Machinists, Measuring & Precision Tools





MACHINIST TOOLS Center Punches

General's Automatic Center Punches are a precise means of punching center holes for drilling in layout work. A single-handed operation with stored energy design eliminates the need for striking the punch

with a hammer. Spring tension cap can be adjusted for light to heavy strokes. Punch depth can be set for repetitive work. Replacement points, shafts and moving parts are hardened alloy steel.

GENERAL[®]



Toll Free 800-697-8665 • Fax 212-431-6499 • www.generaltools.com



UPC

22339 5

punches

MACHINIST TOOLS

Drive Pin Punches are well proportioned, hardened, tempered and have a knurled finger grip. Designed to withstand hard use, they are perfect in the machine shop as well as in the motor service industry.

Machinists use our shank punches for marking work in layout and drilling operations. These tools are constructed of hardened and ground alloy tool steel for maximum strength and durability.

.070" (1.8mm)

D

UTILITY AUTOMATIC CENTER PUNCH

Punches, marks, scribes and starts drill, nail or screw holes
One-hand spring impact operation, no hammer needed

Ball bearing action
 Lightweight aluminum body with
long wearing alloy steel parts

Hardened steel point

 NO.
 A
 B
 C
 D

 70079
 5" (127mm)
 3-15/16" (100mm)
 1/2" (12mm)
 5/32" (4mm)

70079

C

EXTRA LONG DRIVE PIN PUNCHES

- Made of tool steel, hardened and centerless ground
 For use on work not accessible with shorter
- Knurled body
- · Packed in a vinyl case
- Conforms to gov. specs, GGG-P-831E

	UPC	NO.	PUNCH DIAMET	PUNCH DIAMETERS		Set contains five punches, A-E, listed below.		
	31050 7	SPC76	1/8", 3/16", 1/4"	' 5/16", 3/8"				
	UPC	NO.	Α	В	С	D	E	
Ĩ	31052 1	76A	8" (203mm)	4-1/2" (114mm)	3/8" (10mm)	1/8" (3mm)	3-1/2" (89mm)	
	31054 5	76B	8" (203mm)	4-1/2" (114mm)	7/16" (11mm)	3/16" (5mm)	3-1/2" (89mm)	
	31056 9	76C	8" (203mm)	4-1/2" (114mm)	7/16" (11mm)	1/4" (6mm)	3-1/2" (89mm)	
	31058 3	76D	8" (203mm)	4-1/2" (114mm)	7/16" (11mm)	5/16" (8mm)	3-1/2" (89mm)	
	31060 6	76E	8" (203mm)	4-1/2" (114mm)	1/2" (12mm)	3/8" (10mm)	3-1/2" (89mm)	

MACHINIST

DRIVE PIN PUNCHES

....

.....

- Tool steel punches are uniformly heat treated and centerless ground to withstand the hardest use
- Ends are ground square for accurate pin driving
- Packed in a plastic case

UPC	NO.			Set contains e	ight punches, A-H	I, listed below								ALC: N
31032 3	SPC75									10				
UPC	NO.	А	В	С	D	E		11	1					
31034 7	75A	4" (102mm)	2-5/8" (67mm)	1/4" (6mm)	1/16" (2mm)	3/4" (19mm)		- W	W	W	W	W	W	
31036 1	75B	4" (102mm)	2-9/16" (65mm)	1/4" (6mm)	3/32" (2mm)	3/4" (19mm)		V	- W	W	W	W	W	- 111
31038 5	75C	4" (102mm)	2-7/16" (62mm)	5/16" (8mm)	1/8" (3mm)	3/4" (19mm)				1				- 111
31040 8	75D	4" (102mm)	2-9/16" (65mm)	5/16" (8mm)	5/32" (4mm)	3/4" (19mm)							- 111	- 111
31042 2	75E	4" (102mm)	2-5/8" (67mm)	5/16" (8mm)	3/16" (5mm)	1" (25mm)								
31044 6	75F	4" (102mm)	2-5/8" (67mm)	3/8" (10mm)	7/32" (6mm)	1" (25mm)	D							
31046 0	75G	4" (102mm)	2-9/16" (65mm)	3/8" (10mm)	1/4" (6mm)	1"(25mm)				-				
31048 4	75H	4" (102mm)	2-3/4" (70mm)	3/8" (10mm)	5/16" (8mm)	1" (25mm)	L	r					- D	
		. /		` '	. ,	. ,	Г	E -					. в —	

ROUND SHANK CENTER PUNCHES

- Points are ground to size for maximum strength and penetration
- Knurled body

- Stamped with size for quick identification
- Packed in a vinyl case
- UPC NO. Set contains five punches, AA-D, listed below 31018 7 SPC74 UPC NO. A B С D 31020.0 74AA 3-1/16" (78mm) 2" (51mm) 1/4" (6mm) 1/16" (2mm) 5/32" (4mm) 31022 4 74A 3-19/32" (91mm) 2-1/4" (57mm) 1/4" (6mm) 5/64" (2mm) 3/16" (5mm) 74B 3-7/8" (98mm) 2-15/32" (63mm) 5/16" (8mm) 3/32" (2mm) 7/32" (6mm) 31024 8 31026 2 74C 4" (102mm) 2-5/8" (67mm) 5/16" (8mm) 9/64" (4mm) 1/4" (6mm) C 31028 6 74D 4" (102mm) 2-19/32" (66mm) 3/8" (10mm) 5/32" (4mm) 9/32" (7mm) В

"It's Your Job . . . General Tools Make It Easier"

SPC74

MACHINIST TOOLS Scribers



ALWAYS WEAR OSHA APPROVED SAFETY GOGGLES

General manufactures a complete line of Scribers for machinists, engravers, mechanics and craftspeople. A basic tool for layout work and tool marking. General's Scribers are used for marking and engraving on metal, glass, plastics and ceramics.





MACHINIST TOOLS Scribers/Dividers



All Dividers' legs and Calipers' legs are forged of special caliper steel. Hardened and tempered bow springs and fulcrum spools assure uniform tension without side play. Adjusting screw has a self-seating

washer and nut to permit quick and positive adjustment. Dividers have hardened points. Calipers have hardened measurement faces and meet government specifications GGG-C-95.



"It's Your Job . . . General Tools Make It Easier"

MACHINIST TOOLS Tap Wrenches

General's Tap Wrenches provide good leverage in tight spaces. These top quality tools are designed to give the user the reach and leverage needed for

accurate tapping. The T-handle tap wrenches are for holding taps, drills, reamers and other small tools to be turned by hand.

- Ratchet can be set for right- or left-hand operation or locked for non-ratchet use
- Self-centering hardened steel jaws and knurled chuck sleeve provide positive grip on taps, reamers and small tools
- Sliding T-handle for fitting into tight spaces with operator leverage
- No. 161R conforms to government specifications GGG-W-680a

UPC	NO.	TAP CAPACITY	LENGTH	
31200 6	160R	No. 0 to No. 8	2-3/4"	
		(1.6 to 4mm)	(70mm)	
31203 7	161R	No. 0 to 1/4"	3-1/2"	
		(1.6 to 6.3mm)	(88mm)	
31209 9	162R	No. 12 to 1/2"	4-1/4"	
		(6 to 12mm)	(106mm)	
	UPC 31200 6 31203 7	UPC NO. 31200 6 160R 31203 7 161R	UPC NO. TAP CAPACITY 31200 6 160R No. 0 to No. 8 (1.6 to 4mm) 31203 7 161R No. 0 to 1/4" (1.6 to 6.3mm) 31209 9 162R No. 12 to 1/2"	UPC NO. TAP CAPACITY LENGTH 31200 6 160R No. 0 to No. 8 2-3/4" (1.6 to 4mm) (70mm) 31203 7 161R No. 0 to 1/4" 3-1/2" (1.6 to 6.3mm) (88mm) 31209 9 162R No. 12 to 1/2" 4-1/4"

GENERAL

PROFESSIONAL REVERSIBLE RATCHETING TAP WRENCH SET

- Set includes: No. 161R Ratcheting Tap Wrench, No. 162R Ratcheting Tap Wrench and No. 715P Reference Table
- · Self-centering, hardened steel jaws and knurled chuck sleeve
- · For holding taps, reamers, screw extractors, hand turned tools and drill bits
- The No. 715P Plastic Reference Table is the essential reference table for tool makers. machinists and mechanics
- The front has machine screw size tap drill chart for recommended 75% depth thread
- The back has decimal equivalents table in 64ths from 1/64" to 63/64"
- · Packaged in a sturdy, fitted foam lined plastic case designed specifically for this set

UPC	NO.
01650 8	165



GENERAL PROFESSIONAL

Tap Wrench Set

GENERAL) PROFESSIONAL

Tap

Wrench Set

PLAIN TAP WRENCHES

- · Self-centering hardened steel jaws and knurled chuck sleeve
- No. 163 has rigid T-handle
- Nos. 164 and 166 have sliding T-handle for fitting into tight spaces with greater leverage

UPC	NO.	TAP CAPACITY (NOS. & INCHES)	LENGTH
31212 9	163	No. 0 to No. 8	2-1/4"
		(1.6 to 4mm)	(57mm)
31215 0	164	No. 0 to 1/4"	2-3/4"
		(1.6 to 6.3mm)	(70mm)
31218 1	166	No. 12 to 1/2"	3-3/4"
		(6 to 12mm)	(95mm)

PROFESSIONAL TAP WRENCH SET

- Set includes: No. 164 Plain Tap Wrench, No. 166 Plain Tap Wrench and No. 715P **Reference Table**
- Nos. 164 and 166 has sliding T-handles for fitting into tight spaces with greater leverage
- · Self-centering, hardened steel jaws and knurled chuck sleeve
- · For holding taps, reamers, screw extractors, hand turned tools and drill bits
- The No. 715P Plastic Reference Table is the essential reference table for tool makers, machinists and mechanics
- The front has machine screw size tap drill chart for recommended 75% depth thread
- The back has decimal equivalents table in 64ths from 1/64" to 63/64"
- · Packaged in a sturdy, fitted foam lined plastic case designed specifically for this set

NO. 01670 6 167





UPC

165

161R



MACHINIST TOOLS Measuring & Repair Tools

Telescoping Gages are used for quick and accurate measurements of inside diameters of holes and widths of slots from which micrometer

measurements are taken. Thread Repair Files restore damaged external threads on studs, bolts, screws, plumbing pipes and pipe fittings.



NUT SPLITTER

- Here is a real timesaver for the removal of frozen, hard to remove rusted nuts
- Only 4-3/4" long, this compact tool will split nuts up to 1/2" automotive series (3/4" or 19mm across flats)
- Standard 3/4" driving hex head for use with wrenches or sockets
- Angled body for getting into hard-to-reach work areas
- Replaceable hardened steel chisel point can be reversed to achieve best cutting angle





THREAD REPAIR FILES

- These indispensable files restore damaged external threads on studs, bolts, screws, plumbing pipe and pipe fittings
- Four different high carbon steel files are available. Each file provides 4 to 8 different thread pitches
- · Restores rusted or corroded fasteners
- Doubles as a screw pitch gage
- Black oxide to prevent rust

UPC	FILE NO.	THREAD PITCHES
31236 5	177-1	11,12,13, 14, 16, 18, 20, 24, T.P.I.
31240 2	177-2	9, 10, 12, 16, 20, 27, 28, 32, T.P.I.
31244 0	177-4	8, 11-1/2, 14, 18 iron pipe
31242 6	177-8	0.75, 1.0,1.25, 1.5, 1.75, 2.0, 2.5, 3.0mm





TELESCOPING GAGE SET

- These gages are used for quick and accurate measurements of inside diameters of holes and widths of slots from which micrometer measurements are taken
- Both gaging ends are heat treated tool steel and ground to a radius for measuring the smallest hole the gage will enter
- Self-centering action ensures accuracy
- Long handled design provides improved
- reach in deep holes and slotsSatin chrome finish
- Swivel lock at base of handle
- Set of Six, AA-E, listed below, packed in vinyl case

EDGE FINDERS

• General's edge finders accurately locate working edges, shoulders, grooves, center-points and scribed lines

UPC

31329 4

313317

31334 8

31337 9

- Time-saving positioning tools for jig borers, milling and other machines
- Hardened and centerless ground precision tolerance
- All sizes 3" long



SHANK

1/2" (12mm)

1/2" (12mm)

3/8" (10mm)

1/2" (12mm)

S98-6

m) m) m) 260 262 263 264

"It's Your Job . . . General Tools Make It Easier"

END

Single

Double

Single

Double

NO.

260

262

263

264

SIZE

.500'

.200"

.200" and 500'

.200" and point







General's Industrial Quality Steel Rules and Economy Steel Rules are precision made with etched fine black graduations for easy reading and long life. The two finishes available are polished stainless steel, flex and rigid or satin chrome, flex and rigid.

STEEL RULES: ULTRATEST[®], INDUSTRIAL & ECONOMY

UPC CODE	ITEM NO	SIZE	GRAD TYPE	GRADUATION SIDE 1	GRADUATION SIDE 2	WIDTH
		UL	TRATEST	• STEEL RULES	5	
6" CHR	OME PLA	TED HARDEN	ED STEEL	RULES		
39021 9	CF640MM	150mm Flex	_	 mm, .5mm	mm, .5mm	1/2"
33020 8	CF645	6" Flex	5R	10, 100	32.64	1/2"
33035 2	CF649MD	6" Flex	-	10, 100	mm, .5mm	1/2"
33040 6	CF661	6" Rigid	4R	8, 16 w/32nd End Grads	32, 64	3/4"
33050 5	CF664	6" Rigid	4R	8, 16	32, 64	3/4"
33065 9	CF667ME	6" Rigid	-	32, 64	mm, .5mm	3/4"
2" CHF	ROME PL/	ATED HARDEN	ED STEE	L RULES		
33085 7	CF1245	12" Flex	5R	10, 100	32, 64	1/2"
33090 1	CF1246	12" Flex	16R	32, 64	50, 100	1/2"
33095 6	CF1247ME	12" Flex	-	32, 64	mm, .5mm	1/2"
33100 7	CF1249MD	12" Flex	_	10, 100	mm, .5mm	1/2"
33110 6	CF1264	12" Rigid	4R	8, 16	32, 64	1"
8" CHF	ROME PL/	ATED HARDEN	ED STEE	L RULE		
33140 3	CF1845	18" Flex	5R	10, 100	32, 64	3/4"
4" CHE		ATED HARDEN	ED STEE		·	
33190 8	CF2445	24" Flex	5R	10. 100	32,64	3/4"
001000	0.11.0		-	L STEEL RULES	,	0, 1
		AINLESS STEI			00.04	15/001
32096 4	616	6" Flex	5R	10, 100	32, 64	15/32"
32108 4	634	6" Flex	4R	8, 16	32, 64	15/32"
32111 4	676	6" Rigid	4R	8, 16	32,64	3/4"
32114 5	678MED	6" Rigid		mm, .5mm	10, 20, 50, 100	3/4
		TAINLESS STE				= /0 !!
32162 6	1201ME	12" Flex	-	16, 32, 64, mm, .5mm	8, 16, 32, 64	7/8"
32171 8	1210	12" Flex Center Findin	-	32,64	1"	15/001
32174 9	1216	12" Flex	5R Madal DD	10, 100	32, 64	15/32"
32180 0 31286 0	1251 1276	12" Flex 12" Rigid	Model RR 4R	HO, S, O, Gage	N Gg., mm, 64 Dec Equiv.	1" 1"
				8, 16	32, 64	I
				STAINLESS STEE		1 = (0.0 !!
32123 7	CF616	6" Flex	5R	10, 100	32, 64	15/32"
32141 1	CF676	6" Flex	4R	8, 16	32,64	3/4"
32147 3 32150 3	CF678MED CF1216	6" Flex 12" Flex		mm, .5mm	10, 20, 50, 100,16, 32, 64 32, 64	3/4" 15/32"
32150 3	CF1216 CF1227ME	12" Flex	5R	<u> </u>	32, 64 mm, .5mm	15/32"
32153 4	CF1227IVIE CF1276	12" Rigid 12" Rigid	 4R	32, 64	32, 64	1"
32139.0	GF1270	<u>J</u> :		- / -	32, 04	1
				STEEL RULES		
	CISION ST	AINLESS STE	EL RULES	5		
32036 0	300/1*	6" Flex		32, 64	Dec. Equiv.	15/32"
32041 4	300MM*	150mm Flex		mm, .5mm		15/32"
32042 1	300ME*	6" Flex (150 mm)		mm, 64	Metric Equiv.	15/32"
32046 9	301/1*	6" Flex		32, 64		1/4"
32049 0	301ME	6" Flex		mm, 16		1/4"
	305ME 307	6" Flex 6" Flex		mm, 16		15/32" 3/4"
				8, 16 w/32nd End Grads		
32063 6				20 64	Doc Equiv	2//
32063 6 30266 3	308	6" Flex		32, 64	Dec. Equiv.	3/4"
32060 5 32063 6 30266 3 32072 8 32075 9				32, 64 32, 64 mm-inch 16, 32	Dec. Equiv. B&S Wire Gg. Comparison	3/4" 3/4" 3/4"

*Furnished with pocket clip





MACHINIST TOOLS Rulers

ULTRATEST[®] **STEEL RULES**

ULTRATEST [®] Steel Rules are manufactured by a special process to meet or exceed federal specification GGG-R-791f for accuracy. They have ultra-fine black graduations against a hard satin chrome finish for easy reading and long life. All Ultratest® Rules are supplied with a plastic sleeve.



- · Comes in a plastic sleeve
- UPC NO.
- CF649MD 33035 2

CF649MD

"It's Your Job . . . General Tools Make It Easier"

10ths/100ths

mm/.5mm

20

32

16 TEMPERE

24

4 NDS 1 84THS 16



MACHINIST TOOLS Ultratest[®] Steel Rules



ULTRATEST® STEEL RULES ULTRATEST [®] Steel Rules are manufactured by a special process to meet or exceed federal specification GGG-R-791f for accuracy. They have ultra-fine black graduations against a hard satin chrome finish for easy reading and long life. All Ultratest[®] Rules are supplied with a plastic sleeve.



СF664



ULTRATEST® 6" RIGID STEEL RULE

- 4R Graduation 8ths, 16ths w/32nd End Grads; 32nds, 64ths
- Ultra fine black graduations
- Hard satin chrome finish
- Length is 6" long
- Width is 3/4"
- Comes in a plastic sleeve

UPC NO.

33040 6 CF661

ULTRATEST® 6" RIGID STEEL RULE

- 4R Graduation 8ths, 16ths; 32nds, 64ths
- Ultra fine black graduations
- Hard satin chrome finish
- Length is 6" long
- Width is 3/4"
- Comes in a plastic sleeve

UPC NO. 33050 5 CF664

ULTRATEST® 6"/150mm RIGID STEEL RULE

- Graduation 32nds, 64ths; mm, .5mm
- Ultra fine black graduations
- Hard satin chrome finish
- Length is 6" long
- Width is 3/4"
- Comes in a plastic sleeve

UPC NO. 33065 9 CF667ME







MACHINIST

CF667ME



MACHINIST TOOLS Ultratest[®] Steel Rules

1

0.5 mm

TYPE OF GRADUATIONS:

4R Graduation - 8ths, 16ths, 32nds, 64ths. 5R Graduation - 32nds, 64ths, 10ths, 100ths.

16R Graduation - 32nds, 64ths, 50ths, 100ths. Metric English - 32nds, 64ths, 0.5mm, mm.



CF2445

"It's Your Job . . . General Tools Make It Easier"



MACHINIST

MACHINIST TOOLS Industrial Precison Rules



General's Industrial Steel Rules and Economy Steel Rules are precision made with etched fine black graduations for easy reading and long life.

The two finishes available are polished stainless steel or satin chrome.





MACHINIST TOOLS Industrial Precision Rules

TYPE OF GRADUATIONS:

4R Graduation - 8ths, 16ths, 32nds, 64ths. 5R Graduation - 32nds, 64ths, 10ths, 100ths. 16R Graduation - 32nds, 64ths, 50ths, 100ths. Metric English - 32nds, 64ths, 0.5mm, mm.



"It's Your Job . . . General Tools Make It Easier"

T-53



MACHINIST

MACHINIST TOOLS

Industrial Precision Rules

General's Industrial Steel Rules and Economy Steel Rules are precision made with etched fine black graduations for easy reading and long life. The two finishes available are polished stainless steel or satin chrome.

GENERAL

ALWAYS WEAR OSHA APPROVED SAFETY GOGGLES







MACHINIST TOOLS Economy Precision Rules

TYPE OF GRADUATIONS:

4R Graduation - 8ths, 16ths, 32nds, 64ths. 5R Graduation - 32nds, 64ths, 10ths, 100ths.

16R Graduation - 32nds, 64ths, 50ths, 100ths. Metric English - 32nds, 64ths, 0.5mm, mm.





- Polished Stainless Steel finish
- Length is 6" long
- Width is 3/4"
- UPC NO.

32063 6 **307** Carded

"It's Your Job . . . General Tools Make It Easier"

8ths/16ths w/ 32nd End Grads.

16

307

MACHINIST TOOLS

Economy Precision Rules



ULTRA RULE[™] **STAINLESS STEEL RULES**

General's ULTRA RULE [™] Precision Marking Rule looks like an ordinary ruler. Look closer and you will see micro-fine marking holes and slots at every scale position to instantly locate a sharp pencil point or scriber exactly where you want it. You can effortlessly place your mark precisely on target with zero uncertainty and no eye strain.





PRECISION 6" FLEX STEEL RULE

 Graduation - 32nds, 64ths; B & S Wire Gage Ultra fine black etched graduations

- Graduation 32nds, 64ths w/ Dec. Equiv. Table
- · Ultra fine black etched graduations
- Polished Stainless Steel finish
- Length is 6" long

UPC	NO.
30266 3	308 Carded

308

310



80 10 111122112220 ***** 140 150 10 12 1 12 16 20 dilibridu⁶ Telitel GENERAL 11111 mm-inch/16ths/32nds 311ME

PRECISION 6"/150mm

Polished Stainless Steel finish

NO. 310 Carded

· Length is 6" long

• Width is 3/4"

UPC

32072 8

- **FLEX STEEL RULE** Graduation - Comparison
 - mm-inch, 16ths, 32nds
- Ultra fine black etched graduations
- Polished Stainless Steel finish
- Length is 6" long
- Width is 3/4"

UPC NO

32181 7

1241

32075 9 311ME Carded

ULTRA RULE[™] STAINLESS STEEL RULES



1241







MACHINIST TOOLS Feeler Gages

General's Feeler Gages are used for adjusting and gaging spark plugs, distributors points, valve clearances and measuring spaces between parts. All of the feeler gages are made of the finest high grade precision gage steel. Each leaf is etched with size numbers in the thousandths of an inch, as well as corresponding millimeter sized, for inch identification.



PRECISION FEELER GAGES

- Made of the finest high grade precision gage steel
- Each leaf is etched with size numbers in the thousandths for quick identification
- Knurled locknut holds the leaves in desired position
- Conforms to government specifications GGG-G-17b
- Special holder prevents edges from damage
- Leaves include the following sizes: .0015, .002, 0025, .003, .004, .005, .006, .007, .008, .009, .010, .011, .012, .013, .014, .015, .016, .017, .018, .019, .020, .021, .022, .023, .024, and .025"

PRECISION 26 STRAIGHT LEAF FEELER GAGE

• 3" (75mm) leaves are 1/2" (12mm) wide UPC NO. LEAVES SIZES 31306 5 226 26 .0015" to .025"

PRECISION 26 TAPER LEAF FEELER GAGE

• 3" (75mm) leaves taper from 1/2" (12mm) to just 1/4" (6.5mm) wide for working in confined spaces

UPC	NO.	LEAVES	SIZES
31309 6	226T	26	.0015" to .025"





226

26-LEAF ECONOMY GAGE

- General's best selling feeler gage provides precision accuracy at a reasonable price
- 3" leaves include the following sizes: .0015, .002, 0025, .003, .004, .005, .006, .007, .008, .009, .010, .011, .012, .013, .014, .015, .016, .017, .018, .019, .020, .021, .022, .023, .024, and .025"
- Metric range is from .037 to .635mm
 UPC NO. LEAVES SIZES
 31311 9 230 26 .0015" to .025"





230

15-LEAF ECONOMY GAGE WITH 3" (75MM) LEAVES

UF

31

UPC

31316 4

- Gage includes .002, .003, .004, .005, .006, .007, .008, .010, .011, .012, .013, .014, .015, .020, and .025"
- Metric range is from .051 to .635mm

PC	NO.	LEAVES	SIZES
313 3	231	15	.002" to .025"

NO

232



231

15-LEAF ECONOMY GAGE WITH 6" (150MM) LEAVES

- Longer leaves allow accurate measuring in hard-to-reach places
- Gage includes .002, .003, .004, .005, .006, .007, .008, .010, .011, .012, .013, .014, .015, .020, and .025"
- Metric range is from .051 to .635mm



"It's Your Job . . . General Tools Make It Easier"

LEAVES

15

SIZES

.051 to .635mm

232

MACHINIST



MACHINIST TOOLS Precision Squares and Gages



General's Precision Squares are used for checking internal and external 90° angles. Screw Pitch Gages are notched for measuring inside threads of small holes and nuts as well as external threads.

Center Gages improve efficiency and speed up setup time for lathe thread cutting. Wiggler/Center Finders locate spindle centers and working points on drill presses, milling and other machines.





WIGGLER/CENTER FINDER SET

- The snap-in ball and socket wiggler is essential for precise setups in machine shops
- · Locates spindle centers and working points on drill presses, milling and other machines
- Four interchangeable point attachments snap into adjustable spring tension clutch holder
- Set includes snap-in holder, needle point, disk point, ball shaft and indicator shaft packed in a vinyl case
- UPC NO. 31418 5 S389-4

S389-4



CENTER GAGE

REFERENCE TABLE

and mechanics

- General's center gage improves efficiency and speeds set-ups for lathe thread cutting
 - The gage is graduated in 14ths, 20ths, 24ths, and 32nds of an inch for checking the number of threads per inch
- 60° angles for U.S. standard threads and double depth of American National thread

• Essential tap drill and decimal equivalents

reference table for toolmakers, machinists

- Made of hardened spring tempered steel with protective satin chrome finish
- Notches have clearance slots UPC NO

350107 **CF778**

715

CF778

All hand the state

Front has machine screw size tap drill chart for recommended 75% depth thread

- · Back has decimal equivalents table in 64ths from 1/64" to 63/64'
- For National Fine and National Coarse. American Standard Pipe and metric threads
- Convenient 6" rule is graduated in 64ths

UPC NO. 35015 2 715



MACHINIST



Wire Gages are used for gaging the thickness of non-ferrous wire and metals such as copper, brass and aluminum. Sheet Metal Gages are used for

MACHINIST TOOLS Gages

gaging uncoated sheet metal, plate iron and steel. Drill Gages and Hobby Gages are are used to quickly

and conveniently identify drill bit sizes.



DRILL GAGES

- · General's drill gages are used to guickly and conveniently identify drill bit sizes
- Made of heat treated heavy gage steel, machined and ground to close tolerances
- Hole sizes and decimal equivalents are permanently marked on the face
- No. 13 is 3" x 1-1/8" wide. Nos. 14 and 15 are 6-1/2" x 2-1/2" wide
- No. 14 and No. 15 conform to government specifications GG-G-86b



HOBBY DRILL GAGE

- Made of heat treated heavy gage steel, machined and ground to close tolerances
- · Etched graduations are filled in black to give high contrast and will not wear off • Gage measures 2-3/8" x 6-3/4"
- (60 x 172mm) overall

Stainless steel will not rust

UPC	NO.	SPECIFICATIONS
22011 0	24	Fractional size drills
		1/16" to 1/2" x 64ths



- American Standard wire gage 0 to 36
- For gaging non-ferrous wire and metals such as copper, brass and aluminum
- · Decimal equivalents of each size are stamped on reverse side
- · Satin finished, heavy gage hardened and tempered steel
- 3-1/4" diameter, 3/32" thick

NO. 22036 3 20

UPC



SHEET METAL GAGE

- Gage numbers are U.S. Standard 0 to 36
- · For gaging uncoated sheet metal, plate iron and steel
- · Decimal equivalents of each size are stamped on reverse side
- Satin finished, heavy gage steel is hardened and tempered
- 3-1/4" diameter, 3/32" thick



"It's Your Job . . . General Tools Make It Easier"

T-59

24

21



The Multi-Use Rule and Gage performs five separate functions: drill point gage, bevel protractor, center finder, circle divider and tap and drill gage.

Steel Protractors are preferred by machinists, draftspeople, and mechanics for setting bevels, measuring and transferring angles.



MULTI USE RULE AND GAGE

- One of our most popular pocket tools performs five separate and distinct functions
- Drill point gage is used for checking 59° angle drill points
- Bevel protractor is used for measuring and laying out angles
- Center finder locates centers
 of shafts or circles



- Center finder locates centers of shafts or circles
- Circle divider (up to nine equal parts) is used for dividing circles into sectors, regular polygons and polygrams
- Tap and drill table shows popular tap sizes with correct drill sizes for National form of thread
- Made of long-wearing stainless steel
- 4" rule has etched graduations in 64ths and millimeters

UPC	NO.
22015 8	16ME

- Quick way to identify machine screws, bolts, wood screws, standard size rivets and common cotter pin sizes up to 5/16" (8mm)
- 3" scale to check screw lengths

Q

- Checker gives required drill size for corresponding tap size and proper drill size for like hole
- Threaded holes indicate threads per inch while unthreaded indicate size by number and fractions of an inch
- Durable engineering plastic

UPC	NO.
35018 3	714



STEEL PROTRACTORS

- Preferred by machinists, draftspeople, and mechanics for setting bevels, measuring and transferring angles
- Made of ground stainless steel for optimum accuracy
- Permanently etched graduations from 0 to 180° in opposite directions
- 3-3/8" x 2" head
- 6" adjustable protractor arm locks into desired position with knurled thumb nut

UPC	NO.	STYLE
22018 9	17	Square head
22021 9	CF17	Square head
		(Stain chrome finish)
22024 0	18	Round head

GENERAL









MACHINIST TOOLS Protractors

The Pro-Angle[™] Digital Protractor takes the guesswork out of measuring, marking, reading and transferring angels. The 6[™] Stainless Steel Protractor arm has a knurled locking nut. The large, display can be inverted for easy, instant reading. The Hold Function can be used to freeze measurements.







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444

MACHINIST TOOLS **Digital Calipers**

Electronic Digital Calipers do the work of dial calipers with added benefits; high-contrast liquid crystal display provides easy, instant readings with no need for calculations. Microprocessor-based calipers

130

• 6" (153mm) range

Fractions, Metric

· Convenient auto-off feature

• Accuracy: +/- 0.001", +/- 0.02mm

convert from inch to metric at the push of a button. General's high quality, easy-to-read Electronic Digital Calipers make precise inside, outside, depth and step measurements.



GENERAL ULTRALECH

· Heavy-duty stainless steel construction

• Three mode digital display: Decimal Inches,

· Inside, outside, depth & step measurements

DEPTH/ANGLE GAGE

· Permits easy setting of protractor angle to 30°, 45° and 60° settings on both sides

GENERAL[®]

- 6" x 1/4" etched stainless steel rule graduated in 32nds and 64ths
- 2-1/2" wide hardened steel base NO.

444









No. 1433 Digital Display



- Resolution: 0.0005", 0.01mm, 1/64"
- Power Source: 1 "SR44" (1.5V) battery included

	1	nciudeu
UPC	NO.	RANGE
01470 2	147	0 - 6" (0 - 153mm)
01478 3	1478	0 - 8" (0 - 203mm)
14712 7	14712	0 - 12" (0 - 305mm)

6" CARBON FIBER DIGITAL FRACTIONAL CALIPER

- 6" (153mm) range
- · Lightweight, non-marring carbon fiber composite
- · Convenient auto-off feature
- Three mode digital display: Decimal Inches,
- Fractions. Metric Inside, outside, depth & step measurements
- Accuracy: +/- 0.008", +/- 0.2mm
- Resolution: 0.0005", 0.01mm, 1/64"
- Power Source: 1 "SR44" (1.5V) battery incl. UPC NO. RANGE
- 01460 3 (0 - 153mm) 146 0 - 6"

3" CARBON FIBER DIGITAL FRACTIONAL CALIPER

- 3" (76mm) range
- Lightweight non-marring carbon fiber composite
- Convenient auto-off feature
- Three mode digital display: Decimal Inches, Fractional and Metric
- Convenient pocket clip
- Accuracy: +/- 0.005" +/- 0.1mm
- · Inside, outside, depth & step measurements
- Resolution: 0.0005", 0.01mm, 1/64"
- Power Source: 1 "SR54" (1.5V) silver oxide battery included

RANGE UPC NO. 01433 7 0 - 3" (0 - 76mm) 1433

1433







MACHINIST TOOLS Micrometers

General's Micrometers are used to measure distances to the nearest ten thousandth of an inch. The measurement is usually expressed or written as a decimal. The types of micrometers commonly used

are made so that the longest movement possible between the spindle and the anvil is 1 inch. This movement is called the "range".

6" DIAL CALIPER

- Stainless steel construction for accuracy and durability
- Large, clear dial accurately reads to .001" Satin chrome scale with clearly etched
- tenths of inch graduations
- Covered rack ensures smooth operation by preventing dirt and chips from entering rack and gear mechanism
- · Inside, outside, depth and step measurement
- Lock for repetitive measurement
- · Free wheeling thumb roller
- Depth stop rod
- Adjustable bezel for zero setting
- UPC NO. CAPACITY
- 10700 8 107 0 - 6" (0 - 153mm)

DIAL CALIPER AND MARKING SET

- This set contains three of the most useful measuring and marking tools for mechanics and machinists
- Set includes: 6" Dial Caliper; 6" x 3/4" Stainless Steel Ruler with satin finish and reversible Tip Carbide Scriber with magnetic pick-up
- Ruler has etched and filled 4R graduations (1/8", 1/16", 1/32", 1/64")
- · Scriber has aluminum body with knurled handle in an overall length of 4-3/4"
- · Caliper has inside, outside, depth and step measurement
- · Caliper has lock for repetitive measurement

GRADS

0-6" range,

.001" bottom

and 1/20mm top grads

RANGE

0" to 1

0 to 25mm

- · Free wheeling thumb roller
- · Packaged in a sturdy, fitted, plastic case designed specifically for this set

UPC NO. 10800 5 108



PRECISION VERNIER CALIPER

- · General's vernier caliper is an extremely accurate measuring tool guaranteed to .001" accuracy
- Vernier scale is extra long for easier and more accurate readings
- · Permanent black graduations
- · Hardened stainless steel construction with beveled lower jaws and pointed beveled upper jaws
- · Depth gage

- · Plastic case with instructions
- Satin chrome finish UPC

UPC

34185 3

34184 6

NO. 33450 3 MG6001DC



MG1001

108

MACHINIST

107

MG6001DC

PRECISION MICROMETERS FORGED STEEL FRAME • Friction stop for repetitive readings

- Forged steel frame eliminates flexing for greater accuracy
- Reads to .001". Accurate to .0003"
- · Hardened and precision ground measuring surfaces
- Positive spindle lock holds measurement
- · Satin chrome thimble and barrel with easyto-read black contrasting graduations

UTILITY MICROMETER

- A practical and economical measuring device for beginners and hobbyists
- · Well-suited for use in training programs, general toolroom and machine shop use and automotive work
- Accuracy guaranteed to .001"
- Satin chrome thimble and barrel with easyto-read black contrasting graduations
- Special wrench is included for simple zero adjustments

· Quick and easy zero adjustment with

spanner wrench (included)

NO.

MG1001

MG1001MM

- · Ground and polished carbide measuring faces
- Engraved graduations on barrel
- · Lock for repetitive measurement

UPC RANGE INCLUDES NO. 44103 4 102 0" to 1

"It's Your Job . . . General Tools Make It Easier"

102





• Automatic thumb lock • Conversion table on back



MACHINIST

MACHINIST TOOLS

Dial Indicators & Square Sets

General's Dial Indicators provide all the features necessary for precise quality control functions. Large dials provide easy to read measurements. Our Dial Indicators meet or exceed federal specifications for accuracy. General's four-piece set for toolmakers and machinists consists of square and miter heads, center head and bevel protractor head. The 12" blade is fully hardened and tempered steel.

GENERAL







ALWAYS WEAR OSHA APPROVED SAFETY GOGGLES