

WORK HOLDING & TOOL STEEL

PAGE

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CLAMPS

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CLAMPS

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WILTON
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DE-STA-CO® Toggle Lock Plus Clamps

DE-STA-CO® has taken several of their popular toggle clamps and have added a locking lever for improved safety. The locking lever helps ensure that the over-center locking condition is maintained. In order to open each clamp, the locking lever must first be released.

If a clamp application warrants concerns over accidental clamp opening, severe stresses of vibrations on the clamps, or overhead installations, then the DE-STA-CO® Toggle Lock Plus is the right clamp for the job.

Vertical Style

These clamps are unique in that they lock with the aid of the locking lever in both the clamped and unclamped position. Bolt retainer supplied with solid bar Models 207-LR and 210-SR. Spindle assembly and flanged washers supplied with "U" bar Models 207-UR and 210-UR.



Model 207-UR

MODEL NO.	ORDER NO.	OVERALL HEIGHT	HEIGHT UNDER BAR	OVERALL LENGTH	HOLDING CAPACITY LBS.	PRICE EACH
207-LR	4352-071	6-29/32	1-1/4	4-37/64	500	\$31.55
207-UR	4352-078	6-29/32	1-1/4	4-37/64	500	31.63
210-SR	4352-104	8	1-11/16	6-39/64	750	46.71
210-UR	4352-108	8	1-11/16	6-39/64	750	46.03

Horizontal Style

Equipped with a locking lever which locks in the clamped position only. Clamps are supplied with bonded neoprene-tipped spindle assemblies and flanged washers.



Model 225-UR

MODEL NO.	ORDER NO.	OVERALL HEIGHT	HEIGHT UNDER BAR	OVERALL LENGTH	HOLDING CAPACITY LBS.	PRICE EACH
225-UR	4352-251	1-59/64	1-21/64	7-9/64	500	\$29.90
235-UR	4352-351	2-35/64	1-45/64	10-17/32	750	49.09
305-UR	4353-051	1-7/16	1/2	2-1/4	150	22.76
307-UR	4353-071	2-7/16	7/8	3-39/64	350	30.96

Pull Action Latch Style - Horizontal Type

Supplied with a locking lever catch accessory which allows the clamp to lock in the closed position only. Latch plates are supplied with the clamp.



Model 331-R

J-Hook Pull Action

Supplied with a release lever catch accessory which allows the clamp to lock in the closed position only. Large handle pad improves operability of the clamp.



Model 351-R

MODEL NO.	ORDER NO.	OVERALL HEIGHT	OVERALL LENGTH	DRAWING MOV'MT	HOLDING CAPACITY LBS.	PRICE EACH
323-R	4353-233	1-3/16	4	1-11/64	360	\$20.50
323-RSS	4353-234	1-3/16	4	1-11/64	360	38.47
331-R	4353-311	2-5/64	5-31/32	1-3/4	700	29.38
331-RSS	4353-318	2-1/64	6-11/64	2	700	51.80
341-R	4353-411	2-57/64	7-1/2	2-1/2	2000	43.02
341-RSS	4353-414	2-7/8	8-9/32	2-1/2	2000	85.94
375-R	4353-751	4-3/16	9-5/8	3-1/2	4000	75.12
385-R	4353-854	1-3/8	8-3/4	2-3/16	7500	95.37

MODEL NO.	ORDER NO.	HEIGHT TO (*)	OVERALL LENGTH	DRAWING MOV'MT	HOLDING CAPACITY LBS.	PRICE EACH
351-R	4353-511	3/4	9-7/64	4	375	\$27.03
371-R	4353-712	1-27/64	12-7/8	5-3/8	750	50.78

Plunger Style

Patented design locks the release lever into the forged steel base to prevent accidental opening. Clamps lock in both the extended and retracted positions while the release lever secures the clamp in the extended position only.



Model 603-R

Pull Action Latch Style - Vertical Type



Model 324-R

MODEL NO.	ORDER NO.	OVERALL HEIGHT	HEIGHT TO (*) OF PLUNGER	OVERALL LENGTH	DRAWING MOV'MT	HOLDING CAPACITY LBS.	PRICE EACH
6015-M-R	4356-014	1-39/64	1/2	2-61/64	45/64	560	\$38.81
603-R	4356-032	3-27-64	31/32	4-11/16	1-1/2	600	40.90
630-R	4356-301	3-1/16	13/16	7-1/32	2	2500	81.68

MODEL NO.	ORDER NO.	OVERALL HEIGHT	OVERALL LENGTH	DRAWING MOV'MT.	CAPACITY LBS.	PRICE EACH
324-R	4353-248	2-5/64	3-15/32	1-17/32	500	\$29.73
334-R	4353-343	2-35/64	4-1/8	2	1000	36.87
344-R	4353-443	2-25/64	5-49/64	2-1/2	2000	55.74



Model Identification Code:
 S Solid Holding Bar (bolt retainer furnished)
 SS Stainless Steel
 U Shaped Holding Bar
 *Measured to (C) of mounting holes on straight base models.



Model 601

Fully Retractable Plunger Clamps



Model 602

These models have fully retractable plunger, mount directly through a member by a jam nut on the work side or flush by drilling and tapping the member. Locks over center in either extended or retracted position. Red vinyl handle.

Straight-Line Action Clamps

Straight-Line Toggle Clamps

Smallest of the straight-line clamps, ideal for electronic applications and similar small fixturing. Model 601 has an 8-32 nylon spindle.

MODEL NO.	ORDER NO.	OVERALL HEIGHT	HEIGHT TO (C) OF PLUNGER	OVERALL LENGTH	PLUNGER TRAVEL	HOLDING CAPACITY LBS.	PRICE EACH
601	4356-010	1-3/16	1/2	2-5/8	5/8	150	\$11.25
601-O	4356-016	1-3/16	1/2	2-55/64	5/8	100	12.24
601-SS	4356-019	1-3/16	1/2	2-5/8	5/8	100	24.06
6001	4356-003	1-17/64	1/2	2-5/8	5/8	150	15.94
6001-SS*	4356-005	1-17/64	1/2	2-5/8	5/8	150	30.15

MODEL NO.	ORDER NO.	OVERALL HEIGHT	OVERALL LENGTH	PLUNGER TRAVEL	HOLDING CAPACITY LBS.	PRICE EACH
602	4356-020	3-9/64	2-7/16	3/4	200	\$15.91
602-SS	4356-029	3-9/64	2-7/16	3/4	200	52.57
604	4356-040	4-5/32	4-25/32	1-1/2	300	17.80
604-SS	4356-049	4-5/32	4-25/32	1-1/2	400	47.06
624	4356-240	5-5/8	6-11/16	2-5/8	700	37.45
624-SS	4356-249	5-5/8	6-11/16	2-5/8	700	98.29

Low Profile Plunger Clamps

Compact models feature De-Sta-Co balanced construction for durability and rigid holding ability. Red vinyl grip. Clamps lock in both the extended and retracted position.



Model 630

Fully Retractable Plunger Clamp Mounting Brackets



604106
Mounting Plate for 604

MODEL NO.	ORDER NO.	OVERALL HEIGHT	HEIGHT TO (C) OF PLUNGER	OVERALL LENGTH	PLUNGER TRAVEL	HOLDING CAPACITY LBS.	PRICE EACH
607	4356-070	3-19/32	11/16	6-1/64	1-5/8	800	\$32.57
610	4356-100	4-3/8	1-45/64	6-23/32	1-5/8	800	29.90
630	4356-300	3-3/32	13/16	7-1/32	2	2500	39.82
640	4356-400	4-3/8	1-1/4	12-21/32	4	7500	109.76
6015-M	4356-015	1-39/64	1/2	2-61/64	45/64	560	28.52
6015-MSS	4356-013	1-39/64	1/2	2-61/64	45/64	630	45.78

MODEL NO.	ORDER NO.	USE WITH CLAMP	HT. TO (C) OF PLUNGER	PRICE EACH
604106	4356-041	604	1/2	\$8.29
624106-M	4356-244	624	53/64	9.08

Push-Pull Plunger Clamps

These units have a large holding capacity for their size, and are well suited for use in confined areas. Equipped with red ergonomic grips. Locks in either extended or retracted position.



Model 603

Large Capacity Clamps

Model has the largest capacity of the straight-line action clamps. Forged alloy steel base and handle. Removeable ring pivot pin construction permits easy removal of plunger after mounting. Locks over center in both extended and retracted position.



Model 650

MODEL NO.	ORDER NO.	OVERALL HEIGHT	HUT. BASE TO (C) OF PLUNGER	OVERALL LENGTH	PLUNGER TRAVEL	HOLDING CAPACITY LBS.	PRICE EACH
603	4356-030	3-9/32	31/32	4-23/32	1-1/4	600	\$21.23
603-SS	4356-039	3-9/32	31/32	4-23/32	1-1/4	840	48.52
605	4356-050	3-5/32	31/32	5-7/16	1-1/4	300	16.67
608	4356-080	4-3/64	1-1/4	6-1/8	1-5/8	850	37.39
609	4356-090	3-1/4	31/32	5-7/16	1-1/4	300	19.25

MODEL NO.	ORDER NO.	OVERALL HEIGHT	HEIGHT TO (C) OF PLUNGER	OVERALL LENGTH	PLUNGER TRAVEL	HOLDING CAPACITY LBS.	PRICE EACH
650	4356-500	4-7/8	2-1/4	11-1/4	3	16000	\$128.66



Vertical Handle Hold-Down Clamps



Model 2002-S

These clamps deliver two to three times the holding capacity of our legacy models in the same envelope. Now you can save valuable space in all your applications without sacrificing holding capacity or clamp performance. The open "U" bar has a knob on the end to prevent the spindle from slipping off the end of the arm. Unique design delivers greater hand clearance in the open position eliminating pinch points and improving safety and ergonomics. Clamp comes complete with ergonomic handle grip, two flanged washers and spindle assembly ("U" bar models only"). All "S" bar models supplied with bolt retainer. To order without a spindle, include a -LS suffix.

MODEL NO.	ORDER NO.	OVERALL HEIGHT (IN.)	HEIGHT UNDER BAR (IN.)	OVERALL LENGTH (IN.)	HOLDING CAPACITY LBS.	PRICE EACH
2002-S	4352-003	4.73	0.95	3.29	600	\$15.85
2002-U	4352-002	4.73	0.95	3.29	600	15.12
2002-UB	4352-004	5.07	1.27	3.29	600	16.81
2007-S	4352-005	7.21	1.25	4.81	1000	20.07
2007-U	4352-007	7.21	1.25	4.81	1000	19.46
2007-UB	4352-006	7.64	1.68	4.81	1000	20.92
2010-S	4352-008	9.00	1.70	6.09	1400	30.10
2010-U	4352-001	9.00	1.70	6.09	1400	29.06
2010-UB	4352-009	9.612	2.20	6.09	1400	31.01

Horizontal Handle Hold-Down Clamps



Model 2013-U

- Robust Design
- 60% more holding capacity than legacy product
- Low arm deflection under load (greater stiffness)
- Long Handle, increased operator comfort
- DE-STA-CO locks handle in open and closed positions
- Available standard or as an add-on kit
- Large Hand Clearance eliminates "knuckle busters"
- Adjustable Pre-load eliminates arm play for locating applications
- Low Pivot Point Provides perpendicular clamping force
- Bushings at key pivot points provides long life and smooth operation
- Fixed Handle Pivot eliminates sticking points, provides smooth action

MODEL NO.	ORDER NO.	OVERALL HEIGHT (IN.)	HEIGHT UNDER BAR (IN.)	OVERALL LENGTH (IN.)	HOLDING CAPACITY LBS.	PRICE EACH
2013-U	4351-918	1.27	0.75	5.88	295	\$13.77
2017-U	4351-919	1.95	0.98	8.62	560	17.77
2027-U	4351-920	2.20	1.32	9.88	840	19.68
2037-U	4351-921	2.75	1.62	13.35	1680	33.19

Horizontal Hold-Down Clamps

Low silhouette series requires minimum overhead clearance. Spindle, jam nuts, and flanged washers or bolt retainer are included. Bar opens 90° to completely clear work area. Perfect as OEM component on pressure vessels and in assembly jigs.



200 Series Straight Handle

300 Series T-Handle

MODEL NO.	ORDER NO.	OVERALL HEIGHT	HEIGHT UNDER BAR	OVERALL LENGTH	HOLDING CAPACITY LBS.	PRICE EACH
205-S	4352-060	43/64	3/8	2-25/32	60	\$8.50
205-SSS	4352-069	43/64	3/8	2-25/32	75	16.47
205-U	4352-050	43/64	5/16	2-21/32	60	8.50
205-USS	4352-059	43/64	5/16	2-21/32	75	16.14
206-HSS	4352-037	1-1/16	3/4	2-3/4	100	24.60
206-SS	4352-067	1-1/16	13/32	2-3/4	100	24.60
213-U	4352-130	1-25/64	23/32	4-1/8	150	11.14
213-USS	4352-139	1-25/64	23/32	4-1/8	150	22.27
215-U	4352-150	1-17/32	1	5-1/2	200	11.45
215-USS	4352-159	1-17/32	1	5-1/2	250	22.83
217-U	4352-170	1-61/64	31/32	6-9/16	200	14.42
217-USS	4352-179	1-61/64	31/32	6-9/16	250	26.93
225-U	4352-250	1-27/32	1-21/64	6-45/64	500	13.08
225-USS	4352-259	1-27/32	1-21/64	6-45/64	600	31.60
227-U	4352-270	2-7/16	1-19/64	7-9/16	500	15.90
227-USS	4352-279	2-7/16	1-19/64	7-9/16	600	36.00
235-U	4352-350	2-35/64	1-3/4	10-7/8	750	22.12
235-USS	4352-359	2-35/64	1-3/4	10-7/8	850	54.57
237-U	4352-370	3-13/64	1-5/8	10-43/64	750	26.79
245-U	4352-450	4-1/4	2-1/4	12-21/64	1000	42.50
305-U	4353-050	1-3/8	1/2	2-7/32	150	10.82
305-USS	4353-059	1-3/8	1/2	2-7/32	200	21.26
307-U	4353-070	2-13/32	7/8	3-39/64	350	16.24
307-USS	4353-079	2-13/32	7/8	3-39/64	350	34.39
309-U*	4353-090	3-35/64	1-19/64	5-3/16	750	26.92

*Model 309-U = 7

Hold-Down Action Clamps Vertical Hold-Down Clamps

All models have a red vinyl handle grip. Many options are available in most model sizes including straight or flanged bases, solid or U-bars, extra length bars and stainless steel. Bolt retainer is furnished with solid bar models, flanged washers with U-bar models. Model 2002-U207 is mounting pattern interchangeable with Model 207-U.



Model 207-U

MODEL NO.	ORDER NO.	OVERALL HEIGHT	HEIGHT UNDER BAR	OVERALL LENGTH	HOLDING CAPACITY LBS.	PRICE EACH
201-U	4352-010	3-1/32	5/8	2-1/64	100	\$10.99
201-USS	4352-019	3-1/32	5/8	2-1/64	125	21.71
202	4352-020	4-7/32	15/16	2-5/16	200	11.53
202-SS	4352-029	4-7/32	15/16	2-5/16	250	27.33
202-U	4352-026	4-7/32	15/16	2-47/64	200	11.53
202-UL	4352-120	4-7/32	15/16	3-17/64	200	13.35
202-USS	4352-039	4-7/32	15/16	2-47/64	250	27.33
207-L	4352-084	6-57/64	1-1/4	5-1/64	500	17.10
207-S	4352-080	6-57/64	1-1/4	3-3/4	500	15.05
207-U	4352-070	6-57/64	1-1/4	3-11/16	375	15.05
2002-U207	4352-202	5.01	1-1/4	3.29	600	15.12
207-UL	4352-074	6-57/64	1/4	5-13/32	375	15.31
207-USS	4352-079	5-5/8	1-1/4	4-3/8	450	35.20
210-S	4352-101	8	1-43/64	5-17/32	750	24.54
210-U	4352-100	8	1-43/64	5-17/32	600	21.97
210-USS	4352-109	8	1-43/64	5-17/32	750	48.86
247-S	4352-471	8-11/16	2	6-7/8	1000	37.34
247-U	4352-470	8-11/16	2	6-7/8	1000	32.19
267-U	4352-670	11-7/8	3-5/64	8-59/64	1200	51.47

Low Silhouette - Drop Handle Clamp

Combined low silhouette and mounting flexibility provide easy operation for part loading and unloading. Available in U-bar and solid bar models.



Model 317S

MODEL NO.	ORDER NO.	OVERALL HEIGHT	HEIGHT UNDER BAR	OVERALL LENGTH	HOLDING CAPACITY LBS.	PRICE EACH
317-U	4353-170	5-5/8	2-43/64	6-13/16	375	\$23.22
317-S	4353-171	5-5/8	2-43/64	6-13/16	375	22.10



Pull Action Clamps

Pull Action Clamps

2 SS=7

Model Identification Code:

S Solid Holding Bar (bolt retainer furnished)

SS Stainless Steel

U Shaped Holding Bar

*Measured to (Q) of mounting holes on straight base models.

Latch Type Clamp

Latch-type pull action clamps are convenient to operate. One hand engages or disengages the latch bar while the other moves the handle. Red vinyl grip for comfortable handling.



Model 301

MODEL NO.	ORDER NO.	HEIGHT TO (Q)	OVERALL LENGTH	DRAWING MOVEMENT	HOLDING CAPACITY LBS.	PRICE EACH
301	4353-010	1-5/8	8-13/32	4	375	\$20.04
301-SS	4353-019	1-5/8	8-13/32	4	450	46.73
311	4353-110	2-1/16	9-33/64	3-3/8	1200	27.03

J-Hook Pull-Action Clamps

Pull actions are excellent for many types of latching operations. When base is welded or bolted in place units can be used for latching pressure vessels, clean out doors, etc. J-hook is threaded for easy adjustment. Ergonomic grip.



Model 330



Model 331-R

MODEL NO.	ORDER NO.	HEIGHT TO (Q)	OVERALL LENGTH	DRAWING MOVEMENT	HOLDING CAPACITY LBS.	PRICE EACH
330	4353-300	9/16	5-41/64	2-5/16	200	\$14.45
330-SS	4353-309	4-7/32	15/16	2-47/64	200	26.48
351	4353-510	3/4	8-9/16	4	375	12.39
351-B	4353-515	55/64	8-9/16	4	375	13.95
351-SS	4353-519	3/4	8-9/16	4	450	26.93
381	4353-810	1-27/64	12	5-3/8	750	34.48

Pull-Action Latch Clamps

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Controlled Latch Clamp

Innovative controlled motion allows for single handed operation. Once locked over-center, the included J-hook is completely restrained in all directions. Upon opening the hook travels forward 3/4" and then pivots out of the way.



Model 3051-R

MODEL NO.	ORDER NO.	HEIGHT TO (Q)	OVERALL LENGTH	DRAWING MOVEMENT	HOLDING CAPACITY LBS.	PRICE EACH
3051	4353-052	1-17/64	1/2	2-5/8	150	\$32.39
3051-R	4353-063					46.10

FEATURES:

- Safe, single handed operation
- Innovative controlled motion
- Secure toggle-locking action
- Simple set-up and adjustment
- Clamp hook/arm moves and stays safely out of the way

APPLICATIONS:

- Molding
- Closures for doors, lids, covers
- Assembly
- Checking fixtures

MODEL NO.	MAX. HOLDING CAPACITY	WEIGHT	EF:AF	DRAWING MOVEMENT	REPLACEMENT HOOK ASSEMBLY
3051 3051-R	1500lbf	1.0lb	12:1	0.75	3051208

Vertical Latch Type

Ideal for lid closure applications where it is better to mount the latch on the lid or door and the latch plate on the vessel or container. Height is measured from base to top of handle.



Model 324

MODEL NO.	ORDER NO.	OVERALL HEIGHT	OVERALL LENGTH	DRAWING MOVEMENT	HOLDING CAPACITY LBS.	PRICE EACH
324	4353-240	2-63/64	3-23/64	1-17/32	500	\$18.31
324-SS	4353-249	2-63/64	3-23/64	1-17/32	500	34.64
334	4353-340	3-55/64	4-1/4	2	1000	22.73
334-SS	4353-349	3-55/64	4-1/4	2	1000	40.82
344	4353-440	5-19/64	5-23/64	2-1/2	2000	34.41
344-SS	4353-449	5-19/64	5-23/64	2-1/2	2000	69.04

Horizontal Pull-Action Clamps

These units combine maximum holding capacity with easy operation and simple adjustment. All use threaded U-bolts for adjustment. An optional forged latch plate is available on some models for applications such as holding two piece molds.



Model 323

MODEL NO.	ORDER NO.	OVERALL HEIGHT	OVERALL LENGTH	DRAWING MOVEMENT	HOLDING CAPACITY LBS.	PRICE EACH
323	4353-230	1-1/8	4	1-3/16	360	\$12.19
323-SS	4353-239	1-1/8	4	1-3/16	360	26.64
331	4353-310	1-31/32	4	2	700	16.23
331-SS	4353-319	1-31/32	5-5/8	2	700	31.94
341	4353-410	2-3/4	7-1/2	2-1/2	2000	25.27
341-SS	4353-419	2-3/4	7-1/2	2-1/2	2000	57.63
375†	4353-750	4-3/16	10-3/4	3-1/2	4000	56.87
385†	4353-850	3-3/4	8-5/8	2-3/16	7500	74.18
385-L	4353-851	1-27/32	10-1/4	2-3/16	7500	89.46

† Latch plate not included



Pneumatic Power Clamps

Powered Straight-Line Action

Air or hydraulic powered straight-line action clamps provide an economical holding device suited to a wide variety of uses.



Model 816

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MODEL NO.	ORDER NO.	OVERALL LENGTH	OVERALL HEIGHT	PLUNGER TRAVEL	HOLDING CAPACITY LBS.	PRICE EACH
803	4358-030	2-23/32	9-53/64	3/4	600	\$157.53
830	4358-300	3-17/64	14-5/64	1-1/4	2500	261.77
850	4358-500	7-11/64	21-11/64	2	16000	476.61

Powered Hold-Down Action

DE-STA-CO over center toggle action linkage combined with pneumatic cylinder provides an economical holding device, easily adapted to a wide variety of applications. Units are completely assembled and ready to operate.



Model 807-U

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MODEL NO.	ORDER NO.	OVERALL HEIGHT	HEIGHT UNDER BAR	OVERALL LENGTH	HOLDING CAPACITY LBS.	PRICE EACH
812-U*	4358-120	1-9/16	11/16	5-39/64	150	\$ 99.03
802-U	4358-020	2-11/32	1-1/16	7-25/64	200	107.05
807-S	4358-071	3	1-3/8	9-31/32	500	118.55
807-U	4358-070	3	1-3/8	9-7/32	375	118.55
810-S	4358-101	3-51/64	1-51/64	12-1/8	750	199.87
810-U	4358-100	3-51/64	1-51/64	12-9/32	600	193.08
817-S	4358-171	7-27/64	2-11/16	6-3/4	450	142.47
817-U	4358-170	7-27/64	2-11/16	6-3/16	350	142.47
827-S	4358-271	9-21/32	3-7/8	8-41/64	700	236.90
827-U	4358-270	9-21/32	3-7/8	8-3/4	600	236.90
847-S	4358-471	4-11/32	2-1/4	16	1000	348.59
847-U	4358-470	4-11/32	2-1/4	16	800	348.59
858	4358-580	7-1/8	3-27/32	18-3/32	4000	445.39
868	4358-680	14-21/64	4-3/16	10-7/64	4000	512.07

*Model 812-U=6



Model 9540L

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Swing Clamps - 9500 Series

These innovative swing clamps feature no linear travel during rotation, a completely shielded rod, a robust arm connection Sensor ready for round or T-slot style sensors. Clamp shown with optional arm sold.

MODEL NO.	ORDER NO.	CLAMPING STROKE	OVERALL HEIGHT	BASE WIDTH	CLAMPING FORCE AT 87PSI	SWING	PRICE EACH
9522L	4359-343	0.50	5.43	1.42	53lb.	LH	\$288.46
9522R	4359-340	0.50	5.43	1.42	53lb.	RH	288.46
9530L	4359-333	0.79	6.59	1.76	90lb.	LH	322.01
9530R	4359-332	0.79	6.59	1.76	90lb.	RH	322.01
9540L	4359-335	0.79	6.94	2.05	160lb.	LH	345.02
9540R	4359-334	0.79	6.94	2.05	160lb.	RH	345.02

Heavy-Duty Power Roller

These air operated power clamps use a roller and cam principle to clamp work of inconsistent thickness and still maintain a locked condition.



Model 871-2
(Clamp shown in closed position)

14

MODEL NO.	ORDER NO.	OVERALL HEIGHT	OVERALL WIDTH	ARM POSITION: WHEN CLOSED	HOLDING CAPACITY LBS.	PRICE EACH
870-2	4358-700	11-13/32	2-1/8	180	2000	\$ 445.00
871-2	4358-710	11-3/4	2-1/8	90	2000	445.00

Swing Clamps

These versatile pneumatic clamps provide a quick swing-and-clamp movement while exerting just the force your operation requires...without deforming delicate parts. All pneumatic swing clamps are equipped with sensing capabilities as a standard feature. Multiple mounting options allow the clamp to be adapted to the fixture for the best use of space and to minimize installation time.



Model 8015



Model 8115

6

MODEL NO.	ORDER NO.	BODY STYLE	OVERALL HEIGHT	BASE WIDTH	SWING	CLAMPING FORCE @ 80 PSI	PRICE EACH
8015	4358-015	Threaded Body	4-7/8	1 1/8-16	RH	22	\$270.11
8016	4358-016	Threaded Body	4-7/8	1 1/8-16	LH	22	270.11
8115	4358-115	Block Style	4-7/8	1-1/4	RH	22	257.97
8116	4358-116	Block Style	4-7/8	1-1/4	LH	22	257.97
8215	4358-215	Threaded Body	6-23/64	2 1/4-12	RH	80	357.42
8216	4358-216	Threaded Body	6-23/64	2 1/4-12	LH	80	357.42
8315	4358-315	Block Style	6-23/64	3	RH	80	347.60
8316	4358-316	Block Style	6-23/64	3	LH	80	347.60
8415	4358-415	Threaded Body	6-9/64	1 3/4-12	RH	62	328.33
8416	4358-416	Threaded Body	6-9/64	1 3/4-12	LH	62	328.33

Miniature

- Compact Design
- Long life cycle
- High holding torques
- Low weight (aluminum body)
- Two mounting areas (front, rear)
- Toggle action mechanism
- Models can be fitted with magnetic end sensors

14

MODEL NO.	ORDER NO.	HEIGHT (mm)	WIDTH (mm)	PISTON DIA. (mm)	HLDG. TQ. MAX. [in.-lb.]	PRICE EACH
81L20-10100	4358-134	151	40	20	885	\$440.00
81L25-10100	4358-136	151	40	25	885	440.00



Model 81L20-10100

Swing Clamps - 89R Series

These robust swing clamps feature field changeable swing direction for easy ordering and flexible configuration. Sensor ready for round or T-slot style sensors. Clamp arm sold separately.



Model 89R32-010-2

6

MODEL NO.	ORDER NO.	VERTICAL CLAMPING STROKE	OVERALL HEIGHT	BASE WIDTH	CLAMPING FORCE AT 87PSI	SWING	PRICE EACH
89R20-010-2	4358-947	0.39	4.93	1.26	22lb.	LH	\$234.19
89R32-010-2	4358-948	0.39	5.85	1.77	67lb.	RH	260.21
89R40-010-2	4358-949	0.39	6.49	2.15	103lb.	LH	291.09
89R40-025-2	4358-951	0.98	7.67	2.15	103lb.	RH	303.80
89R50-025-2	4358-950	0.98	8.94	2.56	167lb.	LH	351.92
89R63-025-2	4358-963	0.98	9.63	3.15	263lb.	RH	413.91

Accessories

Polyurethane Caps - Flat Tipped



POLYURETHANE CAPS			
MODEL NO.	FOR SPINDLE DIAMETER	ORDER NO.	PRICE EACH
215219	1/4-20	4359-110	\$1.31
225219	5/16-18	4359-111	1.31
235219	3/8-16	4359-112	1.46

Neoprene Caps For Hex Head Spindles



POLYURETHANE CAPS			
MODEL NO.	FOR SPINDLE DIAMETER	ORDER NO.	PRICE EACH
215119	1/4	4359-102	\$0.52
225119	5/16	4359-103	0.57
235119	3/8	4359-105	0.67

Flanged Washers

MODEL NO.	SIZE	ORDER NO.	PRICE EACH
102111	For No. 10 Spindle	4359-121	\$0.28
105106	For No. 8 Spindle	4359-122	0.24
215105	For 1/4 Spindle	4359-123	0.30
235106	For 3/8 Spindle	4359-124	0.41
247109	For 1/2 Spindle	4359-126	0.78
267102	For 5/8 Spindle	4359-127	1.11
507107	For 5/16 Spindle	4359-125	0.34



Hex Head Spindle Assembly w/Locknuts



MODEL NO.	SIZE	ORDER NO.	PRICE EACH
105203	8-32 x 27/32 (Nylon)	4359-301	\$0.94
202203	1/4-20 x 3-1/8	4359-303	1.17
205203	1/4-20 x 1-7/8	4359-302	1.17
207203	5/16-18 x 2-3/4	4359-304	1.14
210203	3/8-16 x 3	4359-305	1.25
220203	1/2-13 x 3-5/16	4359-306	2.15
240203	3/8-16 x 4-1/4	4359-307	2.19
250203	5/8-11 x 4-3/8	4359-308	3.51
305203	10-32 x 1-3/32	4359-313	0.94
325203	1/2-13 x 2-3/4	4359-317	1.93
441203	5/16-18 x 1-15/16	4359-312	1.54
461203	5/16-18 x 1-3/16	4359-314	1.24
491203	3/8-16 x 1-11/16	4359-315	1.24

Bolt Assembly with Bonded Cap & Locknuts



MODEL NO.	ORDER NO.	SIZE	LENGTH	PRICE EACH
201208	4359-816	10-32	1-3/8	\$ 1.55
201208-M	4359-824	M4 X 0.7	1-17/64	1.60
202208	4359-803	1/4-20	1-5/8	1.86
202208-M	4359-825	M6 X 1.0	1-47/64	1.99
205208-M	4359-836	M4 X 0.7	7/8	1.94
215208	4359-805	1/4-20	2-1/8	2.19
215208-M	4359-827	M6 X 1.0	2-1/8	2.22
225208	4359-807	5/16-18	2-3/16	2.19
225208-M	4359-828	M8 X 1.25	2-3/32	2.22
507208	4359-812	5/16-18	3"	2.22

MODEL NO.	ORDER NO.	SIZE	LENGTH	PRICE EACH
507208-M	4359-831	M8 X 1.25	3-17/64	\$2.35
240208	4359-809	3/8-16	3-1/4	2.91
240208-M	4359-830	M10 X 1.50	3-7/64	3.08
527208	4359-815	3/8-16	3-1/2	3.21
235208	4359-808	3/8-16	5-3/4	3.91
247208	4359-820	1/2-13	4"	4.38
247208-M	4359-835	M12 X 1.75	3-53/64	6.07
267208	4359-821	5/8-11	5"	5.18
307208-M	4359-839	M8 X 1.25	1-9/64	2.13
305208-M	4359-838	M5 X 0.8	1-11/16	1.86

Swing Clamp Arms



MODEL NO.	ORDER NO.	USE WITH CLAMP	OVERALL LENGTH	SPINDLE SIZE	PRICE EACH
952250	4359-350	9522	2.28	M6	\$23.04
952253	4359-351	9522	3.07	M6	29.43
954050	4359-336	9530/9540	2.76	M8	25.12
954053	4359-337	9530/9540	3.94	M8	32.60
8JG-215-1	4358-870	89R20	2.64	M6	36.56
8JG-217-1	4358-871	89R32	3.15	M8	40.46
8JG-218-1	4358-872	89R40	3.74	M8	43.39
8JG-219-1	4358-873	89R50	4.17	M8	49.83
8JG-220-1	4358-874	89R63	4.72	M10	56.86

Sensors

These sensors are used along with pneumatic clamps to sense position of the cylinder piston.



MODEL NO.	ORDER NO.	MOUNT STYLE	CONNECTOR	FUNCTION	PRICE EACH
810169	4358-188	Round	M8 Male	Reed	\$51.86
810173	4358-192	Round	M8 Male	PNP	51.86
810174	4358-193	Round	M8 Male	NPN	51.36
8EA-109-1	4358-195	T-Slot	M8 Male	Reed	82.09
810170	4358-189	T-Slot	M8 Male	Reed	68.12
810171	4358-190	T-Slot	M8 Male	Reed	68.12
810151	4358-510	Tie Rod	None, 9ft. cord	Reed	101.19
810153	4358-104	Tie Rod	None, 9ft. cord	Reed	150.64
810155	4358-155	Tie Rod	None, 9ft. cord	Reed	112.22
810157	4358-157	Tie Rod	None, 9ft. cord	Reed	112.22
810156	4358-156	Bnd. Clp.	None, 9ft. cord	Reed	101.19
810158	4358-158	Bnd. Clp.	None, 9ft. cord	Reed	112.22

Extension Cables

MODEL NO.	ORDER NO.	CONNECTOR	PRICE EACH
CABL-010	4359-202	M8	\$24.72
CABL-013	4359-203	M8	27.54



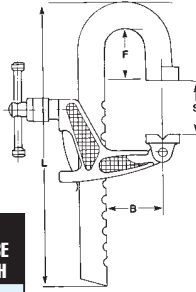
Carver Clamps 14

"C" Clamps

SPEED- Quick adjustment by sliding jaw and only a short turn of the tightening screw assembly.

POWER- Short, fine pitch thread for maximum grip. Only hand tightening is required.

VERSATILITY- Squeezes and spreads or locates by reversing jaws. Ideal for welding.



MODEL	ORDER NO.	OVERALL LENGTH	WIDTH OPENING	THROAT DEPTH	HOLDING CAPACITY LBS.	PRICE EACH
T186-6	4351-866	9-5/8	0 - 6"	2-3/8	2500	\$ 80.45
T186-12	4351-812	15-1/2	0 - 12"	2-3/8	2500	97.44
T321-10	4353-210	14-1/4	0 - 10"	4-3/4	1500	113.75
T290-9	4352-909	16-1/2	0 - 9"	3-1/2	4000	243.44
T290-18	4352-918	25-1/2	0 - 18"	3-1/2	4000	276.55

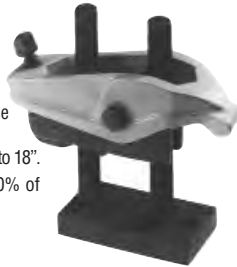
T-Slot Clamps

SAFETY- No loose parts. Clamps and bases are one unit.

EASE OF OPERATION- Loosen adjusting screw and release safety catch to adjust height instantly.

VERSATILITY- Selection of bases gives clamping height from 0" to 18".

A QUALITY TOOL BUILT TO LAST- The design applies 100% of the holding force onto the workpiece.



MODEL NO.	CLAMP RANGE	HOLDING CAPACITY	ORDER NO.	PRICE EACH
T400-4	1-4"	5,000	4354-004	\$231.79
T400-6	1-6"	5,000	4354-006	247.34
T400-8	2-1/2-8"	5,000	4354-008	255.70
T402-6	0-6"	8,000	4354-026	365.17
T402-12	0-12"	8,000	4354-212	384.78
T402-18	6-18"	8,000	4354-218	392.87

Buttress Clamps

These work-holding clamps are designed for use on thin or low-profile workpieces instead of ordinary strap clamps. They feature a self-aligning pivot so that the bolt is always vertical and induces no slide forces.



MODEL NO.	HOLDING CAPACITY	WORKING HUT. RANGE	BOLT SIZE	ORDER NO.	PRICE EACH
T614-0	2,875	0 - 1-3/4"	1/2 (13) dia.	4356-140	\$ 67.06
T614-1	13,750	0 - 2-1/4"	3/4 (20) dia.	4356-141	142.86
T614-2	17,600	0 - 3"	1 (26) dia.	4356-142	197.23

Squeeze Action Clamps 2

Squeeze Action

Most models have De-Sta-Co trigger release for easy one hand operation. These clamps are ideal for a wide range of applications for clamping and fixturing, holding and processing, etc.



Model 325



Model 431



Model 441



Model 424



Model 462



Model 463



Model 482



Model 484



Model 486

MODEL NO.	ORDER NO.	OVERALL LENGTH	WIDTH OPENING	THROAT DEPTH	HOLDING CAPACITY LBS.	PRICE EACH
325	4353-250	8-11/16	1-25/32	1-1/4	800	\$25.48
424	4354-240	4-3/4	1	1-5/64	200	16.87
431*	4354-310	6-7/8	3/4	2-59/64	100	22.62
441	4354-410	6-1/16	1-1/4	1-49/64	350	22.27
462	4354-620	8-1/2	1-3/4	2-23/32	700	32.96
463	4354-630	8-1/2	3	2-23/32	700	37.79
482*	4354-820	9-3/16	1-45/64	2-9/16	1200	45.01
484*	4354-840	9-1/16	3-53/64	2-9/16	1200	46.79
486*	4354-860	9-7/32	6	2-9/16	1000	50.20

* Code = 14

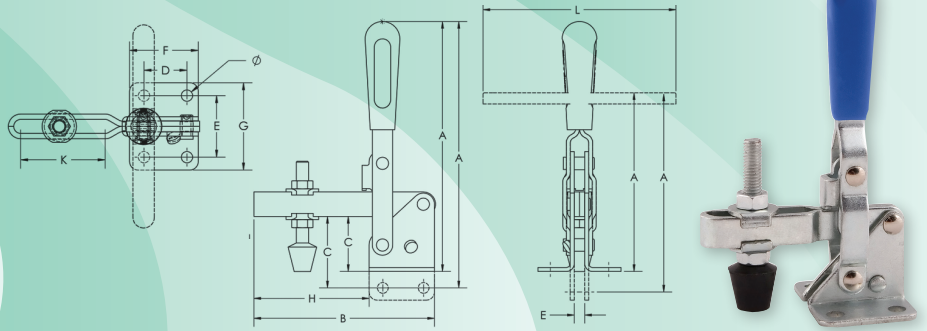
***New Models Added Daily —
Call for any models not shown***

Vertical Handle Toggle Clamps

4 CLAMP-RITE

Models 11011CR-11012CR

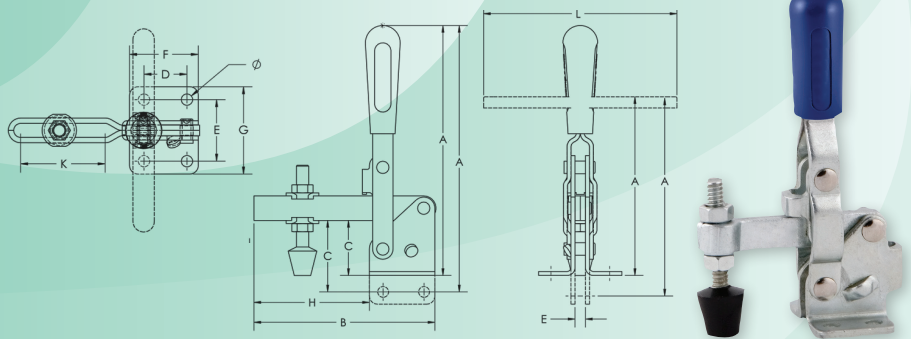
- Bar Opens: 100°
- Handle Opens: 56°
- Spindle Type: Bonded Neoprene
- Spindle Size: #10-24 x 1.38



MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	BASE TYPE	BAR TYPE	HANDLE TYPE	A	B	C	D	E	F	G	H	J	K	L
11011CR	201-U	4311-011	\$7.36	100	.13	Flanged	U-bar	Std.	3.38	2.07	0.73	0.63	0.95	1.00	1.32	1.06	0.17	0.77	-
11011CR-SS	201-USS	4311-011SS	15.65	100	.13	Flanged	U-bar	Std.	3.38	2.07	0.73	0.63	0.95	1.00	1.32	1.06	0.17	0.77	-
11012CR	201-UB	4311-012	8.23	100	.13	Straight	U-bar	Std.	3.65	2.04	1	0.63	0.14	1	-	1.03	0.17	0.82	-

Models 11020CR-11025CR

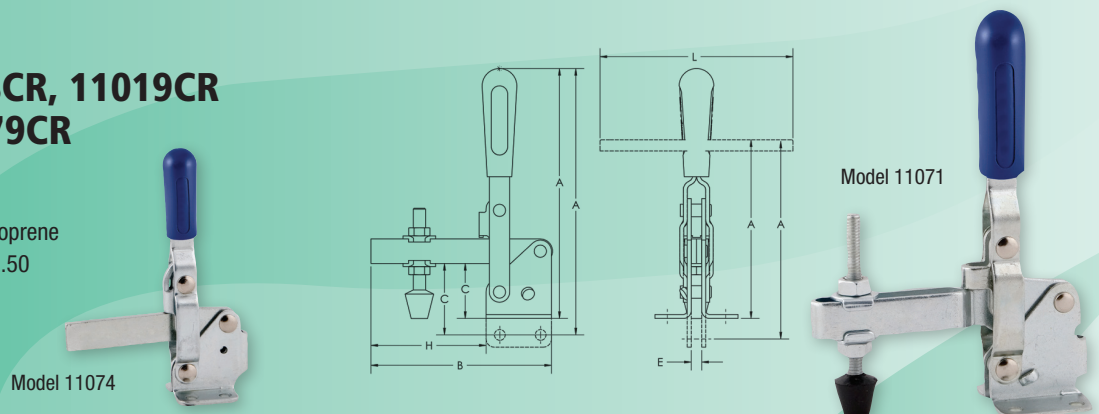
- Bar Opens: 100°
- Handle Opens: 60°
- Spindle Type: Bonded Neoprene
- Spindle Size: 1/4-20 x 1.75



MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	BASE TYPE	BAR TYPE	HANDLE TYPE	A	B	C	D	E	F	G	H	J	K	L
11020CR	202	4311-020	\$7.95	200	.37	Flanged	Solid	Std.	4.01	2.5	0.98	0.51	1	0.98	1.5	1.28	0.21	-	-
11021CR	202-U	4311-021	7.95	200	.37	Flanged	U-bar	Std.	4.01	2.68	0.95	0.52	1.03	0.98	1.5	1.68	0.2	1.08	-
11021CR-SS	202-USS	4311-021SS	19.71	200	.35	Flanged	U-bar	Std.	4.33	2.75	0.94	0.50	1.06	1	1.57	1.75	0.22	1	-
11022CR	202-UB	4311-022	9.06	200	.37	Straight	U-bar	Std.	4.27	2.68	1.18	0.51	0.26	0.98	-	1.68	0.2	1.08	-
11025CR	202-B	4311-025	9.06	200	.37	Straight	Solid	Std.	4.23	2.48	1.15	0.72	0.24	0.98	-	1.24	0.21	-	-

Models 11018CR, 11019CR 11071CR-11079CR

- Bar Opens: 100°
- Handle Opens: 60°
- Spindle Type: Bonded Neoprene
- Spindle Size: 5/16-18 x 2.50



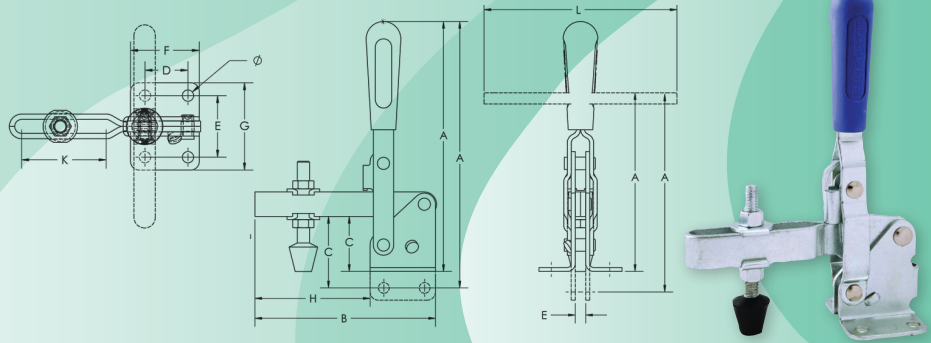
MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	BASE TYPE	BAR TYPE	HANDLE TYPE	A	B	C	D	E	F	G	H	J	K	L
11018CR	207-UL	4311-018	\$10.61	500	.82	Flanged	U-bar	Std.	5.6	5.43	1.25	0.78	1.25	1.38	1.77	3.75	0.27	2.79	-
11071CR	207-U	4311-071	10.42	200	.78	Flanged	U-bar	Std.	5.88	4.59	1.23	0.75	1.25	1.38	1.82	2.85	0.27	2.05	-
11071CR-SS	207-USS	4311-071SS	25.38	200	.78	Flanged	U-bar	Std.	5.88	4.59	1.23	0.75	1.25	1.38	1.82	2.85	0.27	2.05	-
11072CR	207-UB	4311-072	11.41	375	.78	Flanged	U-bar	Std.	5.93	4.61	1.57	0.75	0.24	1.38	-	2.86	0.28	2.03	-
11073CR	207-TU	4311-073	12.29	375	.82	Flanged	U-bar	Std.	4.1	4.6	1.23	0.75	1.25	1.38	1.77	2.86	0.27	2.1	3.86
11074CR	207-S	4311-074	10.42	375	.75	Flanged	U-bar	Std.	5.9	3.75	1.26	0.74	1.25	1.37	1.8	2.24	0.27	-	-

Vertical Handle Toggle Clamps

4 CLAMP-RITE

Models 11101CR-11107CR

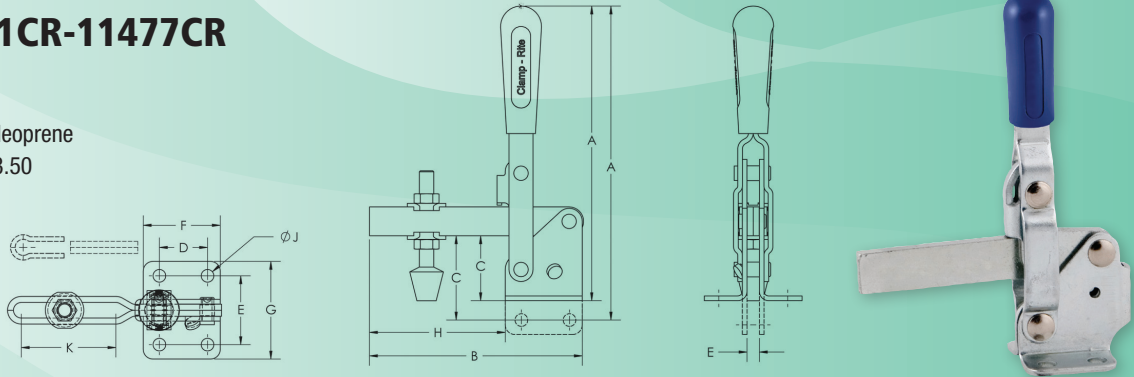
- Bar Opens: 105°
- Handle Opens: 58°
- Spindle Type: Bonded Neoprene
- Spindle Size: 3/8-16 x 3.50



MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	BASE TYPE	BAR TYPE	HANDLE TYPE	A	B	C	D	E	F	G	H	J	K	L
11101CR	210-U	4311-101	\$15.19	600	1.4	Flanged	U-bar	Std.	7.96	5.65	1.66	1.25	1.8	1.94	2.55	3.56	0.31	2.31	-
11104CR	210-S	4311-104	16.10	750	1.5	Flanged	Solid	Std.	7.89	5.59	1.26	1.25	1.81	1.94	2.56	3.53	0.31	-	-
11107CR	210-SB	4311-107	17.45	750	1.5	Flanged	Solid	Std.	8.46	5.59	2.16	1.25	0.35	1.94	-	3.59	0.31	-	-

Models 11471CR-11477CR

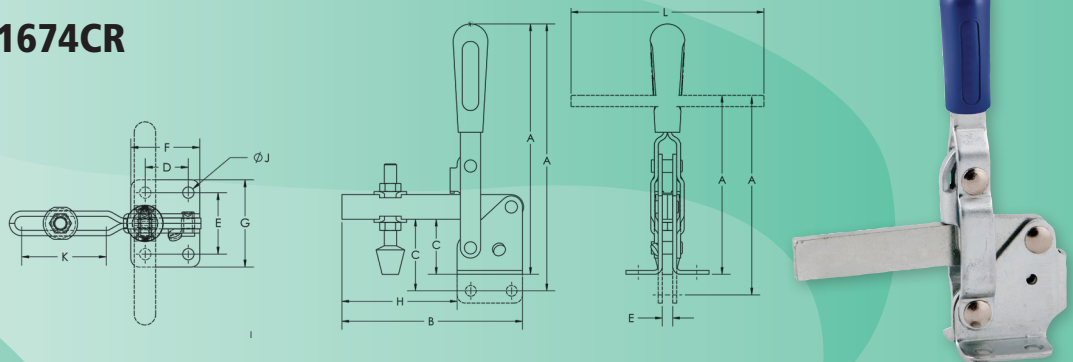
- Bar Opens: 135°
- Handle Opens: 70°
- Spindle Type: Bonded Neoprene
- Spindle Size: 3/8-16 x 3.50



MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	BASE TYPE	BAR TYPE	HANDLE TYPE	A	B	C	D	E	F	G	H	J	K	L
11471CR	247-U	4311-471	\$22.26	1000	2.76	Flanged	U-bar	Std.	8.81	6.89	1.95	1.25	1.77	2	2.56	4.87	0.35	2.98	-
11474CR	247-S	4311-474	24.13	1000	2.76	Flanged	Solid	Std.	8.81	7.12	2	1.26	1.78	2.01	2.56	4.95	0.35	-	-

Models 11671CR-11674CR

- Bar Opens: 140°
- Handle Opens: 60°
- Spindle Type: Hex Head
- Spindle Size: 3/8-16 x 3.50



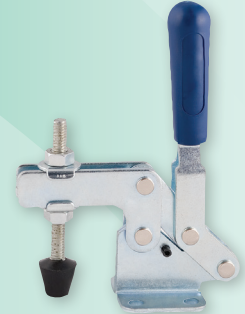
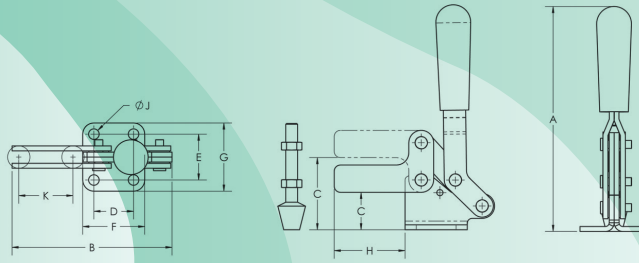
MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	BASE TYPE	BAR TYPE	HANDLE TYPE	A	B	C	D	E	F	G	H	J	K	L
11671CR	267-U	4311-671	\$33.47	1200	5.6	Flanged	U-bar	Std.	11.87	9	3.08	2	2.75	2.99	3.75	5.99	0.48	4.33	-

Vertical Handle Toggle Clamps

4 CLAMP-RITE

Model 11352CR

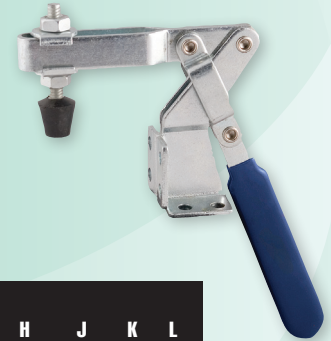
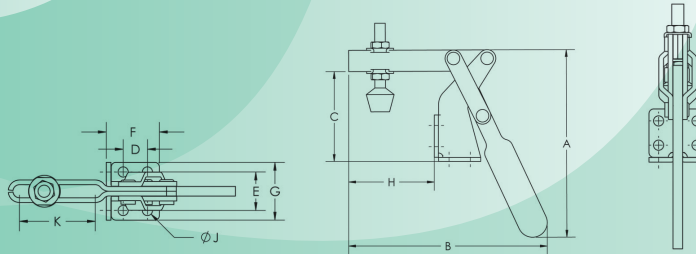
- Bar Opens: 90°
- Handle Opens: 85°
- Spindle Type: Bonded Neoprene
- Spindle Size: 3/8-16 x 3.50



MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	BASE TYPE	BAR TYPE	HANDLE TYPE	A	B	C	D	E	F	G	H	J	K	L
11352CR	136-DI	4311-352	\$10.85	850	1.32	Flanged high U-bar	Std.	Std.	6.85	4.22	2.26	1.26	1.44	1.97	2.2	2.25	0.33	1.53	-

Model 11170CR

- Bar Opens: 185°
- Handle Opens: 60°
- Spindle Type: Bonded Neoprene
- Spindle Size: 5/16-18 x 2.50

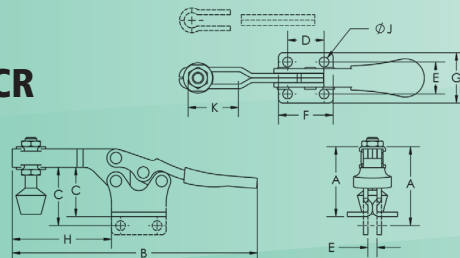


MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	BASE TYPE	BAR TYPE	HANDLE TYPE	A	B	C	D	E	F	G	H	J	K	L
11170CR	317-U	4311-170	\$14.71	375	.88	Flanged U-bar	Std.	Std.	6.37	5.86	2.8	0.64	1.02	1.39	1.54	2.55	0.26	2.11	-

Horizontal Handle Toggle Clamps

Models 14051CR-14054CR

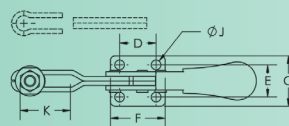
- Bar Opens: 90°
- Handle Opens: 80°
- Spindle Type: Nylon Hex Head
- Spindle Size: #8-32 x .75



MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	BASE TYPE	BAR TYPE	HANDLE TYPE	A	B	C	D	E	F	G	H	J	K
14051CR	205-U	4314-051	\$5.84	60	.06	Flanged U-bar	Standard	Standard	0.70	3.10	0.34	0.53	0.42	0.95	0.98	0.78	0.17	0.48
14054CR	205-S	4314-054	5.84	60	.06	Flanged Solid	Standard	Standard	0.73	5.24	1.42	1.38	0.41	0.95	0.98	0.87	0.17	-

Models 14151CR-14152CR

- Bar Opens: 85°
- Handle Opens: 60°
- Spindle Type: Bonded Neoprene
- Spindle Size: 1/4-20 x 2.13



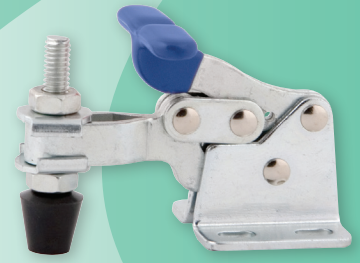
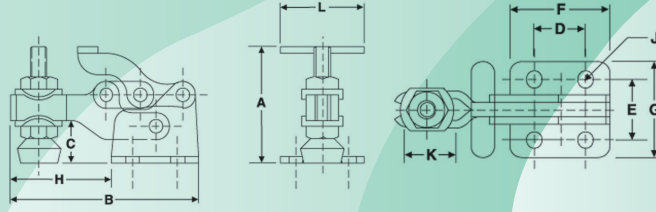
MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	BASE TYPE	BAR TYPE	HANDLE TYPE	A	B	C	D	E	F	G	H	J	K
14151CR	215-U	4314-151	\$8.11	200	.29	Flanged U-bar	Standard	Standard	1.52	5.90	0.96	0.98	0.86	1.46	1.36	2.29	0.21	1.51
14152CR	215-UB	4314-152	8.95	200	.29	Straight U-bar	Standard	Standard	1.76	5.90	1.23	0.98	0.16	1.46	-	2.29	0.21	1.53

Horizontal Handle Toggle Clamps

4 CLAMP-RITE

Models 16051CR-16091CR

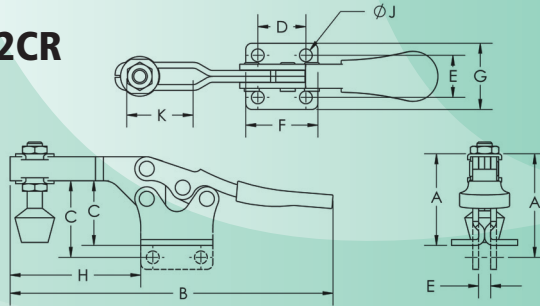
- Bar Opens: 90°
- Handle Opens: 170°
- Spindle Type: Bonded Neoprene
- Spindle Size: #10-24 x 1.38 (16051)
5/16-18 x 2.50 (16071)
3/8-16 x 3.50 (16091)



MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	BASE TYPE	BAR TYPE	HANDLE TYPE	A	B	C	D	E	F	G	H	J	K	L
16051CR	305-U	4316-051	\$7.40	150	.13	Flanged	U-bar	T-Handle	1.47	2.30	0.65	0.53	0.66	1.03	1.03	1.26	0.17	0.44	1.32
16051CRSS	305-USS	4316-051SS	15.33	150	.13	Flanged	U-bar	T-Handle	1.47	2.30	0.65	0.53	0.66	1.03	1.03	1.26	0.17	0.44	1.32
16071CR	307-U	4316-071	10.90	350	.51	Flanged	U-bar	T-Handle	2.49	3.68	0.89	0.91	1.17	1.72	1.82	1.93	0.28	0.77	2.01
16091CR	309-U	4316-091	16.27	750	1.39	Flanged	U-bar	T-Handle	3.73	5.33	1.31	1.38	1.5	2.52	2.52	2.81	0.31	1.32	2.48

Models 14251CR, 14252CR

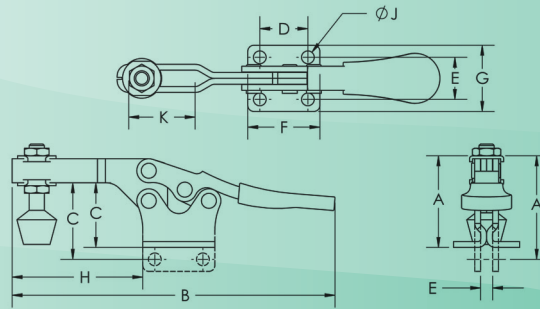
- Bar Opens: 90°
- Handle Opens: 65°
- Spindle Type: Bonded Neoprene
- Spindle Size: 5/16-18 x 3.00



MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	BASE TYPE	BAR TYPE	HANDLE TYPE	A	B	C	D	E	F	G	H	J	K	L
14251CR	225-U	4314-251	\$9.34	500	.7	Flanged	U-bar	Std.	1.96	6.88	1.31	0.99	0.89	1.51	1.36	2.91	0.28	1.31	-
14251CRSS	225-USS	4314-251SS	22.79	500	.7	Flanged	U-bar	Std.	1.96	6.88	1.31	0.99	0.89	1.51	1.36	2.91	0.28	1.31	-
14252CR	225-UB	4314-252	10.22	500	.7	Flanged	U-bar	Std.	2.18	6.87	1.66	0.99	0.23	1.51	-	2.91	0.28	1.42	-

Model 14351CR

- Bar Opens: 85°
- Handle Opens: 50°
- Spindle Type: Bonded Neoprene
- Spindle Size: 3/8-16 x 3.50



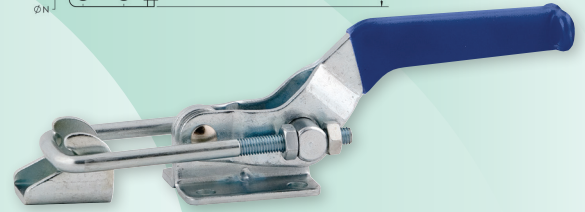
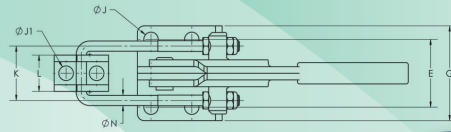
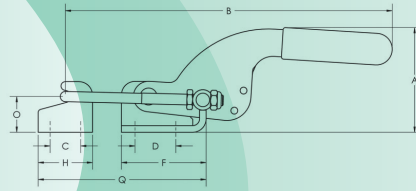
MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	BASE TYPE	BAR TYPE	HANDLE TYPE	A	B	C	D	E	F	G	H	J	K	L
14351CR	235-U	4314-351	\$15.47	750	1.5	Flanged	U-bar	Std.	2.55	10.4	1.73	1.62	1.6	2.25	2.23	4.29	0.31	2.74	-

Pull Action Clamps

Models 12230CR, 12310CR, 12410CR

- Drawing Movement: 1.81" (12230)
1.75" (12310)
2.50" (12410)

- Spindle Type: U-Hook
- Hook Size: M4 (12230)
M5 (12310)
M8 (12410)
- Base Type: Flanged
- Bar Type: Standard

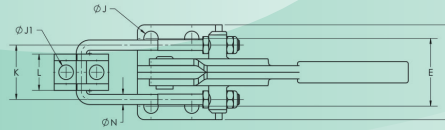
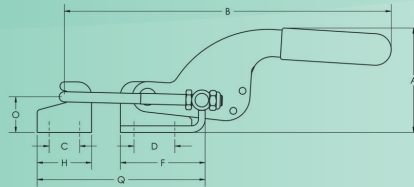


MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY. WT.	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q MIN	Q MAX
12230CR	323	4312-230	\$8.67	360 .16	1.31	4.18	0.40	0.62	0.76	1.03	1.12	0.78	0.17	0.80	0.55	-	0.13	0.44	-	1.84	2.57
12230CR-SS	323-SS	4312-230SS	19.22	360 .16	1.31	4.18	0.40	0.62	0.76	1.03	1.12	0.78	0.17	0.80	0.55	-	0.13	0.44	-	1.84	2.57
12310CR	331	4312-310	11.56	700 .50	1.91	6.56	0.48	0.78	1.25	1.52	1.75	1.01	0.28	1.00	0.79	-	0.17	0.50	-	2.53	3.69
12410CR	341	4312-410	18.01	2,000 1.5	2.75	8.48	0.76	1.62	1.44	2.39	2.12	1.17	0.34	1.75	1.17	-	0.31	0.83	-	4.39	5.37
12410CRSS	341-SS	4312-410SS	41.55	2,000 1.5	2.75	8.48	0.76	1.62	1.44	2.39	2.12	1.17	0.34	1.75	1.17	-	0.31	0.83	-	4.39	5.37

Models 12750CR, 12850CR

- Drawing Movement: 3.50" (12750)
2.19" (12850)

- Spindle Type: U-Hook
- Hook Size: M10 (12750)
M12 (12850)
- Base Type: Flanged
- Bar Type: Standard

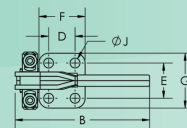
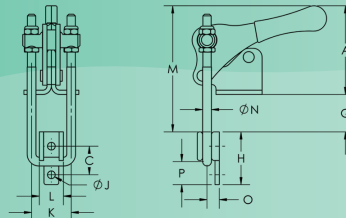


MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY. WT.	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q MIN	Q MAX
12750CR	375	4312-750	\$37.32	4,000 2.78	3.96	11.39	1.37	2.24	2.28	3.42	3.21	2.32	0.41	1.71	3.14	-	0.39	1.17	-	6.22	7.21
12850CR	385	4312-850	48.70	7,500 3.26	3.63	10.18	1.37	2.24	2.26	3.43	3.17	2.32	0.41	2.06	3.14	-	0.46	1.08	-	6.13	7.25

Models 12240CR, 12340CR, 12440CR

- Drawing Movement: 1.53" (12240)
2.00" (12340)
2.50" (12440)

- Spindle Type: U-Hook
- Hook Size: M4 (12240)
M5 (12340)
M8 (12440)
- Base Type: Flanged
- Bar Type: Standard

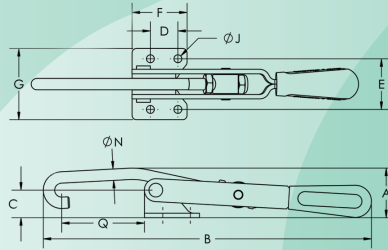


MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY. WT.	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q MIN	Q MAX
12240CR	324	4312-240	\$12.01	500 .25	2.22	3.15	0.57	0.51	0.87	1.02	1.39	1.00	0.21	0.86	0.54	3.43	0.12	0.20	0.43	0.54	1.20
12240CR-SS	324-SS	4312-240SS	24.99	500 .25	2.22	3.15	0.57	0.51	0.87	1.02	1.39	1.00	0.21	0.86	0.54	3.43	0.12	0.20	0.43	0.54	1.20
12340CR	334	4312-340	14.90	1,000 .55	2.86	4.71	0.81	0.75	1.02	1.30	1.56	1.50	0.28	1.06	0.67	4.36	0.23	0.25	0.64	0.54	1.50
12340CR-SS	334-SS	4312-340SS	29.44	1,000 .55	2.86	4.71	0.81	0.75	1.02	1.30	1.56	1.50	0.28	1.06	0.67	4.36	0.23	0.25	0.64	0.54	1.50
12440CR	344	4312-440	22.26	2,000 1.54	3.60	5.25	1.06	1.25	1.47	1.86	2.11	2.13	0.35	1.74	1.19	5.75	0.31	0.50	0.79	2.14	2.11

Models 12510CR - 12810CR

- Drawing Movement: 4.00" (12510, 12515)
5.38" (12710)
6.13" (12810)

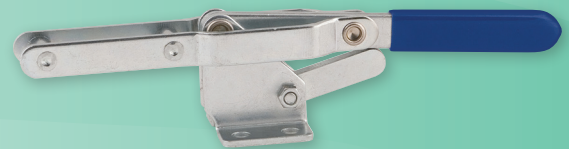
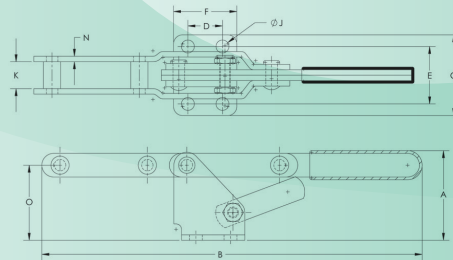
- Spindle Type: U-Hook
- Hook Size: M8 (12510, 12515)
M10 (12710)
M12 (12810)



MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	BASE TYPE	HANDLE TYPE	A	B	C	D	E	F	G	J	N	Q MIN	Q MAX
12510CR	351	4312-510	\$8.83	375	.60	Flanged	Std.	1.45	8.33	0.74	0.94	1.44	1.50	1.99	0.24	0.30	1.53	3.11
12510CR-SS	351-SS	4312-510SS	19.43	375	.60	Flanged	Std.	1.45	8.33	0.74	0.94	1.44	1.50	1.99	0.24	0.30	1.53	3.11
12515CR	351-B	4312-515	8.83	375	.50	Narrow	Std.	1.35	8.40	0.73	1.52	-	2.01	0.55	0.25	0.32	1.61	2.20
12710CR	371	4312-710	17.00	750	1.38	Flanged	Std.	2.17	11.46	0.96	1.25	1.97	1.86	2.61	0.35	0.39	2.70	3.44
12810CR	381	4312-810	17.55	1000	2.49	Flanged	Std.	2.62	13.80	1.82	1.13	2.49	2.13	3.30	0.41	0.47	2.75	3.60

Model 12010CR

- Drawing Movement: 4.00"
- Bar Type: U-Hook



MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	BASE TYPE	HANDLE TYPE	A	B	D	E	F	G	J	K	N	O
12010CR	301	4312-010	\$9.83	375	.68	Flanged	Std.	1.88	8.40	0.75	1.22	1.38	1.72	0.28	0.60	0.12	1.59

— Also In Stock —

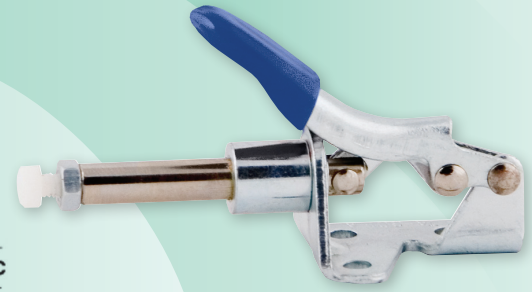
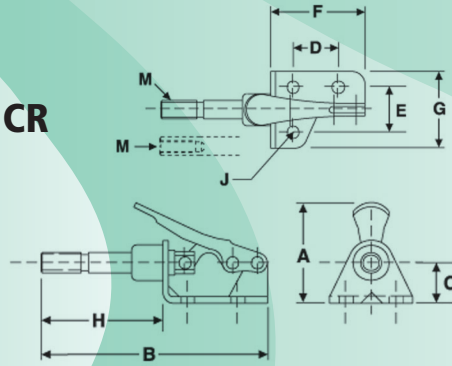
- Aerosol Chemicals
- Tool Steel
- Paint
- Jig Fixtures & Components
- Hand Tools
- Shim Stock
- Markers
- Drill Jig Bushings

Straight-Line Action Clamps

4 CLAMP-RITE

Models 13010CR, 13011CR

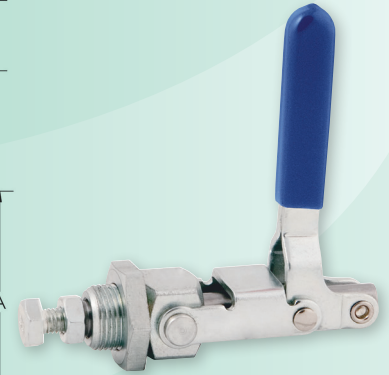
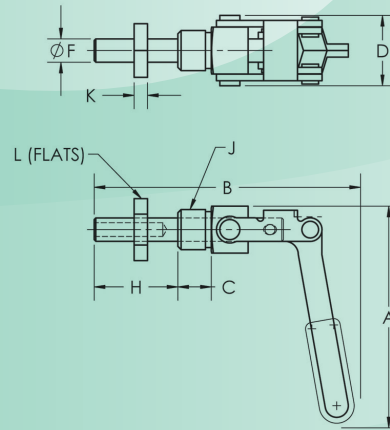
- Spindle Type: Hex Head
- Spindle Size: #8-32 x .50DP (13010)
1/4-20 x .50LG (13011)



MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	PLNGR TRAVEL	BASE TYPE	HANDLE TYPE	THD.	A	B	C	D	E	F	G	H	J	M
13010CR	610	4313-010	\$7.79	100	.11	0.63	Flanged	Std.	Internal	1.57	2.67	0.52	0.63	0.61	1.31	1.07	1.35	0.17	0.25
13011CR	601-0	4313-011	6.42	100	.11	0.63	Flanged	Std.	External	1.59	2.85	0.57	0.63	0.61	1.32	1.07	1.53	0.17	1/4-20

Models 13020CR, 13040CR, 13240CR

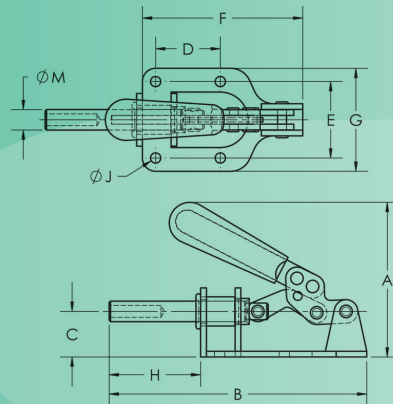
- Spindle Type: Hex Head
- Spindle Size: 1/4-20 x .63 (13020)
5/16-18 x 1.00 (13040)
3/8-16 x 1.25 (13240)



MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	PLNGR. TRAVEL	MOUNT TYPE	HANDLE TYPE	A	B	C	D	F	H	J	K	L
13020CR	602	4313-020	\$10.97	200	.25	0.75	Through-hole	Std.	3.06	2.67	0.48	1.03	0.37	0.81	0.58	0.26	0.94
13020CRSS	602-SS	4313-020SS	37.91	200	.25	0.75	Through-hole	Std.	3.06	2.67	0.48	1.03	0.37	0.81	0.58	0.26	0.94
13040CR	604	4313-040	12.29	300	.60	1.50	Through-hole	Std.	4.16	4.26	0.63	1.28	0.43	1.57	0.73	0.25	1.17
13040CRSS	604-SS	4313-040SS	33.92	300	.60	1.50	Through-hole	Std.	4.16	4.26	0.63	1.28	0.43	1.57	0.73	0.25	1.17
13240CR	624	4313-240	24.60	700	1.54	2.63	Through-hole	Std.	5.43	6.73	0.88	1.86	0.63	2.80	1.05	0.35	1.59

Models 13050CR

- Spindle Type: Hex Head
- Spindle Size: 5/16-18 x 1.00



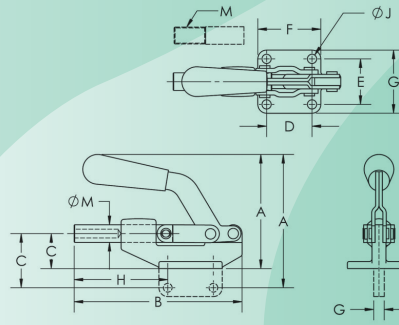
MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	PLNGR TRAVEL	BASE TYPE	HANDLE TYPE	THD.	A	B	C	D	E	F	G	H	J	M
13050CR	605	4313-050	\$11.53	300	.66	1.25	Flanged	Std.	Internal	3.14	5.45	0.98	1.38	1.64	3.55	2.22	1.90	0.22	0.47

Straight-Line Action Clamps

4 CLAMP-RITE

Models 13030CR, 13485CR

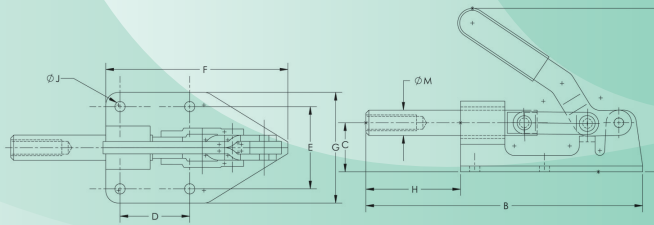
- Spindle Type: Hex Head
- Spindle Size: 5/16-18 x 1.00 (13030)
3/8-16 x 1.25 (13485)
1/2-13 x 2.00 (13485)



MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	PLNGR TRAVEL	BASE TYPE	HANDLE TYPE	THD.	A	B	C	D	E	F	G	H	J	M
13030CR	603	4313-030	\$15.11	600	.7	1.25	Flanged	45°	Internal	3.34	3.64	0.98	1.44	1.32	2.30	1.85	2.03	0.23	0.43
13485CR	608	4313-485	24.53	850	1.28	1.65	Flanged	45°	Internal	4.19	6.41	1.25	1.62	1.63	2.33	2.25	3.13	0.33	0.63

Models 13090CR

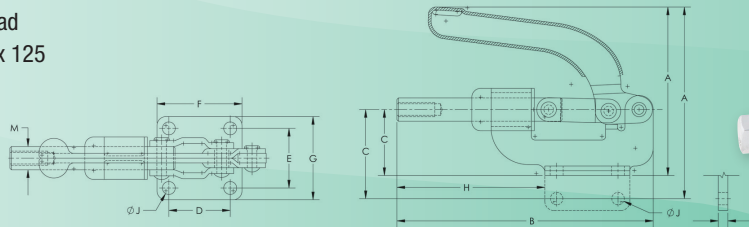
- Spindle Type: Hex Head
- Spindle Size: 5/16-18 x 1.00



MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	PLNGR TRAVEL	BASE TYPE	HANDLE TYPE	THD.	A	B	C	D	E	F	G	H	J	M
13090CR	609	4313-090	\$12.65	300	.76	1.25	Flanged	Std.	Internal	4.10	5.00	0.85	1.57	1.33	3.27	1.95	1.71	0.26	0.47

Models 13100CR

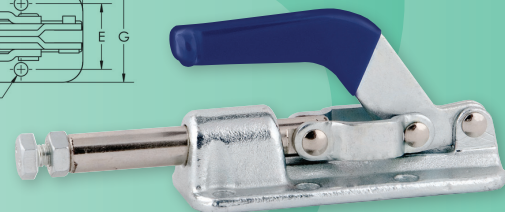
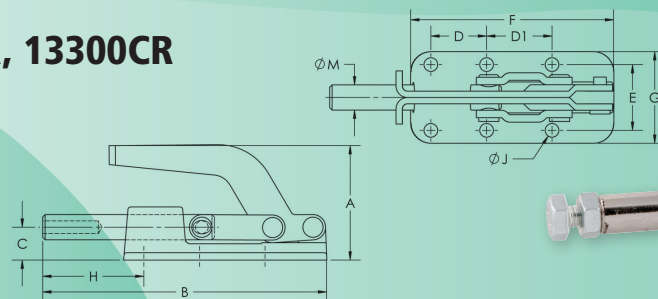
- Spindle Type: Hex Head
- Spindle Size: 3/8-16 x 125



MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	PLNGR TRAVEL	BASE TYPE	HANDLE TYPE	THD.	A	B	C	D	E	F	G	H	J	M
13100CR	610	4313-100	\$19.60	800	1.76	1.63	Flanged	Std.	Internal	5.04	6.82	1.75	1.63	1.58	2.25	2.20	4.23	0.34	0.62

Models 13070CR, 13300CR

- Spindle Type: Hex Head
- Spindle Size: 3/8-16 x 125



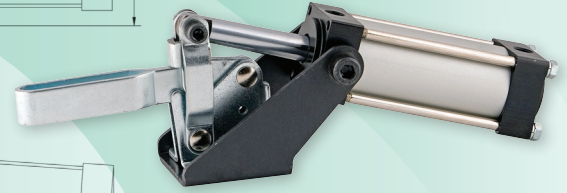
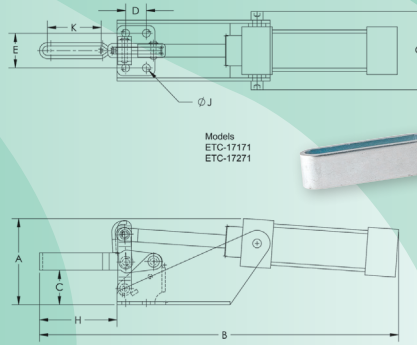
MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	PLNGR TRAVEL	BASE TYPE	HANDLE TYPE	THD.	A	B	C	D	E	F	G	H	J	M
13070CR	607	4313-070	\$22.54	800	1.7	1.63	Flanged	Std.	Internal	3.28	6.10	0.68	1.38	1.62	4.30	2.18	1.86	0.28	0.51
13300CR	630	4313-300	28.39	2500	2.06	2.00	Flanged	Std.	Internal	2.93	7.06	0.88	1.39	1.63	5.25	2.24	1.82	0.35	0.63

Pneumatic Hold-Down Clamps

4 **CLAMP-RITE**

Models 17024CR, 17018CR, 17101CR, 13858CR, 13515CR

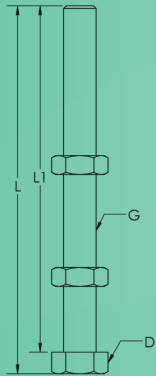
- Spindle Type: Bonded Neoprene
- Spindle Size: 1/4-20 x 1.75 (17024)
5/16-18 x 2.50 (17018)
3/8-16 x 3.50 (17101)
#10-24 x 1.38 (17121)



MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTV.	WT.	PORT SIZE	TYPE	BAR TYPE	A	B	C	D	F	G	H	J	K
17024CR	802-U	4317-024	\$62.33	250	1.60	1/8 NPT	Horizontal	Adj. Hold-Down	2.19	7.28	1.06	0.50	1.0	3.00	1.38	0.21	1.08
17018CR	807-U	4317-018	73.78	375	2.30	1/8 NPT	Horizontal	Adj. Hold-Down	3.04	12.75	1.41	0.74	1.21	2.28	2.83	0.28	2.05
17101CR	810-U	4317-101	120.16	600	4.00	1/8 NPT	Horizontal	Adj. Hold-Down	3.69	15.43	1.74	1.25	1.78	4.00	3.74	0.33	2.31
17121CR	812-U	4317-121	57.62	150	.46	10-32NF	Horizontal	Adj. Hold-Down	1.60	6.63	0.69	0.63	0.94	3.00	0.94	0.13	0.77

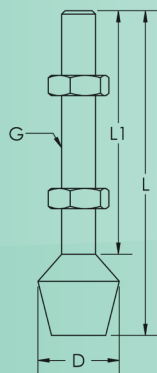
Clamp Accessories

Hex Head Spindle



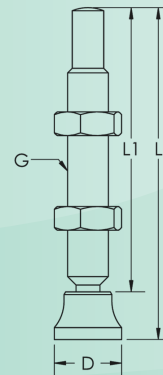
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Bonded Neoprene Spindle



3

Swivel Foot Spindle



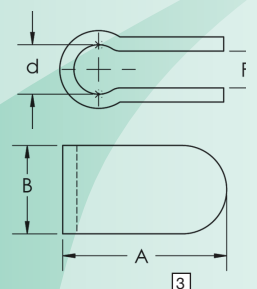
3

MODEL NO.	ORDER NO.	PRICE EACH	D	G	L	L1
19105CR	4319-105	\$0.45	0.25	#8-32	0.86	0.75
19145CR	4319-145	0.75	0.44	1/4-20	0.80	0.63
19112CR	4319-112	0.82	0.43	1/4-20	1.65	1.50
19518CR	4319-518	1.25	0.50	5/16-18	1.22	1.00
19212CR	4319-212	0.89	0.49	5/16-18	2.71	2.50
19381CR	4319-381	1.53	0.56	3/8-16	1.50	1.25
19338CR	4319-338	1.02	0.55	3/8-16	3.23	3.00
19310CR	4319-310	1.73	0.74	1/2-13	3.31	3.00
19450CR	4319-450	1.91	0.75	1/2-13	4.81	4.50
19421CR	4319-421	0.45	0.27	M4 x 0.7	0.86	0.75
19616CR	4319-616	1.08	0.39	M6 x 1.0	0.87	0.78
19825CR	4319-825	1.20	0.51	M8 x 1.25	1.14	0.98
19103CR	4319-103	1.55	0.67	M10 x 1.5	1.69	1.38

MODEL NO.	ORDER NO.	PRICE EACH	D	G	L	L1
19218	4319-218	\$1.28	0.59	1/4-20	2.17	1.59
19316	4319-316	1.41	0.49	5/16-18	3.05	2.31
19312	4319-312	1.91	0.88	3/8-16	3.44	2.60
19420CR	4319-420	0.85	0.31	M4 x 0.7	0.87	0.78
19525CR	4319-525	0.95	0.39	M5 x 0.8	1.14	0.98
19630CR	4319-630	1.35	0.63	M6 x 1.0	1.73	1.18
19836CR	4319-836	1.52	0.75	M8 x 1.25	1.78	1.28
19835CR	4319-835	1.52	0.83	M8 x 1.25	2.09	1.38
19055CR	4319-055	2.10	1.02	M10 x 1.5	3.11	2.17

MODEL NO.	ORDER NO.	PRICE EACH	D	G	L	L1
19214	4319-214	\$2.10	0.43	1/4-20	3.20	2.80
19234	4319-234	2.25	0.47	5/16-18	2.72	2.44
19300	4319-300	2.58	0.63	3/8-16	2.91	2.56

Bolt Retainer



3

MODEL NO.	ORDER NO.	PRICE EACH	BOLT SIZE	A	B	F1	d
19516	4319-516	\$0.80	5/16, M8	1.20	0.64	0.25	0.32
19380	4319-380	1.25	3/8, M10	1.47	0.74	0.33	0.41
19120	4319-120	1.27	1/2, M12	1.70	1.19	0.38	0.67

Clamps



Closeout!

Series 800 and 400 - Regular Duty Drop Forged Clamps

800 SERIES FORGED C-CLAMPS

FEATURES:

- Drop-forged, regular duty with standard throat depth.
- A value alternative for clamping, not requiring as much throat depth or clamping pressure as a 400 series clamp
- Drop forged, equipped with Wilton® Perma-Pads® and a precision cut, single lead acme thread

WILTON/HARGRAVE 400 SERIES DROP FORGED C-CLAMPS

FEATURES:

- Drop-forged, regular duty with extra deep-throat.
- Improved frame design allows for a higher proof test, greater throat depth, and lower overall weight
- Acme rolled spindle threads provide maximum strength and clamping force

WILTON/HARGRAVE 400-CS SERIES HIGH VISIBILITY FORGED C-CLAMPS

FEATURES:

- Spatter resistant copper plated spindle

400-P SERIES WELDING FORGED C-CLAMPS

FEATURES:

- Copper plated spindles and PERMA-PAD® for resistance to welding spatter and corrosion



Wilton's exclusive Perma-Pad® Design.



WILTON CAT. NO.	CAPACITY	THROAT DEPTH	SPINDLE DIAMETER	ORDER NO.	PRICE EACH
800 SERIES					
804	0 - 4	2-5/16	5/8	9540-517	\$14.00
400 SERIES					
H406	0 - 6-1/16	4-1/8	3/4	9540-467	28.00
H408	0 - 8-1/4	5	3/4	9540-468	35.00
400 SERIES HI-VISIBILITY - COPPER PLATED SPINDLE					
H404CS	0 - 4-1/4	3-1/4	3/4	9540-479	18.00
H408CS	0 - 8-1/4	5	3/4	9540-481	35.00
400 SERIES - COPPER PLATED SPINDLE					
408P	0 - 8-1/4	5	3/4	9540-540	32.00
410P	2 - 10-1/8	6	3/4	9540-541	48.00
412P	2 - 12-1/4	6-5/16	7/8	9540-542	78.00

"Jorgensen" Carriage Clamps



- Most universally-used general-purpose "C" clamps for regular-duty industrial service.
- Frame**- heat-treated, perlitic and/or ductile iron; ribbed to resist side strain.
- Anvil**- machine-ground; extra-wide.
- Screw**- cold-drawn steel with special, smoothly cut acme threads; steel sliding-pin handle.
- Swivel**- exclusive JORGENSEN design with steel internal tooth washers for positive "stay-on" power.

MFG. NO.	OPENING MAX.	MIN.	DEPTH OF THROAT	SCREW DIA.	NORMAL LOAD LMT.	ORDER NO.	PRICE EACH
103	3"	0	1-7/8"	9/16"	1,800 lbs.	9545-041	\$9.98
104	4"	0	2-1/8"	5/8"	2,400 lbs.	9545-042	12.65
105	5"	0	2-1/2"	5/8"	2,400 lbs.	9545-043	18.24
106	6"	0	2-3/4"	5/8"	2,400 lbs.	9545-044	18.94
108	8"	0	3-1/4"	3/4"	2,400 lbs.	9545-045	27.10
110	10"	1-1/2"	3-5/8"	13/16"	2,400 lbs.	9545-046	38.61
112	12"	3-7/16"	3-5/8"	13/16"	2,400 lbs.	9545-047	48.38

Adjustable™ "C" Clamps

- Light-duty "C" clamps.
- Frame**- ductile and/or malleable iron; bright plated finish on frames #1410 - #1434.
- Anvil**- machine-ground.
- Screw**- cold-drawn steel with special, smoothly "rolled" threads (U.S.S. on #1410-#1434; Acme on #1440 - #1480); steel sliding-pin handle.
- Swivel**- bright plated steel; securely fastened to screw; revolves freely.



MFG. NO.	OPENING	DEPTH	NORMAL LOAD LIMIT	ORDER NO.	PRICE EACH
1410	1"	1"	400 lbs.	9545-250	\$1.60
1413	1"	3"	400 lbs.	9545-251	3.84
1415	1-1/2"	1-1/2"	400 lbs.	9545-252	2.56
1420	2"	1"	400 lbs.	9545-253	2.17
1422	2-1/2"	1-3/8"	600 lbs.	9545-254	3.84
1423	2"	3-1/2"	400 lbs.	9545-255	5.27
1425	2-1/2"	2-1/2"	600 lbs.	9545-256	3.84
1430	3"	2"	800 lbs.	9545-257	4.50
1434	3"	4-1/2"	500 lbs.	9545-258	9.06
1440	4"	3"	1200 lbs.	9545-259	7.18
1450	5"	3-1/4"	1200 lbs.	9545-260	9.17
1460	6"	3-1/2"	1200 lbs.	9545-261	10.19
1480	8"	4"	1200 lbs.	9545-262	15.50

#1491 3-piece set - Contains one each of the following "C" clamps: #1410, #1420, #1430. Features are identical to the preceding ADJUSTABLE Style No. 1400 "C" clamps.

Order No. 9545-305 Price Each...\$ 8.47

Pittsburg C-Clamps



- Malleable Cast Reinforced Frame
- Black Oxide Spindle and Handle

DIMENSIONS	ORDER NO.	PRICE EACH
1 x 1"	7738-110	\$1.67
1-1/2 x 1-1/2"	7738-115	2.00
2 x 1"	7738-120	2.19
2 x 3-1/2"	7738-123	3.43
2-1/2 x 1-3/8"	7738-125	3.19
2-1/2 x 2-1/2"	7738-127	4.02
3 x 2"	7738-130	4.42
3 x 4-1/2"	7738-134	5.90
4 x 3"	7738-144	7.88
5 x 3-1/4"	7738-145	10.04
6 x 3-1/2"	7738-146	11.56
8 x 4"	7738-148	15.85

WILTON Series 100 Clamps



Designed for heavy industrial and construction work. Frames are forged of special quality steel. Standard throat. Forged spindle end permits wrench tightening. Spindles are black oxide coated.

WILTON CAT. NO.	CAPACITY	THROAT DEPTH	SPINDLE DIAMETER	MIN. PROOF TEST (LBS.)	ORDER NO.	PRICE EACH
102	0 - 2"	1-1/2"	9/16"	7500	9540-508	\$46.00
103	0 - 3"	2"	5/8"	8750	9540-509	55.00
104	0 - 4"	2-3/8"	5/8"	10000	9540-510	65.00

WILTON Series 0 Clamps



FEATURES:

- Extra heavy duty model designed to stand up to the demands of heavy duty industrial applications
- Special quality steels are utilized in the forged construction of these frames, while spindles are machined from a single piece of square, cold drawn steel, hardened and tempered and are black oxide coated.

WILTON CAT. NO.	CAPACITY	THROAT DEPTH	SPINDLE DIAMETER	MIN. PROOF TEST (LBS.)	ORDER NO.	PRICE EACH
2FC	0 - 2-3/8"	1-3/4"	3/4	12500	9540-528	\$54.00
4FC	0 - 4-1/2"	2-3/4"	7/8	20000	9540-530	102.00



Series 540 Carriage Clamps

The 540 Series is rugged constructed with a hardened steel spindle. To permit a truly acceptable stress point, Wilton engineers selected a high tensile ductile alloy casting for the 540's body.

WILTON CAT. NO.	CAPACITY	THROAT DEPTH	SPINDLE DIA.	ORDER NO.	PRICE EACH
540A-4	0 - 4	2-1/8	5/8	9540-645	\$10.00
540A-6	0 - 6	2-3/4	5/8	9540-647	15.00
540A-8	0 - 8	3-11/32	3/4	9540-648	20.00



Super-Junior® Forged C-Clamps

FEATURES:

- Super junior clamps are forged steel with heat treated frames to provide much stronger clamp than pressed steel or malleable clamps.
- Steel screws are nickel plated for longer life.

WILTON CAT. NO.	CAPACITY	THROAT DEPTH	ORDER NO.	PRICE EACH
50	0 - 1"	1"	9540-626	\$3.50
51	0 - 1	1-1/2	9540-627	3.75
52	0 - 1-1/4	1-1/4	9540-628	4.00

Clamps

"Jorgensen" ISD

Bar Clamps



- Dual durometer handle design for comfort.
- 10-40% more clamping force.

2

MFG. NO.	BAR LENGTHS	ORDER NO.	PRICE EACH
33006	6"	9545-480	\$19.80
33012	12"	9545-481	23.02
33018	18"	9545-482	24.85
33024	24"	9545-483	28.43
33036	36"	9545-484	32.78

"Jorgensen" Cabinet Master 90° Parallel Steel Bar Clamps



2

MFG. NO.	MAX. OPENING CAPACITY	NORMAL LOAD LIMIT	ORDER NO.	PRICE EACH
8024	24"	1,000 lbs.	9545-772	\$44.86
8036	36"	1,000 lbs.	9545-774	51.63
8048	48"	1,000 lbs.	9545-775	57.02

Pittsburg ALLEGHANY Bar Clamps



- Sliding Quick Release Precision Steel Jaw,
- Steel Bar, Protective Clamp Pad

3

DIMENSIONS	ORDER NO.	PRICE EACH
6 x 2-1/2"	7738-202	\$6.99
12 x 2-1/2"	7738-204	6.94
18 x 2-1/2"	7738-206	7.80
24 x 2-1/2"	7738-208	10.26
30 x 2-1/2"	7738-210	9.89
36 x 2-1/2"	7738-212	12.51

8 pc. Bar Clamp Pad Set
Order No. 7738-398 Price Each: \$0.90

IRWIN QUICK-GRIP One-Handed Bar Clamps/Spreaders



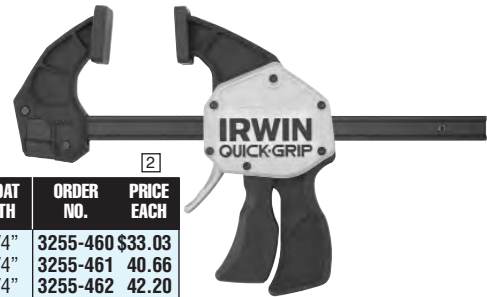
FEATURES:

- One-handed QUICK-RELEASE trigger allows for fast and easy positioning.
- QUICK-CHANGE Jaw provides multi-positioning flexibility, converts quickly and easily to a spreader.
- High-tech resin construction provides strength and durability.
- Non-marring, stay-on pads protect workpiece finish.

2

MFG. NO.	CLAMPING CAPACITY	SPREADING CAPACITY	THROAT DEPTH	ORDER NO.	PRICE EACH
506QC	6"	7-1/2" - 14-5/8"	3-1/4"	3255-450	\$28.48
512QC	12"	7-1/2" - 20-5/8"	3-1/4"	3255-451	33.44
518QC	18"	7-1/2" - 26-5/8"	3-1/4"	3255-452	35.95
524QC	24"	7-1/2" - 32-5/8"	3-1/4"	3255-453	38.42
536QC	36"	7-1/2" - 44-5/8"	3-1/4"	3255-454	43.68
550QC	50"	7-1/2" - 58-5/8"	3-1/4"	3255-455	45.72

IRWIN QUICK-GRIP XP Clamps



2

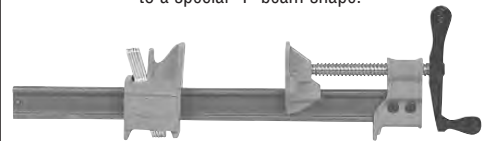
MFG. NO.	CLAMPING CAPACITY	SPREADING CAPACITY	THROAT DEPTH	ORDER NO.	PRICE EACH
2021406	6"	7-1/2" - 14-5/8"	3-1/4"	3255-460	\$33.03
2021412	12"	7-1/2" - 20-5/8"	3-1/4"	3255-461	40.66
2021418	18"	7-1/2" - 26-5/8"	3-1/4"	3255-462	42.20
2021424	24"	7-1/2" - 32-5/8"	3-1/4"	3255-463	42.71
2021436	36"	7-1/2" - 44-5/8"	3-1/4"	3255-464	50.36

"Jorgensen" Steel "I" Bar Clamps

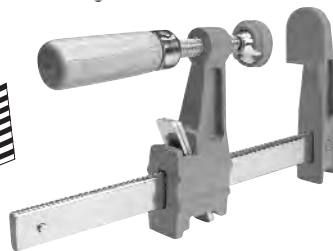
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MFG. NO.	MAX. OPENING CAPACITY	NORMAL LOAD LIMIT	ORDER NO.	PRICE EACH
7224	24"	7000 lbs.	9545-750	\$34.47
7236	36"	7000 lbs.	9545-752	38.81
7248	48"	7000 lbs.	9545-753	43.50
7272	72"	7000 lbs.	9545-755	50.53

- Clamping faces- approximately 2"x 1-3/4".
- Bar- 1-1/2" x 7/16" high carbon steel; rolled to a special "I" beam shape.



"Jorgensen" Steel Bar Clamps and Pads



2

FEATURES FOR LIGHT AND MEDIUM DUTY:

- Clutch discs- hardened, plated steel; two clutch discs and one clutch spring constitute the Multiple-Disc-Clutch.
- Swivel- 3/4" diameter; plated steel; ball-and-socket type.

FEATURES FOR HEAVY DUTY:

These are made for all wood types of heavy-duty clamping. Used by cabinet-makers, woodworkers, metalworkers or for home-shop and do-it-yourself projects. Protective pads made for thick, durable plastic. Clamps rest parallel on work surface for ease of work placement and adjustment.

FEATURES FOR BAR CLAMP PADS:

Protective non-mar, non-stick, non-slip pads.

MFG. NO.	MAX. OPENING CAPACITY	NORMAL LOAD LIMIT	ORDER NO.	PRICE EACH
LIGHT DUTY				
3704-LD	4"	300 lbs.	9545-560	\$6.61
3706-LD	6"	300 lbs.	9545-561	6.78
3708-LD	8"	300 lbs.	9545-562	7.02
3712-LD	12"	300 lbs.	9545-563	8.58
MEDIUM DUTY				
3706	6"	600 lbs.	9545-570	\$10.50
3712	12"	600 lbs.	9545-571	11.62
3718	18"	600 lbs.	9545-572	12.82
3724	24"	600 lbs.	9545-573	14.44
3730	30"	600 lbs.	9545-574	16.39
HEAVY DUTY				
3706-HD	6"	1,000 lbs.	9545-580	\$13.42
3712-HD	12"	1,000 lbs.	9545-581	14.95
3718-HD	18"	1,000 lbs.	9545-582	16.87
3724-HD	24"	1,000 lbs.	9545-583	18.14
3730-HD	30"	1,000 lbs.	9545-584	19.89
3736-HD	36"	1,000 lbs.	9545-585	21.42
BAR CLAMP PADS (for light/med. duty only)				
7437	8 piece pack		9545-764	\$3.71

Clamps

"Pony" Spring Clamps

FEATURES:

- **Jaws**- light-weight, nickel-plated steel.
- **Spring**- heavy-duty tempered steel for maximum strength
- **Handles**- designed for optimum comfort with minimized spread.
- Poly-vinyl handles and jaw tips.



MFG. NO.	MAX. OPENING CAPACITY	JAW LENGTH	REACH	ORDER NO.	PRICE EACH
3201-HT	1"	4"	1-1/4"	9545-364	\$1.83
3202-HT	2"	6"	2"	9545-384	2.88
3203-HT	3"	9"	3"	9545-404	7.96

"Pony" ISD Hand Clamps

- Dual Durometer Handle design for comfort
- Non-marring jaws and riveted head assembly



MFG. NO.	HAND CLAMP SIZE	ORDER NO.	PRICE EACH
32150	1.5"	9545-460	\$3.54
32225	2.25"	9545-461	5.70
32400	4"	9545-463	7.23

Tool Maker's Parallel Clamps

- Hardened & tempered jaws
- Clamps equipped with spring screw clip.
- Black finish.
- Useful for holding small work together when drilling, welding, assembling.

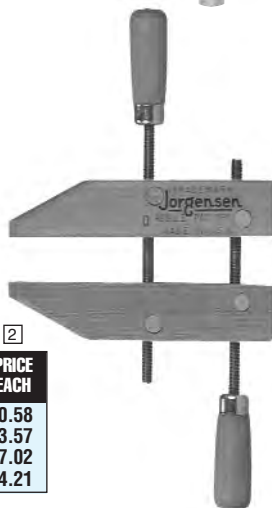


JAW LENGTH	JAW OPENING	ORDER NO.	PRICE EACH
2	1-1/4"	3100-102	\$ 3.85
3	2-1/4"	3100-104	6.35
4	2-3/4"	3100-106	7.95
5	3-1/2"	3100-108	13.50
Complete Set Sizes 2 thru 5		3100-110	20.60

"Jorgensen" Adjustable Handscrews

FEATURES:

- The jaws hold odd shapes easily, are capable of overlapping.
- Provide protection against marring of finished surfaces.
- Seasoned hard maple.



MFG. NO.	JAW IN.	MAX OPENING IN.	REACH IN.	ORDER NO.	PRICE EACH
0	8"	4-1/2"	4"	9545-004	\$20.58
1	10"	6"	5"	9545-005	23.57
2	12"	8-1/2"	6"	9545-006	27.02
3	14"	10"	7"	9545-007	34.21



Spring Clamps

- Heavy Gauge Metal Frame
- Extra Thick/Durable PVC/Rubber Tip and Grip



DIMENSIONS	ORDER NO.	PRICE EACH
1"	7738-301	\$1.22
2"	7738-302	2.17
3"	7738-303	4.88

"Pony" Pressure-Adjusting Spring Clamps

FEATURES:

- **Jaws/Handles**- glass filled nylon.
- **Spring**- heavy-duty tempered steel for maximum strength.
- **Jaw Pads**- plastic.



MFG. NO.	OPENING	JAW LENGTH	NOMINAL REACH	ORDER NO.	PRICE EACH
3251	1"	4-1/2"	1-1/4"	9545-440	\$4.00
3252	2"	6-1/2"	2-1/8"	9545-442	5.33

"Pony" Band Clamps



MFG. NO.	LOAD LIMIT	ORDER NO.	PRICE EACH
1215	1,000 lbs.	9545-240	\$14.60

The small, lightweight Band Clamp features 15 feet of 1-inch width, high-strength nylon webbing which enables the perimeter clamping of round, rectangular and irregular shapes. Positive hold is afforded by the self-locking aluminum cam which is also allows instant release. Four cleverly designed steel "corners" are furnished to assist in clamping mitered joints and to protect the nylon band from sharp corners. A small steel wrench is also furnished to apply final clamping pressure.

"Jorgensen" Hold-Down Clamps



#1623 Hold-down clamps offer the advantage of bench-top and machine "surface" clamping. Designed to rotate 360 degrees around the holding bolt. Use anywhere on wood or metal surfaces.

MFG. NO.	OPENING CAPACITY	DEPTH OF THROAT	SCREW DIA.	NORMAL LOAD LMT.	ORDER NO.	PRICE EACH
1623	3"	1-3/4"	9/16"	2,000 lbs.	9545-310	\$15.58

Clamps

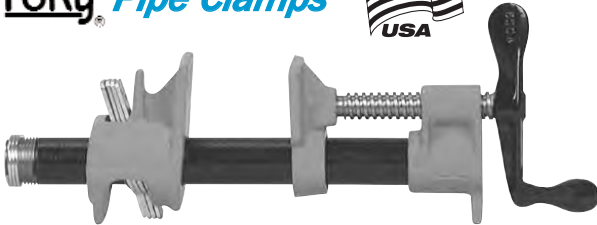
Pittsburg Pipe Clamps



- Malleable Iron Bodies, Extra Wide Base
- Quick Release Clutch Mechanism
- Pipe not included

DIMENSIONS	ORDER NO.	PRICE EACH
1/2"	7738-332	\$10.37
3/4"	7738-334	15.34
4 pc. Pipe Clamp Pad Set Order No. 7738-399 Price Each 1.73		

"Pony" Pipe Clamps



Mounts on any length black pipe with both ends threaded.

FEATURES:

- **Castings**- malleable and/or ductile iron; powder coated orange finish.
- **Screw**- steel diameter (#50-5/8", #52-1/2") with special, smoothly cut Acme threads.
- **Coil-spring "stop"**- one is included with each clamp fixture.

PAD FEATURES:

- Protective, non-mar, non-slip.
- Pipe not included

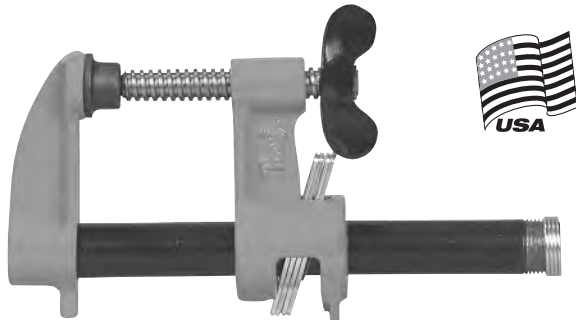


MFG. NO.	PIPE SIZE	CLAMPING FACES	ORDER NO.	PRICE EACH
50	3/4"	1-3/4" sq.	9545-030	\$15.81
52	1/2"	1-1/2" sq.	9545-032	12.10
PADS				
7456	8 piece pack		9545-766	4.63

"Pony" Clamp Fixture for 3/4" Black Pipe

A 2-1/2" deep-reach design. The heads can also be reversed to "spread" work. Mounts on any length black pipe with both ends threaded (pipe not furnished).

MFG. NO.	SCREW SIZE INL.	CLAMPING FACE	ORDER NO.	PRICE EACH
56	5/8"	1-1/4"	9545-035	\$18.14



WILTON Copper Plated L-Clamps

U.S.A. Made Spindles and Perma-Pads®
U.S.A. Made WILTON-GRIP™ Handles

FEATURES:

- Improved clamping speed by sliding along rail to work.
- All-steel clamp is spring hardened, tempered and zinc plated.
- U.S. made solid steel spindles are copper coated for anti-splatter resistance.
- Perma-Pad® is replaceable in field.



WILTON CAT. NO.	NOMINAL OPENING	NOMINAL THROAT DEPTH	NOMINAL RAIL SIZE	SPINDLE DIA.	ORDER NO.	PRICE EACH
LIGHT DUTY L-CLAMPS WITH WILTON-GRIP™ HANDLES						
6312B	12	5-1/2	1 x 15/32	3/4	9540-695	\$42.00
6316B	16	4-3/4	1 x 15/32	3/4	9540-696	45.00
6320B	20	4-3/4	1 x 15/32	3/4	9540-697	48.00
REGULAR DUTY L-CLAMPS WITH WILTON-GRIP™ HANDLES						
6410B	10	4-3/4	1-3/16 x 9/16	13/16	9540-702	65.00
HEAVY DUTY L-CLAMPS						
6516B	16	7	1-9/16 x 3/4	7/8	9540-711	125.00

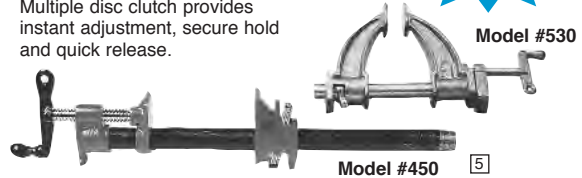
WILTON Economy Series L-Clamps

These versatile clamps are designed for economical repetitive clamping. They combine generous throat depth, substantial clamping pressure, and many more features into an exceptional value clamping tool.

WILTON CAT. NO.	NOMINAL OPENING	THROAT DEPTH	NOMINAL RAIL SIZE	NOMINAL CLAMPING PRESS./LBS.	NOMINAL SPINDLE DIA.	ORDER NO.	PRICE EACH
608	8	4-3/4	7/8 x 7/16	1500	12	9540-727	\$32.00
610	10	4-3/4	1-3/16 x 9/16	2600	12	9540-728	40.00

WILTON Pipe Clamps

Multiple disc clutch provides instant adjustment, secure hold and quick release.



WILTON CAT. NO.	PIPE SIZE	CLAMP FACE	SHIP WT. LBS. EA.	ORDER NO.	PRICE EACH
530	3/4"	2" x 1-3/4"	8-1/2	9540-790	\$45.00

WILTON 90° Steel Angle Clamps

The 90° angle clamp is made of high quality cast iron.

- The copper plated spindle pivots allowing the moveable jaw to securely grip parts at 90°
- Slotted holes are provided in the base for convenient workbench mounting
- Work surfaces (including base) are milled for added precision



WILTON CAT. NO.	CAPACITY MITER	JAW HEIGHT	JAW LENGTH	SHIP WT. LBS. EA.	ORDER NO.	PRICE EACH
AC-325	3-11/32"	1-3/8"	4-1/8"	8-1/2	9540-842	\$78.00
AC-326	4-3/8"	2-3/8"	4-1/8"	18	9540-843	125.00

Bench Vises



Mechanics' Bench Vises

- 30,000 PSI Castings, Heavy Duty Construction
- Chrome Plated Spindle/Handle
- Hardened Steel Replaceable Jaw Faces
- 270° Swivel Base, 4 Lug Reinforcement



DIMENSIONS	ORDER NO.	PRICE EACH
4"	7738-614	\$ 80.75
5"	7738-615	117.53
6"	7738-616	169.82
7"	7738-617	201.51



Super Precision 3-Way Tilting Machine Vise

FEATURES:

- Perfect vise for 3 axis jobs in milling, drilling, grinding, shaping and jig boring
- Manufactured from close grain high tensile cast iron
- Jaw plates, hardened and ground
- Hardness of jaws - 55 ±3 HRC
- No jaw tilt
- Accuracy indexed for 3 way angular work
- All ground surfaces are made to close accuracies
- 360° swivel base • 45° tilting range on either side • 90° vertical indexing

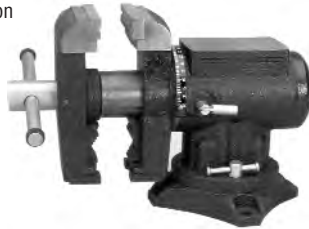


WILTON CAT. NO.	JAW WIDTH	JAW OPENING	JAW DEPTH	SHIP WT. (LBS.)	ORDER NO.	PRICE EACH
TLT/SP-50	2"	2"	5/16"	8	9541-159	\$389.00
TLT/SP-75	3	3	1-15/16	24	9541-160	699.00



Multi-Purpose Vises

- Professional Quality Heavy Duty Construction
- 360° Swivel Base/Head, Locking Mechanism
- Angle Indicator and Large Anvil
- Heavy Duty Replaceable Pipe Jaws



DIMENSIONS	ORDER NO.	PRICE EACH
5"	7738-648	\$ 290.07



Super Precision 2-Way Angular Machine Vise

FEATURES:

- Manufactured from close grained high tensile cast iron
- All ground surfaces made to close tolerances
- Jaw plates, hardened and ground
- Perfect vise for grinding, jig boring, and shaping jobs
- No jaw tilt
- Hardness of jaws - 55 ±3 HRC
- 90° vertical and 180° horizontal indexing
- 360° swivel base
- 90° tilting range
- Perfectly indexed for angular work



WILTON CAT. NO.	JAW WIDTH	JAW OPENING	JAW DEPTH	SHIP WT. (LBS.)	ORDER NO.	PRICE EACH
AMV/SP-75	3	3	1-15/16	21	9541-163	\$479.00
AMV/SP-100	4	4	1-9/16	38	9541-164	589.00



Workshop Series Bench Vises

- 20,000 PSI Castings, Black Oxide Spindle/Handle
- Hardened Steel Replaceable Jaw Faces
- 270° Swivel Base, 4 Lug Reinforcement



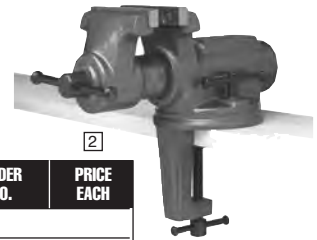
DIMENSIONS	ORDER NO.	PRICE EACH
3"	7738-603	\$ 33.85
4"	7738-604	50.89
5"	7738-605	93.23
6"	7738-606	130.15



Super Junior Vises

FEATURES:

- Clamp-on models are portable.
- Top jaws are grooved and replaceable.
- Spindle is fully enclosed.
- Double lockdowns ensure stability.



WILTON CAT. NO.	JAW WIDTH	MAX. OPENING	SHIP WT. (LBS.)	ORDER NO.	PRICE EACH
CLAMP-ON BASE					
CBV-65	2-1/2"	2-1/2"	9	9540-378	\$129.00
CBV-100	4	4	15	9540-377	159.00
SWIVEL BASE					
SBV-65	2-1/2	2-1/2	8	9540-380	109.00
SBV-100	4	4	14	9540-379	129.00



Arbor Presses

MODEL NO.	PRESS TONS	HT. OF PRESS	BASE DIAM.	MAX HEIGHT	LARGEST ARBOR	ORDER NO.	PRICE EACH
0	1/2 TON	10"	4" x 9-1/2"	4-1/2'	1-1/8"	2904-000	\$ 55.20
1	1 TON	12"	5" x 11"	5-1/4'	1-3/8"	2904-010	61.00
2	2 TON	17"	6-3/4" x 17"	8-1/2'	1-3/4"	2904-020	131.40
3	3 TON	21-1/2"	8" x 18"	12-1/2'	2-1/2"	2904-030	188.60

NOTE: Standard sizes in a given I.D. range are sizes listed in the decimal equivalent chart either as a fraction, number or letter size. Any other decimal or millimeter size within a given range is considered special and will be priced accordingly.

Quantity Discounts:
 1-5 pcs.List
 6-11 pcs.-18%
 12-23 pcs.-29%
 24-49 pcs. ...-34%
 50-99 pcs. ...-43%
 100-199 pcs. -47%
 200-499 pcs. -51%
 500 pcs. up -52%
 Same Size - No Mix

ANSI Tolerances - Sizes Not Listed Available on Request



TYPE "P"



TYPE "H"



TYPE "SF"

Headless Press Fit

I.D. RANGE (STD. DRILL SIZE)		O.D.		ANSI SYMBOL	BODY LENGTH - LIST PRICE - UNGROUND BUSHINGS ARE AVAILABLE															
NOM.	DECIMAL	NOM.	ACTUAL		1/4 -4	5/16 -5	3/8 -6	1/2 -8	5/8 -10	3/4 -12	1" -16	1-1/4 -20	1-3/8 -22	1-1/2 -24	1-3/4 -28	2" -32	2-1/8 -34	2-1/2 -40	3" -48	
#55-1/16	.0520-.0625	5/32	.1578-.1575	P-10	\$18.53	\$19.21	\$19.70	\$19.90	-	\$21.58	-	-	-	-	-	-	-	-	-	
#52-#39	.0625-.0995	13/64	.2046-.2043	P-13	8.68	9.69	10.38	10.70	-	11.73	\$12.75	-	\$19.37	-	-	-	-	-	-	
#40-9/64	.0980-.1406	1/4	.2516-.2513	P-16	7.99	8.50	9.17	9.69	\$10.38	10.88	12.05	-	19.05	\$19.94	\$20.90	-	-	-	-	
1/8-#10	.1250-.1935	5/16	.3141-.3138	P-20	6.65	6.97	7.30	7.66	7.99	8.33	8.68	-	12.75	14.79	16.83	-	-	-	-	
#10-#1	.1935-.2280	3/8	.3766-.3763	P-24	5.77	5.94	6.46	6.65	6.97	7.30	8.50	-	-	-	-	-	-	-	-	
3/16-F	.1875-.2570	13/32	.4078-.4075	P-26	5.77	5.94	6.46	6.65	-	7.30	8.50	-	9.69	10.88	12.05	-	-	-	-	
A-L	.2340-.2900	7/16	.4392-.4389	P-28	5.77	5.94	6.46	6.65	6.97	7.30	8.50	-	-	-	-	-	-	-	-	
3/16-O	.1875-.3160	1/2	.5017-.5014	P-32	5.77	5.94	6.46	6.65	-	7.30	8.50	-	9.69	10.88	12.05	-	\$24.31	-	-	
M-11/32	.2950-.3437	9/16	.5642-.5639	P-36	6.65	5.77	6.13	6.13	6.46	6.65	6.97	-	-	-	-	-	-	-	-	
5/16-7/16	.3125-.4375	5/8	.6267-.6264	P-40	6.65	5.77	6.13	6.13	6.46	6.65	6.97	\$ 9.53	9.53	10.02	10.88	-	13.08	-	-	
5/16-17/32	.3125-.5312	3/4	.7518-.7515	P-48	6.97	5.94	6.65	6.65	6.97	6.97	7.66	9.69	9.69	10.38	11.24	-	13.25	\$24.31	-	
1/2-21/32	.5000-.6562	7/8	.8768-.8765	P-56	-	8.68	9.00	7.99	8.33	8.33	8.68	9.53	9.53	10.38	11.39	-	13.08	15.13	-	
1/2-49/64	.5000-.7656	1"	1.0018-1.0015	P-64	-	-	-	8.33	8.33	8.33	8.84	9.53	9.53	10.70	11.73	-	13.08	15.13	\$25.33	
5/8-1-1/32	.6250-1.0312	1-3/8	1.3772-1.3768	P-88	-	-	-	13.08	12.40	10.88	13.08	14.45	14.45	15.81	17.13	\$19.70	19.94	22.26	30.75	

Boxed prices indicate counterbored bushings.

Head Press Fit

I.D. RANGE (STD. DRILL SIZE)		O.D.		ANSI SYMBOL	BODY LENGTH - LIST PRICE - UNGROUND BUSHINGS ARE AVAILABLE															
NOM.	DECIMAL	NOM.	ACTUAL		1/4 -4	5/16 -5	3/8 -6	1/2 -8	5/8 -10	3/4 -12	1" -16	1-1/4 -20	1-3/8 -22	1-1/2 -24	1-3/4 -28	2" -32	2-1/8 -34	2-1/2 -40	3" -48	
#55-1/16	.0520-.0625	5/32	.1578-.1575	H-10	\$19.37	\$19.70	\$19.94	\$20.22	-	\$22.60	-	-	-	-	-	-	-	-	-	
#52-#39	.0635-.0995	13/64	.2046-.2043	H-13	11.24	11.39	12.05	12.40	-	14.10	\$18.19	-	-	-	-	-	-	-	-	
#40-9/64	.0980-.1406	1/4	.2516-.2513	H-16	9.69	10.38	10.88	11.24	\$12.40	13.76	17.52	-	\$25.33	\$27.02	-	-	-	-	-	
1/8-#10	.1250-.1935	5/16	.3141-.3138	H-20	7.99	8.50	9.00	9.17	9.36	9.53	11.39	-	19.21	21.76	-	-	-	-	-	
#10-#1	.1935-.2280	3/8	.3766-.3763	H-24	7.30	7.99	8.33	8.50	8.84	9.00	10.70	-	-	-	-	-	-	-	-	
3/16-F	.1875-.2570	13/32	.4078-.4075	H-26	7.30	7.66	8.33	8.50	-	9.00	10.70	-	12.05	13.43	\$14.79	-	-	-	-	
A-L	.2340-.2900	7/16	.4392-.4389	H-28	7.30	7.99	8.33	8.50	8.84	9.00	10.70	-	-	-	-	-	-	-	-	
3/16-O	.1875-.3160	1/2	.5017-.5014	H-32	7.30	7.66	8.33	8.50	-	9.00	10.70	-	12.40	13.43	14.79	-	-	-	-	
M-11/32	.2950-.3437	9/16	.5642-.5639	H-36	8.33	7.30	7.99	7.99	8.33	8.33	9.00	-	-	-	-	-	-	-	-	
5/16-7/16	.3125-.4375	5/8	.6767-.6264	H-40	8.33	7.30	7.66	7.66	8.33	8.33	9.00	-	12.05	12.75	13.76	-	-	-	-	
5/16-17/32	.3125-.5312	3/4	.7518-.7515	H-48	9.00	7.99	8.33	8.33	8.68	9.00	9.69	\$12.40	12.40	13.08	13.92	-	\$16.32	-	-	
1/2-21/32	.5000-.6562	7/8	.8768-.8765	H-56	-	-	-	10.02	10.02	10.21	10.70	11.73	11.73	13.08	14.45	-	16.32	\$19.57	-	
1/2-49/64	.5000-.7656	1"	1.0018-1.0015	H-64	-	-	-	10.38	-	10.38	11.24	-	12.05	14.10	15.81	-	18.53	21.24	\$32.80	
5/8-1-1/32	.6250-1.0312	1-3/8	1.3772-1.3768	H-88	-	-	-	16.83	-	15.46	17.01	-	18.86	20.22	21.58	-	24.67	27.68	38.91	

Boxed prices indicate counterbored bushings.

Slip-Fixed Renewable

I.D. RANGE (STD. DRILL SIZE)		O.D.		ANSI SYMBOL	BODY LENGTH - LIST PRICE - UNGROUND BUSHINGS ARE AVAILABLE															
NOM.	DECIMAL	NOM.	ACTUAL		1/4 -4	5/16 -5	3/8 -6	1/2 -8	5/8 -10	3/4 -12	1" -16	1-1/4 -20	1-3/8 -22	1-1/2 -24	1-3/4 -28	2" -32	2-1/8 -34	2-1/2 -40	3" -48	
#39-9/64	.0995-.1406	1/4	.2500-.2498	SF-16	\$12.05	\$12.05	\$12.40	\$13.08	\$13.92	\$14.79	-	-	-	-	-	-	-	-	-	
#55-1/16	.0520-.0625	5/16	.3125-.3123	SF-20	-	21.92	22.60	22.75	-	25.00	-	-	-	-	-	-	-	-	-	
#52-#43	.0635-.0890	5/16	.3125-.3123	SF-20	-	13.25	13.59	14.10	-	15.98	\$19.57	-	-	-	-	-	-	-	-	
#42-#31	.0935-.1200	5/16	.3125-.3123	SF-20	-	12.05	12.40	13.08	-	14.79	17.52	-	\$22.21	-	-	-	-	-	-	
1/8-#10	.1250-.1935	5/16	.3125-.3123	SF-20	-	11.73	12.05	12.58	-	14.27	17.13	-	21.92	-	-	-	-	-	-	
#10-#1	.1935-.2280	3/8	.3750-.3748	SF-24	8.33	8.84	9.17	9.69	\$10.02	10.38	11.73	-	-	-	-	-	-	-	-	
A-L	.2340-.2900	7/16	.4375-.4373	SF-28	8.33	8.84	9.17	9.69	10.02	10.38	11.73	-	-	-	-	-	-	-	-	
#28-3/16	.1405-.1875	1/2	.5000-.4998	SF-32	-	10.02	10.38	10.70	-	11.73	13.43	-	15.46	16.49	17.85	-	-	-	-	
#12-11/32	.1890-.3437	1/2	.5000-.4998	SF-32	-	8.84	9.17	9.53	-	10.38	11.73	-	14.10	14.79	16.15	-	\$30.09	-	-	
M-11/32	.2950-.3437	9/16	.5625-.5623	SF-36	8.33	8.84	9.17	9.69	10.02	10.38	11.73	-	-	-	-	-	-	-	-	
S-7/16	.3480-.4375	5/8	.6250-.6248	SF-40	-	-	9.36	9.36	9.69	10.02	10.54	\$14.10	-	-	-	-	-	-	-	
9/32-9/16	.2812-.5625	3/4	.7500-.7498	SF-48	-	-	9.17	9.36	-	10.02	10.70	-	\$14.10	15.13	16.32	-	18.53	\$31.61	\$43.84	
35/64-21/32	.5469-.6562	7/8	.8750-.8748	SF-56	-	-	-	11.73	12.05	12.24	13.08	14.27	-	15.81	-	-	-	-	-	
15/32-25/32	.4687-.7812	1"	1.0000-.9998	SF-64	-	-	-	11.73	-	12.05	13.08	-	14.27	15.46	17.13	-	20.54	33.63	44.35	
21/32-1-1/16	.7187-1.0625	1-3/8	1.3750-1.3747	SF-88	-	-	-	-	-	17.85	20.22	-	21.92	23.29	25.16	-	28.21	38.06	49.45	

Boxed prices indicate counterbored bushings.

Adjustable Clamping Levers

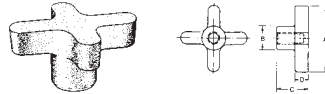
Plastic Handle and Die-Cast Zinc Handle

- Black thermoplastic handle with metal insert.
- Zinc die-cast handle with black finish
- All steel parts ensure durability
- Internal thread with black oxide finish



X THREAD	B	C	D	E	F	PLASTIC HANDLE			DIE-CAST HANDLE		
						REF. NO.	ORDER NO.	PRICE EACH	REF. NO.	ORDER NO.	PRICE EACH
#10-24	.55	.95	1.65	1.30	.39	AH-101	3161-968	\$ 4.15	MH-101	3163-658	\$5.45
#10-32	.55	.95	1.65	1.30	.39	AH-102	3161-969	4.15	MH-102	3163-659	5.45
#1/4"-20	.55	.95	1.65	1.30	.39	AH-103	3161-970	4.15	MH-103	3163-660	5.45
# 1/4"-20	.71	1.22	2.56	1.77	.53	AH-104	3161-971	4.95	MH-104	3163-661	6.15
#5/16"-18	.71	1.22	2.56	1.77	.53	AH-105	3161-972	4.95	MH-105	3163-662	6.15
#5/16"-18	.86	1.41	3.07	2.12	.63	AH-106	3161-973	6.00	MH-106	3163-663	7.10
#3/8"-16	.86	1.41	3.07	2.12	.63	AH-107	3161-974	6.00	MH-107	3163-664	7.10
3/8"-16	.98	1.69	3.62	2.52	.75	AH-108	3161-975	7.50	MH-108	3163-665	8.25
1/2"-13	.98	1.69	3.62	2.52	.75	AH-109	3161-976	7.50	MH-109	3163-666	8.25
1/2"-13	1.18	1.98	4.25	2.95	.91	-	-	-	MH-112	3163-667	10.45
5/8"-11	1.18	1.98	4.25	2.95	.91	-	-	-	MH-113	3163-668	10.45

Hand Knobs — Zinc Plated



A	B	C	D	R REAM	T TAPPED	CAST IRON			ALUMINUM		
						REF. NO.	ORDER NO.	PRICE EACH	REF. NO.	ORDER NO.	PRICE EACH
1-1/2	5/8	7/8	3/8		5/16-18	HK 307	3160-523	3.43	HK 307A	3161-923	\$4.05
1-1/2	5/8	7/8	3/8	.3115		HK 308	3160-524	3.38	HK 308A	3161-924	4.00
1-1/2	5/8	7/8	3/8	BLANK		HK 309	3160-525	2.60	HK 309A	3161-925	3.12
2	3/4	7/8	3/8		3/8-16	HK 410	3160-526	3.65	HK 410A	3161-926	4.40
2	3/4	7/8	3/8	.3115		HK 411	3160-527	3.60	HK 411A	3161-927	4.40
2	3/4	7/8	3/8	.374		HK 412	3160-528	3.60	HK 412A	3161-928	4.40
2	3/4	7/8	3/8	BLANK		HK 413	3160-529	2.70	HK 413A	3161-929	3.22
2-1/2	1	2-1/4	1/2		1/2-13	HK 514	3160-530	6.15	HK 514A	3161-930	6.90
2-1/2	1	2-1/4	1/2	BLANK		HK 515	3160-531	5.35	HK 515A	3161-931	5.50
2-1/2	1-1/8	1-1/2	1/2		1/2-13	HK 616	3160-532	5.15	HK 616A	3161-932	6.50
2-1/2	1-1/8	1-1/2	1/2	.499		HK 617	3160-533	5.15	HK 617A	3161-933	6.40
2-1/2	1-1/8	1-1/2	1/2		5/8-11	HK 618	3160-534	5.15	HK 618A	3161-934	6.40
2-1/2	1-1/8	1-1/2	1/2	.624		HK 619	3160-535	5.60	HK 619A	3161-935	6.75
2-1/2	1-1/8	1-1/2	1/2	.374		HK 620	3160-536	6.05	HK 620A	3161-936	6.85
2-1/2	1-1/8	1-1/2	1/2	BLANK		HK 621	3160-537	4.30	HK 621A	3161-937	5.10
3	1-1/4	1-3/4	1/2		5/8-11	-	-	-	HK 722A	3161-938	7.80
3	1-1/4	1-3/4	1/2	.624		-	-	-	HK 723A	3161-939	7.80
3	1-1/4	1-3/4	1/2	.749		-	-	-	HK 724A	3161-940	7.80
3	1-1/4	1-3/4	1/2	BLANK		HK 725	3160-541†	5.10	HK 725A	3161-941	5.95
3	1-1/2	1-3/4	1/2		3/4-10	HK 826	3160-542†	6.90	HK 826A	3161-942	10.25
3	1-1/2	1-3/4	1/2	.624		-	-	-	HK 827A	3161-943	10.25
3	1-1/2	1-3/4	1/2	.749		-	-	-	HK 828A	3161-944	10.25
3	1-1/2	1-3/4	1/2	BLANK		HK 829	3160-545†	5.55	HK 829A	3161-945	7.85

† Limited Quantities

Hand Knob Screws



A	B	C	D	CAST IRON			ALUMINUM		
				REF. NO.	ORDER NO.	PRICE EACH	REF. NO.	ORDER NO.	PRICE EACH
1/4-20	1	1/2	7/8	HKS-2510	3160-546	\$5.00	HKS-2510A	3161-946	\$5.25
	1-1/2			HKS-2515	3160-547	5.25	HKS-2515A	3161-947	5.45
	1-3/4			HKS-2517	3160-548	5.80	HKS-2517A	3161-948	5.90
	2			HKS-2520	3160-549	6.25	HKS-2520A	3161-949	6.10
	3			HKS-2530	3160-550	6.60	HKS-2530A	3161-950	6.40
5/16-18	1-3/4			HKS-3117	3160-551	6.15	HKS-3117A	3161-951	6.50
	2-1/2			HKS-3125	3160-552	6.50	HKS-3125A	3161-952	7.05
	3			HKS-3130	3160-553	7.00	HKS-3130A	3161-953	7.25
3/8-16	1-1/4	2	7/8	HKS-3712	3160-554	6.50	HKS-3712A	3161-954	6.80
	1-3/4			HKS-3717	3160-555	6.60	HKS-3717A	3161-955	6.95
	2			HKS-3720	3160-556	7.00	HKS-3720A	3161-956	7.10
	2-1/2			HKS-3725	3160-557	7.15	HKS-3725A	3161-957	7.25
	3			HKS-3730	3160-558	7.75	HKS-3730A	3161-958	7.75
1/2-13	1-1/2	2-1/2	1-1/2	HKS-5015	3160-559	8.25	HKS-5015A	3161-959	8.40
	1-3/4			HKS-5017	3160-560	8.80	HKS-5017A	3161-960	8.80
	2			HKS-5020	3160-561	9.25	HKS-5020A	3161-961	8.95
	2-1/2			HKS-5025	3160-562	9.50	HKS-5025A	3161-962	9.55
	3			HKS-5030	3160-563	9.65	HKS-5030A	3161-963	9.75
5/8-11	1-3/4			HKS-6217	3160-564	9.60	HKS-6217A	3161-964	10.10
	2-1/2			HKS-6225	3160-565	10.40	HKS-6225A	3161-965	10.90
	3			HKS-6230	3160-566	10.50	HKS-6230A	3161-966	11.10
	3-1/2			HKS-6235	3160-567	11.10	HKS-6235A	3161-967	11.70

Precision Stainless Steel Thumb Screw



- Made from 303 stainless steel
- Diamond knurl on head
- Longer head length than standard thumb screw

A	D	B	C	PART #	ORDER NO.	PRICE EACH
4-40	1"	3/16	3/8	4118	3164-825	\$1.80
6-32	1"	3/16	3/8	4122	3164-826	1.85
8-32	1/2	3/16	3/8	4219	3164-828	1.75
8-32	1"	3/16	3/8	4228	3164-829	1.80
10-24	1/2	1/4	1/2	4310	3164-831	2.07
10-24	1"	1/4	1/2	4326	3164-833	2.12
10-32	1/2	1/4	1/2	4359	3164-835	2.07
10-32	1"	1/4	1/2	4374	3164-836	2.17
1/4-20	1/2	5/16	1/2	4410	3164-838	2.17
1/4-20	1"	5/16	1/2	4413	3164-840	2.12

Adjustable Clamping Levers

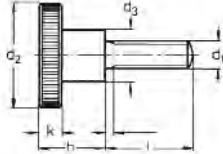
Plastic Handle w/ Stud and Die-Cast Zinc Handle w/ Stud

- Black thermoplastic handle with metal insert
- Steel parts give increased stability and rigidity
- External steel stud with black oxide finish
- Additional thread lengths available upon request



X THREAD	L	B	C	D	E	F	PLASTIC HANDLE			DIE-CAST HANDLE		
							REF. NO.	ORDER NO.	PRICE EACH	REF. NO.	ORDER NO.	PRICE EACH
#10-24	.63	.55	.95	1.65	1.30	.39	AH-301	3161-986	\$4.70	MH-301	3163-680	\$5.80
#10-32	.63	.55	.95	1.65	1.30	.39	AH-302	3161-987	4.70	MH-302	3163-681	5.80
#10-32	1.25	.55	.95	1.65	1.30	.39	AH-3027	3162-085	4.70	MH-3027	3163-732	5.85
1/4"-20	.78	.55	.95	1.65	1.30	.39	AH-303	3161-988	4.70	MH-303	3163-682	5.80
1/4"-20	1.25	.55	.95	1.65	1.30	.39	AH-3034	3162-087	4.70	MH-3034	3163-734	5.85
1/4"-20	1.57	.55	.95	1.65	1.30	.53	AH-3038	3162-091	5.55	MH-3038	3163-738	6.50
1/4"-20	.98	.71	1.22	2.56	1.77	.53	AH-3035	3162-088	6.30	MH-3035	3163-735	7.05
5/16"-18	.78	.71	1.22	2.56	1.77	.53	AH-3037	3162-090	6.30	MH-3037	3163-737	7.05
5/16"-18	1.26	.71	1.22	2.56	1.77	.53	AH-3039	3162-092	6.30	MH-3039	3163-739	7.05
5/16"-18	1.57	.71	1.22	2.56	1.77	.53	AH-304	3161-989	6.30	MH-304	3163-683	7.05
5/16"-18	2.48	.71	1.22	2.56	1.77	.53	AH-3045	3162-094	6.30	MH-3045	3163-741	7.05
3/8"-16	.78	.71	1.22	2.56	1.77	.53	AH-3047	3162-095	6.30	MH-3047	3163-742	7.05
3/8"-16	1.25	.71	1.22	2.56	1.77	.53	AH-3048	3162-096	6.30	MH-3048	3163-743	7.05
3/8"-16	1.57	.71	1.22	2.56	1.77	.53	AH-305	3161-990	6.30	MH-305	3163-684	7.05
5/16"-18	1.97	.86	1.41	3.07	2.12	.63	AH-3053	3162-097	7.85	MH-3053	3163-744	8.35
3/8"-16	.98	.86	1.41	3.07	2.12	.63	AH-3056	3162-098	7.75	MH-3056	3163-745	8.35
3/8"-16	1.26	.86	1.41	3.07	2.12	.63	AH-3058	3162-099	7.85	MH-3058	3163-746	8.35
3/8"-16	1.57	.86	1.41	3.07	2.12	.63	AH-306	3161-991	7.85	MH-306	3163-685	8.35
3/8"-16	1.97	.86	1.41	3.07	2.12	.63	AH-307	3161-992	7.85	MH-307	3163-686	8.35
3/8"-16	2.48	.86	1.41	3.07	2.12	.63	AH-3079	3162-102	7.85	MH-3079	3163-749	8.35
3/8"-16	1.57	.98	1.69	3.62	2.52	.75	AH-3075	3162-100	8.90	MH-3075	3163-747	10.25
3/8"-16	1.97	.98	1.69	3.62	2.52	.75	AH-3078	3162-101	8.90	MH-3078	3163-748	10.25
1/2"-13	1.25	.98	1.69	3.62	2.52	.75	AH-308	3161-993	8.90	MH-308	3163-687	10.25
1/2"-13	1.57	.98	1.69	3.62	2.52	.75	AH-3085	3162-103	8.90	MH-3085	3163-750	10.25
1/2"-13	1.97	.98	1.69	3.62	2.52	.75	AH-309	3161-994	8.90	MH-309	3163-688	10.25
1/2"-13	2.48	.98	1.69	3.62	2.52	.75	AH-310	3161-995	9.10	MH-310	3163-689	10.25
1/2"-13	1.57	1.18	1.98	4.25	2.95	.91	-	-	-	MH-321	3163-690	12.85
1/2"-13	2.48	1.18	1.98	4.25	2.95	.91	-	-	-	MH-322	3163-691	12.85
5/8"-11	1.57	1.18	1.98	4.25	2.95	.91	-	-	-	MH-324	3163-692	12.85
5/8"-11	2.48	1.18	1.98	4.25	2.95	.91	-	-	-	MH-325	3163-693	12.85

Knurled Thumb Screws



- Metric and Inch sizes available
- Available in stainless steel and steel
- Solid one-piece construction
- Straight knurl

d ²	THREAD	THREAD LGTH	d ³	h	k	STEEL			STAINLESS STEEL		
						PART NO.	ORDER NO.	PRICE EACH	PART NO.	ORDER NO.	PRICE EACH
1	1/4-20	5/16	1/2	5/8	1/4	KK-2531	3163-061	\$3.75	KK-2531SS	3163-106	\$6.55
1	1/4-20	3/8	1/2	5/8	1/4	KK-2537	3163-062	3.85	KK-2537SS	3163-107	6.85
1	1/4-20	1/2	1/2	5/8	1/4	KK-2550	3163-063	4.05	KK-2550SS	3163-108	7.20
1	1/4-20	5/8	1/2	5/8	1/4	KK-2562	3163-064	4.20	KK-2562SS	3163-109	7.70
1	1/4-20	3/4	1/2	5/8	1/4	KK-2575	3163-065	4.40	KK-2575SS	3163-110	8.25
1	1/4-20	1	1/2	5/8	1/4	KK-2510	3163-060	4.70	KK-2510SS	3163-105	8.75
1-1/4	5/16-18	1/2	5/8	3/4	1/4	KK-3150	3163-069	5.55	KK-3150SS	3163-114	10.10
1-1/4	5/16-18	5/8	5/8	3/4	1/4	KK-3162	3163-070	5.65	KK-3162SS	3163-115	10.50
1-1/4	5/16-18	3/4	5/8	3/4	1/4	KK-3175	3163-071	6.00	KK-3175SS	3163-116	11.15
1-1/4	5/16-18	1	5/8	3/4	1/4	KK-3110	3163-066	6.65	KK-3110SS	3163-111	12.45
1-1/4	5/16-18	1-1/4	5/8	3/4	1/4	KK-3112	3163-067	6.90	KK-3112SS	3163-112	13.50
1-1/4	5/16-18	1-1/2	5/8	3/4	1/4	KK-3115	3163-068	7.85	KK-3115SS	3163-113	14.45
1-3/8	3/8-16	5/8	3/4	1	5/16	KK-3762	3163-075	8.05	KK-3762SS	3163-120	16.20
1-3/8	3/8-16	3/4	3/4	1	5/16	KK-3775	3163-076	8.75	KK-3775SS	3163-121	17.10
1-3/8	3/8-16	1	3/4	1	5/16	KK-3710	3163-072	9.65	KK-3710SS	3163-117	17.75
1-3/8	3/8-16	1-1/4	3/4	1	5/16	KK-3712	3163-073	10.55	KK-3712SS	3163-118	18.40
1-3/8	3/8-16	1-1/2	3/4	1	3/4	KK-3715	3163-074	11.70	KK-3715SS	3163-119	18.75

Metric Thumb Screws

- Carbon steel, black oxide finish
- Straight knurl



X THREAD	THREAD LENGTH D	B	C	PART NO.	ORDER NO.	PRICE EACH
M3	6mm	12mm	2.5mm	521203006	3165-050	\$1.65
M3	10	12	2.5	521203013	3165-051	1.65
M3	16	12	2.5	521203016	3165-052	1.70
M4	8	16	3.5	521604008	3165-053	1.85
M4	10	16	3.5	521604010	3165-054	1.90
M4	12	16	3.5	521604012	3165-055	1.90
M4	16	16	3.5	521604016	3165-056	2.12
M4	20	16	3.5	521604020	3165-057	2.42
M5	10	20	4	522005010	3165-058	2.22
M5	12	20	4	522005012	3165-059	2.28
M5	16	20	4	522005016	3165-060	2.48
M5	20	20	4	522005020	3165-061	2.90
M6	12	24	5	522406012	3165-062	3.05
M6	16	24	5	522406016	3165-063	3.10
M6	20	24	5	522406020	3165-064	3.25
M6	30	24	5	522406030	3165-065	4.20
M6	40	24	5	522406040	3165-066	5.20
M8	16	30	6	523008016	3165-067	4.25
M8	20	30	6	523008020	3165-068	4.60
M8	25	30	6	523008025	3165-069	4.95
M8	30	30	6	523008030	3165-070	5.85
M8	40	30	6	523008040	3165-071	7.50
M10	20	36	8	523610020	3165-072	6.65
M10	25	36	8	523610025	3165-073	7.60
M10	30	36	8	523610030	3165-074	8.55
M10	40	36	8	523610040	3165-075	11.00

Precision Thumb Screws w/Shoulder

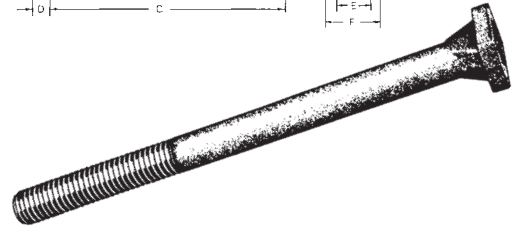
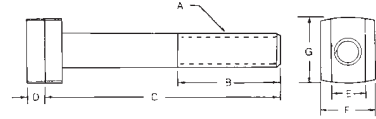
- Precision thumb screw for a wide variety of applications
- 303 stainless steel or carbon steel with black oxide finish
- Diamond knurl on head
- Shoulder provides an excellent bearing surface



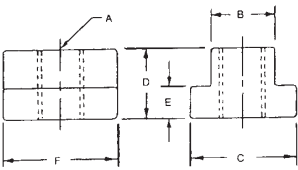
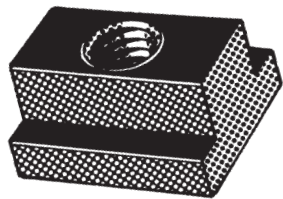
A THREAD	B	C	D	E	F	STEEL			STAINLESS STEEL		
						PART NO.	ORDER NO.	PRICE EACH	PART NO.	ORDER NO.	PRICE EACH
4-40	3/8	1/4	1/4	3/16	3/32	3101	3164-619	\$1.80	-	-	-
4-40	3/8	1/4	1/4	3/16	3/32	3102	3164-620	1.80	-	-	-
6-32	7/16	3/8	7/6	5/16	3/32	3202	3164-621	1.95	4202	3164-853	\$2.38
6-32	7/16	3/8	9/16	5/16	3/32	3204	3164-622	1.95	4204	3164-854	2.38
8-32	7/16	3/8	5/16	5/16	3/32	3205	3164-623	1.95	4205	3164-855	2.38
8-32	7/16	3/8	3/8	5/16	3/32	3206	3164-624	1.95	4206	3164-856	2.38
8-32	7/16	3/8	7/16	5/16	3/32	3207	3164-625	1.95	4207	3164-857	2.38
8-32	7/16	3/8	1/2	5/16	3/32	3208	3164-626	2.10	4208	3164-858	2.53
8-32	7/16	3/8	9/16	5/16	3/32	3209	3164-627	2.10	4209	3164-859	2.53
8-32	1/2	3/8	5/16	5/16	3/32	3301	3164-628	2.20	4301	3164-860	3.05
8-32	1/2	3/8	3/8	5/16	3/32	3302	3164-629	2.20	4302	3164-861	3.05
8-32	1/2	3/8	7/16	5/16	3/32	3303	3164-630	2.25	4303	3164-862	3.10
8-32	1/2	3/8	1/2	5/16	3/32	3304	3164-631	2.25	4304	3164-863	3.20
8-32	1/2	3/8	5/8	5/16	3/32	3305	3164-632	2.35	4305	3164-864	3.20
10-32	1/2	3/8	5/16	5/16	3/32	3401	3164-646	2.15	4401	3164-865	3.00
10-32	1/2	3/8	3/8	5/16	3/32	3402	3164-647	2.15	4402	3164-866	3.00
10-32	1/2	3/8	7/16	5/16	3/32	3403	3164-648	2.20	4403	3164-867	3.10
10-32	1/2	3/8	1/2	5/16	3/32	3403	3164-649	2.35	4404	3164-868	3.20
10-32	1/2	3/8	9/16	5/16	3/32	3405	3164-650	2.35	4405	3164-869	3.20
10-32	1/2	3/8	5/8	5/16	3/32	3406	3164-651	2.40	4406	3164-870	3.20

A	B	C	D	E	F	G	REF. NO.	ORDER NO.	PRICE EACH
3/8-16	5/8	1	13/16	3/8	5/8	3/4	TB-3710	3161-640	\$3.65
3/8-16	1	1-1/2	13/16	3/8	5/8	3/4	TB-3715	3161-641	3.90
3/8-16	1-1/4	2	13/16	3/8	5/8	3/4	TB-3720	3161-642	4.05
3/8-16	1-1/2	2-1/2	13/16	3/8	5/8	3/4	TB-3725	3161-643	4.20
3/8-16	1-1/2	3	13/16	3/8	5/8	3/4	TB-3730	3161-644	4.50
3/8-16	1-1/2	3-1/2	13/16	3/8	5/8	3/4	TB-3735	3161-645	4.60
3/8-16	1-1/2	4	13/16	3/8	5/8	3/4	TB-3740	3161-646	4.75
1/2-13	1	1-1/2	1/4	1/2	13/16	15/16	TB-5015	3161-647	5.75
1/2-13	1-1/4	2	1/4	1/2	13/16	15/16	TB-5020	3161-648	6.25
1/2-13	1-1/2	2-1/2	1/4	1/2	13/16	15/16	TB-5025	3161-649	6.40
1/2-13	1-1/2	3	1/4	1/2	13/16	15/16	TB-5030	3161-650	6.45
1/2-13	1-1/2	3-1/2	1/4	1/2	13/16	15/16	TB-5035	3161-651	6.55
1/2-13	1-1/2	4	1/4	1/2	13/16	15/16	TB-5040	3161-652	6.85
1/2-13	1-1/2	5	1/4	1/2	13/16	15/16	TB-5050	3161-653	7.55
1/2-13	2	6	1/4	1/2	13/16	15/16	TB-5060	3161-654	7.95
5/8-11	1	1-1/2	5/16	5/8	1-1/64	1-1/8	TB-6215	3161-655	6.85
5/8-11	1-1/4	2	5/16	5/8	1-1/64	1-1/8	TB-6220	3161-656	7.00
5/8-11	1-1/2	2-1/2	5/16	5/8	1-1/64	1-1/8	TB-6225	3161-657	7.45
5/8-11	1-1/2	3	5/16	5/8	1-1/64	1-1/8	TB-6230	3161-658	7.75
5/8-11	1-1/2	3-1/2	5/16	5/8	1-1/64	1-1/8	TB-6235	3161-659	8.00
5/8-11	1-1/2	4	5/16	5/8	1-1/64	1-1/8	TB-6240	3161-660	8.40
5/8-11	1-1/2	5	5/16	5/8	1-1/64	1-1/8	TB-6250	3161-661	8.95
5/8-11	2	6	5/16	5/8	1-1/64	1-1/8	TB-6260	3161-662	9.60
5/8-11	3	8	5/16	5/8	1-1/64	1-1/8	TB-6280	3161-663	10.20
3/4-10	1-1/2	3	3/8	3/4	1-1/4	1-3/8	TB-7530	3161-664	9.80
3/4-10	1-1/2	3-1/2	3/8	3/4	1-1/4	1-3/8	TB-7535	3161-665	10.20
3/4-10	1-1/2	4	3/8	3/4	1-1/4	1-3/8	TB-7540	3161-666	10.75

T-Slot Bolts



T-Slot Nuts

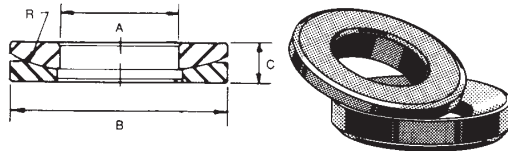


A TAP	B	C	D	E	F	CARBON STEEL			STAINLESS STEEL		
						REF. NO.	ORDER NO.	PRICE EACH	REF. NO.	ORDER NO.	PRICE EACH
5/16-18	.343	5/8	13/32	7/32	3/4	TN 0	3161-129	\$2.95	TN 0SS	3170-365	\$5.45
5/16-18	.418	11/16	3/8	1/4	11/16	TN 00	3161-130	2.70	TN 00SS	3170-366	5.30
3/8-16	.430	3/4	1/2	7/32	1	TN 05	3161-131	2.45	TN 05SS	3170-367	5.70
3/8-16	.490	7/8	5/8	1/4	7/8	TN 10	3161-132	2.70	TN 10SS	3170-368	5.90
3/8-16	.543	7/8	5/8	5/16	1-1/4	TN 15	3161-133	2.90	TN 15SS	3170-369	5.90
1/2-13	.555	7/8	3/4	11/32	1-1/4	TN 20	3161-134	3.20	TN 20SS	3170-370	6.85
1/2-13	.562	7/8	3/4	5/16	1-1/4	TN 1	3161-135	3.35	TN 1SS	3170-371	7.00
1/2-13	.562	1-1/8	3/4	25/64	1-1/4	TN 2	3161-136	3.35	TN 2SS	3170-372	7.25
1/2-13	.625	1	3/4	3/8	1-1/4	TN 22	3161-137	3.20	TN 22SS	3170-373	7.05
1/2-13	.625	1-1/8	3/4	7/16	1-1/4	TN 23	3161-138	3.85	TN 23SS	3170-374	7.30
1/2-13	.665	1-1/8	3/4	13/32	1-1/4	TN 21	3161-139	3.20	TN 21SS	3170-375	7.35
5/8-11	.675	1-1/8	1-1/8	15/32	1-1/2	TN 30	3161-140	3.85	TN 30SS	3170-376	8.95
5/8-11	.687	1-1/4	1	15/32	1-1/2	TN 3	3161-141	3.75	TN 3SS	3170-377	8.80
5/8-11	.780	1-1/4	1	17/32	1-1/2	TN 31	3161-142	3.85	TN 31SS	3170-378	8.65
3/4-10	.800	1-3/8	1-3/8	17/32	1-3/4	TN 40	3161-143	5.55	TN 40SS	3170-379	13.10
3/4-10	.812	1-1/2	1	9/16	1-3/4	TN 5	3161-144	6.45	TN 5SS	3170-380	13.40
3/4-10	.968	1-5/8	1	9/16	1-3/4	TN 4	3161-145	6.45	TN 4SS	3170-381	14.20
3/4-10	1.030	1-5/8	1	9/16	1-3/4	TN 41	3161-150	5.55	TN 41SS	3170-382	14.60

Carbon steel is case hardened. Black Oxide finish. Note: An imperfect thread is left in the base to eliminate the danger of damaging the table by screwing the stub through.

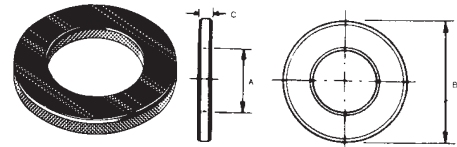
Spherical Washer Sets

Carbon steel is case hardened.



Precision Flat Washers

Carbon steel is case hardened. Black oxide finish.



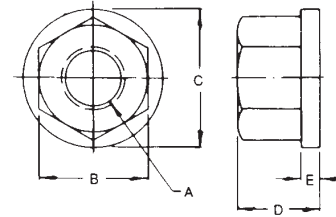
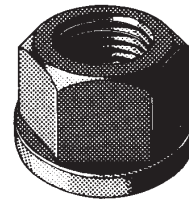
BOLT SIZE	A	B	C	R	CARBON STEEL			STAINLESS STEEL		
					REF. NO.	ORDER NO.	PRICE EACH	REF. NO.	ORDER NO.	PRICE EACH
1/4	9/32	5/8	3/16	3/4	SP 0	3161-009	\$2.00	SP 0SS	3170-187	\$4.30
5/16	11/32	3/4	1/4	1	SP 01	3161-010	2.18	SP 01SS	3170-188	4.98
3/8	13/32	7/8	1/4	1-1/4	SP 1	3161-011	2.52	SP 1SS	3170-189	5.70
1/2	17/32	1-1/8	5/16	1-1/2	SP 2	3161-012	3.18	SP 2SS	3170-190	6.94
5/8	21/32	1-3/8	5/16	1-3/4	SP 3	3161-013	4.22	SP 3SS	3170-191	8.76
3/4	25/32	1-5/8	3/8	2-1/4	SP 4	3161-014	4.66	SP 4SS	3170-192	10.36
7/8	15/16	1-3/4	3/8	2-1/2	SP 5	3161-015	5.98	SP 5SS	3170-193	12.94
1	1-1/16	2	1/2	2-3/4	SP 6	3161-016	7.06	SP 6SS	3170-194	15.20
1-1/8	1-3/16	2-1/4	1/2	3	SP 7	3161-017	11.20	SP 7SS	3170-195	22.70
1-1/4	1-5/16	2-5/8	1/2	3	SP 8	3161-018	13.70	SP 8SS	3170-196	26.20
1-1/2	1-9/16	2-7/8	9/16	3-1/2	SP 9	3161-019	16.98	SP 9SS	3170-197	33.30
1-5/8	1-11/16	3-1/4	11/16	3-1/2	SP 10	3161-020	20.96	SP 10SS	3170-198	38.30
1-3/4	1-13/16	3-1/4	11/16	3-1/2	SP 11	3161-021	22.60	SP 11SS	3170-199	42.00
2	2-1/16	3-7/8	3/4	4	SP 12	3161-022	26.70	SP 12SS	3170-200	52.00

BOLT SIZE	A	B	C	CARBON STEEL			STAINLESS STEEL		
				REF. NO.	ORDER NO.	PRICE EACH	REF. NO.	ORDER NO.	PRICE EACH
1/4	17/64	5/8	3/32	FW 0	3160-474	\$0.46	FW 0SS	3170-100	\$1.25
5/16	11/32	3/4	1/8	FW 01	3160-475	0.53	FW 01SS	3170-101	1.38
3/8	25/64	7/8	1/8	FW 1	3160-476	0.54	FW 1SS	3170-102	1.59
1/2	17/32	1-1/8	1/8	FW 2	3160-477	0.61	FW 2SS	3170-103	2.10
5/8	21/32	1-1/4	1/8	FW 3	3160-478	0.77	FW 3SS	3170-104	2.40
3/4	25/32	1-1/2	5/32	FW 4	3160-479	0.87	FW 4SS	3170-105	2.65
7/8	29/32	1-3/4	5/32	FW 5	3160-480	1.25	FW 5SS	3170-106	3.40
1	1-1/32	2	3/16	FW 6	3160-481	1.69	FW 6SS	3170-107	4.55

Jig Fixtures & Components

Collar Nuts

A	B	C	D	E	LOW CARBON STEEL			STAINLESS STEEL		
					REF. NO.	ORDER NO.	PRICE EACH	REF. NO.	ORDER NO.	PRICE EACH
1/4-20	1/2	5/8	5/16	3/32	CN 0	3160-298	\$ 1.92	CN 0SS	3170-045	\$ 4.05
5/16-18	9/16	3/4	3/8	3/32	CN 00	3160-299	2.09	CN 00SS	3170-046	4.30
3/8-16	11/16	7/8	1/2	1/8	CN 10	3160-300	2.19	CN 10SS	3170-047	4.55
7/16-14	3/4	1	9/16	5/32	CN 15	3160-301	2.42	CN 15SS	3170-048	5.30
1/2-13	7/8	1-1/8	11/16	5/32	CN 20	3160-302	2.47	CN 20SS	3170-049	6.10
5/8-11	1-1/16	1-3/8	13/16	3/16	CN 30	3160-303	3.16	CN 30SS	3170-050	7.25
3/4-10	1-1/4	1-5/8	1	1/4	CN 40	3160-304	4.17	CN 40SS	3170-051	10.30
7/8-9	1-7/16	1-3/4	1-1/8	1/4	CN 50	3160-305	6.03	CN 50SS	3170-052	15.30
1-8	1-5/8	2	1-1/4	1/4	CN 60	3160-306	7.10	CN 60SS	3170-053	18.20
1-1/8-7	1-13/16	2-1/4	1-1/4	1/4	CN 70	3160-307	12.50	CN 70SS	3170-054	34.00
1-1/4-7	1-13/16	2-1/4	1-1/4	1/4	CN 80	3160-308	14.95	CN 80SS	3170-055	45.00
1/4-28	1/2	5/8	5/16	3/32	CN 100	3160-310	1.98	CN 100SS	3170-056	4.20
5/16-24	9/16	3/4	3/8	3/32	CN 105	3160-309	2.09	CN 105SS	3170-057	4.40
3/8-24	11/16	7/8	1/2	1/8	CN 110	3160-311	2.19	CN 110SS	3170-058	4.80
7/16-20	3/4	1	9/16	5/32	CN 115	3160-312	2.47	CN 115SS	3170-059	5.45
1/2-20	7/8	1-1/8	11/16	5/32	CN 120	3160-313	2.62	CN 120SS	3170-060	6.55
5/8-18	1-1/16	1-3/8	13/16	3/16	CN 130	3160-314	3.25	CN 130SS	3170-061	7.45
3/4-16	1-1/4	1-5/8	1	1/4	CN 140	3160-315	4.38	CN 140SS	3170-062	10.70
7/8-14	1-7/16	1-3/4	1-1/8	1/4	CN 150	3160-316	6.13	CN 150SS	3170-063	15.75
1-14	1-5/8	2	1-1/4	1/4	CN 160	3160-317	7.20	CN 160SS	3170-064	18.40
1-1/8-12	1-13/16	2-1/4	1-1/4	1/4	CN 170	3160-318	12.75	CN 170SS	3170-065	34.00
1-1/4-12	1-13/16	2-1/4	1-1/4	1/4	CN 180	3160-319	15.10	CN 180SS	3170-066	45.00



Acorn Nuts

- Available in case hardened steel or stainless steel
- Excellent for protecting exposed threads



A THREAD	HEX	C	LOW CARBON STEEL		
			PART NO.	ORDER NO.	PRICE EACH
5/16-18	5/8	5/8	AN-0	3160-000	\$ 2.95
3/8-16	3/4	3/4	AN-1	3160-002	3.20
1/2-13	7/8	15/16	AN-2	3160-003	3.75
5/8-11	1-1/16	1-3/16	AN-3	3160-004	4.95
3/4-10	1-1/4	1-3/8	AN-4	3160-005	6.10
7/8-9	1-3/8	1-5/8	AN-5	3160-006	7.15

A THREAD	HEX	C	STAINLESS STEEL		
			PART NO.	ORDER NO.	PRICE EACH
5/16-18	5/8	5/8	AN-0SS	3170-000	\$3.50
3/8-16	3/4	3/4	AN-1SS	3170-001	4.65
1/2-13	7/8	15/16	AN-2SS	3170-002	6.05
5/8-11	1-1/16	1-3/16	AN-3SS	3170-003	10.60
3/4-10	1-1/4	1-3/8	AN-4SS	3170-004	12.85
7/8-9	1-3/8	1-5/8	AN-5SS	3170-005	17.40

CARBON STEEL IS CASE HARDENED AND BLACK OXIDE FINISHED.

- Available in case hardened black oxide finish steel or stainless steel.
- Precision machined from bar stock.
- Swing bolts are not to be used for lifting.



Swing Bolts

A THREAD	B	C	D	E	F	G	STEEL			STAINLESS STEEL		
							PART NO.	ORDER NO.	PRICE EACH	PART NO.	ORDER NO.	PRICE EACH
1/4-20	1/4	3/4	1-3/16	1-1/2	1/2	5/16	SWB-01	3161-119	\$ 5.30	SWB-01SS	3170-350	\$ 9.95
1/4-20	1/4	1-1/4	2-3/16	2-1/2	1/2	5/16	SWB-02	3161-120	5.90	SWB-02SS	3170-351	12.05
5/16-18	5/16	1	1-5/8	2	5/8	3/8	SWB-03	3161-121	5.70	SWB-03SS	3170-352	12.50
5/16-18	5/16	1-3/8	2-5/8	3	5/8	3/8	SWB-04	3161-122	7.10	SWB-04SS	3170-353	14.35
3/8-16	3/8	1-3/8	2-5/8	3	5/8	3/8	SWB-1	3161-123	8.40	SWB-1SS	3170-354	16.95
3/8-16	3/8	2	3	3-1/2	3/4	1/2	SWB-10	3161-126	8.50	SWB-10SS	3170-357	19.80
1/2-13	1/2	1-5/8	2-1/2	3-1/8	1	5/8	SWB-2	3161-124	9.20	SWB-2SS	3170-355	24.00
1/2-13	1/2	2-1/2	3-1/2	4-1/8	1	5/8	SWB-20	3161-127	10.90	SWB-20SS	3170-358	27.90
5/8-11	5/8	1/58	2-3/4	3-1/2	1-1/4	3/4	SWB-3	3161-125	11.10	SWB-3SS	3170-356	34.00
5/8-11	5/8	2-1/2	4	4-3/4	1-1/4	3/4	SWB-30	3161-128	13.80	SWB-30SS	3170-359	37.50

Tapped End Clamp Straps

- Case hardened, black oxide finish
- Machined from carbon steel



Stainless Steel Clamp Straps



- Made from 300 series stainless steel

A	B	C	D	E	F	G	H	PART NO.	ORDER NO.	PRICE EACH
3/8	5/8	2	1/2	1	9/32	1/4-20	7/32	CS-7A	3160-338	\$6.05
3/8	5/8	2-1/2	1/2	1-1/8	9/32	1/4-20	1/32	CS-107	3160-374	6.15
1/2	1	2-3/4	7/16	1-1/2	11/32	5/16-18	9/32	CS-71	3160-365	8.45
1/2	1	3-1/4	13/16	1-1/2	11/32	5/16-18	9/32	CS-72	3160-366	9.15
1/2	1	3-3/4	1-3/16	1-1/2	11/32	5/16-18	9/32	CS-73	3160-367	10.50
5/8	1-1/4	3	3/4	1-11/16	13/32	3/8-16	5/16	CS-74	3160-368	10.75
5/8	1-1/4	4	1	2-3/16	13/32	3/8-16	5/16	CS-75	3160-369	10.80
5/8	1-1/4	5	1-1/2	2-11/16	13/32	3/8-16	5/16	CS-76	3160-370	12.90
5/8	1-1/4	6	2	3-3/16	13/32	3/8-16	5/16	CS-77	3160-371	13.00
5/8	1-1/4	4	1	2-1/4	17/32	1/2-13	7/16	CS-7	3160-340	13.05
5/8	1-1/4	4-1/2	1	2-1/4	17/32	1/2-13	7/16	CS-700	3160-392	13.25
5/8	1-1/4	5	1-1/2	2-1/4	17/32	1/2-13	7/16	CS-8	3162-342	12.90
5/8	1-1/4	6	1-1/2	2-1/4	17/32	1/2-13	7/16	CS-9	3160-341	14.10
3/4	1-1/2	4-1/2	1	2-1/2	21/32	5/8-11	1/2	CS-10	3160-342	14.10
3/4	1-1/2	5	1-1/2	2-1/2	21/32	5/8-11	1/2	CS-1000	3160-393	14.40
3/4	1-1/2	5-1/2	1-1/2	2-1/2	21/32	5/8-11	1/2	CS-11	3160-343	14.40
3/4	1-1/2	6	1-1/2	2-1/2	21/32	5/8-11	1/2	CS-12	3160-344	16.85

A	B	C	D	E	F	G	H	J	PART NO.	ORDER NO.	PRICE EACH
1/4	1/2	1-1/2	5/16	5/8	5/64	10-32	7/32	11/16	1503	3164-503	\$8.50
1/4	1/2	1-3/4	7/16	3/4	5/64	10-32	7/32	13/16	1504	3164-504	8.95
1/4	1/2	2	9/16	7/8	5/64	10-32	7/32	15/16	1505	3164-505	9.40
5/16	5/8	1-3/4	3/8	3/4	3/32	1/4-20	9/32	3/4	1628	3164-518	10.55
5/16	5/8	2	1/2	7/8	3/32	1/4-20	9/32	7/8	1629	3164-519	11.35
5/16	5/8	2-1/2	11/16	1-1/16	3/32	1/4-20	9/32	1-3/16	1630	3161-193	12.35
3/8	3/4	2	1/2	7/8	1/8	5/16-18	11/32	13/16	1753	3164-528	10.85
3/8	3/4	2-1/2	3/4	1-1/8	1/8	5/16-18	11/32	1-1/16	1754	3164-529	11.95
3/8	3/4	3	7/8	1-5/16	1/8	5/16-18	11/32	1-3/8	1755	3164-530	12.95
1/2	7/8	3	3/4	1-5/16	1/8	3/8-16	13/32	1-5/16	1878	3164-536	16.65
1/2	7/8	3-1/2	1	1-1/2	1/8	3/8-16	13/32	1-5/8	1879	3164-537	17.85
1/2	7/8	4	1-1/8	1-5/8	1/8	3/8-16	13/32	2	1879	3164-538	18.50

Set-Up Studs



Stainless Steel Available Upon Request

SIZE	LENGTH	STEEL	
		ORDER NO.	PRICE EACH
1/4	1-1/2	3161-459	\$2.10
1/4	2	3161-460	2.00
1/4	2-1/2	3161-461	1.45
1/4	3	3161-462	1.50
1/4	3-1/2	3161-463	1.50
1/4	4	3161-464	1.55
5/16	1-1/2	3161-473	1.87
5/16	2	3161-474	1.72
5/16	2-1/2	3161-475	1.72
5/16	3	3161-476	1.72
5/16	3-1/2	3161-477	1.72
5/16	4	3161-478	1.77
5/16	4-1/2	3161-479	1.95
5/16	5	3161-480	1.95
5/16	6	3161-482	2.00
5/16	7	3161-483	2.05
5/16	8	3161-485	2.10
3/8	1-1/2	3161-487	1.80
3/8	2	3161-488	1.65
3/8	2-1/2	3161-489	\$1.65
3/8	3	3161-490	1.67
3/8	3-1/2	3161-491	1.64
3/8	4	3161-492	1.64
3/8	4-1/2	3161-493	1.70
3/8	5	3161-494	1.72
3/8	5-1/2	3161-495	1.72
3/8	6	3161-496	1.72
3/8	6-1/2	3161-497	1.77
3/8	7	3161-498	1.82

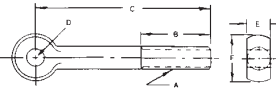
SIZE	LENGTH	STEEL	
		ORDER NO.	PRICE EACH
3/8	7-1/2	3161-499	\$1.82
3/8	8	3161-500	1.87
1/2	1-1/2	3161-501	1.77
1/2	2	3161-502	1.65
1/2	2-1/2	3161-503	1.65
1/2	3	3161-504	1.65
1/2	3-1/2	3161-505	1.77
1/2	4	3161-506	1.77
1/2	4-1/2	3161-507	1.77
1/2	5	3161-508	1.92
1/2	5-1/2	3161-509	1.92
1/2	6	3161-510	1.92
1/2	6-1/2	3161-511	2.02
1/2	7	3161-512	2.02
1/2	7-1/2	3161-513	2.15
1/2	8	3161-514	2.18
1/2	9	3161-515	3.45
1/2	10	3161-516	4.00
1/2	12	3161-517	4.95
1/2	14	3161-518	5.40
5/8	1-1/2	3161-519	2.43
5/8	2	3161-520	1.95
5/8	2-1/2	3161-521	1.75
5/8	3	3161-522	1.95
5/8	3-1/2	3161-523	2.00
5/8	4	3161-524	2.15
5/8	4-1/2	3161-525	2.25
5/8	5	3161-526	2.40
5/8	5-1/2	3161-527	2.50
5/8	6	3161-528	2.55

SIZE	LENGTH	STEEL	
		ORDER NO.	PRICE EACH
5/8	6-1/2	3161-529	\$2.60
5/8	7	3161-530	2.75
5/8	7-1/2	3161-531	2.85
5/8	8	3161-532	2.95
5/8	9	3161-533	4.90
5/8	10	3161-534	5.00
5/8	12	3161-535	5.45
5/8	14	3161-536	6.35
3/4	3	3161-538	2.33
3/4	4	3161-540	5.65
3/4	5	3161-542	2.95
3/4	6	3161-544	3.25
3/4	7	3161-546	3.50
3/4	8	3161-548	3.60
3/4	9	3161-549	7.10
3/4	10	3161-550	7.25
3/4	12	3161-551	7.95
3/4	14	3161-552	8.75
7/8	3	3161-553	6.80
7/8	4	3161-555	6.20
7/8	4-1/2	3161-556	5.75
7/8	5	3161-557	6.10
7/8	5-1/2	3161-558	6.60
7/8	6	3161-559	6.90
7/8	6-1/2	3161-560	7.30
7/8	7	3161-561	7.65
7/8	7-1/2	3161-562	8.10
7/8	8	3161-563	8.45

SIZE	LENGTH	STEEL	
		ORDER NO.	PRICE EACH
7/8	9	3161-564	\$9.90
7/8	10	3161-565	10.95
7/8	12	3161-566	12.50
7/8	14	3161-567	13.50
1	3	3161-568	6.65
1	4	3161-570	7.20
1	5	3161-572	8.00
1	6	3161-574	8.00
1	7	3161-575	8.65
1	8	3161-577	9.30
1	9	3161-578	11.80
1	10	3161-579	13.10
1	12	3161-580	14.50
1	14	3161-581	16.00

† Limited Quantities

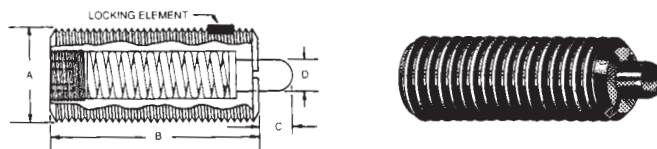
Eye Bolts



A	B	C	D	E	F	STEEL REF.	STEEL ORDER	STEEL PRICE	STAINLESS REF.	STAINLESS ORDER	STAINLESS PRICE
1/4-20	7/8	2-1/8	3/16	1/4	1/2	EB 0	3160-444	\$ 5.75	EB 0SS	3170-070	\$ 11.95
1/4-20	7/8	2-1/8	1/4	1/4	1/2	EB 05	3160-445	5.70	EB 05SS	3170-071	11.90
1/4-20	1-1/4	3	3/16	1/4	1/2	EB 010	3160-446	6.20	EB 010SS	3170-072	12.80
1/4-20	1-1/4	3	1/4	1/4	1/2	EB 020	3160-447	6.20	EB 020SS	3170-073	12.80
5/16-18	1-1/4	2-1/2	1/4	1/4	5/8	EB 030	3160-448	6.30	EB 030SS	3170-074	13.05
5/16-18	1-1/4	2-1/2	5/16	5/16	5/8	EB 040	3160-449	6.30	EB 040SS	3170-075	13.10
5/16-18	1-1/2	3-1/2	1/4	1/4	5/8	EB 050	3160-450	7.15	EB 050SS	3170-076	14.65
5/16-18	1-1/2	3-1/2	5/16	5/16	5/8	EB 060	3160-451	7.15	EB 060SS	3170-077	14.65
5/16-18	2	4	1/4	1/4	5/8	EB 061	3160-452	8.20	EB 061SS	3170-078	16.40
5/16-18	2	4	5/16	5/16	5/8	EB 062	3160-453	8.20	EB 062SS	3170-079	16.40
3/8-16	1-1/2	3-1/2	5/16	5/16	3/4	EB 070	3160-454	8.30	EB 070SS	3170-080	18.05
3/8-16	1-1/2	3-1/2	3/8	3/8	3/4	EB 080	3160-455	8.30	EB 080SS	3170-081	18.05
3/8-16	2	3-3/4	5/16	5/16	3/4	EB 090	3160-456	8.00	EB 090SS	3170-082	18.95
3/8-16	2	3-3/4	3/8	3/8	3/4	EB 100	3160-469	9.15	EB 100SS	3170-083	18.95
3/8-16	2-1/2	5	5/16	3/8	3/4	EB 101	3160-470	9.65	EB 101SS	3170-084	21.10
3/8-16	2-1/2	5	3/8	1/2	3/4	EB 102	3160-471	9.65	EB 102SS	3170-085	21.10
1/2-13	1-1/2	3-3/4	3/8	3/8	1	EB 1	3160-457	11.70	EB 1SS	3170-086	22.55
1/2-13	1-1/2	3-3/4	1/2	1/2	1	EB 5	3160-459	11.60	EB 5SS	3170-087	22.45
1/2-13	2	5	3/8	3/8	1	EB 10	3160-460	12.85	EB 10SS	3170-088	29.40
1/2-13	2	5	1/2	1/2	1	EB 15	3160-461	12.85	EB 15SS	3170-089	29.40
1/2-13	2-1/2	5-1/2	3/8	1/2	1	EB 16	3160-462	15.10	EB 16SS	3170-090	33.60
1/2-13	2-1/2	5-1/2	1/2	1/2	1	EB 17	3160-463	15.10	EB 17SS	3170-091	33.60
5/8-11	1-3/4	4-1/2	5/8	5/8	1-1/4	EB 20	3160-464	16.25	EB 20SS	3170-092	33.60
5/8-11	2	4-1/2	5/8	5/8	1-1/4	EB 2	3160-458	16.45	EB 2SS	3170-093	31.70
5/8-11	2-1/2	6	5/8	5/8	1-1/4	EB 25	3160-465	22.00	EB 25SS	3170-094	43.15
5/8-11	3	6	5/8	5/8	1-1/4	EB 26	3160-466	22.35	EB 26SS	3170-095	46.15
3/4-10	4-1/2	4-1/2	3/4	3/4	1-1/2	EB 30	3160-467	29.60	EB 30SS	3170-096	44.50
3/4-10	6	6	3/4	3/4	1-1/2	EB 35	3160-468	30.05	EB 35SS	3170-097	49.50

Steel Ball Plungers

- Steel body, stainless steel ball nose.
- All plungers equipped with nylon pellet for positive holding. If you require plungers without the nylon locking element, please specify when ordering.
- Ideal for locating or positioning applications.



Spring Plungers - Light Spring Pressures

A	B	C	DIAM. D	END PRESSURES LBS.		PART. NO.	ORDER NO.	PRICE EACH
				START	FULL			
#4-48	3/16	.020	.062	.12	.5	MBP-100	3163-508	\$4.10
#5-40	1/4	.020	.062	.12	.5	MBP-101	3163-509	3.95
#6-40	5/16	.023	.078	.5	1.0	MBP-102	3163-510	3.85
#8-36	11/32	.025	.093	.5	1.25	MBP-103	3163-511	3.75
#8-32	11/32	.025	.093	.5	1.25	MBP-104	3163-512	3.75
#10-32	33/64	.025	.093	.5	1.5	MBP-106	3160-751	3.55
#10-32	33/64	.025	.093	1.5	3.0	MBP-105	3160-750	3.55
#10-32	33/64	.025	.093	2.0	5.0	MBP-107	3160-752	3.55
1/4-20	17/32	.035	1.25	2.0	4.0	MBP-111	3160-754	3.60
1/4-20	17/32	.035	.125	3.0	7.0	MBP-110	3160-753	3.60
1/4-20	17/32	.035	.125	4.0	12.0	MBP-112	3160-755	3.60
5/16-18	37/64	.040	.156	2.0	4.5	MBP-116	3160-757	3.65
5/16-18	37/64	.040	.156	4.0	9.0	MBP-115	3160-756	3.65
5/16-18	37/64	.040	.156	6.0	17.0	MBP-117	3160-758	3.65
3/8-16	5/8	.048	.187	2.5	5.0	MBP-121	3160-760	3.70
3/8-16	5/8	.048	.187	5.0	10.0	MBP-120	3160-759	3.70
3/8-16	5/8	.048	.187	6.0	21.0	MBP-122	3160-749	3.70
1/2-13	3/4	.072	.281	3.0	6.0	MBP-126	3160-762	3.85
1/2-13	3/4	.072	.281	6.0	12.0	MBP-125	3160-761	3.85
1/2-13	3/4	.072	.281	6.0	30.0	MBP-127	3160-763	3.85
5/8-11	63/64	.096	.375	4.5	9.0	MBP-131	3160-765	4.70
5/8-11	63/64	.096	.375	9.0	18.0	MBP-130	3160-764	4.70
5/8-11	63/64	.096	.375	7.0	50.0	MBP-132	3160-766	4.70

A	B	C	D	END PRESSURES			REF. NO.	ORDER NO.	PRICE EACH
				START	1/2 WAY	FULL			
#6-32	17/32	.062	.046	0.5	1.0	1.5	MSP-21	3160-780	\$4.10
#8-32	5/8	.093	.070	0.7	1.5	2.3	MSP-22	3160-781	4.10
#10-32	3/4	.125	.093	1.3	2.0	2.7	MSP-23	3160-782	3.75
1/4-20	1	.187	.119	1.0	2.5	4.0	MSP-24	3160-783	3.75
1/4-28	1	.187	.119	1.0	2.5	4.0	MSP-25	3160-784	3.75
5/16-18	1	.187	.135	1.5	3.0	4.5	MSP-26	3160-785	3.75
3/8-16	1-1/8	.187	.186	2.8	5.0	7.2	MSP-27	3160-786	3.80
1/2-13	1-1/4	.250	.248	2.7	6.0	9.3	MSP-28	3160-787	3.80
5/8-11	1-1/2	.312	.310	3.5	7.0	10.5	MSP-29	3160-788	4.80
3/4-10	1-3/4	.312	.374	4.0	10.0	16.0	MSP-30	3160-789	7.65
1-8	2-13/32	.500	.499	4.0	17.5	31.0	MSP-31	3160-790	10.50

Spring Plungers - Heavy Pressures

Stainless Steel Ball Plungers

- All parts are made of stainless steel.
- All plungers equipped with nylon pellet for positive holding. If you require plungers without the nylon locking element, please specify when ordering.
- Ideal for locating or positioning applications.



A	B	C	DIAM. D	END PRESSURES LBS.		PART. NO.	ORDER NO.	PRICE EACH
				START	FULL			
#4-48	3/16	.020	.062	.12	.5	MBP-090SS	3163-589	\$4.00
#5-40	1/4	.020	.062	.12	.5	MBP-091SS	3163-590	4.00
#6-40	5/16	.023	.078	.5	1.0	MBP-092SS	3163-591	4.00
#8-36	11/32	.025	.093	.5	1.25	MBP-093SS	3163-592	4.00
#8-32	11/32	.025	.093	.5	1.25	MBP-094SS	3163-593	4.00
#10-32	33/64	.025	.093	.5	1.5	MBP-106SS	3163-595	4.15
#10-32	33/64	.025	.093	1.5	3.0	MBP-105SS	3163-594	4.15
#10-32	33/64	.025	.093	2.0	5.0	MBP-107SS	3163-596	4.15
1/4-20	17/32	.035	1.25	2.0	4.0	MBP-111SS	3163-598	4.35
1/4-20	17/32	.035	.125	3.0	7.0	MBP-110SS	3163-597	4.35
1/4-20	17/32	.035	.125	4.0	12.0	MBP-112SS	3163-599	4.35
5/16-18	37/64	.040	.156	2.0	4.5	MBP-116SS	3163-601	4.70
5/16-18	37/64	.040	.156	4.0	9.0	MBP-115SS	3163-600	4.70
5/16-18	37/64	.040	.156	6.0	17.0	MBP-117SS	3163-602	4.70
3/8-16	5/8	.048	.187	2.5	5.0	MBP-121SS	3163-604	5.35
3/8-16	5/8	.048	.187	5.0	10.0	MBP-120SS	3163-603	5.35
3/8-16	5/8	.048	.187	6.0	21.0	MBP-122SS	3163-605	5.35
1/2-13	3/4	.072	.281	3.0	6.0	MBP-126SS	3163-607	5.85
1/2-13	3/4	.072	.281	6.0	12.0	MBP-125SS	3163-606	5.85
1/2-13	3/4	.072	.281	6.0	30.0	MBP-127SS	3163-608	5.85
5/8-11	63/64	.096	.375	4.5	9.0	MBP-131SS	3163-610	7.55
5/8-11	63/64	.096	.375	9.0	18.0	MBP-130SS	3163-609	7.55
5/8-11	63/64	.096	.375	7.0	50.0	MBP-132SS	3163-611	7.55

A	B	C	D	END PRESSURES			REF. NO.	ORDER NO.	PRICE EACH
				START	1/2 WAY	FULL			
#6-32	17/32	.062	.046	1.5	3.0	4.5	MSP-1	3160-767	\$4.15
#6-32	3/8	.062	.046	1.0	1.3	1.6	MSP-2	3160-768	4.15
#8-32	5/8	.093	.070	2.7	5.0	7.3	MSP-3	3160-769	4.15
#10-32	3/4	.125	.093	2.9	7.0	11.1	MSP-4	3160-770	4.15
1/4-20	1	.187	.119	3.0	8.0	13.0	MSP-5	3160-771	4.00
1/4-28	1	.187	.119	3.0	8.0	13.0	MSP-6	3160-772	4.00
1/4-20	3/4	.125	.119	2.0	5.5	9.0	MSP-7	3160-773	4.00
5/16-18	1	.187	.135	3.0	9.0	15.0	MSP-8	3160-774	4.00
3/8-16	1-1/8	.187	.186	5.5	10.0	14.5	MSP-9	3160-775	4.10
1/2-13	1-1/4	.250	.248	6.6	12.0	17.4	MSP-10	3160-776	4.10
5/8-11	1-1/2	.312	.310	10.5	18.0	25.5	MSP-11	3160-777	5.05
3/4-10	1-3/4	.312	.374	6.7	22.0	37.3	MSP-12	3160-778	7.65
1-8	2-13/32	.500	.499	16.0	42.0	68.0	MSP-13	3160-779	13.95

Metric Ball Plungers

- Steel body, stainless steel ball nose, zinc plated finish.
- All plungers equipped with nylon pellet for positive holding. If you require plungers without the nylon locking element, please specify when ordering.
- Ideal for locating or positioning applications.



A	B	C	DIAM. D	END PRESSURES KILOGRAMS		PART. NO.	ORDER NO.	PRICE EACH
				START	FULL			
M 4 x 0.7	9.00	0.60	2.36	.25	.50	MBP-150	3163-513	\$5.15
M 5 x 0.8	13.00	0.60	2.36	.25	.70	MBP-151	3163-514	5.25
M 5 x 0.8	13.00	0.60	2.36	.70	1.35	MBP-152	3163-515	5.25
M 5 x 0.8	13.00	0.60	2.36	.90	2.25	MBP-153	3163-516	5.25
M 6 x 1.0	13.50	0.90	3.20	.90	1.80	MBP-154	3163-517	5.40
M 6 x 1.0	13.50	0.90	3.20	1.35	3.15	MBP-155	3163-518	5.40
M 6 x 1.0	13.50	0.90	3.20	1.80	5.40	MBP-156	3163-519	5.40
M 8 x 1.25	15.00	1.00	3.96	.90	2.00	MBP-157	3163-520	5.50
M 8 x 1.25	15.00	1.00	3.96	1.80	4.00	MBP-158	3163-521	5.50
M 8 x 1.25	15.00	1.00	3.96	2.70	7.65	MBP-159	3163-522	5.50
M 10 x 1.5	16.00	1.20	4.75	1.13	2.25	MBP-160	3163-523	5.55
M 10 x 1.5	16.00	1.20	4.75	2.25	4.50	MBP-161	3163-524	5.55
M 10 x 1.5	16.00	1.20	4.75	2.70	9.50	MBP-162	3163-525	5.55
M 12 x 1.75	19.00	2.00	7.14	1.35	2.70	MBP-163	3163-526	5.60
M 12 x 1.75	19.00	2.00	7.14	2.70	5.40	MBP-164	3163-527	5.60
M 12 x 1.75	19.00	2.00	7.14	2.70	13.50	MBP-165	3163-528	5.60

Precision Ground Flat Stock — Oil Hardening

2

AISI/SAE Type O-1

O-1 GROUND FLAT STOCK is an electric furnace melt oil-hardening tool steel supplied with a fully spheroidized structure. A non-shrinking general-purpose tool steel, it has excellent abrasion resistance, toughness and machinability characteristics.

Tolerance:

Thickness ±.001" Width +.000"/.005"

THICK	WIDTH	18" LENGTH		36" LENGTH		
		ORDER NO.	PRICE EACH	ORDER NO.	PRICE EACH	
1/64	1/2	3190-010	\$ 76.41	—	—	
	3/4	3190-020	79.45	—	—	
	1	3190-030	83.47	—	—	
	1-1/4	3190-040	87.47	—	—	
	1-1/2	3190-050	96.34	—	—	
	2	3190-060	119.66	—	—	
	2-1/2	3190-070	137.21	—	—	
	3	3190-080	164.38	—	—	
1/32	1/2	3190-100	13.87	—	—	
	3/4	3190-110	18.72	—	—	
	1	3190-120	21.81	—	—	
	1-1/4	3190-130	25.87	—	—	
	1-1/2	3190-140	29.90	—	—	
	2	3190-150	37.80	—	—	
	2-1/2	3190-160	45.80	—	—	
	3	3190-170	53.99	—	—	
3/64	1/4	3190-200†	26.74	—	—	
	5/16	3190-210†	23.38	—	—	
	3/8	3190-220†	14.83	—	—	
	1/2	3190-230	12.16	3200-230	\$21.16	
	3/4	3190-240	15.68	—	—	
	1	3190-250	19.11	3200-250	33.23	
	1-1/4	3190-260	22.44	3200-260	39.00	
	1-1/2	3190-270	25.88	3200-270	45.03	
1/16	1/4	3190-340	28.76	—	—	
	5/16	3190-350†	15.82	—	—	
	3/8	3190-360	14.38	—	—	
	1/2	3190-370	8.57	3200-370	14.92	
	3/4	3190-380	10.83	3200-380	18.83	
	1	3190-390	13.07	3200-390	22.74	
	1-1/4	3190-400	15.24	3200-400	26.51	
	1-1/2	3190-410	17.51	3200-410	30.45	
	1-3/4	3190-420	19.72	3200-420	34.29	
	2	3190-430	21.97	3200-430	38.20	
	2-1/2	3190-440	26.40	3200-440	45.90	
	3	3190-450	30.83	3200-450	53.62	
5/64	3/8	3190-550†	9.69	—	—	
	1/2	3190-560	11.20	—	—	
	3/4	3190-570	13.87	—	—	
	1	3190-580	16.59	—	—	
	1-1/2	3190-590	21.94	—	—	
	2	3190-600	27.32	—	—	
	2-1/2	3190-610	32.48	—	—	
	3	3190-620	37.88	—	—	
	4	3190-630	48.78	—	—	
	6	3190-640	70.60	—	—	
	3/32	1/4	3190-650	36.23	—	—
		5/16	3190-660†	15.16	—	—
3/8		3190-670	19.89	—	—	
1/2		3190-680	11.20	3200-680	19.47	
3/4		3190-690	13.87	3200-690	24.12	
1		3190-700	16.59	3200-700	28.87	
1-1/4		3190-710	19.24	3200-710	33.44	
1-1/2		3190-720	21.94	3200-720	38.13	

THICK	WIDTH	18" LENGTH		36" LENGTH		
		ORDER NO.	PRICE EACH	ORDER NO.	PRICE EACH	
3/32	1-3/4	3190-730	\$24.62	3200-730	\$42.83	
	2	3190-740	27.32	3200-740	47.52	
	2-1/2	3190-750	32.75	3200-750	56.94	
	3	3190-760	38.17	3200-760	66.40	
	3-1/2	3190-770†	19.40	—	—	
	4	3190-780	48.94	3200-780	85.12	
	5	3190-790	59.75	3200-790	103.91	
	6	3190-800	70.54	3200-800	122.69	
	8	3190-810	105.49	3200-810	183.47	
	10	3190-820	138.92	3200-820	241.60	
7/64	1/2	3190-840	13.33	—	—	
	3/4	3190-850	16.55	—	—	
	1	3190-860	19.68	—	—	
	1-1/4	3190-870	22.76	—	—	
	1-1/2	3190-880	25.96	—	—	
	2	3190-890	32.34	—	—	
	2-1/2	3190-900	40.48	—	—	
	3	3190-910	45.07	—	—	
	4	3190-920	57.78	—	—	
	1/8	1/8	3190-930	23.66	—	—
1/4		3190-940	8.52	—	—	
5/16		3190-950	9.28	—	—	
3/8		3190-960	9.81	—	—	
1/2		3190-970	10.83	3200-970	18.81	
5/8		3190-980	12.04	3200-980	20.94	
3/4		3190-990	13.30	3200-990	23.11	
1		3191-000	15.73	3201-000	27.36	
1-1/4		3191-010	18.03	3201-010	31.34	
1-1/2		3191-020	20.44	3201-020	35.57	
1-3/4		3191-030	22.90	3201-030	39.82	
2		3191-040	25.32	3201-040	44.04	
2-1/2		3191-050	30.17	3201-050	52.46	
3		3191-060	35.04	3201-060	60.96	
9/64	3-1/2	3191-070	39.91	3201-070	69.41	
	4	3191-080	44.77	3201-080	77.87	
	4-1/2	3191-090†	30.84	3201-090†	56.82	
	5	3191-100	54.47	3201-100	94.76	
	6	3191-110	64.20	3201-110	111.63	
	7	3191-120	84.78	3201-120	147.47	
	8	3191-130	96.09	3201-130	167.11	
	10	3191-140	118.45	3201-140	206.03	
	12	3191-150	140.94	3201-150	245.14	
	14	3191-160	162.79	3201-160	283.11	
	9/64	1/2	3191-170†	13.28	—	—
	3/4	3191-180	13.44	—	—	
	1	3191-190	15.32	—	—	
	1-1/4	3191-200	18.13	—	—	
1-1/2	3191-210	21.81	—	—		
2	3191-220	23.56	—	—		
3	3191-230	29.17	—	—		
4	3191-240	40.30	—	—		
5/32	5/32	3191-250	51.43	—	—	
	1/4	3191-260	21.97	—	—	
	1/2	3191-270	32.87	—	—	
	5/16	3191-280†	16.98	—	—	
	3/8	3191-290	19.08	—	—	
	1/2	3191-300	13.32	3201-300	23.16	
	3/4	3191-310	16.32	3201-310	28.39	
	1	3191-320	19.31	3201-320	33.56	
	1-1/4	3191-330	22.10	3201-330	38.44	
	1-1/2	3191-340	25.01	3201-340	43.48	
	1-3/4	3191-350	27.98	3201-350	48.66	
	2	3191-360	30.99	3201-360	53.89	
	2-1/2	3191-370	36.84	3201-370	64.07	
	3	3191-380	42.79	3201-380	74.42	
3/16	3-1/2	3191-390	48.71	3201-390	84.73	
	4	3191-400	54.63	3201-400	95.02	
	5	3191-410	66.51	3201-410	115.65	
	6	3191-420	78.29	3201-420	136.16	
	8	3191-430	116.75	3201-430	203.06	
	10	—	—	—	—	
	12	—	—	—	—	
	3/16	1/4	3191-460	21.14	—	—
	5/16	3191-470	11.66	—	—	
	3/8	3191-480	12.64	—	—	
	1/2	3191-490	13.21	—	—	
	3/4	3191-500	14.54	3201-500	25.28	
1	3191-510	17.42	3201-510	30.29		
1-1/4	3191-520	20.43	3201-520	35.52		
1-1/2	3191-530	23.20	3201-530	40.37		
1-3/4	3191-540	26.19	3201-540	45.53		
2	3191-550	29.14	3201-550	50.69		
2-1/2	3191-560	32.14	3201-560	55.89		
3	3191-570	38.06	3201-570	66.19		
		3191-580	44.04	3201-580	76.57	

THICK	WIDTH	18" LENGTH		36" LENGTH		
		ORDER NO.	PRICE EACH	ORDER NO.	PRICE EACH	
3/16	3-1/2	3191-590	\$50.01	3201-590	\$86.99	
	4	3191-600	55.89	3201-600	97.21	
	4-1/2	3191-605†	34.13	—	—	
	5	3191-610	67.81	3201-610	117.92	
	6	3191-620	79.70	3201-620	138.60	
	8	3191-630	118.51	3201-630	206.10	
	10	3191-640	145.76	3201-640	253.50	
	12	3191-650	173.23	—	—	
	7/32	7/32	3191-660	20.30	—	—
		5/16	3191-670†	19.02	—	—
		3/8	3191-680†	14.99	—	—
		1/2	3191-690	17.40	3201-690	30.26
3/4		3191-700	20.96	3201-700	36.44	
1		3191-710	24.53	3201-710	42.65	
1-1/4		3191-720	27.86	3201-720	48.46	
1-1/2		3191-730	31.41	3201-730	54.63	
2		3191-740	38.52	3201-740	66.99	
2-1/2		3191-750	45.96	3201-750	79.93	
3		3191-760	52.71	3201-760	91.66	
4		3191-770	66.86	3201-770	116.29	
6	3191-780	95.24	3201-780	165.62		
1/4	1/4	3191-790	18.93	3201-790	32.92	
	5/16	3191-800	28.98	—	—	
	3/8	3191-810	14.81	—	—	
	1/2	3191-820	16.14	3201-820	28.07	
	3/4	3191-830	19.27	3201-830	33.51	
	1	3191-840	22.45	3201-840	39.06	
	1-1/8	3191-845†	14.40	—	—	
	1-1/4	3191-850	25.33	3201-850	44.07	
	1-1/2	3191-860	28.53	3201-860	49.62	
	1-3/4	3191-870	31.45	3201-870	54.70	
	2	3191-880	34.83	3201-880	60.57	
	2-1/2	3191-890	41.10	3201-890	71.49	
	3	3191-900	47.41	3201-900	82.44	
	3-1/2	3191-910	53.71	3201-910	93.41	
4	3191-920	60.04	3201-920	104.39		
9/32	4-1/2	3191-930	66.29	3201-930	115.31	
	5	3191-940	72.59	3201-940	126.24	
	5-1/2	3191-950	78.92	3201-950	137.26	
	6	3191-960	88.62	3201-960	154.14	
	7	3191-970	112.11	3201-970	194.97	
	8	3191-980	126.83	3201-980	220.57	
	10	3191-990	155.81	3201-990	270.94	
	12	3192-000	184.91	3202-000	321.59	
	14	3192-010	213.14	3202-010	370.71	
	5/16	9/32	3192-020	19.68	—	—
		1/2	3192-030			

Precision Ground Flat Stock — Oil Hardening

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AISI/SAE Type 0-1

Continued from Previous Page

THICK	WIDTH	18" LENGTH		36" LENGTH		
		ORDER NO.	PRICE EACH	ORDER NO.	PRICE EACH	
3/8	3-1/2	3192-450	\$76.96	3202-450	\$133.83	
	4	3192-460	85.89	3202-460	149.37	
	4-1/2	3192-470	94.81	3202-470	164.89	
	5	3192-480	103.73	3202-480	180.41	
	5-1/2	3192-490†	112.75	3202-490	196.07	
	6	3192-500	121.67	3202-500	211.61	
	7	3192-510	159.54	3202-510	277.46	
	8	3192-520	180.27	3202-520	313.52	
	10	3192-540	221.28	3202-540	384.84	
	12	3192-550	262.53	3202-550	456.56	
	7/16	7/16	3192-560	31.08	3202-560	54.03
		1/2	3192-570	28.09	3202-570	48.84
3/4		3192-580	33.28	3202-580	57.89	
1		3192-590	38.47	3202-590	66.90	
1-1/4		3192-600	43.27	3202-600	75.27	
1-1/2		3192-610	48.48	3202-610	84.30	
2		3192-620	58.86	3202-620	102.38	
2-1/2		3192-630	69.26	3202-630	120.46	
3		3192-640	79.66	3202-640	138.54	
4		3192-650	97.94	3202-650	170.33	
6		3192-660	142.06	3202-660	247.08	
1/2		1/2	3192-670	28.96	3202-670	50.38
	5/8	3192-680	31.68	3202-680	55.09	
	3/4	3192-690	34.36	3202-690	59.77	
	1	3192-700	39.75	3202-700	69.16	
	1-1/4	3192-710	44.98	3202-710	78.22	
	1-1/2	3192-720	50.35	3202-720	87.56	
	1-3/4	3192-730	55.91	3202-730	97.25	
	2	3192-740	61.16	3202-740	106.37	
	2-1/2	3192-750	71.97	3202-750	125.17	
	3	3192-760	82.79	3202-760	143.97	
	3-1/2	3192-770	93.58	3202-770	162.74	
	4	3192-780	104.41	3202-780	181.57	
	4-1/2	3192-790	115.22	3202-790	200.38	
	5	3192-800	126.76	3202-800	220.45	
6	3192-810	155.36	3202-810	270.19		
7	3192-820	196.48	3202-820	341.73		
8	3192-830	221.90	3202-830	385.92		
10	3192-850	267.10	3202-850	464.52		
12	3192-860	311.86	—	—		
14	3192-870†	265.18	—	—		

Oversize Available Upon Request

THICK	WIDTH	18" LENGTH		36" LENGTH	
		ORDER NO.	PRICE EACH	ORDER NO.	PRICE EACH
9/16	9/16	3192-880	\$34.76	3202-880	\$60.45
	3/4	3192-890	39.20	3202-890	68.20
	1	3192-900	45.19	3202-900	78.60
	1-1/4	3192-910	51.08	3202-910	88.82
	1-1/2	3192-920	57.03	3202-920	99.20
	2	3192-930	69.07	3202-930	120.11
5/8	5/8	3192-940	37.96	3202-940	65.99
	3/4	3192-950	41.08	3202-950	71.43
	1	3192-960	47.25	3202-960	82.19
	1-1/4	3192-970	53.28	3202-970	92.66
	1-1/2	3192-980	59.49	3202-980	103.43
	2	3192-990	71.89	3202-990	125.03
	2-1/2	3193-000	84.29	3203-000	146.60
	3	3193-010	96.71	3203-010	168.20
	3-1/2	3193-020	109.14	3203-020	189.82
	4	3193-030	121.55	3203-030	211.42
	5	3193-040	147.18	3203-040	255.97
	6	3193-050	172.02	3203-050	299.15
3/4	3/4	3193-110	48.84	3203-110	84.94
	1	3193-120	56.11	3203-120	97.58
	1-1/4	3193-130	62.95	3203-130	109.49
	1-1/2	3193-140	70.17	3203-140	122.05
	1-3/4	3193-150	77.41	3203-150	134.63
	2	3193-160	84.64	3203-160	147.20
	2-1/2	3193-170	99.08	3203-170	172.29
	3	3193-180	113.58	3203-180	197.53
	3-1/2	3193-190	128.04	3203-190	222.65
	4	3193-200	142.49	3203-200	247.81
	4-1/2	3193-210	156.96	3203-210	272.96
	5	3193-220	172.23	3203-220	299.52
7/8	7/8	3193-290	61.19	3203-290	106.42
	1	3193-300	65.32	3203-300	113.60
	1-1/4	3193-310	73.07	3203-310	127.06
	1-1/2	3193-320	81.26	3203-320	141.34
	2	3193-330	97.65	3203-330	169.83
	2-1/2	3193-340†	85.69	3203-340†	151.24
	3	3193-350	130.58	3203-350	227.10
	4	3193-370	163.45	3203-370	284.25
	4	3193-390	229.99	3203-390	400.01

THICK	WIDTH	18" LENGTH		36" LENGTH	
		ORDER NO.	PRICE EACH	ORDER NO.	PRICE EACH
1	1	3193-450	\$70.24	3203-450	\$122.15
	1-1/4	3193-460	78.29	3203-460	136.18
	1-1/2	3193-470	86.95	3203-470	151.22
	1-3/4	3193-480	95.56	3203-480	166.19
	2	3193-490	104.20	3203-490	181.21
	2-1/2	3193-500	121.46	3203-500	211.24
	3	3193-510	138.65	3203-510	241.14
	3-1/2	3193-520	155.90	3203-520	271.13
	4	3193-530	173.14	3203-530	301.12
	4-1/2	3193-540†	145.93	3203-540†	252.27
	5	3193-550	208.43	3203-550	362.48
	6	3193-560	242.95	3203-560	422.53
1-1/8	1-1/2	3193-620	104.30	—	—
	2	3193-630	124.05	3203-630	215.74
	2-1/2	3193-635	94.45	—	—
	3	3193-640	163.50	3203-640	284.34
	4	3193-650	202.99	3203-650	353.04
	6	3193-660	282.79	3203-660	491.83
1-1/4	1-1/4	3193-670	98.90	3203-670	172.00
	1-1/2	3193-680	109.55	3203-680	190.53
	2	3193-690	130.93	3203-690	227.74
	2-1/2	3193-700	152.25	3203-700	264.77
	3	3193-710	173.51	3203-710	301.75
	4	3193-730	216.14	3203-730	375.90
	5	3193-740	259.63	3203-740	451.53
	6	3193-750	302.26	3203-750	525.68
	8	3193-770†	324.24	3203-770†	549.57
	10	—	—	3203-790†	663.78
1-1/2	1-1/2	3193-830	127.82	3203-830	222.31
	2	3193-840	152.27	3203-840	264.82
	2-1/2	3193-850	176.73	3203-850	307.36
	3	3193-860	201.23	3203-860	349.96
	3-1/2	3193-870†	170.03	3203-870†	292.52
	4	3193-880	250.14	3203-880	435.01
	5	—	—	3203-890†	388.77
	6	3193-900	353.05	3203-900	614.02
	8	3193-920	488.68	3203-920	849.86
	10	3193-940†	456.97	3203-940†	765.57
2	2	3193-980	195.08	3203-980	339.28
	3	3193-990	256.57	3203-990	446.21
	4	3194-000	318.14	3204-000	553.27
	4	3194-010	423.53	3204-010	736.58

† Limited Quantities

Precision Ground Flat Stock — Low Carbon

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AISI/SAE Type C-1018

Tolerance: Thickness ±.001" Width +.000"/.005"

† Limited Quantities

LOW CARBON GROUND FLAT STOCK is a fine-grained, vacuum-degassed carbon steel. It is easily machined, has excellent weldability, and responds uniformly to case hardening. The manganese content provides greater strength and hardness compared to many other carbon steels. It is often used in its natural state for such applications as back-up plate, stripper plates, punch pads, and machine parts. As a case-hardened material, it is used for jigs, fixtures, cams and patterns.

Also Available:
• S-7 • D-2
• A-6 • Nutec 42

THICK.	WIDTH	24" LENGTH	
		ORDER NO.	PRICE EACH
1/16	3/4	3210-380	\$13.32
	1	3210-390	15.84
	1-1/4	3210-400	18.36
	1-1/2	3210-410	20.80
	2	3210-430	26.84
	2-1/2	3210-440	32.53
	3	3210-450	37.24
	3-1/2	3210-460	42.42
	4	3210-470	47.47
	5	3210-480	57.35
	6	3210-490	69.03
	8	3210-500	91.88
3/32	1/2	3210-680	13.69
	3/4	3210-690	16.80
	1	3210-700	19.75
	1-1/4	3210-710	22.31
	1-1/2	3210-720	25.33
	2	3210-740	31.34
	2-1/2	3210-750	37.21
	3	3210-760	43.16
	3-1/2	3210-770	49.28
	4	3210-780	54.54

THICK.	WIDTH	24" LENGTH	
		ORDER NO.	PRICE EACH
3/32	5	3210-790	\$63.91
	6	3210-800	78.86
	10	3210-820	126.49
	12	3210-830	150.72
7/64	4	3210-920†	29.39
	4-1/2	3210-925†	32.37
1/8	1/2	3210-970	13.26
	3/4	3210-990	15.84
	1	3211-000	18.60
	1-1/4	3211-010	20.60
	1-1/2	3211-020	24.57
	2	3211-040	28.46
	2-1/2	3211-050	33.67
	3	3211-060	38.08
	3-1/2	3211-070	43.41
	4	3211-080	47.41
	5	3211-100	57.55
	10	3211-140	109.74
5/32	1/2	3211-300	16.30
	3/4	3211-310	18.70
	1	3211-320	21.83
	1-1/4	3211-330	22.92
	1-1/2	3211-340	26.12

THICK.	WIDTH	24" LENGTH	
		ORDER NO.	PRICE EACH
5/32	2	3211-360	\$31.61
	2-1/2	3211-370	37.65
	3	3211-380	42.13
	3-1/2	3211-390	48.39
	4	3211-400	53.58
	5	3211-410	65.00
3/16	6	3211-420	76.71
	12	3211-450	143.98
	1/2	3211-500	22.95
	3/4	3211-510	26.04
	1	3211-520	30.93
	1-1/4	3211-530	33.46
	1-1/2	3211-540	37.49
	2	3211-560	45.58
	3	3211-580	60.80
	3-1/2	3211-590	69.90
	4	3211-600	78.38
	5	3	

Precision Ground Flat Stock – Low Carbon

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AISI/SAE Type C-1018

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**Oversize Available
Upon Request**

THICK.	WIDTH	24" LENGTH	
		ORDER NO.	PRICE EACH
5/16	4	3212-260	\$84.78
	5	3212-280	100.78
	6	3212-290	118.86
	7	3212-300	138.81
	8	3212-310	154.19
	10	3212-330	185.82
3/8	12	3212-340	213.69
	3/8	3212-350	27.22
	1/2	3212-360	29.83
	3/4	3212-370	32.87
	1	3212-380	38.68
	1-1/4	3212-390	42.47
	1-1/2	3212-400	45.94
	2	3212-420	54.47
	2-1/2	3212-430	65.32
	3	3212-440	70.03
	3-1/2	3212-450	82.05
	1/2	4	3212-460
5		3212-480	109.33
6		3212-500	127.93
7		3212-510	145.74
8		3212-520	162.08
9		3212-530	179.52
10		3212-540	196.82
1/2		3212-670	35.16
3/4		3212-690	39.57
1		3212-700	45.78
3/4	1-1/4	3212-710	50.77
	1-1/2	3212-720	55.82
	2	3212-740	64.62
	2-1/2	3212-750	74.44
	3	3212-760	83.24

THICK.	WIDTH	24" LENGTH	
		ORDER NO.	PRICE EACH
1/2	3-1/2	3212-770	\$ 94.67
	4	3212-780	103.31
	5	3212-800	124.32
	6	3212-810	144.09
	7	3212-820	157.41
	8	3212-830	182.05
5/8	10	3212-850	218.53
	12	3212-860	250.67
	5/8	3212-940	41.97
	3/4	3212-950	45.05
	1	3212-960	51.61
	1-1/4	3212-970	58.81
3/4	1-1/2	3212-980	64.11
	2	3212-990	75.34
	2-1/2	3213-000	85.07
	3	3213-010	96.52
	3-1/2	3213-020	106.26
	4	3213-030	117.16
	5	3213-040	141.03
	6	3213-050	161.12
	7	3213-060	181.66
	9	3213-080	228.87
	10	3213-090	245.69
	12	3213-100	302.76
1	3/4	3213-110	49.49
	1	3213-120	61.32
	1-1/4	3213-130	66.61
	1-1/2	3213-140	73.30
	2	3213-160	85.42
	2-1/2	3213-170	97.14
1	3	3213-180	110.03
	3-1/2	3213-190	122.12

THICK.	WIDTH	24" LENGTH		
		ORDER NO.	PRICE EACH	
3/4	4	3213-200	\$133.26	
	5	3213-220	157.35	
	6	3213-230	182.62	
	7	3213-240	206.03	
	8	3213-250	232.52	
	9	3213-260	252.45	
7/8	10	3213-270	273.85	
	12	3213-280	316.80	
	7/8	3213-290	65.92	
	1	3213-300	69.71	
	1-1/4	3213-310	76.02	
	1-1/2	3213-320	82.03	
1	2	3213-330	96.87	
	2-1/2	3213-340	108.66	
	3	3213-350	120.34	
	3-1/2	3213-360	133.78	
	4	3213-370	147.33	
	5	3213-380	181.16	
	6	3213-400	232.16	
	8	3213-410	261.14	
	9	3213-420	292.04	
	10	3213-430	315.95	
	1	1	3213-450	73.69
		1-1/4	3213-460	83.24
1-1/2		3213-470	90.56	
2		3213-490	104.85	
2-1/2		3213-500	117.99	
3		3213-510	131.11	
1	3-1/2	3213-520	146.01	
	4	3213-530	157.19	
	6	3213-560	208.00	
	8	3213-580	267.40	

THICK.	WIDTH	24" LENGTH	
		ORDER NO.	PRICE EACH
1	9	3213-590	\$299.04
	10	3213-600	322.48
	12	3213-610	362.40
1-1/4	1-1/4	3213-670	99.01
	1-1/2	3213-680	110.63
	2	3213-690	126.29
	2-1/2	3213-700	143.66
	3	3213-710	159.01
	3-1/2	3213-720	174.70
	4	3213-730	191.27
	5	3213-740	227.93
	6	3213-750	252.73
	7	3213-760	300.02
	8	3213-770	327.54
	9	3213-780	357.85
1-1/2	10	3213-790	388.08
	12	3213-800	443.58
	1-1/2	3213-830	128.75
	2	3213-840	148.91
	2-1/2	3213-850	167.74
	3-1/2	3213-870	204.75
	7	3213-910	349.28
8	3213-920	375.61	
9	3213-930	413.14	
10	3213-940	446.07	
12	3213-950	555.56	
16	3213-970	555.53	

† Limited Quantities

Precision Ground Flat Stock – Air Hardening

2

AISI/SAE Type A-2

Tolerances:

Thickness ±.001"
Width +.000"/.005"

A-2 GROUND FLAT STOCK is made from fine grain, electric furnace air hardening, 5% chrome tool steel. It is a superior quality steel which has excellent wear and abrasion resistance properties. AIR-TRUE is furnished with a fully spheroidized structure and is 100% free of decarb and other imperfections. AIR-TRUE's low sulphur content makes it **non-freemachining**.

THICK.	WIDTH	18" LENGTH		36" LENGTH	
		ORDER NO.	PRICE EACH	ORDER NO.	PRICE EACH
1/16	1/2	5330-010	\$11.27	5340-010	\$20.50
	3/4	5330-020	15.16	5340-020	27.57
	1	5330-030	17.42	5340-030	31.66
	1-1/4	5330-040	20.34	5340-040	36.98
	1-1/2	5330-050	23.41	5340-050	42.58
	2	5330-060	29.48	5340-060	53.58
3/32	2-1/2	5330-070	35.66	5340-070	64.84
	3	5330-080	37.80	5340-080	68.71
	4	5330-090	54.06	5340-090	98.29
	1/2	5330-100	14.88	5340-100	27.08
	3/4	5330-110	18.68	5340-110	33.96
	1	5330-120	22.49	5340-120	40.89
1/8	1-1/4	5330-130	26.19	5340-130	47.61
	1-1/2	5330-140	30.01	5340-140	54.56
	2	5330-150	37.62	5340-150	68.41
	2-1/2	5330-160	45.28	5340-160	82.33
	3	5330-170	52.91	5340-170	96.20
	4	5330-180	68.21	5340-180	124.02
1/4	1/2	5330-190	12.34	5340-190	22.42
	5/8	5330-200	13.78	5340-200	25.05
	3/4	5330-210	15.15	5340-210	27.54
	1	5330-220	17.96	5340-220	32.64
	1-1/4	5330-230	20.57	5340-230	37.39
	1-1/2	5330-240	23.38	5340-240	42.51
	1-3/4	5330-250	26.19	5340-250	47.63
	2	5330-260	29.01	5340-260	52.75
	2-1/2	5330-270	34.60	5340-270	62.90
	3	5330-280	40.21	5340-280	73.10
	3-1/2	5330-290	46.76	5340-290	85.00
	4	5330-300	51.47	5340-300	93.60
5/32	5	5330-310	62.69	5340-310	113.96
	6	5330-320	73.92	5340-320	134.40
	7	5330-330	100.52	5340-330	182.74
	8	5330-340	113.92	5340-340	207.11
	10	5330-350	140.54	5340-350	255.51
	12	5330-360	167.18	5340-360	303.97
	1/2	5330-370	15.86	5340-370	28.82
	3/4	5330-380	19.47	5340-380	35.40
	1	5330-390	23.16	5340-390	42.10
	1-1/4	5330-400	26.58	5340-400	48.34
	1-1/2	5330-410	30.19	5340-410	54.88
	1-3/4	5330-420	33.85	5340-420	61.55
3/8	2	5330-430	37.49	5340-430	68.20
	2-1/2	5330-440	44.75	5340-440	81.37
	3	5330-450	52.09	5340-450	94.70
	3-1/2	5330-460	59.36	5340-460	107.93
	4	5330-470	66.67	5340-470	121.19
	5	5330-480	81.26	5340-480	147.74
	6	5330-490	95.79	5340-490	174.17
	8	5330-500	157.92	5340-500	281.27
	3/16	5330-510	29.12	5340-510	52.94
	1/2	5330-520	17.19	5340-520	30.63

THICK.	WIDTH	18" LENGTH		36" LENGTH	
		ORDER NO.	PRICE EACH	ORDER NO.	PRICE EACH
3/16	3/4	5330-530	20.84	5340-530	\$37.88
	1	5330-540	24.59	5340-540	44.71
	1-1/4	5330-550	28.05	5340-550	51.01
	1-1/2	5330-560	31.72	5340-560	57.65
	1-3/4	5330-570	35.45	5340-570	64.46
	2	5330-580	39.20	5340-580	71.29
1/4	2-1/2	5330-590	46.50	5340-590	84.75
	3	5330-600	54.06	5340-600	98.28
	3-1/2	5330-610	62.45	5340-610	113.53
	4	5330-620	68.94	5340-620	125.35
	5	5330-630	83.84	5340-630	152.45
	6	5330-640	98.70	5340-640	179.47
1/2	7	5330-650	127.22	5340-650	231.31
	8	5330-660	152.46	5340-660	277.21
	1/4	5330-670	26.52	5340-670	48.23
	1/2	5330-680	19.50	5340-680	35.43
	3/4	5330-690	23.57	5340-690	42.86
	1	5330-700	27.72	5340-700	50.40
3/8	1-1/4	5330-710	31.41	5340-710	57.12
	1-1/2	5330-720	35.57	5340-720	64.68
	1-3/4	5330-730	39.66	5340-730	72.11
	2	5330-740	43.75	5340-740	79.56
	2-1/2	5330-750	51.93	5340-750	94.40
	3	5330-760	60.11	5340-760	109.28
5/16	3-1/2	5330-770	68.30	5340-770	124.20
	4	5330-780	76.52	5340-780	139.11
	5	5330-790	92.89	5340-790	168.87
	6	5330-800	109.30	5340-800	198.72
	5/16	5330-810	29.99	5340-810	54.53
	1/2	5330-820	22.84	5340-820	41.53
3/4	3/4	5330-830	27.50	5340-830	50.03
	1	5330-840	32.18	5340-840	58.51
	1-1/4	5330-850	36.41	5340-850	66.19</

Drill Rod – 36” Length

Oil Hardening – AISI/SAE Type O-1 & Water Hardening – AISI/SAE Type W-1

Fractional Sizes

FRAC. SIZES	OIL HARDENING		WATER HARDENING	
	ORDER NO.	PRICE EACH	ORDER NO.	PRICE EACH
1/64	3220-001	\$1.25	—	—
1/32	3220-002	1.25	—	—
3/64	3220-003	1.25	—	—
1/16	3220-004	1.60	3223-004	\$0.87
5/64	3220-005	2.68	3223-005	1.49
3/32	3220-006	1.85	3223-006	1.60
7/64	3220-007	2.68	3223-007	2.33
1/8	3220-008	2.45	3223-008	1.78
9/64	3220-009	3.29	3223-009	2.42
5/32	3220-010	3.08	3223-010	2.26
11/64	3220-011	4.00	3223-011	3.00
3/16	3220-012	3.56	3223-012	2.65
13/64	3220-013	4.48	3223-013	3.38
7/32	3220-014	4.23	3223-014	3.29
15/64	3220-015	5.26	3223-015	4.14
1/4	3220-016	4.04	3223-016	3.25
17/64	3220-017	4.89	3223-017	3.72
9/32	3220-018	5.07	3223-018	3.79
19/64	3220-019	6.06	3223-019	4.62
5/16	3220-020	5.07	3223-020	4.23
21/64	3220-021	6.63	3223-021	5.58
11/32	3220-022	6.72	3223-022	5.65
23/64	3220-023	7.95	3223-023	6.72
3/8	3220-024	7.15	3223-024	5.65
25/64	3220-025	9.14	3223-025	7.38
13/32	3220-026	9.28	3223-026	7.36
27/64	3220-027	10.65	3223-027	8.64
7/16	3220-028	9.69	3223-028	7.70
29/64	3220-029	12.30	3223-029	9.97
15/32	3220-030	12.27	3223-030	9.71
31/64	3220-031	14.06	3223-031	11.34
1/2	3220-032	11.91	3223-032	9.26
33/64	3220-033	15.00	3223-033	11.86
17/32	3220-034	15.50	3223-034	12.02
35/64	3220-035	16.87	3223-035	13.26
9/16	3220-036	16.64	3223-036	12.89
37/64	3220-037	18.86	3223-037	14.86
19/32	3220-038	19.41	3223-038	15.00
39/64	3220-039	20.69	3223-039	16.52
5/8	3220-040	18.40	3223-040	13.07
41/64	3220-041	22.86	3223-041	16.55
21/32	3220-042	23.36	3223-042	16.64
43/64	3220-043	25.14	3223-043	18.17
11/16	3220-044	24.53	3223-044	17.42
45/64	3220-045	27.54	3223-045	19.96
23/32	3220-046	28.04	3223-046	19.98
47/64	3220-047	30.01	3223-047	21.74
3/4	3220-048	25.88	3223-048	18.47
49/64	3220-049	31.96	3223-049	23.18
25/32	3220-050	32.43	3223-050	23.16
51/64	3220-051	34.60	3223-051	25.10
13/16	3220-052	33.49	3223-052	23.89
53/64	3220-053	37.40	3223-053	27.15
27/32	3220-054	37.83	3223-054	27.02
55/64	3220-055	40.25	3223-055	29.19

FRAC. SIZES	OIL HARDENING		WATER HARDENING	
	ORDER NO.	PRICE EACH	ORDER NO.	PRICE EACH
7/8	3220-056	\$38.79	3223-056	\$27.72
57/64	3220-057	43.25	3223-057	31.36
29/32	3220-058	43.64	3223-058	31.16
59/64	3220-059	46.33	3223-059	33.64
15/16	3220-060	46.69	3223-060	33.32
61/64	3220-061	49.51	3223-061	35.93
31/32	3220-062	49.87	3223-062	35.54
63/64	3220-063	52.78	3223-063	38.35
1	3220-064	43.82	3223-064	32.25
1-1/64	3220-065	53.46	3223-065	39.96
1-1/32	3220-066	53.73	3223-066	39.50
1-3/64	3220-067	56.80	3223-067	42.47
1-1/16	3220-068	57.03	3223-068	41.99
1-5/64	3220-069	60.21	3223-069	45.05
1-3/32	3220-070	60.14	3223-070	44.46
1-7/64	3220-071	63.77	3223-071	47.72
1-1/8	3220-072	61.05	3223-072	44.91
1-9/64	3220-073	67.41	3223-073	50.42
1-5/32	3220-074	67.91	3223-074	49.94
1-11/64	3220-075	71.20	3223-075	53.23
1-3/16	3220-076	71.27	3223-076	52.46
1-13/64	3220-077	75.02	3223-077	56.11
1-7/32	3220-078	75.06	3223-078	55.18
1-15/64	3220-079	78.99	3223-079	59.04
1-1/4	3220-080	71.54	3223-080	54.65
1-17/64	3220-081	78.93	3223-081	61.37
1-9/32	3220-082	78.67	3223-082	60.16
1-19/64	3220-083	82.74	3223-083	64.32
1-5/16	3220-084	82.61	3223-084	63.17
1-21/64	3220-085	86.76	3223-085	67.45
1-11/32	3220-086	86.56	3223-086	66.19
1-23/64	3220-087	90.86	3223-087	70.67
1-3/8	3220-088	86.56	3223-088	66.19
1-25/64	3220-089	95.11	3223-089	73.96
1-13/32	3220-090	94.81	3223-090	72.41
1-27/64	3220-091	99.45	3223-091	77.30
1-7/16	3220-092	99.15	3223-092	75.75
1-29/64	3220-093	103.88	3223-093	80.71
1-15/32	3220-094	103.45	3223-094	79.04
1-31/64	3220-095	108.39	3223-095	84.25
1-1/2	3220-096	102.01	3223-096	72.32
1-9/16	3220-100	109.97	3223-100	78.01
1-5/8	3220-104	125.37	3223-104	88.93
1-11/16	3220-108	135.18	3223-108	95.89
1-3/4	3220-112	138.85	3223-112	98.54
1-13/16	3220-116	155.98	3223-116	110.61
1-7/8	3220-120	166.95	3223-120	118.37
1-15/16	3220-124	178.22	3223-124	126.44
2	3220-128	179.88	3223-128	127.82

Also Available
 • Metric Sizes
 • Special Diameters
 • Special Lengths

Fractional Sizes

Air Hardening –
 AISI/SAE Type A-2

FRAC. SIZES	DEC. EQUIV.	ORDER NO.	PRICE EACH
1/16	.0625	3225-100	\$ 2.44
5/64	.0781	3225-101	4.20
3/32	.0937	3225-102	3.93
7/64	.1093	3225-104	4.71
1/8	.1250	3225-105	4.32
9/64	.1406	3225-106	6.06
5/32	.1562	3225-107	6.15
11/64	.1718	3225-108	7.41
3/16	.1875	3225-109	6.56
13/64	.2031	3225-110	8.48
7/32	.2187	3225-111	9.14
15/64	.2343	3225-112	10.49
1/4	.2500	3225-113	8.98
17/64	.2656	3225-114	10.01
9/32	.2812	3225-115	11.24
19/64	.2968	3225-116	12.55
5/16	.3125	3225-117	11.59
21/64	.3281	3225-118	14.13
11/32	.3437	3225-119	15.47
23/64	.3593	3225-120	16.92
3/8	.3750	3225-121	16.48
25/64	.3906	3225-122	19.73
13/32	.4062	3225-123	21.37
27/64	.4218	3225-124	23.06
7/16	.4375	3225-125	22.44
29/64	.4531	3225-126	26.56
15/32	.4687	3225-127	28.46
31/64	.4843	3225-128	30.40
1/2	.5000	3225-129	28.11
17/32	.5312	3225-130	35.63
9/16	.5625	3225-131	35.56
19/32	.5937	3225-132	43.73
5/8	.6250	3225-133	43.40
21/32	.6562	3225-134	52.87
11/16	.6875	3225-135	52.52
23/32	.7187	3225-136	63.47
3/4	.7500	3225-137	62.01
13/16	.8125	3225-138	72.77
7/8	.8750	3225-139	84.41
1	1.0000	3225-140	109.58
1-1/16	1.0625	3225-141	123.70
1-1/8	1.1250	3225-142	138.69
1-1/4	1.2500	3225-143	160.29
1-3/8	1.3750	3225-144	193.99
1-1/2	1.5000	3225-145	228.89
1-3/4	1.7500	3225-146	311.51
2	2.0000	3225-147	403.77

Drill Rod - 36" Length

Wire Gage Sizes

Oil Hardening — AISI/SAE Type 0-1

Water Hardening — AISI/SAE Type W-1

WIRE GAGE	OIL HARDENING		WATER HARDENING	
	ORDER NO.	PRICE EACH	ORDER NO.	PRICE EACH
1	3221-001	\$ 4.92	3224-001	\$ 3.88
2	3221-002	4.59	3224-002	3.57
3	3221-003	4.89	3224-003	3.66
4	3221-004	4.62	3224-004	3.48
5	3221-005	4.55	3224-005	3.38
6	3221-006	4.37	3224-006	3.34
7	3221-007	4.27	3224-007	3.25
8	3221-008	4.23	3224-008	3.16
9	3221-009	4.12	3224-009	3.09
10	3221-010	3.95	3224-010	2.99
11	3221-011	3.84	3224-011	2.95
12	3221-012	4.66	3224-012	3.48
13	3221-013	4.48	3224-013	3.36
14	3221-014	4.41	3224-014	3.29
15	3221-015	4.30	3224-015	3.22
16	3221-016	4.14	3224-016	3.09
17	3221-017	4.02	3224-017	3.00
18	3221-018	3.84	3224-018	2.74
19	3221-019	3.66	3224-019	2.60
20	3221-020	3.56	3224-020	2.65
21	3221-021	3.34	3224-021	2.51
22	3221-022	3.95	3224-022	2.99
23	3221-023	3.93	3224-023	2.95
24	3221-024	3.79	3224-024	2.84
25	3221-025	3.66	3224-025	2.74
26	3221-026	3.56	3224-026	2.65
27	3221-027	3.41	3224-027	2.51
28	3221-028	3.22	3224-028	2.38
29	3221-029	2.97	3224-029	2.20
30	3221-030	2.68	3224-030	1.97
31	3221-031	3.22	3224-031	2.84
32	3221-032	2.97	3224-032	2.60
33	3221-033	2.77	3224-033	2.44
34	3221-034	2.70	3224-034	2.38
35	3221-035	2.63	3224-035	2.29
36	3221-036	2.54	3224-036	2.20
37	3221-037	2.38	3224-037	2.08
38	3221-038	2.35	3224-038	1.99
39	3221-039	2.20	3224-039	1.94
40	3221-040	2.08	3224-040	1.88
41	3221-041	2.03	3224-041	1.81
42	3221-042	3.73	3224-042	2.08
43	3221-043	3.40	3224-043	1.94
44	3221-044	3.11	3224-044	1.81
45	3221-045	2.88	3224-045	1.60
46	3221-046	2.74	3224-046	1.51
47	3221-047	2.63	3224-047	1.46
48	3221-048	2.45	3224-048	1.39
49	3221-049	2.28	3224-049	1.28
50	3221-050	2.06	3224-050	1.16
51	3221-051	1.92	3224-051	1.08
52	3221-052	1.76	3224-052	1.01

Letter Sizes

Oil Hardening — AISI/SAE Type 0-1

Water Hardening — AISI/SAE Type W-1

LETTER SIZES	OIL HARDENING		WATER HARDENING	
	ORDER NO.	PRICE EACH	ORDER NO.	PRICE EACH
A	3222-001	\$ 5.23	3225-001	\$ 4.14
B	3222-002	5.44	3225-002	4.25
C	3222-003	5.58	3225-003	4.32
D	3222-004	5.76	3225-004	4.55
E	3222-005	4.30	3225-005	3.50
F	3222-006	4.55	3225-006	3.47
G	3222-007	4.69	3225-007	3.57
H	3222-008	4.89	3225-008	3.77
I	3222-009	5.12	3225-009	3.91
J	3222-010	5.30	3225-010	4.04
K	3222-011	5.46	3225-011	4.16
L	3222-012	5.80	3225-012	4.43
M	3222-013	6.01	3225-013	4.59
N	3222-014	6.29	3225-014	4.82
O	3222-015	6.19	3225-015	5.26
P	3222-016	6.38	3225-016	5.44
Q	3222-017	6.76	3225-017	5.76
R	3222-018	7.08	3225-018	5.99
S	3222-019	7.41	3225-019	6.33
T	3222-020	7.86	3225-020	6.68
U	3222-021	8.32	3225-021	7.08
V	3222-022	8.53	3225-022	6.88
W	3222-023	8.94	3225-023	7.18
X	3222-024	9.48	3225-024	7.63
Y	3222-025	9.80	3225-025	7.86
Z	3222-026	10.24	3225-026	8.25

Threaded Rod 36" Length



SIZE	PLAIN OIL FINISH		ZINC PLATED	
	ORDER NO.	PRICE EACH	ORDER NO.	PRICE EACH
6-36	3215-806	\$ 1.80	3215-906	\$ 2.20
8-32	3215-808	1.80	3215-908	2.20
10-21	3215-810	1.80	3215-910	2.20
10-32	3215-811	1.98	3215-911	2.42
12-24	3215-812	1.97	3215-912	2.40
1/4-20	3215-816	1.97	3215-916	2.40
1/4-28	3215-817	2.17	3215-917	2.64
5/16-18	3215-820	2.52	3215-920	3.02
5/16-24	3215-821	2.78	3215-921	3.32
3/8-16	3215-824	3.00	3215-924	3.52
3/8-24	3215-825	3.30	3215-925	3.87
7/16-14	3215-828	3.52	3215-928	4.18
7/16-20	3215-829	3.87	3215-929	4.60
1/2-13	3215-832	4.18	3215-932	5.05
1/2-20	3215-833	4.60	3215-933	5.55
9/16-12	3215-836	5.80	3215-936	6.92
9/16-18	3215-837	6.38	3215-937	7.61
5/8-11	3215-840	5.80	3215-940	6.92
5/8-18	3215-841	6.38	3215-941	7.61
3/4-10	3215-848	9.67	3215-948	11.15
3/4-16	3215-849	10.64	3215-949	12.26
7/8-9	3215-856	11.96	3215-956	14.06
7/8-14	3215-857	13.16	3215-957	15.47
1-8	3215-864	14.93	3215-964	17.46
1-14	3215-866	16.43	3215-966	19.20
1-1/8-7	3215-872	24.91	3215-972	31.86
1-1/8-12	3215-873	27.40	3215-973	35.04
1-1/4-7	3215-880	29.64	3215-980	37.71
1-1/4-12	3215-881	32.60	3215-981	41.48
1-3/8-6	3215-888	39.50	3215-988	50.24
1-3/8-12	3215-889	43.45	3215-989	55.26
1-1/2-6	3215-896	48.48	3215-996	60.14
1-1/2-12	3215-897	53.33	3215-997	66.16

Brass Shim Stock

- Cold rolled, half-hard temper, CDA 260 alloy
- Rockwell hardness 30T 56/68.
- Meets CDA-260, SAE-CA260 and ASTM-B19 & B36 specifications.
- Tensile Strength: 57-67,000 p.s.i.
- Elongation: 18-42% in 2"



The unique quality about Precision Brand's Branded Shim® is that everything the user needs to know is clearly marked right on the material:

- Material type,
- Material thickness,
- Lot # for full traceability.

Whether in the field or on the shop floor, this clearly marked information is at your fingertips. It eliminates the need for a micrometer, and aids in keeping tool cribs organized, saving time and money.

THICK.	6" x 100" ROLLS		6" x 180" ROLLS	
	ORDER NO.	PRICE EACH	ORDER NO.	PRICE EACH
.0010	3226-010	\$21.89	3226-401	\$40.56
.0015	3226-015	22.02	3226-400	40.56
.0020	3226-020	22.71	3226-402	40.56
.0030	3226-030	23.43	3226-403	40.56
.0040	3226-040	24.70	3226-404	42.97
.0050	3226-050	25.57	3226-405	49.03
.0060	3226-060	26.33	3226-406	53.28
.0070	3226-070	27.59	3226-407	59.36
.0080	3226-080	29.12	3226-408	59.36
.0090	3226-090	31.28	3226-409	63.34
.0100	3226-100	34.04	3226-410	63.34
.0120	3226-120	36.87	3226-412	78.73
.0150	3226-150	42.57	3226-415	87.51
.0200	3226-200	48.11	3226-420	97.84
.0250	3226-250	57.50	3226-425	118.60
.0310	3226-310	68.04	3226-431	135.28

Brass Shim Assortments

12 PAK - .001", .0015", .002", .003", .004", .005", .006", .007", .008", .010", .012", .015"

15 PAK - .001", .0015", .002", .003", .004", .005", .006", .007", .008", .010", .012", .015", .020", .025", .031"

DESCRIPTION	ORDER NO.	PRICE EACH
12 pc. 6" x 12"	3226-359	\$44.47
15 pc. 6" x 12"	3226-360	60.52
12 pc. 6" x 18"	3226-361	85.92
15 pc. 6" x 18"	3226-362	127.34

Steel Shim Stock

- Made from full hard, cold rolled, low carbon C1008/C1010
- Rockwell hardness: <.069 RB 90 MIN., >.070 RB 84 MIN.
- Meets AISI C-1010 and ASTM A-109 specifications.
- Tensile Strength: N/A
- #2 Bright Finish



TYPICAL C .13 max, Mn .30-.60, ANALYSIS: P .04 max, S .05 max

THICK.	6" x 100" ROLLS		6" x 180" ROLLS		12" x 120" ROLLS	
	ORDER NO.	PRICE EACH	ORDER NO.	PRICE EACH	ORDER NO.	PRICE EACH
.0010	3227-010	\$14.02	3227-401	\$28.74	3227-501	\$52.64
.0015	3227-015	16.65	3227-400	28.74	-	-
.0020	3227-020	9.59	3227-402	18.52	3227-502	31.84
.0025	3227-025	10.10	3227-435	27.71	-	-
.0030	3227-030	12.22	3227-403	18.52	3227-503	39.24
.0035	3227-035	13.04	3227-440	26.66	-	-
.0040	3227-040	11.74	3227-404	19.37	3227-504	36.39
.0050	3227-050	10.76	3227-405	19.71	3227-505	34.10
.0060	3227-060	10.25	3227-406	21.27	3227-506	33.90
.0070	3227-070	10.71	3227-407	21.27	3227-507	35.32
.0080	3227-080	10.60	3227-408	21.79	3227-508	36.70
.0090	3227-090	11.12	3227-409	21.79	3227-509	37.58
.0100	3227-100	11.30	3227-410	23.02	3227-510	39.78
.0120	3227-112	11.04	3227-412	23.29	3227-512	37.84
.0135	3227-135	11.44	3227-413	23.29	-	-
.0150	3227-150	10.50	3227-415	23.29	3227-515	36.18
.0165	3227-165	11.99	3227-416	25.51	-	-
.0180	3227-180	11.87	3227-418	25.51	3227-518	41.55
.0200	3227-200	11.87	3227-420	27.60	3227-520	41.55
.0220	3227-220	12.39	3227-422	28.26	-	-
.0250	3227-250	12.70	3227-425	28.26	3227-525	44.05
.0310	3227-310	13.35	3227-431	30.23	3227-531	48.87



Steel Shim Flat Sheet Assortments

12 PAK - .001", .0015", .002", .003", .004", .005", .006", .007", .008", .010", .012", .015"
15 PAK - one each 6" x 18"
.001", .0015", .002", .003", .004", .005", .006", .007", .008", .010", .012", .015", .020", .025", .031"

DESCRIPTION	ORDER NO.	PRICE EACH
12 pc. 6" x 12"	3227-364	\$38.74
15 pc. 6" x 12"	3227-365	46.70
12 pc. 6" x 18"	3227-361	57.52
15 pc. 6" x 18"	3227-362	69.34

Blue Tempered Spring Steel Shim Stock

- High carbon 1095 hardened and tempered spring steel.
 - Meets AMS 5122, SAE 1095, AISI 1095 specifications.
 - Rockwell hardness C48-51. • Tensile Strength: 230,000 p.s.i.
- TYPICAL ANALYSIS: C .90-1.04, Mn .30-.50, P .040 max, S .050 max, Si .10-.30

THICK.	3" x 50" ROLLS		6" x 50" ROLLS		6" x 60" ROLLS	
	ORDER NO.	PRICE EACH	ORDER NO.	PRICE EACH	ORDER NO.	PRICE EACH
.0020	3229-502	\$28.23	-	-	-	-
.0030	3229-503	29.64	-	-	-	-
.0040	-	-	3229-504*	\$32.01	-	-
.0050	-	-	3229-505	28.23	3229-605†	\$ 20.38
.0060	-	-	3229-506	28.12	-	-
.0070	-	-	3229-507	28.68	-	-
.0150	-	-	-	-	3229-615†	23.63
.0250	-	-	-	-	3229-625†	31.27
.0300	-	-	-	-	3229-630†	34.35

* 5" x 50" † Limited Quantities

Stainless Steel Shim Stock

- Full hard, cold rolled, type 302
 - Rockwell hardness C45 (maximum).
 - Meets SAE 30302, AISI-T302, ASTM A-666
 - Ultimate tensile strength is 185,000 p.s.i. min.
- TYPICAL ANALYSIS: C .15 max, Mn 2.00 max, P .045 max, S .030 max, Si .75 max, Ni 8.00-10.00, Cr 17.00-19.00, N .10 max

Stainless Steel Assortment

Contains one 6" x 18" of each of the following: .001", .002", .003", .005", .008", .010", .015", .020"

DESCRIPTION	ORDER NO.	PRICE EACH
8 pc. 6" x 12"	3228-361	\$89.08

THICK.	6" x 50" ROLLS		6" x 60" ROLLS	
	ORDER NO.	PRICE EACH	ORDER NO.	PRICE EACH
.0005	3228-005	\$79.08	3228-400	\$113.86
.0010	3228-010	38.14	3228-401	54.91
.0015	3228-015	34.94	3228-435	50.32
.0020	3228-020	24.21	3228-402	34.88
.0030	3228-030	23.21	3228-403	33.39
.0040	3228-040	22.62	3228-404	32.55
.0050	3228-050	26.04	3228-405	37.48
.0060	3228-060	26.00	3228-406	37.41
.0070	3228-070	26.80	3228-407	38.61
.0080	3228-080	27.24	3228-408	39.20
.0090	3228-090	30.66	3228-409	44.17
.0100	3228-100	28.27	3228-410	40.69
.0120	3228-120	29.54	3228-412	42.53
.0150	3228-150	31.96	3228-415	46.01
.0200	3228-200	37.94	3228-420	54.65
.0250	3228-250	44.46	3228-425	64.01
.0310	3228-310	50.66	3228-431	72.97

Blue Tempered Assortment

Contains one 6" x 12" of each of the following: .005", .010", .015", .020", .025", .032"

DESCRIPTION	ORDER NO.	PRICE EACH
6 pc. 6" x 12"	3229-553	\$54.26

Flat Packs

(2 pcs./ 6" x 25")

Brass

THICK.	ORDER NO.	PRICE EACH
.012	3229-012	\$27.70
.015	3229-015	31.87
.020	3229-020	36.15
.025	3229-025	43.10
.031	3229-031	51.02
.032	3229-032†	47.36

† Limited Quantities

Steel Flat Pak

THICK.	ORDER NO.	PRICE EACH
.012	3229-112	\$12.10
.015	3229-115	11.85
.020	3229-120	13.31
.025	3229-125	14.25
.031	3229-131	14.96
.032	3229-132†	10.75

Blue Tempered

THICK.	ORDER NO.	PRICE EACH
.008	3229-308	\$33.50
.010	3229-310	36.53
.012	3229-312	37.68
.015	3229-315	40.96
.020	3229-320	47.67
.025	3229-325	54.49
.032	3229-332	60.38

Stainless Steel

THICK.	ORDER NO.	PRICE EACH
.008	3229-208	\$32.70
.010	3229-210	33.97
.012	3229-212	35.45
.015	3229-215	38.31
.020	3229-220	45.56
.025	3229-225	53.38
.031	3229-231	60.83

Slotted Shims

- Each shim marked with thickness in decimal and/or metric
- Eliminates misalignment of machinery
- .001"-.010" and .025-.25mm permanently etched; .015"-.125" and .040-2mm permanent stamp
- Shim thickness tolerances meet industry standards; conform to standard bolt/stud sizes

THICK.	PCS./PKG.	"A" 2 x 2 x 5/8		"B" 3 x 3 x 3/4		"C" 4 x 4 x 1-1/4	
		ORDER NO.	PRICE/PKG.	ORDER NO.	PRICE/PKG.	ORDER NO.	PRICE/PKG.
.001	20	3229-900	\$43.87	3229-920	\$52.62	3229-940	\$69.30
.002	20	3229-901	43.87	3229-921	52.62	3229-941	69.30
.003	20	3229-902	43.87	3229-922	52.62	3229-942	69.30
.004	20	3229-903	43.87	3229-923	52.62	3229-943	69.30
.005	20	3229-904	43.87	3229-924	52.62	3229-944	69.30
.010	20	3229-905	43.87	3229-925	52.62	3229-945	69.30
.015	10	3229-906	21.93	3229-926	26.32	3229-946	34.65
.020	10	3229-907	24.53	3229-927	26.32	3229-947	37.26
.025	10	3229-908	24.53	3229-928	26.32	3229-948	37.26
.050	5	3229-909	13.20	3229-929	16.45	3229-949	23.04
.075	5	3229-910	14.92	3229-930	21.93	3229-950	31.76
.100	5	3229-911	17.57	3229-931	24.70	3229-951	41.65
.125	5	3229-912	19.30	3229-932	27.42	3229-952	47.16



Std. Assortments

20 pcs.: one each of sizes from .001" to .125". 260 pc. assortment includes metal case

STYLE	ORDER NO.	PRICE EACH
A	3229-914	\$664.89
B	3229-934	835.45
C	3229-954	1209.55



Mini Assortments

10 pcs.: one each of sizes from .001" to .125"
130 pc. assortment includes metal case

STYLE	ORDER NO.	PRICE EACH
A	3229-915	\$380.62
B	3229-935	465.23
C	3229-955	662.81

Key Stock- 12" Length- Zinc-Plated & Stainless Steel-

Used to provide driving torque between shafts and pulleys, gears, sprockets, etc.

SQ. SIZE	ZINC-PLATED		STAINLESS STEEL	
	ORDER NO.	PRICE EACH	ORDER NO.	PRICE EACH
1/8	3229-800	\$1.11	3229-454	\$3.76
5/32	3229-804	1.39	-	-
3/16*	3229-808	1.16	3229-456	3.78
7/32	3229-812	1.75	-	-
1/4*	3229-816	1.44	3229-458	5.41
9/32	3229-820	2.24	-	-
5/16*	3229-824	1.92	3229-460	11.07
3/8*	3229-828	2.36	3229-462	12.30
7/16*	3229-832	3.04	3229-464	17.16
1/2*	3229-836	3.85	3229-466	22.53
9/16	3229-840	7.28	-	-
5/8	3229-844	6.13	3229-470	36.18
11/16	3229-848	10.68	-	-
3/4	3229-852	8.01	3229-474	44.87
13/16	3229-856	15.62	-	-
7/8	3229-860	10.67	3229-478	64.31
1	3229-864	13.02	3229-482	82.02
1-1/8	3229-868	23.70	-	-
1-3/16	3229-872	38.00	-	-
1-1/4	3229-876	30.63	-	-
1-3/8	3229-880	34.43	-	-
1-1/2	3229-884	41.12	-	-
1-3/4	3229-888	56.63	-	-
2	3229-892	80.89	-	-
asst.*	3229-895	68.57	3229-498	276.44

*Assortment contains one bundle of each size indicated

Metric Gold Dichromate plating on most sizes for clear identification

(MM) SIZE	ORDER NO.	PRICE EACH	SQ. SIZE	ORDER NO.	PRICE EACH
3MM*	3229-753	\$4.00	14MM	3229-764	\$14.71
4MM	3229-754	2.27	16MM	3229-766	14.71
5MM	3229-755	2.41	18MM	3229-768	18.17
6MM	3229-756	2.68	20MM	3229-770	22.71
7MM	3229-757	6.68	22MM	3229-772	53.45
8MM	3229-758	3.87	25MM*	3229-775	30.07
10MM	3229-760	5.62			
12MM	3229-762	8.55			

*Available in plain finish only.

Tool Wrap

- Type 321 soft annealed stainless steel
- Helps protect from scale and oxide buildup
- Eliminates decarburization buildup
- Resistant to chromium carbide precipitation
- Protects the surface of air hardening tool steels
- Can use in furnaces up to 1850°F
- Approx. 24 inches wide, in 50 and 100 ft. lengths

QTY.	ORDER NO.	PRICE EACH
100 sq. ft.	3229-990	\$488.18
50 sq. ft.	3229-989	256.96

Material is .002" thick and approximately 24" wide.

Feeler Gage

- Made from 1/2" wide spring steel stock, close grain, C1095 high carbon steel
- Thicknesses clearly etched every 6" in decimal and metric.
- Used in manufacturing and maintenance operations requiring the setting of close spacing, or checking very tight tolerances
- Hardened and tempered to RC 48-62

Strips 1/2" x 12"
12 Pcs. Per Package

SIZE	1/2" x 12" STRIPS		1/2" x 25" COILS		SIZE	1/2" x 12" STRIPS		1/2" x 25" COILS	
	ORDER NO.	PRICE EACH	ORDER NO.	PRICE EACH		ORDER NO.	PRICE EACH	ORDER NO.	PRICE EACH
.001	3225-801	\$4.90	3225-851	\$108.71	.017	3225-817	\$1.88	3225-867	\$31.62
.0015	3225-845	2.62	3225-895	53.24	.018	3225-818	1.88	3225-868	31.62
.002	3225-802	2.62	3225-852	53.24	.019	3225-819	1.88	3225-869	31.62
.003	3225-803	2.62	3225-853	53.24	.020	3225-820	1.88	3225-870	31.62
.004	3225-804	2.13	3225-854	38.31	.021	3225-821	1.88	3225-871	31.62
.005	3225-805	2.13	3225-855	38.31	.022	3225-822	1.88	3225-872	31.62
.006	3225-806	2.13	3225-856	38.31	.023	3225-823	1.88	3225-873	31.62
.007	3225-807	1.88	3225-857	31.62	.024	3225-824	1.88	3225-874	31.62
.008	3225-808	1.88	3225-858	31.62	.025	3225-825	1.88	3225-875	31.62
.009	3225-809	1.88	3225-859	31.62	.028	3225-828	1.88	3225-878	31.62
.010	3225-810	1.88	3225-860	31.62	.030	3225-830	1.88	3225-880	31.62
.011	3225-811	1.88	3225-861	31.62	.031	3225-831	1.96	3225-881	35.87
.012	3225-812	1.88	3225-862	31.62	.032	3225-832	1.96	3225-882	35.87
.013	3225-813	1.88	3225-863	31.62	.034	3225-834	1.96	3225-884	35.87
.014	3225-814	1.88	3225-864	31.62	.040	3225-840	1.96	-	-
.015	3225-815	1.88	3225-865	31.62	.050	3225-842	11.57	-	-
.016	3225-816	1.88	3225-866	31.62					

FEELER GAGE ASSORTMENTS				1/2" X 12" STRIPS		1/2" X 5" STRIPS		
SIZES INCLUDED				NO. OF PCS.	ORDER NO.	PRICE EACH	ORDER NO.	PRICE EACH
.001, .0015, .002, .003, .004, .005, .006, .007, .008, .009, .010, .012, .014, .015, .016, .018, .020, .022, .025, .030				20	3225-849	\$68.74	3225-850	\$29.73 (NEW Poc-Kit® Asst.)

Metric Feeler Gage Kit

- Made of C1095 close grain, high carbon spring steel
- Rockwell Hardness: C Scale 46-62
- Each blade is clearly etched with thickness
- Ends are rounded and edges are smooth for safety

Assortment contains: twenty 12.7mm (1/2") wide x 127mm (5") long blades

Sizes: .05mm, .10mm, .15mm, .20mm, .25mm, .30mm, .35mm, .40mm, .45mm, .50mm, .55mm, .60mm, .65mm, .70mm, .75mm, .80mm, .85mm, .90mm, .95mm, 1.00mm

Order No.: 3225-899...Price Each: \$47.70



Woodruff Key Sets

ORDER NO. 3229-980...\$43.90

Our Woodruff Keys are made of
1035 Carbon Steel. Kits contain the following:

QTY.	SIZE
15	1/8" x 1/2"
10	3/32" x 5/8"
30	1/8" x 5/8"
50	5/32" x 5/8"

QTY.	SIZE
10	1/16" x 3/8"
5	3/16" x 3/8"
20	3/32" x 3/8"
20	1/8" x 3/4"

QTY.	SIZE
10	1/8" x 3/8"
10	5/32" x 3/4"
10	1/16" x 1/2"
15	3/32" x 1/2"