E	56670			
8-9"		824F	56671			
9-10"		824G	56672			
10-11"		824H	56673			
11-12"		824J	56674			
6-8"		824K	56675			
8-10"	2"	824L	56676			
10-12"		824N	56677			
824M Inside Micro	meters (0.01mm Gra	aduation)				
50-75mm		824MAA	64192			
75-100mm	25mm	824MA	64193			
100-125mm	ZJIIIII	824MB	64194			
125-150mm		824MC	64195			

824 Fixed Range Inside Micrometer Sets								
Total Range	Description	Cat. No.	EDP					
2-6"	4 micrometers, 1" range: 2-3", 3-4", 4-5", 5-6"	S824AZ	56678					
2-12"	10 micrometers, 1" range: 2-3", 3-4", 4-5", 5-6", 6-7", 7-8", 8-9", 9-10", 10-11", 11-12"	S824BZ	56679					
6-12"	3 micrometers, 2" eange: 6-8", 8-10", 10-12"	S824CZ	56680					
2-12"	7 micrometers, (4) 1" range, (3) 2" range: 2-3", 3-4", 4-5", 5-6", 6-8", 8-10", 10-12"	S824DZ	56681					
824M Fixed Range Inside Micrometer Sets								
50-150mm	4 micrometers, 25mm Range: 50-75mm, 75- 100mm, 100-125mm, 125-150mm	S824MAZ	64196					







INSIDE MICROMETERS

700, 700M INSIDE MICROMETER CALIPERS

.200-2"/5-50MM

Caliper-type jaws permit quick inside measurements accurate to $\pm .0002$ " or ± 0.005 mm. Jaws are hardened and ground on a radius for accurate feel without cramping.

- Satin chrome reading surface is glare free and resists rust
- Smooth friction thimble for consistent readings
- Lock screw

700 Inside Micrometer Calipers (.001" Graduation)				
Range	Cat. No.	EDP		
.200-1.200"	700A	52909		
1-2"	700B	52911		
700M Inside Micrometer Ca	700M Inside Micrometer Calipers (0.01mm Graduation)			
5-30mm	700MA	56063		
25-50mm	700MB	56064		
Case for 700 and 700M Insid	de Micrometer Calipers			
Description	Cat. No.	EDP		
Case for 700, 700M inside micrometer calipers	940	55359		

701 INTERNAL GROOVE MICROMETERS

.500-2.500"

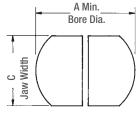
Measures grooves for retaining rings and "0" rings, oil grooves, washer grooves, as well as bores and recesses. Depth of grooves up to 5/64" can be measured with 701A; and 7/32" with 701B. Tool is accurate to $\pm .0002$ ".

- Hardened and ground gaging contacts are .030" thick
- Contacts have flush ends to gage grooves at the bottom of blind holes
- Satin chrome reading surface is glare free and resists rust
- Smooth friction thimble for consistent readings
- Lock screw

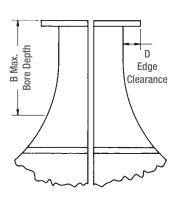
701 Internal Groove Micrometers (.001" Graduation)					
Range	Min. Bore	Max. Depth Bore	Thickness Jaws	Cat. No.	EDP
.500-1.500"	.500"	1/2"	.030"	701A	52913
1.500-2.500"	1.500"	7/8"	.030	701B	52915
Case for 701 Internal Groove Micrometers					
Description			Cat. No.	EDP	
Protective Case			940	55359	







701A		701B
Range	.5-1.5"	1.5-2.5"
Α	.5"	1.5"
В	1/2"	3/4"
C	3/8"	3/8"
D	3/32"	9/32"





749 ELECTRONIC MICROMETER DEPTH GAGE (WITH OUTPUT)



0-12"/0-300MM The 749 Electronic Depth Micrometer has a wide 0-12" (0-300mm) range for

measuring the depth of most holes, slots, shoulders and projections.

			ndard Inch Gra	duations on SI	hell and Thimble
Cat. No.	EDP	Description	Description		
749BZ-6RL	65063	0-6"/0-150mm	n range		
749BZ-12RL	68854	0-12"/0-300m	m range		
749M Electronic Micrometer Depth Gages, Standard Millimeter Graduations on Shell and					
Thimble					
749MEBZ-150	66124	0-150mm/0-6	•		
749MEBZ-300	68855	0-300mm/0-1			
Rods Only for 7	49 and 749M	Electronic Micr	ometer Depth (Gages	
Inch	Part No.	EDP	mm	Part No.	EDP
0-1"	PT99486	72493	0-25mm	PT99143	66331
1-2"	PT99487	72494	25-50mm	PT99183	66332
2-3"	PT99488	72495	50-75mm	PT99190	66333
3-4"	PT99489	72496	75-100mm	PT99266	66334
4-5"	PT99490	72497	100-125mm	PT99267	66335
5-6"	PT99491	72498	125-150mm	PT99268	66336
6-7"	PT99457	11626	150-175mm	PT99531	11632
7-8"	PT99458	11627	175-200mm	PT99532	11633
8-9"	PT99459	11628	200-225mm	PT99533	11634
9-10"	PT99460	11629	225-250mm	PT99534	11635
10-11"	PT99461	11630	250-275mm	PT99535	11636
11-12"	PT99462	11631	275-300mm	PT99536	11637
Cable Informati	on for 749 and	d 749M Electron	nic Micrometer	Depth Gages	
Part No.	EDP	Description			
PT61963	66636	Computer interface cable complete to PC (RS232C)			
PT61768	66454	Adaptor from PT22938 cable to PC (RS232C)			
PT22938	64059	Shielded cable adaptor	Shielded cable to 761/772 Starrett modules and PT61768 adaptor		
PT61120	65446	One 3-Volt batt	tery CR2450		

READABILITY FEATURES

- · Large high-contrast LCD digital readout
- Resolution: .0001" (0.001mm)
- Inch or millimeter graduations standard
- No-glare black wrinkle finish frame
- No-glare satin chrome finish on thimble and sleeve

EASE-OF-HANDLING FEATURES

- Ring-type knurled lock nut
- Combination ratchet and speeder

ACCURACY AND LONG-LIFE FEATURES

- Ground and lapped one-piece spindle
- Base length 4" (100mm); rod diameter 5/32" (4mm)
- One 3-volt battery furnished with over one year's normal usage
- Automatic OFF after 30 minutes of nonuse
- Full-Function Action Features
- Instant inch/millimeter conversion
- "ME" millimeter model turns on in millimeter mode after battery installation
- Measurement HOLD button
- Ability to zero at any position and retain and return to true zero reading
- PRESET button to install any reading at any position
- Ability to install minimum and maximum limits
- RS232 data output port
- Works well with Starrett DataSure® Wireless Data Collection Systems

DEPTH MICROMETERS

Our varied line of electronic, mechanical digital and regular depth micrometers are available with base lengths from 2-1/2-6" (63.5-150mm) and can measure depths up to 9" (225mm). They are also available with rotating or non-rotating blades. All heads used in our depth micrometers are accurate to $\pm .0001$ " or ± 0.002 mm.

Unless otherwise noted under the individual tools, they all have these features:

- A base shape design that will automatically position the fingers so that the base is easily held in place for measuring stability
- All precision screws are ground and lapped
- All bases and rods are hardened, ground, and lapped for permanent accuracy
- All reading surfaces have a satin chrome finish that resists rust and provides a noglare background for the sharp lines and figures
- All measuring rods are adjustable
- Quick and easy adjustment







446, 446M DIGITAL MICROMETER DEPTH GAGES

0-6"/0-150MM



446 Mechanical Digital Depth Micrometers are simple to use even by the inexperienced. Besides those listed on the lead page of this section, this tool has these additional features:

- Clear, easily read white numbers on black background reduce errors
- No-glare black finish on the frame
- .001" or 0.01mm is read directly from the counter
- Ring-type knurled lock nut for quick and sure locking
- Combination ratchet and speeder for uniform pressure and quicker adjustment
- Hardened, ground, and lapped base is 3" (75mm) long
- Measuring rods are 5/32" (4mm) diameter and are adjustable

446 Digital Micro	446 Digital Micrometer Depth Gages (.001" Graduation)					
Range	Rods	Cat. No.	EDP			
0-3"	3	446AZ-3RL	56288			
0-6"	6	446AZ-6RL	56289			
446M Digital Mic	rometer Depth Gage	s (0.01mm Graduat	ion)			
0-75mm	3	446MAZ-75RL		56294		
0-150mm	6	446MAZ-150RL		56295		

Rods Only for 446 & 446M Digital Micrometer Depth Gages						
For 446 (Inch)			For 446M (Mil	For 446M (Millimeter)		
Size	Part No.	EDP	Size	Part No.	EDP	
0-1"	PT99381	72211	0-25mm	PT99391	72217	
1-2"	PT99382	72212	25-50mm	PT99392	72218	
2-3"	PT99383	72213	50-75mm	PT99393	72219	
3-4"	PT99384	72214	75-100mm	PT99394	72220	
4-5"	PT99385	72215	100-125mm	PT99395	72221	
5-6"	PT99386	72216	125-150mm	PT99396	72222	

446AZ-3RL



449, 449M MICROMETER DEPTH GAGES WITH NON-ROTATING BLADES



0-6"/0-150MM

By holding the base in one hand, the .045" thick x 1/8" wide (1.2 x 3.2mm) blade can be turned with the fingers and positioned at any angle relative to the base. In operation, blade does not turn, but moves perpendicularly only, permitting depth measurement of narrow shoulders without the blade rolling off. This is also ideal for slots and recesses as narrow as .045" (1.2mm). Furnished with a 2-1/2" (63mm) or a 4" (100mm) base.

Also available with 3 rods for measuring 0-3" (0-75mm), or 6 rods for measuring 0-6" (0-150mm) in thousandths of an inch or 0.01mm.

This tool comes with the combination ratchet and speeder for uniform pressure and quicker adjustment.

449 Micromete	449 Micrometer Depth Gages (.001" Graduation)				
Range	Base Length	Rods	Rod Size	Cat. No.	EDP
0-3"	2-1/2"	3		449AZ-3R	52318
0-6"	2-1/2"	6	.045 x 1/8"	449AZ-6R	52320
0-3"	4"	3	.043 X 1/0	449BZ-3R	52322
0-6"	4"	6		449BZ-6R	52324
449M Micrometer Depth Gages (0.01mm Graduation)					
0-75mm	63.5mm	3		449MAZ-75R	56636
0-150mm	63.5mm	6	1.2 x 3.2mm	449MAZ-150R	56637
0-75mm	100mm	3	1.2 X 3.211111	449MBZ-75R	56638
0-150mm	100mm	6		449MBZ-150R	56639
Rods Only for 4	49M Micromete	r Depth Gages			
For 449 (Inch)			For 449M (Milli	meter)	
Size	Part No.	EDP	Size	Part No.	EDP
0-1"	PT99115	71838	0-25mm	PT99306	72476
1-2"	PT99116	71839	25-50mm	PT99307	72477
2-3"	PT99117	71840	50-75mm	PT99308	72478
3-4"	PT99118	71841	75-100mm	PT99309	72479
4-5"	PT99119	71842	100-125mm	PT99310	72480
5-6"	PT99120	71843	125-150mm	PT99311	72481

Longer rods are available by special order.







440, 440M, 445, 445M Depth Micrometers



0-9" AND 0-12"/0-225MM

- The depths of holes, slots, shoulders and projections can be measured to .001" or 0.01 mm with these fine tools
- 440 Gages furnished with a 2-1/2" (63.5mm) base and 1/8" (3.2mm) diameter measuring rods
- 445 Gages furnished with choices of 3" (75mm),
 4" (100mm), and 6" (150mm) bases and have
 5/32" (4mm) diameter measuring rods
- Combination ratchet and speeder for uniform pressure and quicker adjustment
- Ring-type lock nut for quick and sure locking



440, 445 Depth Micrometers					
Range	Base	Rods	Rod Dia.	Cat. No.	EDP
0-3"		3		440Z-3L	52113
0-6"	2-1/2"	6	1/8"	440Z-6L	52117
0-9"		9		440Z-9L	52121
0-3"		3		440Z-3RL	52115
0-6"	2-1/2"	6	1/8"	440Z-6RL	52119
0-9"		9		440Z-9RL	52123
0-3"		3		445AZ-3RL	52208
0-6"	3"	6	5/32"	445AZ-6RL	52212
0-9"	5	9	3/32	445AZ-9RL	52216
0-12"		12		445AZ-12RL	67117
0-3"		3		445BZ-3RL	52220
0-6"	4"	6	5/32"	445BZ-6RL	52224
0-9"	7	9	3/3 <u>Z</u>	445BZ-9RL	52228
0-12"		12		445BZ-12RL	67118
0-3"		3		445DZ-3RL	52244
0-6"	6"	6	5/32"	445DZ-6RL	52248
0-9"	O	9	O/OL	445DZ-9RL	52252
0-12"		12		445DZ-12RL	67119
	epth Micrometer				
0-75mm		3		440MZ-75RL	52116
0-150mm	63.5mm	6	3.2mm	440MZ-150RL	52120
0-225mm		9		440MZ-225RL	52124
0-75mm		3		445MAZ-75RL	52209
0-150mm	75mm	6	4mm	445MAZ-150RL	52213
0-225mm		9		445MAZ-225RL	52217
0-75mm		3		445MBZ-75RL	52221
0-150mm	100mm	6	4mm	445MBZ-150RL	52225
0-225mm		9		445MBZ-225RL	52229
0-75mm		3		445MDZ-75RL	52245
0-150mm	150mm	6	4mm	445MDZ-150RL	52249
0-225mm		9		445MDZ-225RL	52253

Inch Reading Rods Only					
	Fits 440 Mo	odels	Fits 445 M	odels	
Size	Part No.	EDP	Part No.	EDP	
0-1"	PT99331	71973	PT99341	71982	
1-2"	PT99332	71974	PT99342	71983	
2-3"	PT99333	71975	PT99343	71984	
3-4"	PT99334	71976	PT99344	71985	
4-5"	PT99335	71977	PT99345	71986	
5-6"	PT99336	71978	PT99346	71987	
6-7"	PT99337	71979	PT99347	71988	
7-8"	PT99338	71980	PT99348	71989	
8-9"	PT99339	71981	PT99349	71990	
9-10"			PT99358	66673	
10-11"			PT99359	66674	
11-12"			PT99360	66675	
Millimeter Rea	ading Rods (Only			

Millimeter Reading Rods Only					
	Fits 440M I	Vlodels	Fits 445M I	Vlodels	
Size	Part No.	EDP	Part No.	EDP	
0-25mm	PT99361	72193	PT99371	72202	
25-50mm	PT99362	72194	PT99372	72203	
50-75mm	PT99363	72195	PT99373	72204	
75-100mm	PT99364	72196	PT99374	72205	
100-125mm	PT99365	72197	PT99375	72206	
125-150mm	PT99366	72198	PT99376	72207	
150-175mm	PT99367	72199	PT99377	72208	
175-200mm	PT99368	72200	PT99378	72209	
200-225mm	PT99369	72201	PT99379	72210	

Longer rods available by special order.



443 MICROMETER DEPTH GAGES WITH HALF BASE



0-9"

- Exactly like the 445 Micrometer except that it has a half base
- 2" (50mm) half base permits measuring depths of holes and slots close to shoulders and between obstructions
- Rods have individual length adjustment and are 5/32" (4mm) in diameter

443 Micrometer Depth Gages					
Range	No. of Rods	Graduation	Cat. No.	EDP	
0-3"	3		443Z-3RL	52171	
0-6"	6	.001"	443Z-6RL	52173	
0-9"	9		443Z-9RL	52175	

Inch Reading Rods Only			
	443 Models		
Size	Part No.	EDP	
0-1"	PT99341	71982	
1-2"	PT99342	71983	
2-3"	PT99343	71984	
3-4"	PT99344	71985	
4-5"	PT99345	71986	
5-6"	PT99346	71987	
6-7"	PT99347	71988	
7-8"	PT99348	71989	
8-9"	PT99349	71990	
9-10"	PT99358	66673	
10-11"	PT99359	66674	
11-12"	PT99360	66675	





