# **GAGE BLOCK SETS**



Manufactured by some of the world's leading gage block manufacturers and used in many of the world's leading factories and laboratories. Manufactured to highest precision standards, meeting or exceeding Federal specifications. All sets have individual serial numbers and are supplied with individual inspection certificates, showing the exact measurement of each block. Indexed wooden case furnished with each set.

81 pc. sets consist of the following blocks:	36 pc. sets consist of the following blocks:
9 blocks from .1001" to 1.009" 49 blocks from .101" to .149" 19 blocks from .050" to .950" 4 blocks from 1.000" to 4.000"	1 block .050" 10 blocks from .1000" to .1009" 9 blocks from .101" to .109" 9 blocks from .110" to .190" 4 blocks from .200" to .500" 3 blocks 1.000" - 2.000" - 4.000"

# GRADES AND TOLERANCES (Length) Maximum permissible errors. Units = 1 millionth of an inch

Size of Gauge Up to and including	1(AA)	Grade 2(A+)	3(A+B)	В
1"	+2	+4	+8	+10
	-2	-2	-4	-6
2"	+4	+8	+16	+20
	-4	-4	-8	-12
3"	+5	+10	+20	+30
	-5	-5	-10	-18
4"	+6	+12	+24	+40
	-6	-6	-12	-24

# GAGE BLOCK SETS

**SERIES 224:** 

RECISION TOOLS





Starrett	Webber
81 pc. Gra	de B
Rectangula	r Set.
Includes	s:
Certificate of Ca	alibration
traceable to	NIST.

Order No. 99923

Price	

Pieces	Grade	Order No.	Price
	RECT	ANGULAR	1
81	2	1575281	
81	3	1575381	
81	В	1550810	
36	2	1575236	
36	3	1575336	
36	В	1550036	
	S	QUARE	
81	2	1560281	
81	3	1560381	
81	В	1560481	

# METRIC GAGE BLOCK SET

**SERIES 224:** 





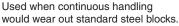
Consists of the following blocks: 9 blocks 1.001 - 1.009 in 0.001mm steps 49 blocks 1.01 - 1.49 in 0.01mm steps 19 blocks 0.5 - 9.5 in 0.5mm steps 10 blocks 10 - 100 in 10mm steps

Pieces	Grade	Grade Order No.	
87	2	2240873	

Can be supplied with a certificate traceable to the U.S. National Bureau of Standards. Please inquire for price and delivery.

# CARBIDE GAGE BLOCK SET

**SERIES 224:** 



- Rectangular
- All blocks are carbide.
- Superior coefficient ratio.
- Extremely high corrosion resistance.



Pieces	Grade	Order No.	Price
81	2	2240000	

Can be supplied with a certificate traceable to the U.S. National Bureau of Standards. Please inquire for price and delivery.

# STEEL GAGE BLOCK SETS-

**LONG SIZES** 

**SERIES 224:** 





8 Piece Set Includes 5", 6", 7", 8", 10", 12", 16", 20"

Grade 2 Grade 3		Grade 2		e 3	Grade	В
Order No.	Price	Order No. Price		Order No.	Price	
2420082		2420083		2420084		

Can be supplied with a certificate traceable to the U.S. National Bureau of Standards. Please inquire for price and delivery.

# PRECISION TOOLS

# RECTANGULAR STEEL GAGE BLOCK SETS IN CASE

**SERIES 793:** 

METRIC sets available, please inquire.





The quality of Starrett-Webber is your assurance of accuracy year after year. Steel blocks have a Rockwell hardness of 65  $\pm$  1/2 "C" scale, and feature unusually fine hard grain structure which gives them a lifetime of wear and abrasion. Starrett-Webber standards of surface finish are actually higher than government requirements.

# STEEL GAGE BLOCKS

SIEEL GAGE BLUCKS						
Catalog No.	EDP No.	Acc. Grade	Blocks Per Set	Measuring Range	Price*	
RS81.A1	92913		81	.100-12.000" in steps of .001"/.200-12.000" in steps of .0001"		
RS88.A1	92802	0 e	88	.001-12.000" in steps of .001"/.200-12.000" in steps of .0001"/.300-12.000" in steps of .000025"/1/16 - 12.000" in steps of 1/64"		
RS92.A1	92804	39.1.9 Grade	92	.001-12.000" in steps of .001"/.200-12.000" in steps of .0001"/.300-12.000" in steps of .000025"/1/64 -12.000" in steps of 1/64"		
RS38.A1	92807	Webber Grade, A1 / B89.1.9	38	.100-4.000" in steps of .001"/.150-4.000" in steps of .0001"/.2004000" in steps of .00005"		
RS36.A1	99023	ber Gra	34	.200-8.000" in steps of .001"/.300-8.000" in steps of .0001"		
RS28.A1		Web	28	.020240" in steps of .001"/.040240" in steps of .0001"/.060240" in steps of .00005"		
RS9.A1	92939		9	.0625-4.000" in steps of .0625"/.100-4.000" in steps of .100"		

# \*CROBLOX® GAGE BLOCKS

*CROB	LUX®	GAG	E BLC	CKS	
RC81.A1	92885	Grade 0	81	.100-12.000" in steps of .001"/.200-12.000" in steps of .0001"	
RC88.A1	92898	A1 / B89.1.9 Gr	88	.001-12.000" in steps of .001"/.200-12.000" in steps of .0001"/.300-12.000" in steps of .000025"/1/16 - 12.000" in steps of 1/64"	
RC34.A1	92390		34	.200-8.000" in steps of .001"/.300-8.000" in steps of .0001"	
RC28.A1	92908	Webber Grade,	28	.020240" in steps of .001"/.040240" in steps of .0001"/.060240" in steps of .00005"	

\*NOTE: Sets include etched serial numbers and NVLAP Accredited Commercial Grade Calibration.



# SQUARE STEEL GAGE BLOCK SETS IN CASE





# **STEEL GAGE BLOCKS**

Catalog No.	EDP No.	Acc. Grade	Blocks Per Set	Measuring Range	Price*
SS81.A1	92844		81	.100-12.000" in steps of .001"/.200-12.00 in steps of .0001"	
SS88.A1	92850	Grade,A1 / Grade 0	88	.100-12.000" in steps of .001"/200-12.000" in steps of .0001"/.300-12.000" in steps of .000025"/ 1/16-12.000" in steps of 1/64"	
SS36.A1	92852	Webber B89.1.9	36	.200-8.000" in steps of .001"/ .300-8.000" in steps of .0001"	
SS28.A1	92856	We B8	28	0.20240" in steps of .001"/ .040"-0.240" in steps of .0001"/ .060240" in steps of .00005"	
SS8.A1X SS8.AAX	92994 93675		8 8	5.000-84" in steps of 1.000" 5.000-84 "in steps of 1.000"	

# \*CROBLOX® GAGE BLOCKS

SC81.A1	92818	A1 /	81	.100-12.000" in steps of .001"/.200-12.00 in steps	
SC88.A1	92830	Webber Grade, A B89.1.9 Grade	88	of .0001" .100-12.000" in steps of .001"/200-12.000" in steps of .0001"/.300-12.000" in steps of .000025"/ 1/16-12.000" in steps	
SC36.A1	92840	<b>&gt;</b>	88	of 1/64" .200-8.000" in steps of .001"/ .300-8.000" in steps of .0001"	

\*Croblox® Chromium Carbide gage blocks are considered the top of the line - the finest available. They outwear regular steel and ceramic. In addition, they will not corrode and are very stable and accurate, and have exceptional "wringing" qualities

Individual blocks available.

Complete accessory kits and individual accessories available; please inquire.

All sets also available in Webber Grade AA / B89.1 Grade 00; please inquire.

# Mitutoyo GAGE BLOCK SETS SERIES 516:

Metric Gage Blocks available; please inquire.

MITUTOYO Gage Blocks are now available either in rectangular or square, Inch or Metric, individually or in sets. All gage blocks are made of a special steel alloy which possesses excellent stability and thermal expansion coefficiency for most measuring applications. Each block is manufactured and calibrated to MITUTOYO Specifications which meet or exceed Federal Specifications GGG-G-15C. Each block is serialized regardless of the grade so that it can be easily identified when the block is re-calibrated at a later date. The quality of the surface finish on MITUTOYO Blocks has been tested and compared by our users. The result indicates that MITUTOYO Gage Blocks have a superior surface finish.

- All MITUTOYO Gage Blocks meet or exceed Federal Specifications GGG-G-15C. (except B-Grade.)
- All MITUTOYO Gage Block Sets (except B-Grade) are furnished with a

Certificate of Calibration without extra charge, and are traceable to the National Bureau of Standards.

- The rugged wooden box has index numbers and is specially treated to keep moisture away from the blocks. The underside of the case has four soft pads to prevent slippage.
- All gage block edges have blended radius, and are burr-proofed. Wringing or stacking the block does not cause damage to the measuring surfaces.

A Certificate of Accuracy, traceable to the National Bureau of Standards, is furnished with each MITUTOYO gage block set and individual block. It indicates the actual size of each block to the closest millionth of an inch. This Certificate, a highly important part of gage block use, is automatically provided with sets or individual blocks at no additional cost.

# RECTANGULAR GAGE BLOCK SETS

**SERIES 516:** 

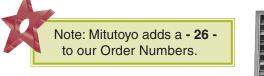
RECISION TOOLS



# **Mitutoy**o

# LONG GAGE BLOCK SETS

SERIES 516





Number of Blocks / Grade	Block Combination in Set	Order No.	Price
81 / 1 (AA) 81 / 2 (A+) 81 / 3 (A&B) 81 / B*	9 Blks .10011009 in .0001" steps 49 Blks .101149 in .001" steps 19 Blks .050950 in .050" steps 4 Blks 1.000 - 4.000 in 1.000" steps	516901 516902 516903 516904	
35 / 2 (A+) 35 / 3 (A&B)	1 Blk .10005" 9 Blks .10011009 in .0001" steps 9 Blks .101109 in .001" steps 10 Blks .10190 in .01" steps 3 Blks .200, .300 and .500"	516914 516915	
9 / 2 (A+)	3 Blks 1.000, 2.000 and 4.000"	516930	
9/3 (A&B)	2 Blocks .0625 and .1000" 1 Block .125" 3 Blocks .200,.250 and .300"	516931	
9/3 (A&B)	3 Blocks .500,1.000 and 2.000"	516935	

- \* The B grade 516904 is furnished with a certificate of accuracy stating
- +.000010" and -.000006" for all blocks one inch and under and +.000010" and -.000006" for each additional inch.

-.000006" for each additional inch

No. of Blocks / Grade	Block Combination in Set	Order No.	Price
8 / 2 (A+)	1", 2", 3", 4", 5", 6", 7", 8"	516126	
8 / 2 (A+)	5", 6", 7 , 8", 10", 12", 16", 20"	516712	
8 / 3 (A+B)	5", 6", 7", 8", 10", 12", 16", 20"	516713	

# **SQUARE GAGE BLOCK SETS** SERIES 516:

**Mitutoyo** 

**Mitutoyo** 



# THIN GAGE BLOCK SETS

SERIES 516: (RECTANGULAR)



# Mitutoyo

No. of Blocks / Grade	Block Combination in Set	Order No.	Price
10 / 2 (A+)	.005", .010", .015", .020", .025", .030", .035", .040", .045", .050"	516926	
10 / 3 (A+B)	.005", .010", .015", .020", .025", .030", .035", .040", .045", 050"	516927	

No. of Blocks / Grade	Block Combination in Set	Order No.	Price
81 / 2 (A+)	1 Blk .050" 10 Blks .100"1009" in .0001" steps 49 Blks .101"149" in .001" steps 17 Blks .150"950" in .05" steps 4 Blks 1.000" - 4.000" in 1.000" steps	516401 516402 516403 516404	
36 / 2 (A+) 36 / 3 (A+B)	1 Blk .050" 10 Blks .1000"1009" in .0001" steps 9 Blks .101"109" in .001" steps 9 Blks .11"19" in .01" steps 4 Blks .2"5" in .1" steps 3 Blks 1", 2", 4"	516422 516423	

# STAR TOOL SUPPLY / GRAND TOOL SUPPLY

Tel: 201-518-8461 / Fax: 201-596-3427 650 Huyler St / So. Hackensack, NJ 07606 USA

# **GAGE BLOCK ACCESSORIES**

FOR RECTANGULAR BLOCKS SERIES 226:



# LIMITED QUANTITY

	Description / Use	Quantity	Order No.	Price
	Base Block - Gage Block mounting surface lapped flat and parallel with base. Size of base : 4" x 2-3/4" x 1.7"	1	1565101	
	Scriber Point - Used for scribing lines	1	1565102	
	Center Point - Used for locating centers	1	1565103	
	Points - Used for checking graduations	Pair	1565204	
	Cylindrical Jaws - Used for inside and outside measurements and setting of instruments accuracy .100" Radius Size .200" Radius Size .250" Radius Size .500" Radius Size .750" Radius Size .750" Radius Size	Pair Pair Pair Pair Pair	1565205 1565206 1565207 1565208 1565209	
	Flat Jaws - Two sides lapped and accurately flat, parallel and to size750" Height, 6" long	Pair	1565210	
	Jaws with Reference Lines - used for spacing blocks within limits .0625"	Pair	1565211	
Pollud S	Jaws with Beveled Ends - .750" Height, 4" Long .750" Height, 6" Long	Pair Pair	1565212 1565213	
page (2)	Holders - 2.250" Capacity 4.000" Capacity 6.000" Capacity 10.000" Capacity 16.000" Capacity	1 1 1 1	1565114 1565115 1565116 1565117 1565118	

# COMPLETE ACCESSORY SETS FOR RECTANGULAR GAGE BLOCKS



SERIES 226:





LIMITED QUANTITY

Order No. 1565140 Price 14 pc. Accessory Set Consists of	<u>Description</u>	Order No.1565270 Price 27 pc. Accessory Set Consists of
1 Pair	.100" Radius Cylindrical Jaws	1 Pair
1 Pair	.200" Radius Cylindrical Jaws	1 Pair
1 Pair	.250" Radius Cylindrical Jaws	1 Pair
1 Pair	.500" Radius Cylindrical Jaws	1 Pair
	.750" Radius Cylindrical Jaws	1 Pair
1 Pair	Jaws-Beveled Ends .750" x 4" L	1 Pair
1 Pair	Jaws-Beveled Ends .750" x 6" L	1 Pair
1 each	Holder 2.250" Capacity	1 each
	Holder 4.000" Capacity	1 each
1 each	Holder 6.000" Capacity	1 each
	Holder 10.000" Capacity	1 each
	Base Block	1 each
	Scriber Point	1 each
	Center Point	1 each
	Points	1 Pair

# STAR TOOL SUPPLY / GRAND TOOL SUPPLY

SPACE BLOCKS

**SERIES 227:** 

Set consists of the following 36 blocks:

9 pcs. .101" - .109" by .001" 15 pcs. .050" - .190" by .010" 9 pcs. .200" - 1.000" by .100"

1 pc. .0625" 1 pc. .125"

1 extra block 1.000"







Can often take the place of gage blocks. Outside diameter is .750"; inside diameter has 1/4" - 28 thread for accurately connecting the individual blocks. 4 threaded connecting studs included. Hardened, ground, and lapped to ±.0001". Supplied in fitted wooden case.

Order No. 1570036

**Price** 

Tel: 201-518-8461 / Fax: 201-596-3427 650 Huyler St / So. Hackensack, NJ 07606 USA

# **PLUG GAGE HANDLE**

**SERIES 463:** 





Handles all Plug Gage sizes from 1/32" thru 1/2", 0.79 to 12.7mm diameter. GO and NO-GO clearly marked.

STAR USA - Order No. 4630000	Price	
MEDA - Order No. 4630567	Price	

# PLUG GAGE SETS

**SERIES 463:** 

### Each gage is:

- · Centerless lapped to a 10 micro finish or better
- 2" Long
- Hardened to 60 62 RC.
- Electro etched with size (over .060")

Useful for checking locations, measuring hole sizes and depths, GO and NO-GO gaging, setting micrometers, checking distances between holes etc.

.626 - .750



125

Range

.0040" to .0105"

.0110" to .0605"

.0610" to .5005"

.5010" to .6255"

.6260" to .7505"

.7510" to .8325"

.8330" to .9165"

9170" to 1 0005'

4630140

Partial Order No.\*

Minus

9870101

9870102

9870103

9870104

9870105

9870106

9870107

9870108

Price

Plus

INCH

9870001

9870002

9870003

9870004

9870005

9870006

9870007

9870008



Larger sets available. See our website or inquire

## PLUS TOLERANCE SETS + .0002" - .0000"

Range	No. of Mem	Order No.	Price	Range	No. of Mem	Order No.	Price
.011"060"	50	4630001		.011"060"	50	4630100	
.061250	190	4630010		.061250	190	4630110	
.251500	250	4630020		.251500	250	4630120	
.501625	125	4630030		.501625	125	4630130	

.626 - .750

4630040

Replacement Pins,

see page 428.

# CLASS ZZ REPLACEMENT PINS **SERIES 987:**

# Keep old sets in compliance!

Replace missing, damaged, or worn-out Class ZZ gages from your existing sets & libraries. These replacement pins are perfect in updating your old sets, and bringing them back into compliance. Each pin is individually marked with size and direction of tolerance. Packaged with a rust preventative, these pins maintain an indefinite shelf life; so keep several of your most used sizes on hand! Each pin is NIST traceable and includes a Certificate of Accuracy printed on back of package.

- Class ZZ (.0002" or .005mm tolerance)
- Go (Plus) or NoGo (Minus)
- NIST traceable
- .0005", or .01mm sizes
- .001" or .02mm set increments
- 52100 tool steel; 60/62 Rc
- 2" long
- 10 microinch finish or better
- within .0001" round
- · marked with size & direction of tolerance on gages over .060"
- Certificate of Accuracy included







.0170 10 1.0000	00.000	00.0.00	
	METRIC		
0.20mm to 1.29mm	9870009	9870109	Г
1.30mm to 4.99mm	9870010	9870110	
5.00mm to 9.99mm	9870011	9870111	
10.00mm to 13.99mm	9870012	9870112	
14.00mm to 16.49mm	9870013	9870113	
16.50mm to 18.99mm	9870014	9870114	
19.00mm to 20.99mm	9870015	9870115	
21.00mm to 22.49mm	9870016	9870116	
22.50mm to 23.99mm	9870017	9870117	
24.00mm to 25.49mm	9870018	9870118	

\*Specific size must be added to these partial Order Numbers