

WORK HOLDING & TOOL STEEL



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Clamps - 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-UR and 210-SR. Spindle assembly and flanged washers supplied with "U" bar Models 207-UR and 210-UR.

MODEL NO.	ORDER NO.	OVERALL HEIGHT	HEIGHT UNDER BAR	OAL	HOLDING CAPACITY LBS.	PRICE EACH
207-UR	4352-078	6-29/32	1-1/4	4-37/64	500	\$52.36
210-UR	4352-108	8	1-11/16	6-39/64	750	75.68



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	OAL	HOLDING CAPACITY LBS.	PRICE EACH
225-UR	4352-251	1-59/64	1-21/64	7-9/64	500	\$48.50
235-UR	4352-351	2-35/64	1-45/64	10-17/32	750	82.76
305-UR	4353-051	1-7/16	1/2	2-1/4	150	38.21
307-UR	4353-071	2-7/16	7/8	3-39/64	350	52.75

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 341-R

MODEL NO.	ORDER NO.	OVERALL HEIGHT	OAL	DRAWING MOV'MT	HOLDING CAPACITY LBS.	PRICE EACH
323-R	4353-233	1-3/16	4	1-11/64	360	\$34.19
323-RSS	4353-234	1-3/16	4	1-11/64	360	62.04
331-R	4353-311	2-5/64	5-31/32	1-3/4	700	45.58
331-RSS	4353-318	2-1/64	6-11/64	2	700	84.40
341-R	4353-411	2-57/64	7-1/2	2-1/2	2000	66.74
341-RSS	4353-414	2-7/8	8-9/32	2-1/2	2000	135.28
375-R**	4353-751	4-3/16	9-5/8	3-1/2	4000	122.94
385-R**	4353-854	1-3/8	8-3/4	2-3/16	7500	154.64

** Latch plate optional

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

MODEL NO.	ORDER NO.	OVERALL HEIGHT	HEIGHT TO (*) OF PLUNGER	OAL	DRAWING MOV'MT	HOLDING CAPACITY LBS.	PRICE EACH
603-R	4356-032	3-27/64	31/32	4-11/16	1-1/2	600	\$70.33
630-R	4356-301	3-1/16	13/16	7-1/32	2	2500	133.09

Heavy Duty Vertical Hold Down Clamps

Features: High strength forged alloy steel clamping arm, Hardened steel pivot pins and bushings for long life, Large clearance under clamping bar, Black oxide finish.

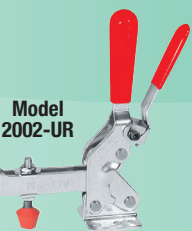


Model 5110-R

MODEL NO.	ORDER NO.	HEIGHT TO (*)	OAL	DRAWING MOV'MT	HOLDING CAPACITY LBS.	PRICE EACH
5110-R	4397-939	8.7	3.37	6.33	1150	101.95

Vertical Hold Down Clamps

Features: Longer handle with greater hand clearance, Longer clamp arm, Spindle contacts workpiece vertically, Bolts up to legacy model 202

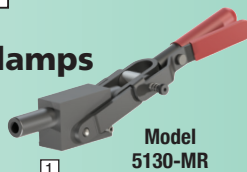


Model 2002-UR

MODEL NO.	ORDER NO.	OVERALL HEIGHT	HEIGHT UNDER BAR	OAL	HOLDING CAPACITY LBS.	PRICE EACH
2002-UR	4351-902	4.72	0.95	3.29	600	\$40.31
2007-UR	4351-905	7.17	1.25	4.82	1000	59.89
2010-UR	4351-908	9.08	1.7	6.09	1400	89.85

Heavy Duty Straight Line Action Clamps

Features: Hardened plungers, Reverse acting (handle rotates backward as plunger advances) for a low profile, keeps handle out of the work zone, Hardened steel pivot pins and bushings for long life, Black oxide finish



Model 5130-MR

MODEL NO.	ORDER NO.	OVERALL HEIGHT	HEIGHT TO (*)	OAL	DRAWING MOV'MT	HOLDING CAPACITY LBS.	PRICE EACH
5130-R	4397-947	3.63	1.38	11.11	1.9	5800	\$136.78

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.	HEIGHT TO (*)	OAL	DRAWING MOV'MT	HOLDING CAPACITY LBS.	PRICE EACH
351-R	4353-511	3/4	9-7/64	4	375	\$46.03

Pull Action Latch Style - Vertical Type

Model 324-R

MODEL NO.	ORDER NO.	OVERALL HEIGHT	OAL	DRAWING MOV'MT	HOLDING CAPACITY LBS.	PRICE EACH
324-R	4353-248	2-5/64	3-15/32	1-17/32	500	\$50.12
334-R	4353-343	2-35/64	4-1/8	2	1000	61.29
344-R	4353-443	2-25/64	5-49/64	2-1/2	2000	93.49

Heavy Duty Horizontal Hold Down Clamps

Features: High strength forged alloy steel clamping arm, Hardened steel pivot pins and bushings for long life, Black oxide finish



Model 5310-R

MODEL NO.	ORDER NO.	OVERALL HEIGHT	HEIGHT UNDER BAR	OAL	HOLDING CAPACITY LBS.	PRICE EACH
5305-R	4397-975	1.51	1.12	8.36	600	\$113.63
5310-R	4397-979	2.00	1.31	11.02	1300	158.28

Horizontal Hold Down Clamps

Features: Longer handle with greater hand clearance, Longer clamp arm, Spindle contacts workpiece vertically

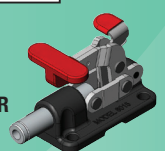


Model 2017-UR

MODEL NO.	ORDER NO.	OVERALL HEIGHT	HEIGHT UNDER BAR	OAL	HOLDING CAPACITY LBS.	PRICE EACH
2013-UR	4351-926	1.3	0.75	5.87	295	\$45.99
2017-UR	4351-927	1.95	0.98	8.65	560	59.93
2027-UR	4351-928	2.25	1.32	9.88	840	65.25

Straight Line Action Clamps

Features: Smallest machined cast base plunger clamp • Compact design combined with high holding capacity • Allow handle to fall below mounting plane to lock in retracted position



Model 6015-MR

MODEL NO.	ORDER NO.	OVERALL HEIGHT	HEIGHT TO (*)	OAL	DRAWING MOV'MT	HOLDING CAPACITY LBS.	PRICE EACH
6015-R	4356-114	1-19/32	1/2	2-61/64	45/64	560	\$64.45
6015-MR	4356-014	1-39/64	1/2	2-61/64	45/64	560	66.97

Clamps



Model Identification Code:

S Solid Holding Bar (bolt retainer furnished)

SS Stainless Steel

U Shaped Holding Bar

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

Straight-Line Action/Toggle Clamps

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

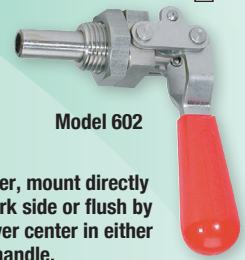


Model 601

MODEL NO.	ORDER NO.	OVERALL HEIGHT	HEIGHT TO (¢) 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	\$15.34
601-O	4356-016	1-3/16	1/2	2-55/64	5/8	100	28.36
601-SS	4356-019	1-3/16	1/2	2-5/8	5/8	100	37.69
6001	4356-003	1-17/64	1/2	2-5/8	5/8	150	29.84

Fully Retractable Plunger Clamps

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.



Model 602

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	\$21.68
602-SS	4356-029	3-9/64	2-7/16	3/4	200	83.15
604	4356-040	4-5/32	4-25/32	1-1/2	300	24.20
604-SS	4356-049	4-5/32	4-25/32	1-1/2	400	75.15
624-SS	4356-249	5-5/8	6-11/16	2-5/8	700	160.01

Compact Straight-Line Action Clamps

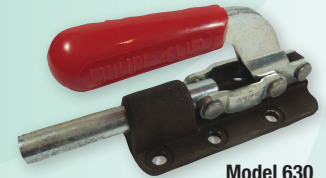


Model 6015

MODEL NO.	ORDER NO.	HEIGHT TO (*)	OVERALL LENGTH	DRAWING MOV'MT	HOLDING CAPACITY LBS.	PRICE EACH
6015-SS	4356-113	0.5	2.96	0.7	630	85.62
6015-M	4356-015	1/2	2-61/64	45/64	560	67.97
6015-MSS	4356-013	1/2	2-61/64	45/64	630	77.84

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.

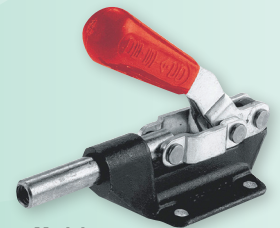


Model 630

MODEL NO.	ORDER NO.	OVERALL HEIGHT	HEIGHT TO (¢) 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	\$45.82
630	4356-300	3-3/32	13/16	7-1/32	2	2500	55.51
640	4356-400	4-3/8	1-1/4	12-21/32	4	7500	163.74

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

MODEL NO.	ORDER NO.	OVERALL HEIGHT	HUT. BASE TO (¢) OF PLUNGER	OVERALL LENGTH	PLUNGER TRAVEL	HOLDING CAPACITY LBS.	PRICE EACH
603-SS	4356-039	3-9/32	31/32	4-23/32	1-1/4	840	\$81.40
609	4356-090	3-1/4	31/32	5-7/16	1-1/4	300	29.29

Hold Down Clamps



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	\$36.47
2002-U	4352-002	4.73	0.95	3.29	600	33.26
2002-UB	4352-004	5.07	1.27	3.29	600	39.13
2007-U	4352-007	7.21	1.25	4.82	1000	46.77
2007-UB*	4352-006	7.64	1.68	4.82	1000	37.02
2010-U	4352-001	9.00	1.70	6.09	1400	73.42

*Code = 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	\$23.84
201-USS	4352-019	3-1/32	5/8	2-1/64	125	34.47
202-SS	4352-029	4-7/32	15/16	2-5/16	250	44.05
202-U	4352-026	4-7/32	15/16	2-47/64	200	24.77
202-UL	4352-120	4-7/32	15/16	3-17/64	200	28.95
202-USS	4352-039	4-7/32	15/16	2-47/64	250	44.25
207-L	4352-084	6-57/64	1-1/4	5-1/64	500	38.09
207-S	4352-080	6-57/64	1-1/4	3-3/4	500	32.37
207-U	4352-070	6-57/64	1-1/4	3-11/16	375	32.38
2002-U207	4352-202	5.01	1-1/4	3.29	600	36.16
207-UL	4352-074	6-57/64	1-1/4	5-13/32	375	32.27
207-USS	4352-079	5-5/8	1-1/4	4-3/8	450	60.69
210-S	4352-101	8	1-43/64	5-17/32	750	64.85
210-U	4352-100	8	1-43/64	5-17/32	600	47.91
210-USS	4352-109	8	1-43/64	5-17/32	750	84.74
247-S	4352-471	8-11/16	2	6-7/8	1000	88.61
247-U	4352-470	8-11/16	2	6-7/8	1000	74.87
267-U	4352-670	11-7/8	3-5/64	8-59/64	1200	125.03

Heavy Duty Vertical Handle Hold-Down Clamps 1

- High strength forged alloy steel clamping arm
- Hardened steel pivot pins and bushings for long life
- Black oxide finish



Model 5110

MODEL NO.	ORDER NO.	OVERALL HEIGHT	HEIGHT UNDER BAR	OVERALL LENGTH	CAPACITY LBS.	PRICE EACH
5905-B	4397-981	6.24	1.27	4.02	750	\$64.72
5910-B	4397-983	8.72	1.75	6.02	1600	89.72
LARGE CLEARANCE UNDER CLAMPING BAR						
5105	4397-932	6.54	2.54	4.13	700	48.73

Horizontal Handle Hold-Down Clamps



Model 2013-U

- 60% more holding capacity than legacy product • Robust Design
- 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	\$39.42
2017-U	4351-919	1.95	0.98	8.62	560	48.52
2027-U	4351-920	2.20	1.32	9.88	840	53.66

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	\$17.56
205-USS	4352-069	43/64	3/8	2-25/32	75	26.92
205-U	4352-050	43/64	5/16	2-21/32	60	18.34
205-USS	4352-059	43/64	5/16	2-21/32	75	26.38
206-S	4352-067	1-1/16	13/32	2-3/4	100	39.85
213-U	4352-130	1-25/64	23/32	4-1/8	150	24.07
213-USS	4352-139	1-25/64	23/32	4-1/8	150	37.00
215-U	4352-150	1-17/32	1	5-1/2	200	24.67
215-USS	4352-159	1-17/32	1	5-1/2	250	36.83
217-U	4352-170	1-61/64	31/32	6-9/16	200	30.14
217-USS	4352-179	1-61/64	31/32	6-9/16	250	44.74
225-U	4352-250	1-27/32	1-21/64	6-45/64	500	26.70
225-USS	4352-259	1-27/32	1-21/64	6-45/64	600	50.24
227-U	4352-270	2-7/16	1-19/64	7-9/16	500	33.22
227-USS	4352-279	2-7/16	1-19/64	7-9/16	600	60.09
235-U	4352-350	2-35/64	1-3/4	10-7/8	750	46.90
237-U	4352-370	3-13/64	1-5/8	10-43/64	750	63.88
245-U	4352-450	4-1/4	2-1/4	12-21/64	1000	102.31
305-U	4353-050	1-3/8	1/2	2-7/32	150	23.65
305-USS	4353-059	1-3/8	1/2	2-7/32	200	34.12
307-U	4353-070	2-13/32	7/8	3-39/64	350	37.00
307-USS	4353-079	2-13/32	7/8	3-39/64	350	56.53
309-U*	4353-090	3-35/64	1-19/64	5-3/16	750	45.81

*Model 309-U = 7

Heavy Duty Horizontal Handle Hold-Down Clamps 1

Model 5310



MODEL NO.	ORDER NO.	OVERALL HEIGHT	HEIGHT UNDER BAR	OVERALL LENGTH	CAPACITY LBS.	PRICE EACH
5305	4397-972	1.51	1.12	8.36	600	\$63.61
5305-B	4397-973	1.2	0.81	8.36	600	67.74
5310-B	4397-977	1.69	1	11.02	1300	105.01

Low Silhouette - Drop Handle Clamp



Model 317-S

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

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	\$51.73
317-S	4353-171	5-5/8	2-43/64	6-13/16	375	49.99

Pull Action Clamps



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

2 SS = 7

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 311

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.	HEIGHT TO (¢)	OVERALL LENGTH	DRAWING MOVEMENT	HOLDING CAPACITY LBS.	PRICE EACH
311	4353-110	2-1/16	9-33/64	3-3/8	1200	\$39.98

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	\$27.23
324-SS	4353-249	2-63/64	3-23/64	1-17/32	500	54.82
334	4353-340	3-55/64	4-1/4	2	1000	33.76
334-SS	4353-349	3-55/64	4-1/4	2	1000	64.88
344	4353-440	5-19/64	5-23/64	2-1/2	2000	52.35
344-SS	4353-449	5-19/64	5-23/64	2-1/2	2000	110.79

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

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 331-R

MODEL NO.	ORDER NO.	HEIGHT TO (¢)	OVERALL LENGTH	DRAWING MOVEMENT	HOLDING CAPACITY LBS.	PRICE EACH
330	4353-300	9/16	5-41/64	2-5/16	200	\$22.11
330-SS	4353-309	4-7/32	15/16	2-47/64	200	41.65
351	4353-510	3/4	8-9/16	4	375	16.88
351-B	4353-515	55/64	8-9/16	4	375	33.61
351-SS	4353-519	3/4	8-9/16	4	450	43.24
371	4353-710	750	11.89	5.38	750	46.78
371-SS	4353-719	750	11.89	5.38	750	116.61
381	4353-810	1-27/64	12	5-3/8	750	52.97

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	\$16.60
323-SS	4353-239	1-1/8	4	1-3/16	360	42.36
331	4353-310	1-31/32	4	2	700	22.07
331-SS	4353-319	1-31/32	5-5/8	2	700	50.30
341	4353-410	2-3/4	7-1/2	2-1/2	2000	35.27
341-SS	4353-419	2-3/4	7-1/2	2-1/2	2000	90.26
375†	4353-750	4-3/16	10-3/4	3-1/2	4000	86.49
385†	4353-850	3-3/4	8-5/8	2-3/16	7500	110.12
385-L	4353-851	1-27/32	10-1/4	2-3/16	7500	200.09

† Latch plate not included

Pull-Action Latch Clamps

Controlled Latch Clamps

Model 3051-R



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.

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.	ORDER NO.	HEIGHT TO (¢)	OVERALL LENGTH	DRAWING MOVEMENT	HOLDING CAPACITY LBS.	PRICE EACH
3051-R	4353-063	0.69	8.98	0.75	1500	\$ 90.51

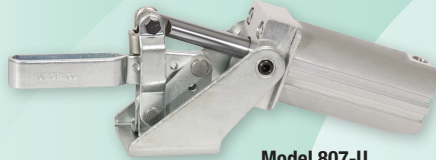
MODEL NO.	MAX. HOLDING CAPACITY	WEIGHT	EF:AF	DRAWING MOVEMENT	REPLACEMENT HOOK ASSEMBLY
3051 3051-R	1500lbf	1.0lb	12:1	0.75	3051208

Pneumatic Power Clamps



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

7

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	\$156.03
802-U	4358-020	2-11/32	1-1/16	7-25/64	200	182.89
807-S	4358-071	3	1-3/8	9-31/32	500	194.19
807-U	4358-070	3	1-3/8	9-7/32	375	194.19
810-S	4358-101	3-51/64	1-51/64	12-1/8	750	348.58
810-U	4358-100	3-51/64	1-51/64	12-9/32	600	313.31
817-S	4358-171	7-27/64	2-11/16	6-3/4	450	240.16
817-U	4358-170	7-27/64	2-11/16	6-3/16	350	229.91
827-S	4358-271	9-21/32	3-7/8	8-41/64	700	410.95
827-U	4358-270	9-21/32	3-7/8	8-3/4	600	407.15
847-U	4358-470	4-11/32	2-1/4	16	800	604.75

*Model 812-U= 6

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	\$ 997.55
871-2	4358-710	11-3/4	2-1/8	90	2000	997.55

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-lbf.]	PRICE EACH
81L12-10100	4358-130	104	28	12	220	\$564.22
81L16-10100	4358-132	119	30	16	528	612.86
81L20-10100	4358-134	151	35	20	885	713.36
81L25-10100	4358-136	151	35	25	885	713.36



Model 81L20-10100

Swing Clamps - 9500 Series

The 9500 Series Swing Clamps have been redesigned with flexible mounting options and an additional size with a larger bore.

- Ideal for tight spaces with an arm motion that rotates at the top of the stroke.
- Includes a rod weld cover to protect the rod throughout the entire stroke
- 9500 Swing Clamps can be mounted on any face with optional mounting kit (sold separately)
- Swing arms also sold separately



Model 9522-2L

6

MODEL NO.	ORDER NO.	CLAMPING STROKE	OVERALL HEIGHT	BASE WIDTH	CLAMPING FORCE AT 87PSI	SWING	PRICE EACH
9522-2L	4395-220	0.50	5.22	1.42	34lb.	LH	\$470.29
9522-2R	4395-221	0.50	5.22	1.42	34lb.	RH	470.29
9530-2L	4395-300	0.50	6.54	1.81	76lb.	LH	508.94
9530-2R	4395-302	0.50	6.54	1.81	76lb.	RH	508.94
9540-2L	4395-400	0.79	6.73	2.05	123lb.	LH	521.18
9540-2R	4395-402	0.79	6.73	2.05	123lb.	RH	521.18
9550-2L	4395-500	0.79	7.85	2.52	196lb.	LH	661.49
9550-2R	4395-502	0.79	7.85	2.52	196lb.	RH	661.49

Pneumatic Lever Clamps - 8700 Series

- Alternative clamping solution to swing clamps when space is limited
- Lever arm can be positioned left, forward, or right within the same clamp body
- Consistent clamping force over a range of part thickness
- Up to 25% more clamping force than comparably sized swing clamps
- Convenient mounting using the upper flange or through a clearance hole using optional jam nuts



Model 8725

6

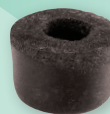
MODEL NO.	ORDER NO.	OVERALL HEIGHT	HEIGHT UNDER BAR	OVERALL LENGTH	CAPACITY LBS.	PRICE EACH
8725	4387-250	5.67	15-25	1.97	43	\$450.85
8732	4387-320	6.65	16-30	2.36	64	468.33
8740	4387-400	6.93	19-29	2.35	106	485.80
8750	4387-500	7.87	22-33	2.95	167	520.75

Polyurethane Caps- Flat Tipped



POLYURETHANE CAPS			
MODEL NO.	FOR SPINDLE DIAMETER	ORDER NO.	PRICE EACH
215219	1/4-20	4359-110	\$2.37
225219	5/16-18	4359-111	2.37

Neoprene Caps For Hex Head Spindles



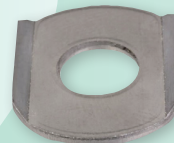
POLYURETHANE CAPS			
MODEL NO.	FOR SPINDLE DIAMETER	ORDER NO.	PRICE EACH
215119	1/4	4359-102	\$0.95
225119	5/16	4359-103	1.02
235119	3/8	4359-105	1.19

Hex Head Spindle Assembly with Locknuts



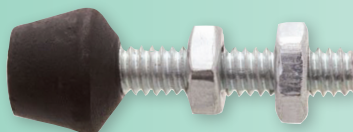
MODEL NO.	SIZE	ORDER NO.	PRICE EACH
207203	5/16-18 x 2-3/4	4359-304	\$2.22
210203	3/8-16 x 3	4359-305	2.69

Flanged Washers



MODEL NO.	SIZE	ORDER NO.	PRICE EACH
102111	For No. 10 Spindle	4359-121	\$0.55
215105	For 1/4 Spindle	4359-123	0.55
247109	For 1/2 Spindle	4359-126	1.45

Bolt Assembly with Bonded Cap & Locknuts



MODEL NO.	ORDER NO.	SIZE	LENGTH	PRICE EACH
201208	4359-816	10-32	1-3/8	\$2.66
201208-M	4359-824	M4 X 0.7	1-17/64	4.19
202208	4359-803	1/4-20	1-5/8	3.06
202208-M	4359-825	M6 X 1.0	1-47/64	5.11
205208-M	4359-836	M4 X 0.7	7/8	5.03
215208	4359-805	1/4-20	2-1/8	3.59
215208-M	4359-827	M6 X 1.0	2-1/8	5.66
225208	4359-807	5/16-18	2-3/16	3.59
225208-M	4359-828	M8 X 1.25	2-3/32	5.66
507208	4359-812	5/16-18	3"	3.66

MODEL NO.	ORDER NO.	SIZE	LENGTH	PRICE EACH
507208-M	4359-831	M8 X 1.25	3-17/64	\$5.88
240208	4359-809	3/8-16	3-1/4	4.83
240208-M	4359-830	M10 X 1.50	3-7/64	7.81
527208	4359-815	3/8-16	3-1/2	5.45
235208	4359-808	3/8-16	5-3/4	6.62
247208	4359-820	1/2-13	4"	7.47
247208-M	4359-835	M12 X 1.75	3-53/64	15.48
307208-M	4359-839	M8 X 1.25	1-9/64	5.59
305208-M	4359-838	M5 X 0.8	1-11/16	4.79

Sensor

Used along with pneumatic clamps to sense position of the cylinder piston.



14

MODEL NO.	ORDER NO.	MOUNT STYLE	CONNECTOR	FUNCTION	PRICE EACH
8EA-109-1	4358-195	T-Slot	M8 Male	Reed	\$142.40

Squeeze Action Clamps

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

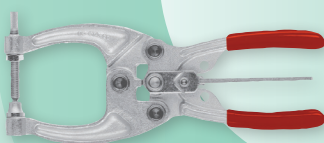
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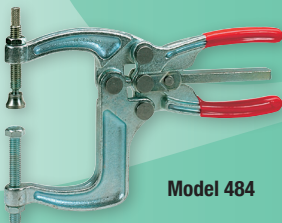
Model 441



Model 462



Model 482



Model 484

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	\$42.28
325-SS**	4353-259	8-11/16	1-25/32	1-1/4	800	109.25
441	4354-410	6-1/16	1-1/4	1-49/64	350	34.21
462	4354-620	8-1/2	1-3/4	2-23/32	700	51.62
484*	4354-840	9-1/16	3-53/64	2-9/16	1200	71.58

** SS = 7

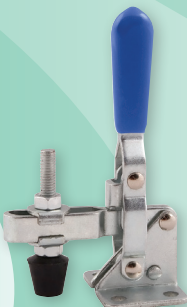
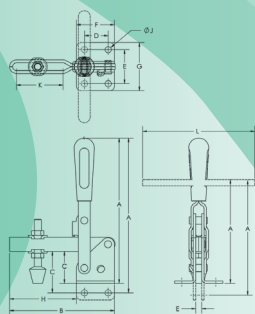
* Code = 14

Vertical Handle Toggle Clamps

4 CLAMP-RITE

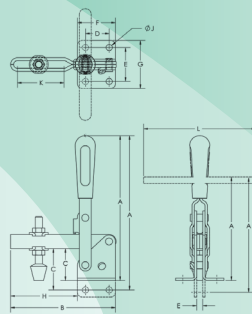
Model 11011CR

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



Model 11020CR

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

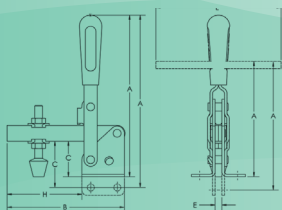


MODEL NO.	DE-STA-CO CROSS-REF. NO.		ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	BASE TYPE		BAR TYPE	HANDLE TYPE	
11011CR	201-U		4311-011	\$7.65	100	.13	Flanged		U-bar	Std.	
MODEL NO.	A	B	C	D	E	F	G	H	J	K	L
11011CR	3.38	2.07	0.73	0.63	0.95	1.00	1.32	1.06	0.17	0.77	-

MODEL NO.	DE-STA-CO CROSS-REF. NO.		ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	BASE TYPE		BAR TYPE	HANDLE TYPE	
11020CR	202		4311-020	\$8.35	200	.37	Flanged		Solid	Std.	
MODEL NO.	A	B	C	D	E	F	G	H	J	K	L
11020CR	4.01	2.5	0.98	0.51	1	0.98	1.5	1.28	0.21	-	-

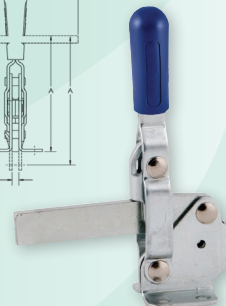
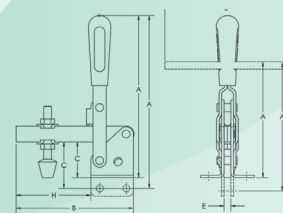
Model 11074CR

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



Model 11671CR

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

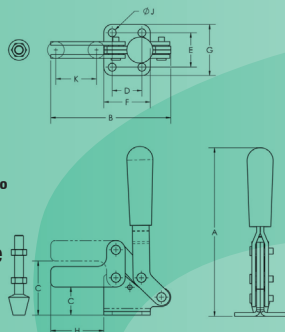


MODEL NO.	DE-STA-CO CROSS-REF. NO.		ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	BASE TYPE		BAR TYPE	HANDLE TYPE	
11074CR	207-S		4311-074	\$10.75	375	.75	Flanged		U-bar	Std.	
MODEL NO.	A	B	C	D	E	F	G	H	J	K	L
11074CR	5.9	3.75	1.26	0.74	1.25	1.37	1.8	2.24	0.27	-	-

MODEL NO.	DE-STA-CO CROSS-REF. NO.		ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	BASE TYPE		BAR TYPE	HANDLE TYPE	
11671CR	267-U		4311-671	\$34.95	1200	5.6	Flanged		U-bar	Std.	
MODEL NO.	A	B	C	D	E	F	G	H	J	K	L
11671CR	11.87	9	3.08	2	2.75	2.99	3.75	5.99	0.48	4.33	-

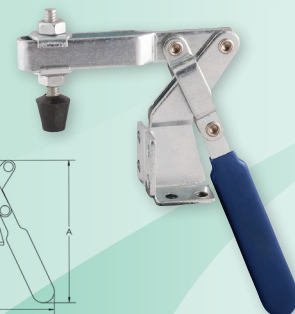
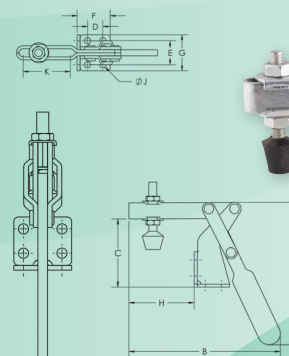
Model 11352CR

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



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		
11352CR	136-DI		4311-352	\$10.85	850	1.32	Flanged	high U-bar	Std.		
MODEL NO.	A	B	C	D	E	F	G	H	J	K	L
11352CR	6.85	4.22	2.26	1.26	1.44	1.97	2.2	2.25	0.33	1.53	-

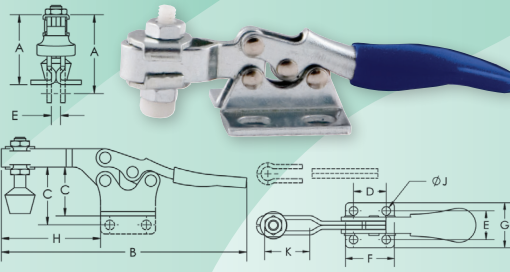
MODEL NO.	DE-STA-CO CROSS-REF. NO.		ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	BASE TYPE		BAR TYPE	HANDLE TYPE	
11170CR	317-U		4311-170	\$14.71	375	.88	Flanged		U-bar	Std.	
MODEL NO.	A	B	C	D	E	F	G	H	J	K	L
11170CR	6.37	5.86	2.8	0.64	1.02	1.39	1.54	2.55	0.26	2.11	-

Horizontal Handle Toggle Clamps

4 CLAMP-RITE

Models 14051CR- 14054CR

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

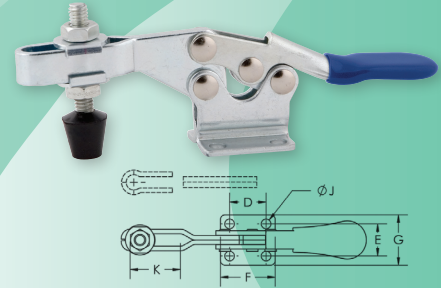


MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	BASE TYPE	BAR TYPE	HANDLE TYPE
14051CR	205-U	4314-051	\$5.95	60	.06	Flanged	U-bar	Std.
14054CR	205-S	4314-054	5.95	60	.06	Flanged	Solid	Std.

MODEL NO.	A	B	C	D	E	F	G	H	J	K
14051CR	0.70	3.10	0.34	0.53	0.42	0.95	0.98	0.78	0.17	0.48
14054CR	0.73	5.24	1.42	1.38	0.41	0.95	0.98	0.87	0.17	-

Model 14151CR

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

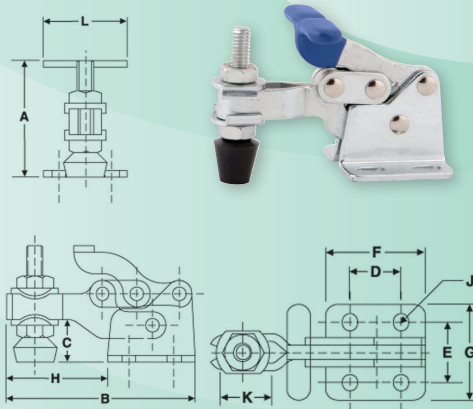


MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	BASE TYPE	BAR TYPE	HANDLE TYPE
14151CR	215-U	4314-151	\$8.11	200	.29	Flanged	U-bar	Std.

MODEL NO.	A	B	C	D	E	F	G	H	J	K
14151CR	1.52	5.90	0.96	0.98	0.86	1.46	1.36	2.29	0.21	1.51

Models 16051CR- 16071CR

- 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)

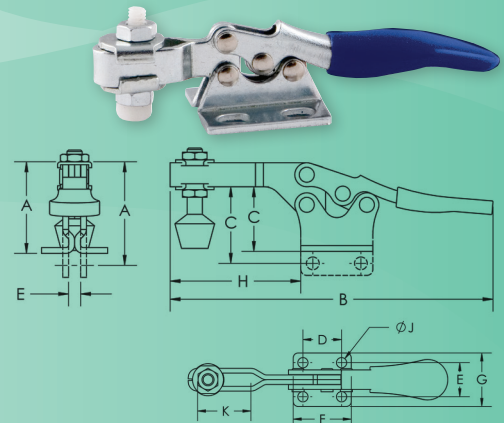


MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	BASE TYPE	BAR TYPE	HANDLE TYPE
16051CR	305-U	4316-051	\$7.40	150	.13	Flanged	U-bar	T-Handle
16071CR	307-U	4316-071	POA	350	.51	Flanged	U-bar	T-Handle

MODEL NO.	A	B	C	D	E	F	G	H	J	K	L
16051CR	1.47	2.30	0.65	0.53	0.66	1.03	1.03	1.26	0.17	0.44	1.32
16071CR	2.49	3.68	0.89	0.91	1.17	1.72	1.82	1.93	0.28	0.77	2.01

Model 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
14252CR	225-UB	4314-252	\$10.35	500	.7	Flanged	U-bar	Std.

MODEL NO.	A	B	C	D	E	F	G	H	J	K	L
14252CR	2.18	6.87	1.66	0.99	0.23	1.51	-	2.91	0.28	1.42	-

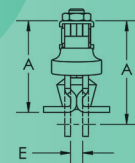
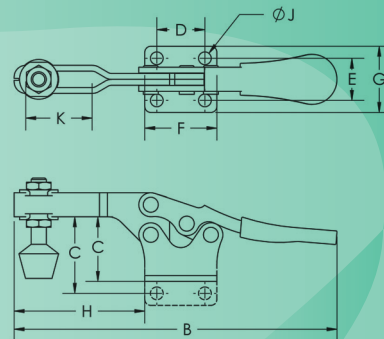
Model 14351CR

- 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
14351CR	235-U	4314-351	\$15.65	750	1.5	Flanged	U-bar	Std.

MODEL NO.	A	B	C	D	E	F	G	H	J	K	L
14351CR	2.55	10.4	1.73	1.62	1.6	2.25	2.23	4.29	0.31	2.74	-

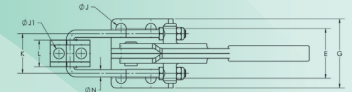
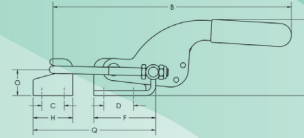


Pull Action Clamps

4 **CLAMP-RITE**

Models 12310CR, 12410CR

- Drawing Movement: 1.75" (12310), 2.50" (12410)
- Hook Size: M5 (12310), M8 (12410)
- Spindle Type: U-Hook
- Base Type: Flanged
- Bar Type: Standard

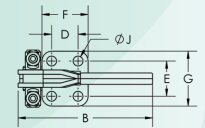
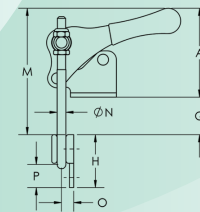
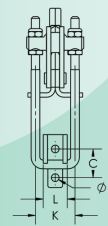


MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY. WT.	A	B	C	D	E	F
12310CR	331	4312-310	\$11.56	700 .50	1.91	6.56	0.48	0.78	1.25	1.52
12410CR	341	4312-410	18.55	2,000 1.5	2.75	8.48	0.76	1.62	1.44	2.39

MODEL NO.	G	H	J	K	L	M	N	O	P	Q MIN	Q MAX
12310CR	1.75	1.01	0.28	1.00	0.79	-	0.17	0.50	-	2.53	3.69
12410CR	2.12	1.17	0.34	1.75	1.17	-	0.31	0.83	-	4.39	5.37
12410CRSS	2.12	1.17	0.34	1.75	1.17	-	0.31	0.83	-	4.39	5.37

Models 12240CR, 12340CR

- Drawing Movement: 1.53" (12240), 2.00" (12340)
- Spindle Type: U-Hook
- Hook Size: M4 (12240), M5 (12340)
- Base Type: Flanged
- Bar Type: Standard

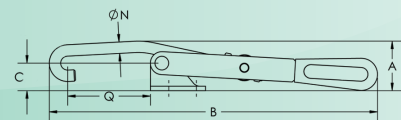
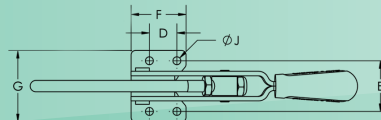


MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY. WT.	A	B	C	D	E	F
12240CR	324	4312-240	\$12.15	500 .25	2.22	3.15	0.57	0.51	0.87	1.02
12340CR	334	4312-340	14.90	1,000 .55	2.86	4.71	0.81	0.75	1.02	1.30

MODEL NO.	G	H	J	K	L	M	N	O	P	Q MIN	Q MAX
12240CR	1.39	1.00	0.21	0.86	0.54	3.43	0.12	0.20	0.43	0.54	1.20
12340CR	1.56	1.50	0.28	1.06	0.67	4.36	0.23	0.25	0.64	0.54	1.50

Models 12710CR, 12810CR

- Drawing Movement: 5.38" (12710), 6.13" (12810)
- Spindle Type: U-Hook
- Hook Size: M10 (12710), M12 (12810)



MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY. WT.	BASE TYPE	HANDLE TYPE
12710CR	371	4312-710	\$17.00	750 1.38	Flanged	Std.
12810CR	381	4312-810	18.40	1000 2.49	Flanged	Std.

MODEL NO.	A	B	C	D	E	F	G	J	N	Q MIN	Q MAX
12710CR	2.17	11.46	0.96	1.25	1.97	1.86	2.61	0.35	0.39	2.70	3.44
12810CR	2.62	13.80	1.82	1.13	2.49	2.13	3.30	0.41	0.47	2.75	3.60

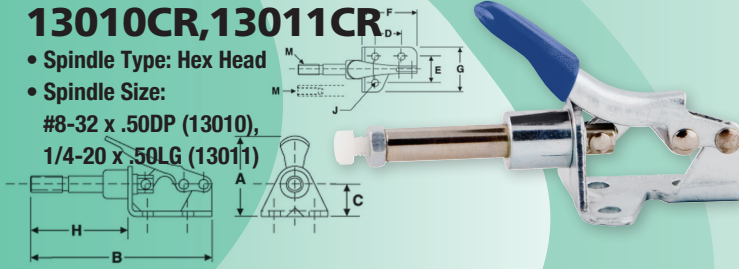
Straight-Line Action Clamps

4 CLAMP-RITE

Models

13010CR, 13011CR

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

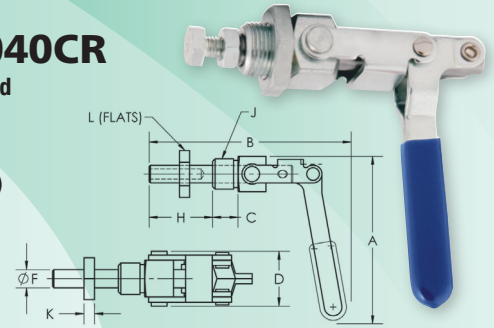


MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	PLNGR. WT.	BASEHANDLE TYPE	THD. TYPE
13010CR	610	4313-010	\$8.10	100	.11	Fling.	Std.
13011CR	601-0	4313-011	6.42	100	.11	Flanged	Std.

MODEL NO.	A	B	C	D	E	F	G	H	J	M
13010CR	1.57	2.67	0.52	0.63	0.61	1.31	1.07	1.35	0.17	0.25
13011CR	1.59	2.85	0.57	0.63	0.61	1.32	1.07	1.53	0.17	1/4-20

Models 13040CR

- 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.	PLNGR. WT.	MOUNT TRAVEL	HANDL TYPE
13040CR	604	4313-040	\$12.65	300	.60	1.50 Through-hole	Std.

MODEL NO.	A	B	C	D	F	H	J	K	L
13040CR	4.16	4.26	0.63	1.28	0.43	1.57	0.73	0.25	1.17

Model 13050CR

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

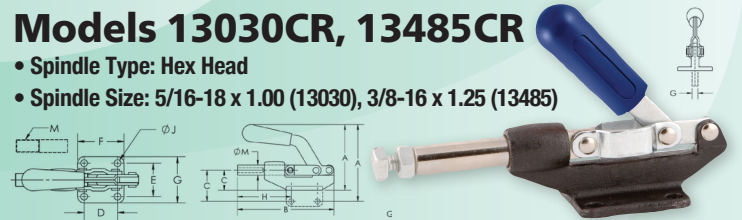


MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	PLNGR. WT.	BASEHANDLE TYPE	THD. TYPE
13050CR	605	4313-050	\$11.90	300	.66	Fling.	Std.

MODEL NO.	THD.	A	B	C	D	E	F	G	H	J	K
13050CR	Int.	3.14	5.45	0.98	1.38	1.64	3.55	2.22	1.90	0.22	0.47

Models 13030CR, 13485CR

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



MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	PLNGR. WT.	BASEHANDLE TYPE	THD. TYPE
13485CR	608	4313-485	\$25.75	850	1.28	Fling.	45° Int.

MODEL NO.	A	B	C	D	E	F	G	H	J	M
13485CR	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

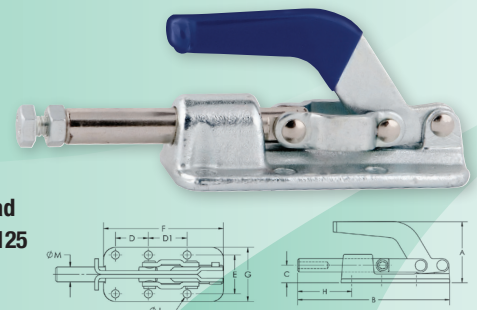


MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	PLNGR. WT.	BASEHANDLE TYPE	THD. TYPE
13090CR	609	4313-090	\$12.95	300	.76	Flanged	Std.

MODEL NO.	THD.	A	B	C	D	E	F	G	H	J	K
13090CR	Int.	4.10	5.00	0.85	1.57	1.33	3.27	1.95	1.71	0.26	0.47

Models 13070CR, 13300CR

- Spindle Type: Hex Head
- Spindle Size: 3/8-16 x 1.25



MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	PLNGR. WT.	BASEHANDLE TYPE	THD. TYPE
13070CR	607	4313-070	\$23.25	800	1.7	Flanged	Std.
13300CR	630	4313-300	29.25	2500	2.06	Flanged	Std.

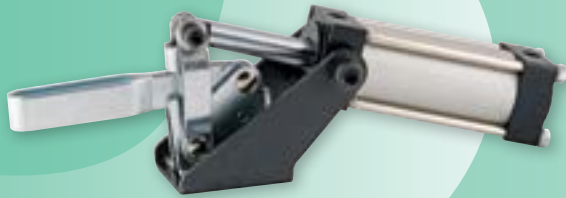
MODEL NO.	A	B	C	D	E	F	G	H	J	M
13070CR	3.28	6.10	0.68	1.38	1.62	4.30	2.18	1.86	0.28	0.51
13300CR	2.93	7.06	0.88	1.39	1.63	5.25	2.24	1.82	0.35	0.63

Pneumatic Hold-Down Clamps

4 CLAMP-RITE

Model 17101CR

- Spindle Type: Bonded Neoprene
- Spindle Size: 5/16-18 x 2.50 (17018)
3/8-16 x 3.50 (17101)

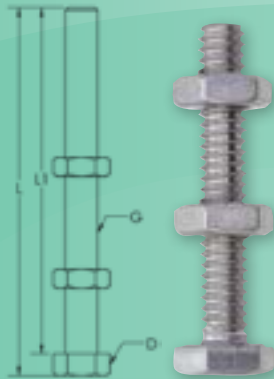


MODEL NO.	DE-STA-CO CROSS-REF. NO.	ORDER NO.	PRICE EACH	HLDG. CPCTY.	WT.	PORT SIZE	TYPE	BAR TYPE
17101CR	810-U	4317-101	\$120.16	600	4.00	1/8 NPT	Horizontal Adj. Hold-Down	

MODEL NO.	A	B	C	D	F	G	H	J	K
17101CR	3.69	15.43	1.74	1.25	1.78	4.00	3.74	0.33	2.31

Clamp Accessories

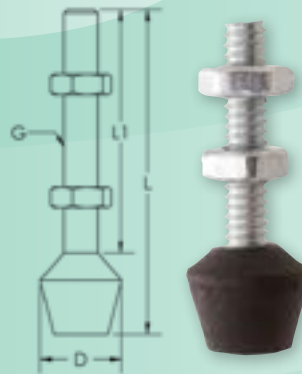
Hex Head Spindle



3

MODEL NO.	ORDER NO.	PRICE EACH	D	G	L	L1
19112CR	4319-112	\$0.82	0.43	1/4-20	1.65	1.50
19212CR	4319-212	0.89	0.49	5/16-18	2.71	2.50
19338CR	4319-338	1.02	0.55	3/8-16	3.23	3.00
19310CR	4319-310	1.82	0.74	1/2-13	3.31	3.00

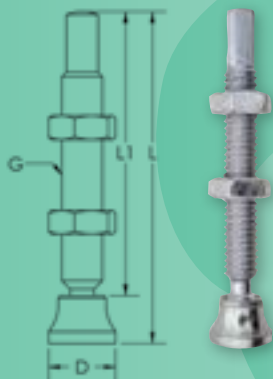
Bonded Neoprene Spindle



3

MODEL NO.	ORDER NO.	PRICE EACH	D	G	L	L1
19312	4319-312	\$2.00	0.88	3/8-16	3.44	2.60

Swivel Foot Spindle



3

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	\$0.90	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	1.35	1/2, M12	1.70	1.19	0.38	0.67

Clamps

WILTON[®] Series 400 Deep Throat Clamps

400 SERIES FEATURES:

- Drop Forged steel frame, regular-duty with extra deep throat.
- Both Black-oxide and copper spindles w/Perma-Pad[®] and are replaceable.
- Innovative frame geometry for maximum strength.
- Spark Duty Series features copper plated spindles for better resistance to welding spatter and corrosion.
- V-grooved anvil provides secure hold for all material shapes including round, square, and flat.

Wilton's exclusive Perma-Pad[®] Design.

WILTON[®] Series 800 Standard Throat Clamps

800 SERIES 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.
- Equipped with Wilton Perma-Pads[®] and a precision-cut, single lead acme thread.
- ACME rolled spindle and black oxide coating.

Wilton's exclusive Perma-Pad[®] Design.

Pittsburgh[®] C-Clamps

- Malleable Cast Reinforced Frame
- Black Oxide Spindle and Handle

3

DIMENSIONS	ORDER NO.	PRICE EACH
3 x 2"	7738-130	\$6.75
3 x 4-1/2"	7738-134	9.01
4 x 3"	7738-144	12.02
5 x 3-1/4"	7738-145	15.32
6 x 3-1/2"	7738-146	17.63
8 x 4"	7738-148	24.19

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.

2

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	\$68.60
103	0 - 3	2	5/8	8750	9540-509	144.90
104	0 - 4	2-3/8	5/8	8750	9540-510	164.20
106	2 - 6	2-1/2	5/8	8750	9540-511	230.00
108	4 - 8	2-5/8	5/8	8750	9540-512	297.50

WILTON[®] 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	\$43.20
540A-6	0 - 6	2-3/4	5/8	9540-647	64.30
540A-8	0 - 8	3-11/32	3/4	9540-648	71.10

WILTON[®] 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	\$9.80
51	0 - 1	1-1/2	9540-627	9.80
52	0 - 1-1/4	1-1/4	9540-628	9.80

2

WILTON CAT. NO.	CAPACITY	THROAT DEPTH	SPINDLE DIAMETER	MIN. PROOF TEST (LBS.)	SHIP WT. (LBS.)	ORDER NO.	PRICE EACH
400 SERIES							
402	0 - 2-1/8"	2-1/4"	9/16"	3500	2	9540-464	\$35.40
403	0 - 3	2-1/2	9/16	3500	3	9540-465	43.30
404	0 - 4-1/4	3-1/4	3/4	6200	4	9540-466	64.60
406	0 - 6-1/16	4-1/8	3/4	6600	6	9540-467	98.00
408	0 - 8-1/4	5	3/4	6900	7	9540-468	127.20
410	2 - 10-1/8	6	3/4	8000	11	9540-469	169.60
412	2 - 12-1/4	6-5/16	7/8	9300	15	9540-470	270.80
400 SERIES HI-VISIBILITY							
402SF	0 - 2-1/8"	2-1/4"	9/16"	3500	2	9540-477	\$33.50
403SF	0 - 3	2-1/2	9/16	3500	3	9540-478	44.00
404SF	0 - 4-1/4	3-1/4	3/4	6200	4	9540-479	64.40
406SF	0 - 6-1/16	4-1/8	3/4	6600	6	9540-480	102.40
408SF	0 - 8-1/4	5	3/4	6900	7	9540-481	128.40
410SF	2 - 10-1/8	6	3/4	8000	11	9540-482	174.90
412SF	2 - 12-1/4	6-5/16	7/8	9300	15	9540-483	286.00
400 SERIES SPARK DUTY (COPPER PLATED SPINDLE)							
402P	0 - 2-1/8"	2-5/8"	9/16"	3500	2	9540-536	\$35.90
403P	0 - 3	2-1/2	5/8	3500	3	9540-537	47.40
404P	0 - 4-1/4	3-1/4	3/4	6200	4	9540-538	66.40
406P	0 - 6-1/16	4-1/8	3/4	6600	6	9540-539	105.30
408P	0 - 8-1/4	5	3/4	6900	7	9540-540	129.40
410P	2 - 10-1/8	6	3/4	8000	11	9540-541	183.60
412P	2 - 12-1/4	6-5/16	7/8	9300	15	9540-542	300.00
WILTON CAT. NO.	CAPACITY	THROAT DEPTH	SPINDLE DIAMETER	MIN. PROOF TEST (LBS.)	SHIP WT. (LBS.)	ORDER NO.	PRICE EACH
800 SERIES							
803	0 - 3"	1-15/16"	9/16"	3000	1-5/8	9540-516	\$41.30
804	0 - 4	2-5/16	5/8	3700	2-7/8	9540-517	57.00
806	0 - 6	2-15/16	5/8	4500	3-7/8	9540-518	93.40
808	0 - 8	3-7/16	3/4	5200	6-3/4	9540-519	107.10

Jorgensen[®] MASTER-QUALITY CLAMPS



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.

3

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	\$11.65
108	8"	0	3-1/4"	3/4"	2,400 lbs.	9545-045	36.53
110	10"	1-1/2"	3-5/8"	13/16"	2,400 lbs.	9545-046	49.30
112	12"	3-7/16"	3-5/8"	13/16"	2,400 lbs.	9545-047	65.04

'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.

3

MFG. NO.	OPENING	DEPTH	NORMAL LOAD LIMIT	ORDER NO.	PRICE EACH
1413	1"	3"	400 lbs.	9545-251	\$ 4.16
1415	1-1/2"	1-1/2"	400 lbs.	9545-252	3.02
1422	2-1/2"	1-3/8"	600 lbs.	9545-254	4.21
1423	2"	3-1/2"	400 lbs.	9545-255	5.91
1425	2-1/2"	2-1/2"	600 lbs.	9545-256	4.87
1430	3"	2"	800 lbs.	9545-257	5.10
1480	8"	4"	1200 lbs.	9545-262	16.66

#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...\$ 8.81

Clamps



Spring Clamps

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

[3]

DIMENSIONS	ORDER NO.	PRICE EACH
1"	7738-301	\$2.14
2"	7738-302	3.50
3"	7738-303	7.45



Tool Maker's Parallel Clamps

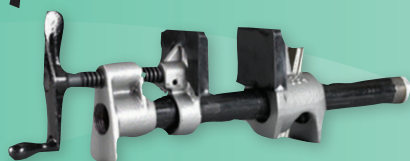
- Hardened & tempered jaws
- Clamps equipped with spring screw clip.
- Black finish.
- Useful for holding small work together when drilling, welding, assembling.

[2]

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



Pipe Clamps



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

[3]

DIMENSIONS	ORDER NO.	PRICE EACH
1/2"	7738-332	\$16.70
3/4"	7738-334	24.69
4 pc. Pipe Clamp Pad Set		
Order No. 7738-399 Price Each		\$1.73



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

[2]

WILTON CAT. NO.	CAPACITY MITER	JAW HEIGHT	JAW LENGTH	SHIP WT. LBS. EA.	ORDER NO.	PRICE EACH
AC-326	4-3/8"	2-3/8"	4-1/8"	18	9540-843	\$292.00



Vise Jaws

Magnefix Vise Jaw Caps

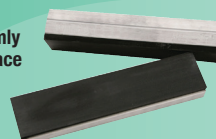
MODEL A-ALUMINUM MAGNEFIX JAW CAPS

- Aluminum alloy design includes six grooves to compensate for the unevenness of the workpiece
- Deeper V-groove for more secure clamping of circular workpieces
- Use together with rubber magnefix jaw caps



MODEL R-RUBBER FACE MAGNEFIX JAW CAPS

- Aluminum alloy with synthetic rubber cover
- Jaw cap conforms to workpiece and grips firmly without slipping while protecting work surface
- Use in combination with aluminum and prism jaw caps to clamp taper pins or tapered workpieces



MODEL P-PRISM MAGNEFIX JAW CAPS

- Aluminum alloy with synthetic rubber cover
- Jaw construction includes a 120° horizontal V-groove, three vertical V-grooves and a 90° groove for marking out and center punching
- Ideal for light tapping and thread cutting



[2]

WILTON NO.	JAW WIDTH	ORDER NO.	PRICE EA.
A-3.5	3-1/2	9540-399	\$30.25
A-4	4	9540-400	67.70
A-4.5	4-1/2	9540-401	69.80
A-5	5	9540-402	72.00
A-5.5	5-1/2	9540-403	78.60
A-6	6	9540-404	78.60
A-6.5	6-1/2	9540-405	82.90

WILTON NO.	JAW WIDTH	ORDER NO.	PRICE EA.
R-3.5	3-1/2	9540-423	\$33.15
R-4	4	9540-424	67.70
R-4.5	4-1/2	9540-425	72.00
R-5	5	9540-426	72.00
R-5.5	5-1/2	9540-427	78.60
R-6	6	9540-428	78.60
R-6.5	6-1/2	9540-429	80.80

WILTON NO.	JAW WIDTH	ORDER NO.	PRICE EA.
P-3.5	3-1/2	9540-415	\$33.15
P-4	4	9540-416	74.20
P-4.5	4-1/2	9540-417	80.80
P-5	5	9540-418	80.80
P-5.5	5-1/2	9540-419	85.10
P-6	6	9540-420	82.90
P-6.5	6-1/2	9540-421	87.30



Copper Jaw Caps



- Designed to avoid marring the surface of materials
- 100% copper jaw caps have polished faces and pliable copper extensions for a sure-grip fit

[2]

WILTON CAT. NO.	JAW WIDTH	ORDER NO.	PRICE EACH
404-3	3"	9540-389	\$ 61.80
404-3-1/2	3-1/2	9540-390	81.90
404-4	4"	9540-391	85.50
404-4-1/2	4-1/2	9540-392	87.30
404-5	5"	9540-393	123.70
404-5-1/2	5-1/2	9540-394	151.00
404-6	6"	9540-395	176.40
404-6-1/2	6-1/2	9540-396	207.40

Bar Clamps

Jorgensen
MASTER-QUALITY CLAMPS

Steel Bar Clamps and Pads



FEATURES FOR LIGHT AND MEDIUM DUTY:

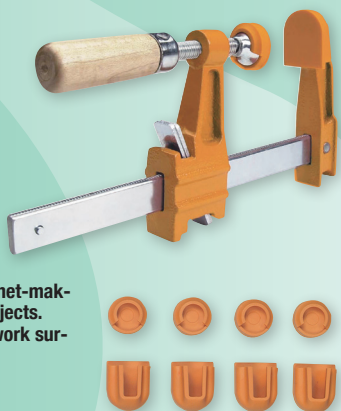
- Clutch discs- hardened, plated steel; two clutch discs and one clutch spring constitute the Multiple-Disc-Clutch.
- Swivel- 3/4" diameter; plated steel; ball-and-socket type.

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.



Pony & Jorgensen products are subject to availability.

2

MFG. NO.	MAX. OPENING CAPACITY	NORMAL LOAD LIMIT	ORDER NO.	PRICE EACH
LIGHT DUTY				
3708-LD	8"	300 lbs.	9545-562	\$8.38
3712-LD	12"	300 lbs.	9545-563	9.09
MEDIUM DUTY				
3706	6"	600 lbs.	9545-570	\$10.92
3712	12"	600 lbs.	9545-571	12.08
3724	24"	600 lbs.	9545-573	15.02
3730	30"	600 lbs.	9545-574	17.05
HEAVY DUTY				
3706-HD	6"	1,000 lbs.	9545-580	\$15.27
3712-HD	12"	1,000 lbs.	9545-581	16.25
3724-HD	24"	1,000 lbs.	9545-583	19.54
3730-HD	30"	1,000 lbs.	9545-584	21.12
3736-HD	36"	1,000 lbs.	9545-585	22.27
BAR CLAMP PADS (for light/med. duty only)				
7437	8 piece pack		9545-764	\$3.85

Jorgensen
MASTER-QUALITY CLAMPS

Steel "I" Bar Clamps



- 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.

2

MFG. NO.	MAX. OPENING CAPACITY	NORMAL LOAD LIMIT	ORDER NO.	PRICE EACH
7224	24"	7000 lbs.	9545-750	\$45.39
7236	36"	7000 lbs.	9545-752	50.67
7248	48"	7000 lbs.	9545-753	56.41

IRWIN

QUICK-GRIP Medium-Duty One-Handed Bar Clamps



FEATURES:

- Evenly distributes up to 300 lbs. of sustained clamping force
- I-beam bar to reduce flexing & bowing
- New grip design and Quick-Release™ trigger provide simple, one-handed operation

2

MFG. NO.	CLAMPING CAPACITY	SPREADING CAPACITY	THROAT DEPTH	ORDER NO.	PRICE EACH
1964717	6"	7-7/8" - 13-3/8"	3-3/16"	3255-450	\$30.34
1964718	12"	7-7/8" - 19-3/8"	3-3/16"	3255-451	35.26
1964719	18"	7-7/8" - 25-3/8"	3-3/16"	3255-452	39.48
1964720	24"	7-7/8" - 31-3/8"	3-3/16"	3255-453	43.30
1964741	36"	7-7/8" - 43-3/8"	3-3/16"	3255-454	51.31

Jorgensen
MASTER-QUALITY CLAMPS

Bar Clamps ISB™

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



2

MFG. NO.	BAR LENGTHS	ORDER NO.	PRICE EACH
33012	12"	9545-481	\$23.71
33024	24"	9545-483	29.29
33036	36"	9545-484	33.76

IRWIN

QUICK-GRIP Heavy-Duty One-Handed Bar Clamps



FEATURES:

- Evenly distributes up to 600lbs of sustained clamping pressure; one of the top performance One-Handed Bar clamps available
- Ideal for heavy-duty applications such as installation, demolition and rough glue-up
- Dual removable swivel jaws and non-marring, full-faced pads for even distribution of clamping force
- Pads can be removed for full contact of the swivel jaws to combat flexing at extreme pressure and to conform to irregular shapes
- New grip design and Quick-Release™ trigger provide simple, one-handed operation

2

MFG. NO.	CLAMPING CAPACITY	SPREADING CAPACITY	THROAT DEPTH	ORDER NO.	PRICE EACH
1974711	6"	9-1/4"-14-7/8"	3-5/8"	3255-460	\$39.29
1974712	12"	9-1/4"-20-7/8"	3-5/8"	3255-461	42.90
1974713	18"	9-1/4"-26-7/8"	3-5/8"	3255-462	48.62
1974714	24"	9-1/4"-32-7/8"	3-5/8"	3255-463	54.64
1974715	36"	9-1/4"-44-7/8"	3-5/8"	3255-464	66.54

Jorgensen
MASTER-QUALITY CLAMPS

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	\$46.66
8036	36"	1,000 lbs.	9545-774	53.69
8048	48"	1,000 lbs.	9545-775	59.30

Pittsburg
ALLEGHANY

Bar Clamps

3

DIMENSIONS	ORDER NO.	PRICE EACH
6 x 2-1/2"	7738-202	\$10.66
12 x 2-1/2"	7738-204	10.58
18 x 2-1/2"	7738-206	11.90
24 x 2-1/2"	7738-208	15.66
30 x 2-1/2"	7738-210	15.08
36 x 2-1/2"	7738-212	19.08



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

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.



2

MFG. NO.	MAX. OPENING CAPACITY	JAW LENGTH	REACH	ORDER NO.	PRICE EACH
3201-HT	1"	4"	1-1/4"	9545-364	\$1.90
3203-HT	3"	9"	3"	9545-404	8.28



Adjustable Handscrews

FEATURES:

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



2

MFG. NO.	JAW IN.	MAX. OPENING IN.	REACH IN.	ORDER NO.	PRICE EACH
0	8"	4-1/2"	4"	9545-004	\$26.82
1	10"	6"	5"	9545-005	30.46
2	12"	8-1/2"	6"	9545-006	37.92

Pony & Jorgensen products are subject to availability.

PONY

Band Clamp



Made in USA

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.

2

MFG. NO.	LOAD LIMIT	ORDER NO.	PRICE EACH
1215	1,000 lbs.	9545-240	\$15.04



Hold-Down Clamp



Made in USA

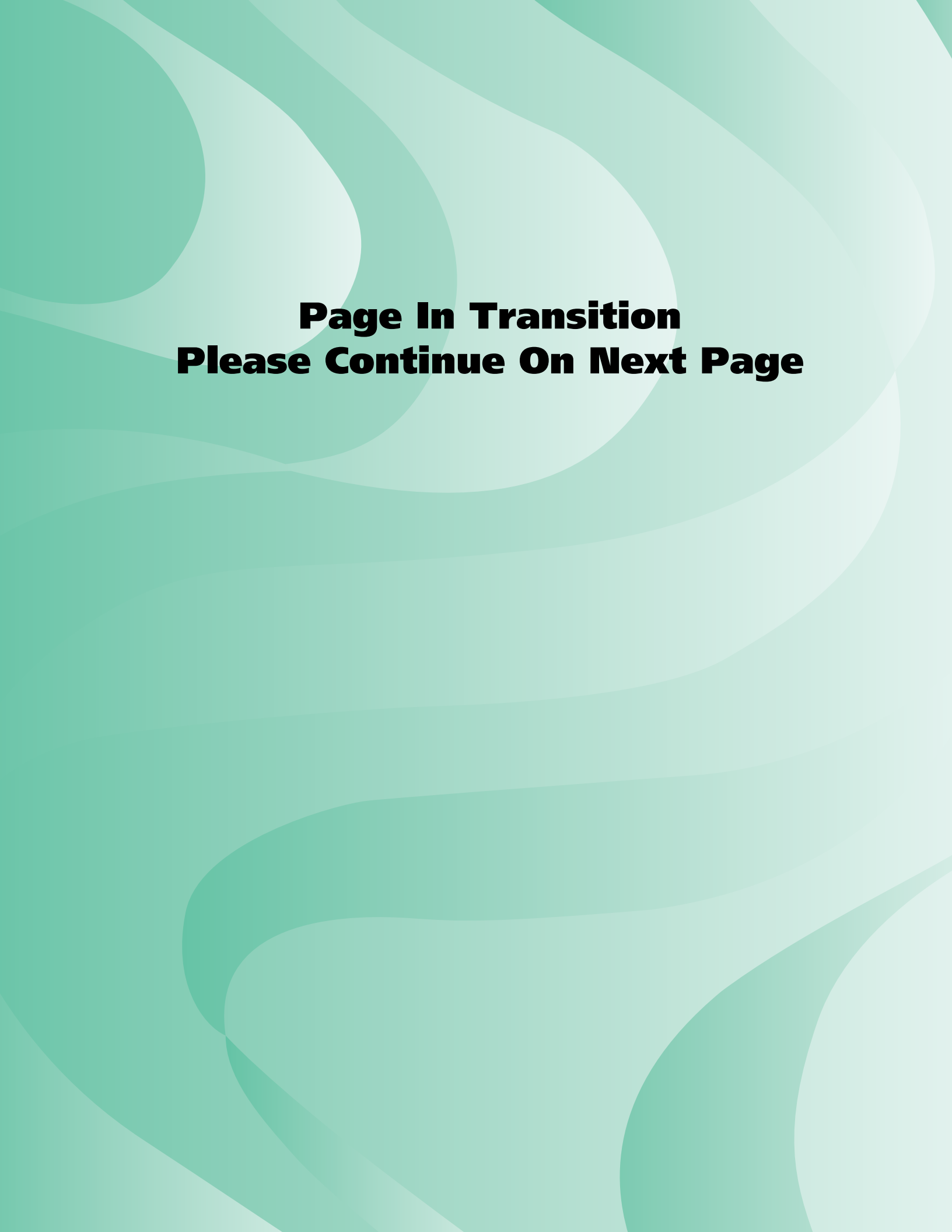
#1623 Hold-down clamps offer the advantage of bench-top and machine "surface" clamping. Designed to rotate 360 degrees around the holding bolt. Use anywhere on wood or metal surfaces.

2

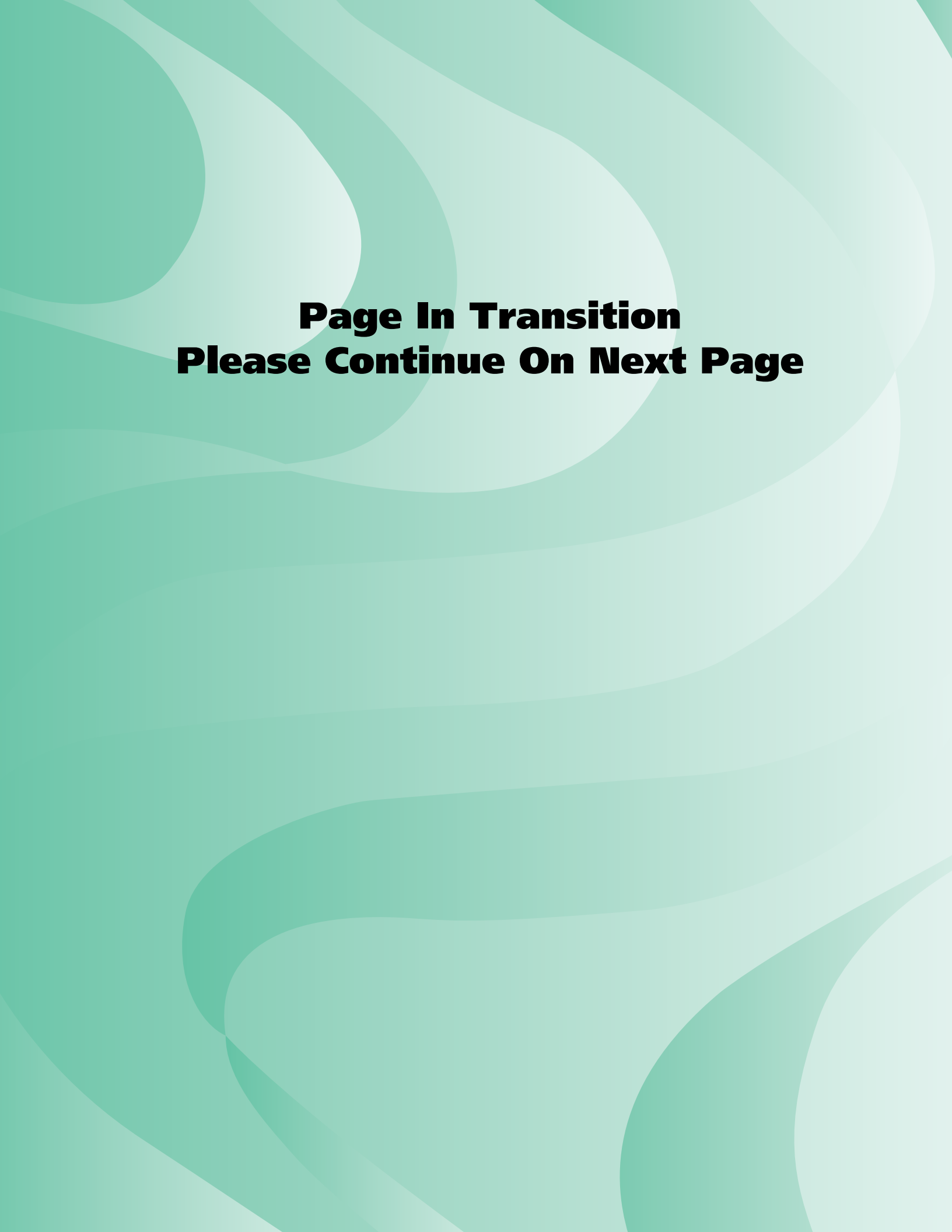
MFG. NO.	OPENING CAPACITY	DEPTH OF THROAT	SCREW DIA.	NORMAL LOAD LMT.	ORDER NO.	PRICE EACH
1623	3"	1-3/4"	9/16"	2,000 lbs.	9545-310	\$19.55

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Bench Vises

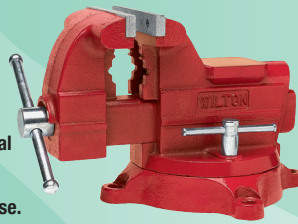


Utility Workshop Vises

Versatile, all-around vise recommended for the professional craftsman or home workshop enthusiast.

FEATURES:

- Replaceable, serrated steel top jaws.
- 180° swivel base.
- Large anvil work area.
- Built-in pipe jaws



2

WILTON CAT. NO.	JAW WIDTH	MAX OPENING	PIPE CAP.	JAW DEPTH	SHIP WT. (LBS.)	ORDER NO.	PRICE EACH
674U	4-1/2"	4"	1/8" - 2"	3-1/2"	19	9540-346	\$ 232.90
675U	5-1/2"	5"	1/8 - 2-1/2	4"	29	9540-347	287.50
676U	6-1/2"	5-1/2"	1/8 - 2-1/2	5"	41	9540-348	391.90
656UHD	6"	6"	1/8 - 3"	6"	63	9540-368	520.30
648UHD	8"	7-1/2"	1/8 - 3"	8"	79	9540-367	730.40



Cam Action Drill Press Vises

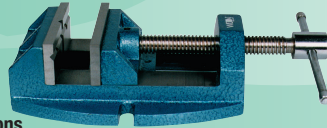


- Simple push or pull on the center bar knob sets the jaw in position
- Easy press locking lever cams the jaw ahead 3/32", exerting a holding pressure that is adjustable from 400 to 1100 lbs.
- Base is designed for clear through drilling applications
- Unique top locking lever can be raised/lowered to tighten/loosen against the work

WILTON CAT. NO.	JAW WIDTH	MAX OPENING	JAW DEPTH	HEIGHT	SHIP WT. (LBS.)	ORDER NO.	PRICE EACH
1204	4"	4-11/16"	1-5/16"	3-1/4"	18	9540-439	\$330.20
1206	6"	6-3/16"	1-13/16"	3-3/4"	35	9540-440	573.30
1208	8"	8-3/16"	2"	4-7/16"	53	9540-441	716.20



Drill Press Vises



FEATURES:

- The 1300 series is made of graded cast irons and offers a ground vise bed for a smooth, consistent jaw movement and hardened top u-groove jaws.
- The 1400 series is made of graded cast iron and features precision 90° machining of the vise's side bodies, which allows them to be used additionally as bases. A rapid action nut for fast loading of production material. The nut provides extra tightening capabilities. Sturdy main castings provides extra strength and increased durability.

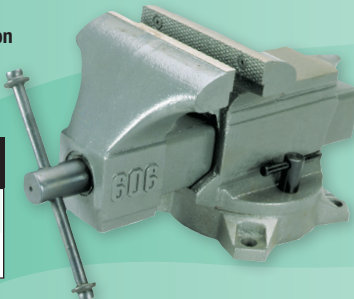
WILTON CAT. NO.	JAW WIDTH	JAW OPENING	JAW DEPTH	SHIP WT. (LBS.)	ORDER NO.	PRICE EACH
SERIES 1300						
1335	3"	1-7/8"	2-1/2"	6"	9540-442	\$145.40
1345	4"	2-1/8"	3-3/4"	12"	9540-443	209.80
1360	5"	2-1/8"	4-7/8"	24"	9540-444	299.70
SERIES 1400						
1445	4-1/2"	1-7/8"	4-3/4"	15"	9540-446	334.10
1460	6"	2-1/8"	6-3/4"	38"	9540-447	469.30



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

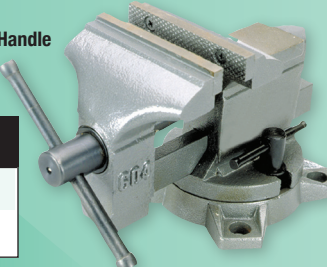
DIMENSIONS	ORDER NO.	PRICE EACH
4"	7738-614	\$ 105.17
5"	7738-615	145.98
6"	7738-616	210.47
7"	7738-617	243.38



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	\$ 30.07
4"	7738-604	61.07
5"	7738-605	111.10
6"	7738-606	155.85



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



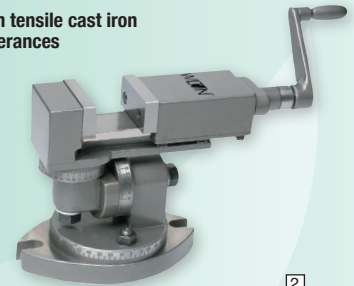
WILTON CAT. NO.	JAW WIDTH	JAW OPENING	JAW DEPTH	SHIP WT. (LBS.)	ORDER NO.	PRICE EACH
TLT/SP-50	2"	2"	5/16"	8"	9541-159	\$611.10
TLT/SP-75	3"	3"	1-15/16"	24"	9541-160	1009.00



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



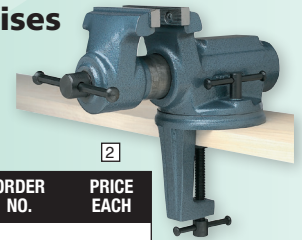
WILTON CAT. NO.	JAW WIDTH	JAW OPENING	JAW DEPTH	SHIP WT. (LBS.)	ORDER NO.	PRICE EACH
AMV/SP-75	3"	3"	1-15/16"	21"	9541-163	\$719.00
AMV/SP-100	4"	4"	1-9/16"	38"	9541-164	882.70



Super Junior Vises

FEATURES:

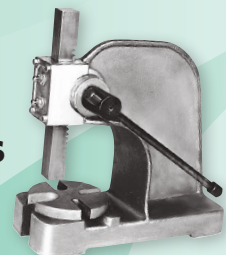
- Clamp-on models are portable.
- Top jaws are grooved and replaceable.
- Spindle is fully enclosed.
- Double lockdowns ensure stability.



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	\$182.50
CBV-100	4"	4"	15"	9540-377	216.90
SWIVEL BASE					
SBV-65	2-1/2"	2-1/2"	8"	9540-380	157.40
SBV-100	4"	4"	14"	9540-379	175.30



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	\$ 50.20
1	1 TON	12"	5" x 11"	5-1/4'	1-3/8"	2904-010	68.40
2	2 TON	17"	6-3/4" x 17"	8-1/2'	1-3/4"	2904-020	164.80
3	3 TON	21-1/2"	8" x 18"	12-1/2'	2-1/2"	2904-030	298.10

Drill Bushings

2

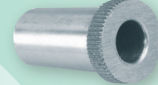
NOTE: Standard sizes in a given I.D. range are sizes listed in the decimal equivalent chart either as a fraction, number or letter size. Any other decimal or millimeter size within a given range is considered special and will be priced accordingly.

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

ANSI Tolerances – Sizes Not Listed Available on Request



TYPE "P"



TYPE "H"



TYPE "SF"

Headless Press Fit

O.D.				BODY LENGTH – LIST PRICE – UNGROUND BUSHINGS ARE AVAILABLE															
I.D. RANGE (STD. DRILL SIZE)		NOM.	ACTUAL	ANSI SYMBOL	1/4	5/16	3/8	1/2	5/8	3/4	1"	1-1/4	1-3/8	1-1/2	1-3/4	2"	2-1/8	2-1/2	3"
NOM.	DECIMAL				-4	-5	-6	-8	-10	-12	-16	-20	-22	-24	-28	-32	-34	-40	-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

O.D.				BODY LENGTH – LIST PRICE – UNGROUND BUSHINGS ARE AVAILABLE															
I.D. RANGE (STD. DRILL SIZE)		NOM.	ACTUAL	ANSI SYMBOL	1/4	5/16	3/8	1/2	5/8	3/4	1"	1-1/4	1-3/8	1-1/2	1-3/4	2"	2-1/8	2-1/2	3"
NOM.	DECIMAL				-4	-5	-6	-8	-10	-12	-16	-20	-22	-24	-28	-32	-34	-40	-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

O.D.				BODY LENGTH – LIST PRICE – UNGROUND BUSHINGS ARE AVAILABLE															
I.D. RANGE (STD. DRILL SIZE)		NOM.	ACTUAL	ANSI SYMBOL	1/4	5/16	3/8	1/2	5/8	3/4	1"	1-1/4	1-3/8	1-1/2	1-3/4	2"	2-1/8	2-1/2	3"
NOM.	DECIMAL				-4	-5	-6	-8	-10	-12	-16	-20	-22	-24	-28	-32	-34	-40	-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

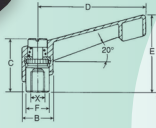
Boxed prices indicate counterbored bushings.

Jig Fixtures & Components

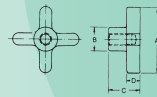
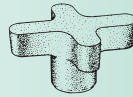
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Adjustable Clamping Levers Plastic Handle and Die-Cast Zinc Handle

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



						PLASTIC HANDLE			DIE-CAST HANDLE		
X THREAD	B	C	D	E	F	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	\$ 4.85	MH-101	3163-658	\$6.30
#10-32	.55	.95	1.65	1.30	.39	AH-102	3161-969	4.85	MH-102	3163-659	6.30
#1/4"-20	.55	.95	1.65	1.30	.39	AH-103	3161-970	4.85	MH-103	3163-660	6.30
# 1/4"-20	.71	1.22	2.56	1.77	.53	AH-104	3161-971	5.80	MH-104	3163-661	7.45
#5/16"-18	.71	1.22	2.56	1.77	.53	AH-105	3161-972	5.80	MH-105	3163-662	7.45
#5/16"-18	.86	1.41	3.07	2.12	.63	AH-106	3161-973	7.20	MH-106	3163-663	8.80
#3/8"-16	.86	1.41	3.07	2.12	.63	AH-107	3161-974	7.20	MH-107	3163-664	8.80
3/8"-16	.98	1.69	3.62	2.52	.75	AH-108	3161-975	8.95	MH-108	3163-665	10.35
1/2"-13	.98	1.69	3.62	2.52	.75	AH-109	3161-976	8.95	MH-109	3163-666	10.35
1/2"-13	1.18	1.98	4.25	2.95	.91	-	-	-	MH-112	3163-667	13.70
5/8"-11	1.18	1.98	4.25	2.95	.91	-	-	-	MH-113	3163-668	13.70

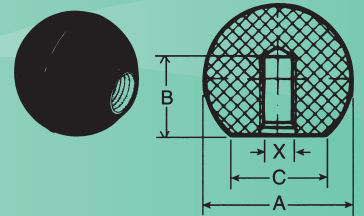


Hand Knobs — Zinc Plated

						CAST IRON			ALUMINUM		
A	B	C	D	R REAM	T TAPPED	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	\$6.15	HK 307A	3161-923	\$6.30
1-1/2	5/8	7/8	3/8	.3115		HK 308	3160-524	6.10	HK 308A	3161-924	6.30
1-1/2	5/8	7/8	3/8	BLANK		HK 309	3160-525	4.95	HK 309A	3161-925	5.05
2	3/4	7/8	3/8		3/8-16	HK 410	3160-526	7.60	HK 410A	3161-926	7.50
2	3/4	7/8	3/8	.3115		HK 411	3160-527	7.55	HK 411A	3161-927	7.50
2	3/4	7/8	3/8	.374		HK 412	3160-528	7.55	HK 412A	3161-928	7.50
2	3/4	7/8	3/8	BLANK		HK 413	3160-529	6.20	HK 413A	3161-929	6.05
2-1/2	1	2-1/4	1/2	BLANK		HK 515	3160-531†	5.35	-	-	-
2-1/2	1-1/8	1-1/2	1/2		1/2-13	HK 616	3160-532	9.85	HK 616A	3161-932	10.70
2-1/2	1-1/8	1-1/2	1/2	.499		HK 617	3160-533	9.85	HK 617A	3161-933	10.60
2-1/2	1-1/8	1-1/2	1/2		5/8-11	HK 618	3160-534	10.25	HK 618A	3161-934	10.60
2-1/2	1-1/8	1-1/2	1/2	.624		HK 619	3160-535	10.75	HK 619A	3161-935	10.95
2-1/2	1-1/8	1-1/2	1/2	.374		HK 620	3160-536	11.45	HK 620A	3161-936	10.85
2-1/2	1-1/8	1-1/2	1/2	BLANK		HK 621	3160-537	8.80	HK 621A	3161-937	9.00
3	1-1/4	1-3/4	1/2	BLANK		HK 725	3160-541†	5.10	-	-	-
3	1-1/2	1-3/4	1/2		3/4-10	HK 826	3160-542†	6.90	HK 826A	3161-942	17.60
3	1-1/2	1-3/4	1/2	.624		-	-	-	HK 827A	3161-943	17.60
3	1-1/2	1-3/4	1/2	.749		-	-	-	HK 828A	3161-944	17.60
3	1-1/2	1-3/4	1/2	BLANK		HK 829	3160-545†	5.55	HK 829A	3161-945	14.10

† Limited Quantities

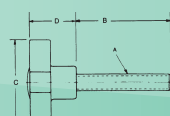
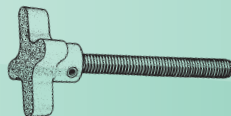
Plastic Ball Knobs



Plastic Ball Knobs have brass insert

A	B TAP	REF. NO.	ORDER NO.	PRICE EACH
3/4	#10-32	PB5	3160-809	\$2.25
1	1/4-20	PB9	3160-810	2.45
1	5/16-1/8	PB 10	3160-811	2.55
1-3/8	3/8-16	PB 11	3160-812	3.00
1-1/2	1/2-13	PB 13	3160-814	6.30

Hand Knob Screws



				CAST IRON			ALUMINUM		
A	B	C	D	REF. NO.	ORDER NO.	PRICE EACH	REF. NO.	ORDER NO.	PRICE EACH
1/4-20	1	1/2	7/8	HKS-2510	3160-546	\$7.80	HKS-2510A	3161-946	\$7.55
	1-1/2			HKS-2515	3160-547	7.95	HKS-2515A	3161-947	7.80
	1-3/4			HKS-2517	3160-548	8.75	HKS-2517A	3161-948	8.50
	2			HKS-2520	3160-549	9.25	HKS-2520A	3161-949	8.75
	3			HKS-2530	3160-550	9.85	HKS-2530A	3161-950	9.20
5/16-18	1-3/4			HKS-3117	3160-551	9.30	HKS-3117A	3161-951	9.55
	2-1/2			HKS-3125	3160-552	9.80	HKS-3125A	3161-952	10.20
	3			HKS-3130	3160-553	10.50	HKS-3130A	3161-953	10.50
3/8-16	1-1/4	2	7/8	HKS-3712	3160-554	9.80	HKS-3712A	3161-954	10.20
	1-3/4			HKS-3717	3160-555	9.90	HKS-3717A	3161-955	10.30
	2			HKS-3720	3160-556	10.60	HKS-3720A	3161-956	10.40
	2-1/2			HKS-3725	3160-557	10.75	HKS-3725A	3161-957	10.70
	3			HKS-3730	3160-558	11.60	HKS-3730A	3161-958	11.30
1/2-13	1-1/2	2-1/2	1-1/2	HKS-5015	3160-559	13.70	HKS-5015A	3161-959	12.75
	1-3/4			HKS-5017	3160-560	14.85	HKS-5017A	3161-960	13.30
	2			HKS-5020	3160-561	14.95	HKS-5020A	3161-961	13.45
	2-1/2			HKS-5025	3160-562	15.40	HKS-5025A	3161-962	14.25
	3			HKS-5030	3160-563	15.60	HKS-5030A	3161-963	14.70
5/8-11	1-3/4			HKS-6217	3160-564	15.65	HKS-6217A	3161-964	14.60
	2-1/2			HKS-6225	3160-565	16.40	HKS-6225A	3161-965	15.60
	3			HKS-6230	3160-566	16.50	HKS-6230A	3161-966	15.75
	3-1/2			HKS-6235	3160-567	17.20	HKS-6235A	3161-967	16.50

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	\$2.40
6-32	1"	3/16	3/8	4122	3164-826	2.40
8-32	1/2	3/16	3/8	4219	3164-828	2.35
8-32	1"	3/16	3/8	4228	3164-829	2.40
10-24	1/2	1/4	1/2	4310	3164-831	2.90
10-24	1"	1/4	1/2	4326	3164-833	2.95
10-32	1/2	1/4	1/2	4359	3164-835	2.90
10-32	1"	1/4	1/2	4374	3164-836	3.05
1/4-20	1/2	5/16	1/2	4410	3164-838	3.05
1/4-20	1"	5/16	1/2	4413	3164-840	3.00

Jig Fixtures & Components

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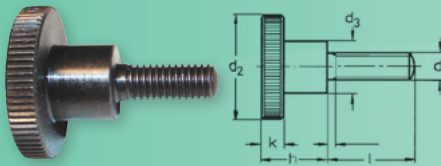
Adjustable Clamping Levers Plastic Handle w/ Stud and Die-Cast Zinc Handle w/ Stud

- 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	\$5.60	MH-301	3163-680	\$6.80
#10-32	.63	.55	.95	1.65	1.30	.39	AH-302	3161-987	5.60	MH-302	3163-681	6.80
#10-32	1.25	.55	.95	1.65	1.30	.39	AH-3027	3162-085	5.60	MH-3027	3163-732	6.90
1/4"-20	.78	.55	.95	1.65	1.30	.39	AH-303	3161-988	5.60	MH-303	3163-682	6.80
1/4"-20	1.25	.55	.95	1.65	1.30	.39	AH-3034	3162-087	5.60	MH-3034	3163-734	6.90
1/4"-20	1.57	.55	.95	1.65	1.30	.53	AH-3038	3162-091	6.60	MH-3038	3163-738	7.70
1/4"-20	.98	.71	1.22	2.56	1.77	.53	AH-3035	3162-088	7.45	MH-3035	3163-735	8.80
5/16"-18	.78	.71	1.22	2.56	1.77	.53	AH-3037	3162-090	7.45	MH-3037	3163-737	8.50
5/16"-18	1.26	.71	1.22	2.56	1.77	.53	AH-3039	3162-092	7.45	MH-3039	3163-739	8.50
5/16"-18	1.57	.71	1.22	2.56	1.77	.53	AH-304	3161-989	7.45	MH-304	3163-683	8.50
5/16"-18	2.48	.71	1.22	2.56	1.77	.53	AH-3045	3162-094	7.45	MH-3045	3163-741	8.50
3/8"-16	.78	.71	1.22	2.56	1.77	.53	AH-3047	3162-095	7.45	MH-3047	3163-742	8.50
3/8"-16	1.25	.71	1.22	2.56	1.77	.53	AH-3048	3162-096	7.45	MH-3048	3163-743	8.50
3/8"-16	1.57	.71	1.22	2.56	1.77	.53	AH-305	3161-990	7.45	MH-305	3163-684	8.50
5/16"-18	1.97	.86	1.41	3.07	2.12	.63	AH-3053	3162-097	9.30	MH-3053	3163-744	10.15
3/8"-16	.98	.86	1.41	3.07	2.12	.63	AH-3056	3162-098	9.30	MH-3056	3163-745	10.15
3/8"-16	1.26	.86	1.41	3.07	2.12	.63	AH-3058	3162-099	9.30	MH-3058	3163-746	10.15
3/8"-16	1.57	.86	1.41	3.07	2.12	.63	AH-306	3161-991	9.30	MH-306	3163-685	10.10
3/8"-16	1.97	.86	1.41	3.07	2.12	.63	AH-307	3161-992	9.30	MH-307	3163-686	10.10
3/8"-16	2.48	.86	1.41	3.07	2.12	.63	AH-3079	3162-102	9.30	MH-3079	3163-749	10.40
3/8"-16	1.57	.98	1.69	3.62	2.52	.75	AH-3075	3162-100	10.55	MH-3075	3163-747	12.55
3/8"-16	1.97	.98	1.69	3.62	2.52	.75	AH-3078	3162-101	10.55	MH-3078	3163-748	12.55
1/2"-13	1.25	.98	1.69	3.62	2.52	.75	AH-308	3161-993	10.55	MH-308	3163-687	12.55
1/2"-13	1.57	.98	1.69	3.62	2.52	.75	AH-3085	3162-103	10.55	MH-3085	3163-750	12.55
1/2"-13	1.97	.98	1.69	3.62	2.52	.75	AH-309	3161-994	10.55	MH-309	3163-688	12.55
1/2"-13	2.48	.98	1.69	3.62	2.52	.75	AH-310	3161-995	10.75	MH-310	3163-689	12.55
1/2"-13	1.57	1.18	1.98	4.25	2.95	.91	-	-	-	MH-321	3163-690	15.95
1/2"-13	2.48	1.18	1.98	4.25	2.95	.91	-	-	-	MH-322	3163-691	15.95
5/8"-11	1.57	1.18	1.98	4.25	2.95	.91	-	-	-	MH-324	3163-692	15.95
5/8"-11	2.48	1.18	1.98	4.25	2.95	.91	-	-	-	MH-325	3163-693	15.95

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	\$5.10	KK-2531SS	3163-106	\$8.55
1	1/4-20	3/8	1/2	5/8	1/4	KK-2537	3163-062	5.20	KK-2537SS	3163-107	8.95
1	1/4-20	1/2	1/2	5/8	1/4	KK-2550	3163-063	5.45	KK-2550SS	3163-108	9.40
1	1/4-20	5/8	1/2	5/8	1/4	KK-2562	3163-064	5.75	KK-2562SS	3163-109	9.95
1	1/4-20	3/4	1/2	5/8	1/4	KK-2575	3163-065	5.95	KK-2575SS	3163-110	10.75
1	1/4-20	1	1/2	5/8	1/4	KK-2510	3163-060	6.25	KK-2510SS	3163-105	11.40
1-1/4	5/16-18	1/2	5/8	3/4	1/4	KK-3150	3163-069	7.50	KK-3150SS	3163-114	13.10
1-1/4	5/16-18	5/8	5/8	3/4	1/4	KK-3162	3163-070	7.70	KK-3162SS	3163-115	13.60
1-1/4	5/16-18	3/4	5/8	3/4	1/4	KK-3175	3163-071	8.05	KK-3175SS	3163-116	14.45
1-1/4	5/16-18	1	5/8	3/4	1/4	KK-3110	3163-066	8.95	KK-3110SS	3163-111	16.15
1-1/4	5/16-18	1-1/4	5/8	3/4	1/4	KK-3112	3163-067	9.20	KK-3112SS	3163-112	17.50
1-1/4	5/16-18	1-1/2	5/8	3/4	1/4	KK-3115	3163-068	10.45	KK-3115SS	3163-113	18.65
1-3/8	3/8-16	5/8	3/4	1	5/16	KK-3762	3163-075	10.80	KK-3762SS	3163-120	21.20
1-3/8	3/8-16	3/4	3/4	1	5/16	KK-3775	3163-076	11.60	KK-3775SS	3163-121	22.50
1-3/8	3/8-16	1	3/4	1	5/16	KK-3710	3163-072	12.80	KK-3710SS	3163-117	22.95
1-3/8	3/8-16	1-1/4	3/4	1	5/16	KK-3712	3163-073	14.20	KK-3712SS	3163-118	23.75
1-3/8	3/8-16	1-1/2	3/4	1	3/4	KK-3715	3163-074	15.50	KK-3715SS	3163-119	24.10

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	\$2.45
M3	10	12	2.5	521203013	3165-051	2.50
M3	16	12	2.5	521203016	3165-052	2.55
M4	8	16	3.5	521604008	3165-053	2.80
M4	10	16	3.5	521604010	3165-054	2.85
M4	12	16	3.5	521604012	3165-055	2.90
M4	16	16	3.5	521604016	3165-056	3.20
M4	20	16	3.5	521604020	3165-057	3.60
M5	10	20	4	522005010	3165-058	3.40
M5	12	20	4	522005012	3165-059	3.50
M5	16	20	4	522005016	3165-060	3.60
M5	20	20	4	522005020	3165-061	4.25
M6	12	24	5	522406012	3165-062	4.45
M6	16	24	5	522406016	3165-063	4.50
M6	20	24	5	522406020	3165-064	4.70
M6	30	24	5	522406030	3165-065	6.25
M6	40	24	5	522406040	3165-066	7.50
M8	16	30	6	523008016	3165-067	6.50
M8	20	30	6	523008020	3165-068	7.20
M8	25	30	6	523008025	3165-069	7.45
M8	30	30	6	523008030	3165-070	9.20
M8	40	30	6	523008040	3165-071	10.95
M10	20	36	8	523610020	3165-072	9.90
M10	25	36	8	523610025	3165-073	11.25
M10	30	36	8	523610030	3165-074	12.95
M10	40	36	8	523610040	3165-075	15.50

Precision Thumb Screws w/Shoulder

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



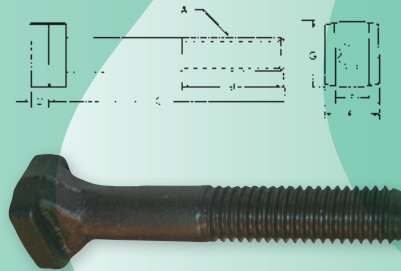
A THREAD	B	C	D	E	F	STEEL			STAINLESS STEEL		
						PART NO.	ORDER NO.	PRICE EACH	PART NO.	ORDER NO.	PRICE EACH
4-40	3/8	1/4	1/4	3/16	3/32	3101	3164-619	\$2.45	-	-	-
4-40	3/8	1/4	1/4	3/16	3/32	3102	3164-620	2.45	-	-	-
6-32	7/16	3/8	7/6	5/16	3/32	3202	3164-621	2.55	4202	3164-853	\$3.25
6-32	7/16	3/8	9/16	5/16	3/32	3204	3164-622	2.55	4204	3164-854	3.25
8-32	7/16	3/8	5/16	5/16	3/32	3205	3164-623	2.55	4205	3164-855	3.25
8-32	7/16	3/8	3/8	5/16	3/32	3206	3164-624	2.55	4206	3164-856	3.25
8-32	7/16	3/8	7/16	5/16	3/32	3207	3164-625	2.55	4207	3164-857	3.25
8-32	7/16	3/8	1/2	5/16	3/32	3208	3164-626	2.75	4208	3164-858	3.60
8-32	7/16	3/8	9/16	5/16	3/32	3209	3164-627	2.75	4209	3164-859	3.60
8-32	1/2	3/8	5/16	5/16	3/32	3301	3164-628	2.95	4301	3164-860	4.20
8-32	1/2	3/8	3/8	5/16	3/32	3302	3164-629	2.95	4302	3164-861	4.20
8-32	1/2	3/8	7/16	5/16	3/32	3303	3164-630	3.00	4303	3164-862	4.25
8-32	1/2	3/8	1/2	5/16	3/32	3304	3164-631	3.15	4304	3164-863	4.35
8-32	1/2	3/8	5/8	5/16	3/32	3305	3164-632	3.15	4305	3164-864	4.35
10-32	1/2	3/8	5/16	5/16	3/32	3401	3164-646	2.85	4401	3164-865	4.25
10-32	1/2	3/8	3/8	5/16	3/32	3402	3164-647	2.85	4402	3164-866	4.25
10-32	1/2	3/8	7/16	5/16	3/32	3403	3164-648	3.05	4403	3164-867	4.40
10-32	1/2	3/8	1/2	5/16	3/32	3403	3164-649	3.20	4404	3164-868	4.50
10-32	1/2	3/8	9/16	5/16	3/32	3405	3164-650	3.20	4405	3164-869	4.50
10-32	1/2	3/8	5/8	5/16	3/32	3406	3164-651	3.25	4406	3164-870	4.50

Jig Fixtures & Components

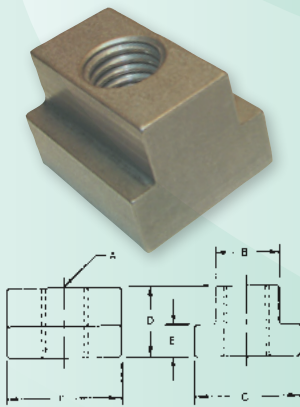
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A	B	C	D	E	F	G	REF. NO.	ORDER NO.	PRICE EACH
3/8-16	5/8	1	13/16	3/8	5/8	3/4	TB-3710	3161-640	\$13.25
3/8-16	1	1-1/2	13/16	3/8	5/8	3/4	TB-3715	3161-641	13.75
3/8-16	1-1/4	2	13/16	3/8	5/8	3/4	TB-3720	3161-642	14.40
3/8-16	1-1/2	2-1/2	13/16	3/8	5/8	3/4	TB-3725	3161-643	14.55
3/8-16	1-1/2	3	13/16	3/8	5/8	3/4	TB-3730	3161-644	14.95
3/8-16	1-1/2	3-1/2	13/16	3/8	5/8	3/4	TB-3735	3161-645	15.25
3/8-16	1-1/2	4	13/16	3/8	5/8	3/4	TB-3740	3161-646	15.75
1/2-13	1	1-1/2	1/4	1/2	13/16	15/16	TB-5015	3161-647	17.65
1/2-13	1-1/4	2	1/4	1/2	13/16	15/16	TB-5020	3161-648	18.65
1/2-13	1-1/2	2-1/2	1/4	1/2	13/16	15/16	TB-5025	3161-649	19.40
1/2-13	1-1/2	3	1/4	1/2	13/16	15/16	TB-5030	3161-650	19.70
1/2-13	1-1/2	3-1/2	1/4	1/2	13/16	15/16	TB-5035	3161-651	20.20
1/2-13	1-1/2	4	1/4	1/2	13/16	15/16	TB-5040	3161-652	21.10
1/2-13	1-1/2	5	1/4	1/2	13/16	15/16	TB-5050	3161-653	23.40
1/2-13	2	6	1/4	1/2	13/16	15/16	TB-5060	3161-654	24.20
5/8-11	1	1-1/2	5/16	5/8	1-1/64	1-1/8	TB-6215	3161-655	20.75
5/8-11	1-1/4	2	5/16	5/8	1-1/64	1-1/8	TB-6220	3161-656	21.05
5/8-11	1-1/2	2-1/2	5/16	5/8	1-1/64	1-1/8	TB-6225	3161-657	22.40
5/8-11	1-1/2	3	5/16	5/8	1-1/64	1-1/8	TB-6230	3161-658	23.10
5/8-11	1-1/2	3-1/2	5/16	5/8	1-1/64	1-1/8	TB-6235	3161-659	23.75
5/8-11	1-1/2	4	5/16	5/8	1-1/64	1-1/8	TB-6240	3161-660	25.50
5/8-11	1-1/2	5	5/16	5/8	1-1/64	1-1/8	TB-6250	3161-661	27.25
5/8-11	2	6	5/16	5/8	1-1/64	1-1/8	TB-6260	3161-662	28.90
5/8-11	3	8	5/16	5/8	1-1/64	1-1/8	TB-6280	3161-663	29.90
3/4-10	1-1/2	3	3/8	3/4	1-1/4	1-3/8	TB-7530	3161-664	29.10
3/4-10	1-1/2	3-1/2	3/8	3/4	1-1/4	1-3/8	TB-7535	3161-665	32.00
3/4-10	1-1/2	4	3/8	3/4	1-1/4	1-3/8	TB-7540	3161-666	34.00

T-Slot Bolts



T-Slot Nuts

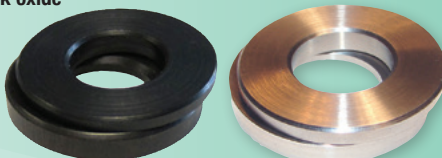
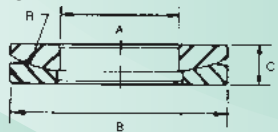


CARBON STEEL						STAINLESS STEEL					
A TAP	B	C	D	E	F	REF. NO.	ORDER NO.	PRICE EACH	REF. NO.	ORDER NO.	PRICE EACH
5/16-18	.343	5/8	13/32	7/32	3/4	TN 0	3161-129	\$4.15	TN 0SS	3170-365	\$7.30
5/16-18	.418	11/16	3/8	1/4	11/16	TN 00	3161-130	3.90	TN 00SS	3170-366	7.65
3/8-16	.430	3/4	1/2	7/32	1	TN 05	3161-131	3.65	TN 05SS	3170-367	7.95
3/8-16	.490	7/8	5/8	1/4	7/8	TN 10	3161-132	3.90	TN 10SS	3170-368	8.30
3/8-16	.543	7/8	5/8	5/16	1-1/4	TN 15	3161-133	4.20	TN 15SS	3170-369	8.30
1/2-13	.555	7/8	3/4	11/32	1-1/4	TN 20	3161-134	4.50	TN 20SS	3170-370	9.75
1/2-13	.562	7/8	3/4	5/16	1-1/4	TN 1	3161-135	4.60	TN 1SS	3170-371	11.10
1/2-13	.562	1-1/8	3/4	25/64	1-1/4	TN 2	3161-136	4.60	TN 2SS	3170-372	10.15
1/2-13	.625	1	3/4	3/8	1-1/4	TN 22	3161-137	4.60	TN 22SS	3170-373	9.95
1/2-13	.625	1-1/8	3/4	7/16	1-1/4	TN 23	3161-138	5.45	TN 23SS	3170-374	10.25
1/2-13	.665	1-1/8	3/4	13/32	1-1/4	TN 21	3161-139	4.60	TN 21SS	3170-375	10.30
5/8-11	.675	1-1/8	1-1/8	15/32	1-1/2	TN 30	3161-140	6.90	TN 30SS	3170-376	14.20
5/8-11	.687	1-1/4	1	15/32	1-1/2	TN 3	3161-141	6.60	TN 3SS	3170-377	13.75
5/8-11	.780	1-1/4	1	17/32	1-1/2	TN 31	3161-142	6.90	TN 31SS	3170-378	13.90
3/4-10	.800	1-3/8	1-3/8	17/32	1-3/4	TN 40	3161-143	9.40	TN 40SS	3170-379	20.00
3/4-10	.812	1-1/2	1	9/16	1-3/4	TN 5	3161-144	9.15	TN 5SS	3170-380	21.20
3/4-10	.968	1-5/8	1	9/16	1-3/4	TN 4	3161-145	9.15	TN 4SS	3170-381	20.60
3/4-10	1.030	1-5/8	1	9/16	1-3/4	TN 41	3161-150	9.40	TN 41SS	3170-382	22.10

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. Black oxide finish.



Precision Flat Washers

Carbon steel is case hardened. Black oxide finish.



CARBON STEEL											STAINLESS STEEL			
BOLT SIZE					REF. NO.	ORDER NO.	PRICE EACH					REF. NO.	ORDER NO.	PRICE EACH
	A	B	C	R										
1/4	9/32	5/8	3/16	3/4	SP 0	3161-009	\$2.90	SP 0SS	3170-187	\$5.50				
5/16	11/32	3/4	1/4	1	SP 01	3161-010	3.50	SP 01SS	3170-188	6.20				
3/8	13/32	7/8	1/4	1-1/4	SP 1	3161-011	3.60	SP 1SS	3170-189	7.30				
1/2	17/32	1-1/8	5/16	1-1/2	SP 2	3161-012	4.50	SP 2SS	3170-190	8.90				
5/8	21/32	1-3/8	5/16	1-3/4	SP 3	3161-013	6.20	SP 3SS	3170-191	11.30				
3/4	25/32	1-5/8	3/8	2-1/4	SP 4	3161-014	7.70	SP 4SS	3170-192	13.80				
7/8	15/16	1-3/4	3/8	2-1/2	SP 5	3161-015	9.20	SP 5SS	3170-193	17.40				
1	1-1/16	2	1/2	2-3/4	SP 6	3161-016	11.20	SP 6SS	3170-194	20.80				
1-1/8	1-3/16	2-1/4	1/2	3	SP 7	3161-017	17.50	SP 7SS	3170-195	32.80				
1-1/4	1-5/16	2-5/8	1/2	3	SP 8	3161-018	20.40	SP 8SS	3170-196	38.00				
1-1/2	1-9/16	2-7/8	9/16	3-1/2	SP 9	3161-019	25.00	SP 9SS	3170-197	47.00				
1-5/8	1-11/16	3-1/4	11/16	3-1/2	SP 10	3161-020	31.20	SP 10SS	3170-198	54.20				
1-3/4	1-13/16	3-1/4	11/16	3-1/2	SP 11	3161-021	34.60	SP 11SS	3170-199	68.50				
2	2-1/16	3-7/8	3/4	4	SP 12	3161-022	39.50	SP 12SS	3170-200	86.00				

CARBON STEEL							STAINLESS STEEL		
BOLT SIZE	A	B	C	REF. NO.	ORDER NO.	PRICE EACH	REF. NO.	ORDER NO.	PRICE EACH
1/4	9/32	5/8	1/8	FW 0	3160-474	\$0.79	FW 0SS	3170-100	\$1.68
5/16	11/32	3/4	1/8	FW 01	3160-475	0.88	FW 01SS	3170-101	1.85
3/8	13/32	7/8	1/8	FW 1	3160-476	0.90	FW 1SS	3170-102	2.10
1/2	17/32	1-1/8	1/8	FW 2	3160-477	0.96	FW 2SS	3170-103	2.80
5/8	21/32	1-3/8	1/8	FW 3	3160-478	1.15	FW 3SS	3170-104	3.35
3/4	25/32	1-5/8	5/32	FW 4	3160-479	1.52	FW 4SS	3170-105	3.60
7/8	29/32	1-3/4	5/32	FW 5	3160-480	1.78	FW 5SS	3170-106	4.60
1	1-1/32	2	3/16	FW 6	3160-481	2.45	FW 6SS	3170-107	6.20

Jig Fixtures & Components

Collar Nuts

LOW CARBON STEEL					STAINLESS STEEL		
A	B	C	D	E	REF. NO.	ORDER NO.	PRICE EACH
1/4-20	1/2	5/8	5/16	3/32	CN 0	3160-298	\$ 3.10
5/16-18	9/16	3/4	3/8	3/32	CN 00	3160-299	3.60
3/8-16	11/16	7/8	1/2	1/8	CN 10	3160-300	3.65
7/16-14	3/4	1	9/16	5/32	CN 15	3160-301	3.85
1/2-13	7/8	1-1/8	11/16	5/32	CN 20	3160-302	4.50
5/8-11	1-1/16	1-3/8	13/16	3/16	CN 30	3160-303	5.20
3/4-10	1-1/4	1-5/8	1	1/4	CN 40	3160-304	7.85
7/8-9	1-7/16	1-3/4	1-1/8	1/4	CN 50	3160-305	10.75
1-8	1-5/8	2	1-1/4	1/4	CN 60	3160-306	12.85
1-1/8-7	1-13/16	2-1/4	1-1/4	1/4	CN 70	3160-307	20.10
1-1/4-7	1-13/16	2-1/4	1-1/4	1/4	CN 80	3160-308	24.95
1/4-28	1/2	5/8	5/16	3/32	CN 100	3160-310	3.15
5/16-24	9/16	3/4	3/8	3/32	CN 105	3160-309	3.65
3/8-24	11/16	7/8	1/2	1/8	CN 110	3160-311	3.75
7/16-20	3/4	1	9/16	5/32	CN 115	3160-312	3.85
1/2-20	7/8	1-1/8	11/16	5/32	CN 120	3160-313	4.60
5/8-18	1-1/16	1-3/8	13/16	3/16	CN 130	3160-314	5.55
3/4-16	1-1/4	1-5/8	1	1/4	CN 140	3160-315	8.45
7/8-14	1-7/16	1-3/4	1-1/8	1/4	CN 150	3160-316	10.95
1-14	1-5/8	2	1-1/4	1/4	CN 160	3160-317	13.10
1-1/8-12	1-13/16	2-1/4	1-1/4	1/4	CN 170	3160-318	20.50
1-1/4-12	1-13/16	2-1/4	1-1/4	1/4	CN 180	3160-319	25.50
					CN 0SS	3170-045	\$ 5.30
					CN 00SS	3170-046	5.50
					CN 10SS	3170-047	5.90
					CN 15SS	3170-048	6.90
					CN 20SS	3170-049	7.90
					CN 30SS	3170-050	9.90
					CN 40SS	3170-051	13.80
					CN 50SS	3170-052	21.30
					CN 60SS	3170-053	25.75
					CN 70SS	3170-054	47.00
					CN 80SS	3170-055	63.00
					CN 100SS	3170-056	5.45
					CN 105SS	3170-057	5.75
					CN 110SS	3170-058	6.20
					CN 115SS	3170-059	7.10
					CN 120SS	3170-060	8.55
					CN 130SS	3170-061	10.15
					CN 140SS	3170-062	14.20
					CN 150SS	3170-063	21.60
					CN 160SS	3170-064	26.00
					CN 170SS	3170-065	48.25
					CN 180SS	3170-066	64.50

CARBON STEEL IS CASE HARDENED AND BLACK OXIDE FINISHED.

Swing Bolts

- 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.



STEEL							STAINLESS STEEL		
A	B	C	D	E	F	G	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	\$ 7.85
1/4-20	1/4	1-1/4	2-3/16	2-1/2	1/2	5/16	SWB-02	3161-120	9.55
5/16-18	5/16	1	1-5/8	2	5/8	3/8	SWB-03	3161-121	9.50
5/16-18	5/16	1-3/8	2-5/8	3	5/8	3/8	SWB-04	3161-122	10.30
3/8-16	3/8	1-3/8	2-5/8	3	5/8	3/8	SWB-1	3161-123	12.40
3/8-16	3/8	2	3	3-1/2	3/4	1/2	SWB-10	3161-126	13.00
1/2-13	1/2	1-5/8	2-1/2	3-1/8	1	5/8	SWB-2	3161-124	13.60
1/2-13	1/2	2-1/2	3-1/2	4-1/8	1	5/8	SWB-20	3161-127	17.65
5/8-11	5/8	1-5/8	2-3/4	3-1/2	1-1/4	3/4	SWB-3	3161-125	25.70
5/8-11	5/8	2-1/2	4	4-3/4	1-1/4	3/4	SWB-30	3161-128	29.80
							SWB-01SS	3170-350	\$ 13.80
							SWB-02SS	3170-351	16.75
							SWB-03SS	3170-352	17.35
							SWB-04SS	3170-353	19.90
							SWB-1SS	3170-354	23.40
							SWB-10SS	3170-357	27.30
							SWB-2SS	3170-355	33.30
							SWB-20SS	3170-358	39.50
							SWB-3SS	3170-356	47.50
							SWB-30SS	3170-359	52.00

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	\$7.95
3/8	5/8	2-1/2	1/2	1-1/8	9/32	1/4-20	1/32	CS-107	3160-374	8.10
1/2	1	2-3/4	7/16	1-1/2	11/32	5/16-18	9/32	CS-71	3160-365	11.10
1/2	1	3-1/4	13/16	1-1/2	11/32	5/16-18	9/32	CS-72	3160-366	12.00
1/2	1	3-3/4	1-3/16	1-1/2	11/32	5/16-18	9/32	CS-73	3160-367	13.85
5/8	1-1/4	3	3/4	1-11/16	13/32	3/8-16	5/16	CS-74	3160-368	14.10
5/8	1-1/4	4	1	2-3/16	13/32	3/8-16	5/16	CS-75	3160-369	14.20
5/8	1-1/4	5	1-1/2	2-11/16	13/32	3/8-16	5/16	CS-76	3160-370	16.90
5/8	1-1/4	6	2	3-3/16	13/32	3/8-16	5/16	CS-77	3160-371	17.00
5/8	1-1/4	4	1	2-1/4	17/32	1/2-13	7/16	CS-7	3160-340	17.10
5/8	1-1/4	4-1/2	1	2-1/4	17/32	1/2-13	7/16	CS-700	3160-392	17.35
5/8	1-1/4	5	1-1/2	2-1/4	17/32	1/2-13	7/16	CS-8	3162-342	16.90
5/8	1-1/4	6	1-1/2	2-1/4	17/32	1/2-13	7/16	CS-9	3160-341	18.50
3/4	1-1/2	4-1/2	1	2-1/2	21/32	5/8-11	1/2	CS-10	3160-342	18.50
3/4	1-1/2	5	1-1/2	2-1/2	21/32	5/8-11	1/2	CS-1000	3160-393	18.90
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	18.85
3/4	1-1/2	6	1-1/2	2-1/2	21/32	5/8-11	1/2	CS-12	3160-344	22.00

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	\$11.55
1/4	1/2	1-3/4	7/16	3/4	5/64	10-32	7/32	13/16	1504	3164-504	12.25
1/4	1/2	2	9/16	7/8	5/64	10-32	7/32	15/16	1505	3164-505	12.65
5/16	5/8	1-3/4	3/8	3/4	3/32	1/4-20	9/32	3/4	1628	3164-518	14.40
5/16	5/8	2	1/2	7/8	3/32	1/4-20	9/32	7/8	1629	3164-519	15.30
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	16.85
3/8	3/4	2	1/2	7/8	1/8	5/16-18	11/32	13/16	1753	3164-528	14.70
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	16.30
3/8	3/4	3	7/8	1-5/16	1/8	5/16-18	11/32	1-3/8	1755	3164-530	17.50
1/2	7/8	3	3/4	1-5/16	1/8	3/8-16	13/32	1-5/16	1878	3164-536	22.50
1/2	7/8	3-1/2	1	1-1/2	1/8	3/8-16	13/32	1-5/8	1879	3164-537	24.40
1/2	7/8	4	1-1/8	1-5/8	1/8	3/8-16	13/32	2	1879	3164-538	25.15

Jig Fixtures & Components

1

Stainless Steel Available Upon Request

Set-Up Studs



STEEL			
SIZE	LENGTH	ORDER NO.	PRICE EACH
1/4	1-1/2	3161-459	\$4.30
1/4	2	3161-460	4.25
1/4	2-1/2	3161-461	3.10
1/4	3	3161-462	3.70
1/4	3-1/2	3161-463	4.20
1/4	4	3161-464	4.75
5/16	1-1/2	3161-473	3.85
5/16	2	3161-474	3.75
5/16	2-1/2	3161-475	3.70
5/16	3	3161-476	3.75
5/16	3-1/2	3161-477	3.85
5/16	4	3161-478	3.90
5/16	4-1/2	3161-479	4.30
5/16	5	3161-480	4.35
5/16	6	3161-482	4.60
5/16	7	3161-483	4.90
5/16	8	3161-485	5.25
3/8	1-1/2	3161-487	3.75
3/8	2	3161-488	3.80
3/8	2-1/2	3161-489	3.80
3/8	3	3161-490	3.90
3/8	3-1/2	3161-491	4.00
3/8	4	3161-492	4.20
3/8	4-1/2	3161-493	4.45
3/8	5	3161-494	4.75
3/8	5-1/2	3161-495	4.90
3/8	6	3161-496	5.10
3/8	6-1/2	3161-497	5.35
3/8	7	3161-498	5.65

STEEL			
SIZE	LENGTH	ORDER NO.	PRICE EACH
3/8	7-1/2	3161-499	\$5.90
3/8	8	3161-500	6.15
1/2	1-1/2	3161-501	5.10
1/2	2	3161-502	5.05
1/2	2-1/2	3161-503	5.05
1/2	3	3161-504	5.10
1/2	3-1/2	3161-505	5.40
1/2	4	3161-506	5.65
1/2	4-1/2	3161-507	6.50
1/2	5	3161-508	7.10
1/2	5-1/2	3161-509	7.15
1/2	6	3161-510	7.25
1/2	6-1/2	3161-511	7.35
1/2	7	3161-512	7.40
1/2	7-1/2	3161-513	7.55
1/2	8	3161-514	7.65
1/2	9	3161-515	10.70
1/2	10	3161-516	13.25
1/2	12	3161-517	15.85
1/2	14	3161-518	17.25
5/8	1-1/2	3161-519	6.60
5/8	2	3161-520	6.45
5/8	2-1/2	3161-521	6.30
5/8	3	3161-522	7.05
5/8	3-1/2	3161-523	7.30
5/8	4	3161-524	7.40
5/8	4-1/2	3161-525	7.95
5/8	5	3161-526	8.40
5/8	5-1/2	3161-527	8.90
5/8	6	3161-528	9.05

STEEL			
SIZE	LENGTH	ORDER NO.	PRICE EACH
5/8	6-1/2	3161-529	\$9.35
5/8	7	3161-530	9.60
5/8	7-1/2	3161-531	9.75
5/8	8	3161-532	10.25
5/8	9	3161-533	15.75
5/8	10	3161-534	17.45
5/8	12	3161-535	17.80
5/8	14	3161-536	19.40
3/4	3	3161-538	8.10
3/4	4	3161-540	8.90
3/4	5	3161-542	11.50
3/4	6	3161-544	13.65
3/4	7	3161-546	14.30
3/4	8	3161-548	15.10
3/4	9	3161-549	23.40
3/4	10	3161-550	24.20
3/4	12	3161-551	26.50
3/4	14	3161-552	27.50
7/8	3	3161-553	11.25
7/8	4	3161-555	11.95
7/8	5	3161-557	12.20
7/8	6	3161-559	13.50
7/8	7	3161-561	14.20
7/8	8	3161-563	15.30
7/8	9	3161-564	18.10
7/8	10	3161-565	20.45
7/8	12	3161-566	23.20
7/8	14	3161-567	26.75

STEEL			
SIZE	LENGTH	ORDER NO.	PRICE EACH
1	3	3161-568	12.65
1	4	3161-570	13.55
1	5	3161-572	15.00
1	6	3161-574	15.30
1	7	3161-575	16.20
1	8	3161-577	17.75
1	9	3161-578	22.60
1	10	3161-579	25.30
1	12	3161-580	28.10
1	14	3161-581	30.80

† Limited Quantities

Eye Bolts

A THREAD	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	\$ 8.75	EB 0SS	3170-070	\$ 16.70
1/4-20	7/8	2-1/8	1/4	1/4	1/2	EB 05	3160-445	8.75	EB 05SS	3170-071	16.60
1/4-20	1-1/4	3	3/16	1/4	1/2	EB 010	3160-446	9.50	EB 010SS	3170-072	17.80
1/4-20	1-1/4	3	1/4	1/4	1/2	EB 020	3160-447	9.50	EB 020SS	3170-073	17.80
5/16-18	1-1/4	2-1/2	1/4	1/4	5/8	EB 030	3160-448	10.45	EB 030SS	3170-074	18.25
5/16-18	1-1/4	2-1/2	5/16	5/16	5/8	EB 040	3160-449	10.45	EB 040SS	3170-075	18.35
5/16-18	1-1/2	3-1/2	1/4	1/4	5/8	EB 050	3160-450	11.85	EB 050SS	3170-076	20.50
5/16-18	1-1/2	3-1/2	5/16	5/16	5/8	EB 060	3160-451	11.85	EB 060SS	3170-077	20.50
5/16-18	2	4	1/4	1/4	5/8	EB 061	3160-452	12.75	EB 061SS	3170-078	22.90
5/16-18	2	4	5/16	5/16	5/8	EB 062	3160-453	12.75	EB 062SS	3170-079	22.90
3/8-16	1-1/2	3-1/2	5/16	5/16	3/4	EB 070	3160-454	12.35	EB 070SS	3170-080	25.10
3/8-16	1-1/2	3-1/2	3/8	3/8	3/4	EB 080	3160-455	12.35	EB 080SS	3170-081	25.10
3/8-16	2	3-3/4	5/16	5/16	3/4	EB 090	3160-456	12.60	EB 090SS	3170-082	26.45
3/8-16	2	3-3/4	3/8	3/8	3/4	EB 100	3160-469	12.50	EB 100SS	3170-083	26.45
3/8-16	2-1/2	5	5/16	3/8	3/4	EB 101	3160-470	13.20	EB 101SS	3170-084	29.50
3/8-16	2-1/2	5	3/8	1/2	3/4	EB 102	3160-471	16.30	EB 102SS	3170-085	29.50
1/2-13	1-1/2	3-3/4	3/8	3/8	1	EB 1	3160-457	18.75	EB 1SS	3170-086	31.50
1/2-13	1-1/2	3-3/4	1/2	1/2	1	EB 5	3160-459	18.65	EB 5SS	3170-087	31.25
1/2-13	2	5	3/8	3/8	1	EB 10	3160-460	20.20	EB 10SS	3170-088	41.25
1/2-13	2	5	1/2	1/2	1	EB 15	3160-461	20.20	EB 15SS	3170-089	41.25
1/2-13	2-1/2	5-1/2	3/8	1/2	1	EB 16	3160-462	24.25	EB 16SS	3170-090	47.50
1/2-13	2-1/2	5-1/2	1/2	1/2	1	EB 17	3160-463	24.25	EB 17SS	3170-091	47.50
5/8-11	1-3/4	4-1/2	5/8	5/8	1-1/4	EB 20	3160-464	26.40	EB 20SS	3170-092	47.50
5/8-11	2	4-1/2	5/8	5/8	1-1/4	EB 2	3160-458	26.25	EB 2SS	3170-093	51.20
5/8-11	2-1/2	6	5/8	5/8	1-1/4	EB 25	3160-465	29.75	EB 25SS	3170-094	60.50
5/8-11	3	6	5/8	5/8	1-1/4	EB 26	3160-466	30.20	EB 26SS	3170-095	64.50
3/4-10	4-1/2	4-1/2	3/4	3/4	1-1/2	EB 30	3160-467	40.65	EB 30SS	3170-096	62.50
3/4-10	6	6	3/4	3/4	1-1/2	EB 35	3160-468	48.85	EB 35SS	3170-097	72.00



Stainless Steel



Steel - Black Oxide



Jig Fixtures & Components

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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.



END PRESSURES								
A	B	C	DIAM. D	LBS.		PART. NO.	ORDER NO.	PRICE EACH
				START	FULL			
#4-48	3/16	.020	.062	.12	.5	MBP-100	3163-508	\$5.70
#5-40	1/4	.020	.062	.12	.5	MBP-101	3163-509	5.55
#6-40	5/16	.023	.078	.5	1.0	MBP-102	3163-510	5.40
#8-36	11/32	.025	.093	.5	1.25	MBP-103	3163-511	5.20
#8-32	11/32	.025	.093	.5	1.25	MBP-104	3163-512	5.20
#10-32	33/64	.025	.093	.5	1.5	MBP-106	3160-751	4.90
#10-32	33/64	.025	.093	1.5	3.0	MBP-105	3160-750	4.90
#10-32	33/64	.025	.093	2.0	5.0	MBP-107	3160-752	4.90
1/4-20	17/32	.035	1.25	2.0	4.0	MBP-111	3160-754	4.95
1/4-20	17/32	.035	1.25	3.0	7.0	MBP-110	3160-753	4.95
1/4-20	17/32	.035	1.25	4.0	12.0	MBP-112	3160-755	4.95
5/16-18	37/64	.040	.156	2.0	4.5	MBP-116	3160-757	5.10
5/16-18	37/64	.040	.156	4.0	9.0	MBP-115	3160-756	5.10
5/16-18	37/64	.040	.156	6.0	17.0	MBP-117	3160-758	5.10
3/8-16	5/8	.048	.187	2.5	5.0	MBP-121	3160-760	5.20
3/8-16	5/8	.048	.187	5.0	10.0	MBP-120	3160-759	5.20
3/8-16	5/8	.048	.187	6.0	21.0	MBP-122	3160-749	5.20
1/2-13	3/4	.072	.281	3.0	6.0	MBP-126	3160-762	5.35
1/2-13	3/4	.072	.281	6.0	12.0	MBP-125	3160-761	5.35
1/2-13	3/4	.072	.281	6.0	30.0	MBP-127	3160-763	5.35
5/8-11	63/64	.096	.375	4.5	9.0	MBP-131	3160-765	6.50
5/8-11	63/64	.096	.375	9.0	18.0	MBP-130	3160-764	6.50
5/8-11	63/64	.096	.375	7.0	50.0	MBP-132	3160-766	6.50

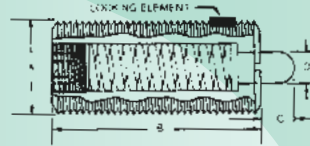
Stainless Steel Ball Plungers

- 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.



END PRESSURES								
A	B	C	DIAM. D	LBS.		PART. NO.	ORDER NO.	PRICE EACH
				START	FULL			
#4-48	3/16	.020	.062	.12	.5	MBP-090SS	3163-589	\$5.90
#5-40	1/4	.020	.062	.12	.5	MBP-091SS	3163-590	5.90
#6-40	5/16	.023	.078	.5	1.0	MBP-092SS	3163-591	5.90
#8-36	11/32	.025	.093	.5	1.25	MBP-093SS	3163-592	5.90
#8-32	11/32	.025	.093	.5	1.25	MBP-094SS	3163-593	5.90
#10-32	33/64	.025	.093	.5	1.5	MBP-106SS	3163-595	6.05
#10-32	33/64	.025	.093	1.5	3.0	MBP-105SS	3163-594	6.05
#10-32	33/64	.025	.093	2.0	5.0	MBP-107SS	3163-596	6.05
1/4-20	17/32	.035	1.25	2.0	4.0	MBP-111SS	3163-598	6.20
1/4-20	17/32	.035	1.25	3.0	7.0	MBP-110SS	3163-597	6.20
1/4-20	17/32	.035	1.25	4.0	12.0	MBP-112SS	3163-599	6.20
5/16-18	37/64	.040	.156	2.0	4.5	MBP-116SS	3163-601	7.05
5/16-18	37/64	.040	.156	4.0	9.0	MBP-115SS	3163-600	7.05
5/16-18	37/64	.040	.156	6.0	17.0	MBP-117SS	3163-602	7.05
3/8-16	5/8	.048	.187	2.5	5.0	MBP-121SS	3163-604	10.95
3/8-16	5/8	.048	.187	5.0	10.0	MBP-120SS	3163-603	7.20
3/8-16	5/8	.048	.187	6.0	21.0	MBP-122SS	3163-605	10.95
1/2-13	3/4	.072	.281	3.0	6.0	MBP-126SS	3163-607	12.05
1/2-13	3/4	.072	.281	6.0	12.0	MBP-125SS	3163-606	12.05
1/2-13	3/4	.072	.281	6.0	30.0	MBP-127SS	3163-608	12.05
5/8-11	63/64	.096	.375	4.5	9.0	MBP-131SS	3163-610	14.85
5/8-11	63/64	.096	.375	9.0	18.0	MBP-130SS	3163-609	14.85
5/8-11	63/64	.096	.375	7.0	50.0	MBP-132SS	3163-611	14.85

Spring Plungers - Light Spring Pressures



END PRESSURES							REF. NO.	ORDER NO.	PRICE EACH
A	B	C	D	START	1/2 WAY	FULL			
#6-32	17/32	.062	.046	0.5	1.0	1.5	MSP-21	3160-780	\$6.70
#8-32	5/8	.093	.070	0.7	1.5	2.3	MSP-22	3160-781	5.85
#10-32	3/4	.125	.093	1.3	2.0	2.7	MSP-23	3160-782	5.40
1/4-20	1	.187	.119	1.0	2.5	4.0	MSP-24	3160-783	5.40
1/4-28	1	.187	.119	1.0	2.5	4.0	MSP-25	3160-784	5.40
5/16-18	1	.187	.135	1.5	3.0	4.5	MSP-26	3160-785	5.85
3/8-16	1-1/8	.187	.186	2.8	5.0	7.2	MSP-27	3160-786	6.05
1/2-13	1-1/4	.250	.248	2.7	6.0	9.3	MSP-28	3160-787	6.05
5/8-11	1-1/2	.312	.310	3.5	7.0	10.5	MSP-29	3160-788	7.20
3/4-10	1-3/4	.312	.374	4.0	10.0	16.0	MSP-30	3160-789	10.65
1-8	2-13/32	.500	.499	4.0	17.5	31.0	MSP-31	3160-790	14.85

Spring Plungers - Heavy Pressures



END PRESSURES									
A	B	C	D	START	1/2 WAY	FULL	REF. NO.	ORDER NO.	PRICE EACH
#6-32	17/32	.062	.046	1.5	3.0	4.5	MSP-1	3160-767	\$7.05
#6-32	3/8	.062	.046	1.0	1.3	1.6	MSP-2	3160-768	6.10
#8-32	5/8	.093	.070	2.7	5.0	7.3	MSP-3	3160-769	6.10
#10-32	3/4	.125	.093	2.9	7.0	11.1	MSP-4	3160-770	6.10
1/4-20	1	.187	.119	3.0	8.0	13.0	MSP-5	3160-771	5.35
1/4-28	1	.187	.119	3.0	8.0	13.0	MSP-6	3160-772	5.35
1/4-20	3/4	.125	.119	2.0	5.5	9.0	MSP-7	3160-773	5.35
5/16-18	1	.187	.135	3.0	9.0	15.0	MSP-8	3160-774	6.00
3/8-16	1-1/8	.187	.186	5.5	10.0	14.5	MSP-9	3160-775	7.75
1/2-13	1-1/4	.250	.248	6.6	12.0	17.4	MSP-10	3160-776	7.75
5/8-11	1-1/2	.312	.310	10.5	18.0	25.5	MSP-11	3160-777	8.95
3/4-10	1-3/4	.312	.374	6.7	22.0	37.3	MSP-12	3160-778	12.25
1-8	2-13/32	.500	.499	16.0	42.0	68.0	MSP-13	3160-779	19.95

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.



END PRESSURES								
A	B	C	DIAM. D	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	\$7.15
M 5 x 0.8	13.00	0.60	2.36	.25	.70	MBP-151	3163-514	7.35
M 5 x 0.8	13.00	0.60	2.36	.70	1.35	MBP-152	3163-515	7.35
M 5 x 0.8	13.00	0.60	2.36	.90	2.25	MBP-153	3163-516	7.35
M 6 x 1.0	13.50	0.90	3.20	.90	1.80	MBP-154	3163-517	7.55
M 6 x 1.0	13.50	0.90	3.20	1.35	3.15	MBP-155	3163-518	7.55
M 6 x 1.0	13.50	0.90	3.20	1.80	5.40	MBP-156	3163-519	7.55
M 8 x 1.25	15.00	1.00	3.96	.90	2.00	MBP-157	3163-520	7.60
M 8 x 1.25	15.00	1.00	3.96	1.80	4.00	MBP-158	3163-521	7.60
M 8 x 1.25	15.00	1.00	3.96	2.70	7.65	MBP-159	3163-522	7.60
M 10 x 1.5	16.00	1.20	4.75	1.13	2.25	MBP-160	3163-523	7.80
M 10 x 1.5	16.00	1.20	4.75	2.25	4.50	MBP-161	3163-524	7.80
M 10 x 1.5	16.00	1.20	4.75	2.70	9.50	MBP-162	3163-525	7.80
M 12 x 1.75	19.00	2.00	7.14	1.35	2.70	MBP-163	3163-526	7.85
M 12 x 1.75	19.00	2.00	7.14	2.70	5.40	MBP-164	3163-527	7.85
M 12 x 1.75	19.00	2.00	7.14	2.70	13.50	MBP-165	3163-528	7.85

Precision Ground Flat Stock - Oil Hardening

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AISI/SAE Type 0-1

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"

		18" LENGTH		36" LENGTH	
THICK	WIDTH	ORDER NO	PRICE EACH	ORDER NO.	PRICE EACH
1/64	1/2	3190-010	\$127.95	-	-
	3/4	3190-020	133.01	-	-
	1	3190-030	139.81	-	-
	1-1/4	3190-040	146.47	-	-
	1-1/2	3190-050	161.34	-	-
	2	3190-060	200.39	-	-
	2-1/2	3190-070	229.80	-	-
	3	3190-080	275.29	-	-
	4	3190-090	374.12	-	-
1/32	1/2	3190-100	23.24	-	-
	3/4	3190-110	31.34	-	-
	1	3190-120	36.52	-	-
	1-1/4	3190-130	43.31	-	-
	1-1/2	3190-140	50.12	-	-
	2	3190-150	63.31	-	-
	2-1/2	3190-160	76.69	-	-
	3	3190-170	90.45	-	-
	4	3190-180	117.42	-	-
	6	3190-190	208.70	-	-
3/64	1/4	3190-200†	26.74	-	-
	5/16	3190-210†	23.38	-	-
	3/8	3190-220†	14.83	-	-
	1/2	3190-230	20.37	3200-230	\$35.08
	3/4	3190-240	26.31	-	-
	1	3190-250	32.02	3200-250	55.09
	1-1/4	3190-260	37.55	3200-260	64.69
	1-1/2	3190-270	43.32	3200-270	74.67
	2	3190-280	54.88	-	-
	2-1/2	3190-290	66.24	-	-
	3	3190-300	77.71	-	-
	3-1/2	3190-310	89.23	-	-
	4	3190-320	122.93	-	-
	5	3190-325†	34.83	-	-
	6	3190-330	147.59	-	-
1/16	1/4	3190-340	48.18	-	-
	5/16	3190-350†	15.82	-	-
	3/8	3190-360	24.05	-	-
	1/2	3190-370	14.38	3200-370	24.73
	3/4	3190-380	18.19	3200-380	31.29
	1	3190-390	21.88	3200-390	37.74
	1-1/4	3190-400	25.55	3200-400	43.98
	1-1/2	3190-410	29.30	3200-410	50.54
	1-3/4	3190-420	33.05	3200-420	56.89
	2	3190-430	36.76	3200-430	63.36
	2-1/2	3190-440	44.23	3200-440	76.11
	3	3190-450	51.59	3200-450	88.94
	3-1/2	3190-460	59.31	3200-460	102.03
	4	3190-470	67.17	3200-470	115.57
	5	3190-480	82.26	3200-480	141.67
	5-1/2	3190-485†	23.45	-	-
	6	3190-490	97.32	3200-490	167.59
	8	3190-500	145.87	3200-500	251.26
	10	3190-510	180.30	3200-510	310.60
	12	-	-	-	-
5/64	1/2	3190-560	18.74	-	-
	3/4	3190-570	23.31	-	-
	1	3190-580	27.79	-	-
	1-1/2	3190-590	36.71	-	-
	2	3190-600	45.78	-	-
	2-1/2	3190-610	54.37	-	-
	3	3190-620	63.50	-	-
	4	3190-630	82.44	-	-
	6	3190-640	119.27	-	-
3/32	1/4	3190-650	60.69	-	-
	5/16	3190-660†	15.16	-	-
	3/8	3190-670	33.32	-	-
	1/2	3190-680	18.74	3200-680	32.36
	3/4	3190-690	23.31	3200-690	39.98
	1	3190-700	27.79	3200-700	47.89
	1-1/4	3190-710	32.18	3200-710	55.45
	1-1/2	3190-720	36.71	3200-720	63.27

Precision Ground Flat Stock - Oil Hardening

AISI/SAE Type 0-1 Continued from Previous Page

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		18" LENGTH		36" LENGTH	
THICK	WIDTH	ORDER NO	PRICE EACH	ORDER NO.	PRICE EACH
3/8	3-1/2	3192-450	\$141.55	3202-450	\$243.86
	4	3192-460	158.05	3202-460	272.11
	4-1/2	3192-470	174.42	3202-470	300.41
	5	3192-480	190.86	3202-480	328.70
	5-1/2	3192-490†	207.38	3202-490	357.21
	6	3192-500	223.83	3202-500	385.48
	7	3192-510	293.48	3202-510	505.46
	8	3192-520	331.58	3202-520	571.17
	10	3192-540	407.08	3202-540	701.08
	12	3192-550	482.92	3202-550	831.73
7/16	7/16	3192-560	56.36	3202-560	97.05
	1/2	3192-570	50.99	3202-570	87.72
	3/4	3192-580	60.37	3202-580	103.97
	1	3192-590	69.80	3202-590	120.16
	1-1/4	3192-600	78.53	3202-600	135.18
	1-1/2	3192-610	87.93	3202-610	151.40
	2	3192-620	106.76	3202-620	183.88
	2-1/2	3192-630	125.64	3202-630	216.38
	3	3192-640	144.48	3202-640	248.86
	4	3192-650	177.62	3202-650	305.94
	6	3192-660	257.66	3202-660	443.79
1/2	1/2	3192-670	54.10	3202-670	93.16
	5/8	3192-680	59.09	3202-680	101.83
	3/4	3192-690	64.20	3202-690	110.51
	1	3192-700	74.22	3202-700	127.84
	1-1/4	3192-710	83.95	3202-710	144.59
	1-1/2	3192-720	93.97	3202-720	161.85
	1-3/4	3192-730	104.37	3202-730	179.75
	2	3192-740	114.13	3202-740	196.66
	2-1/2	3192-750	134.35	3202-750	231.42
	3	3192-760	154.53	3202-760	266.14
	3-1/2	3192-770	174.63	3202-770	300.82
	4	3192-780	194.88	3202-780	335.63
	4-1/2	3192-790	215.08	3202-790	370.46
	5	3192-800	236.66	3202-800	407.53
	6	3192-810	289.98	3202-810	499.44
	7	3192-820	366.74	3202-820	631.63
	8	3192-830	414.16	3202-830	713.36
	10	3192-850	498.51	3202-850	858.64
	12	3192-860	581.98	-	-
	14	3192-870†	265.18	-	-

Upsize Available Upon Request

		18" LENGTH		36" LENGTH	
THICK	WIDTH	ORDER NO	PRICE EACH	ORDER NO.	PRICE EACH
9/16	9/16	3192-880	\$64.91	3202-880	\$111.77
	3/4	3192-890	73.16	3202-890	126.03
	1	3192-900	84.29	3202-900	145.26
	1-1/4	3192-910	95.33	3202-910	164.18
	1-1/2	3192-920	106.51	3202-920	183.40
	2	3192-930	128.94	3202-930	222.05
5/8	5/8	3192-940	70.77	3202-940	122.01
	3/4	3192-950	76.69	3202-950	132.05
	1	3192-960	88.27	3202-960	151.98
	1-1/4	3192-970	99.45	3202-970	171.27
	1-1/2	3192-980	111.06	3202-980	191.18
	2	3192-990	134.17	3202-990	231.15
	2-1/2	3193-000	157.30	3203-000	271.04
	3	3193-010	180.55	3203-010	310.92
	3-1/2	3193-020	203.74	3203-020	350.90
	4	3193-030	226.90	3203-030	390.81
	5	3193-040	274.72	3203-040	473.14
	6	3193-050	321.05	3203-050	552.98
3/4	7	3193-060†	161.66	-	-
	8	3193-070†	199.26	3203-070†	332.64
	10	3193-090†	230.83	3203-090†	400.68
7/8	3/4	3193-110	91.17	3203-110	157.02
	1	3193-120	104.75	3203-120	180.39
	1-1/4	3193-130	117.55	3203-130	202.40
	1-1/2	3193-140	131.02	3203-140	225.60
	1-3/4	3193-150	144.48	3203-150	248.91
	2	3193-160	157.98	3203-160	272.09
	2-1/2	3193-170	184.89	3203-170	318.48
	3	3193-180	211.97	3203-180	365.16
	3-1/2	3193-190	238.92	3203-190	411.54
	4	3193-200	265.94	3203-200	458.03
	4-1/2	3193-210	292.98	3203-210	504.52
	5	3193-220	321.50	3203-220	553.64
	5-1/2	3193-225†	123.73	-	-
	6	3193-230	375.42	3203-230	646.64
	8	3193-250	549.25	3203-250	946.04
	10	3193-270	662.46	3203-270	1140.94
	12	3193-280	775.73	3203-280	1336.05
	7/8	3193-290	114.22	3203-290	196.73
	1	3193-300	121.92	3203-300	209.98
	1-1/4	3193-310	136.36	3203-310	234.87
	1-1/2	3193-320	151.70	3203-320	261.30
	2	3193-330	182.26	3203-330	313.92
	2-1/2	3193-340†	85.69	3203-340†	151.24
	3	3193-350	243.68	3203-350	419.76
	4	3193-370	305.09	3203-370	525.45
	6	3193-390	429.32	3203-390	739.35

		18" LENGTH		36" LENGTH	
THICK	WIDTH	ORDER NO	PRICE EACH	ORDER NO.	PRICE EACH
1	1	3193-450	\$ 131.15	3203-450	\$225.82
	1-1/4	3193-460	146.17	3203-460	251.70
	1-1/2	3193-470	162.31	3203-470	279.52
	1-3/4	3193-480	178.33	3203-480	307.24
	2	3193-490	194.46	3203-490	334.97
	2-1/2	3193-500	226.69	3203-500	390.51
	3	3193-510	258.78	3203-510	445.68
	3-1/2	3193-520	291.03	3203-520	501.20
	4	3193-530	323.13	3203-530	556.63
	4-1/2	3193-540†	145.96	3203-540†	252.27
	5	3193-550	389.05	3203-550	670.07
	6	3193-560	453.46	3203-560	780.99
1-1/8	8	3193-580	661.23	3203-580	1138.88
	10	3193-600	798.07	3203-600	1374.61
	12	3193-610	934.80	3203-610	1610.15
	1-1/2	3193-620	194.65	-	-
	2	3193-630	231.56	3203-630	398.81
	2-1/2	3193-635	94.45	-	-
1-1/4	3	3193-640	305.14	3203-640	525.64
	4	3193-650	378.87	3203-650	652.58
	6	3193-660	527.81	3203-660	909.08
	1-1/4	3193-670	184.61	3203-670	317.96
	1-1/2	3193-680	204.46	3203-680	352.22
	2	3193-690	244.41	3203-690	421.02
1-1/2	2-1/2	3193-700	284.18	3203-700	489.43
	3	3193-710	323.84	3203-710	557.77
	4	3193-730	403.40	3203-730	694.80
	5	3193-740	484.61	3203-740	834.62
	6	3193-750	564.17	3203-750	971.71
	8	3193-770†	324.24	3203-770†	549.57
	10	-	-	3203-790†	663.78
	1-1/2	3193-830	238.58	3203-830	410.94
	2	3193-840	284.22	3203-840	489.52
	2-1/2	3193-850	329.91	3203-850	568.11
2	3	3193-860	375.54	3203-860	646.89
	3-1/2	3193-870†	170.03	3203-870†	292.52
	4	3193-880	466.85	3203-880	804.10
	5	-	-	3203-890†	388.77
	6	3193-900	658.96	3203-900	1134.97
	8	3193-920	912.08	3203-920	1570.92
	10	3193-940†	456.97	3203-940†	765.57
	2	3193-980	364.13	3203-980	627.10
	3	3193-990	478.85	3203-990	824.79
	4	3194-000	593.77	3204-000	1022.66
	6	3194-010	790.52	3204-010	1361.47

Precision Ground Flat Stock - Low Carbon

AISI/SAE Type C-1018

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

Tolerance:

Thickness ±.001" Width +.000"/.005"

		24" LENGTH	
THICK.	WIDTH	ORDER NO.	PRICE EACH
1/16	3/4	3210-380	\$18.54
	1	3210-390	22.08
	1-1/4	3210-400	25.58
	1-1/2	3210-410	28.98
	2	3210-430	37.37
	2-1/2	3210-440	45.30
	3	3210-450	51.88
	3-1/2	3210-460	59.08
	4	3210-470	66.15
	5	3210-480	79.88
	6	3210-490	96.20
	8	3210-500	127.95
3/32	10	3210-510	154.54
	12	3210-520	185.78
	1/2	3210-680	19.06
	3/4	3210-690	23.43
	1	3210-700	27.52
	1-1/4	3210-710	31.11
	1-1/2	3210-720	35.32
	2	3210-740	43.66
	2-1/2	3210-750	51.82
	3	3210-760	60.09
	3-1/2	3210-770	68.68
	4	3210-780	76.00

		24" LENGTH	
THICK.	WIDTH	ORDER NO.	PRICE EACH
3/32	5	3210-790	\$89.03
	6	3210-800	109.87
	10	3210-820	176.18
	12	3210-830	209.92
1/8	1/2	3210-970	18.45
	3/4	3210-990	22.08
	1	3211-000	25.92
	1-1/4	3211-010	28.69
	1-1/2	3211-020	34.24
	2	3211-040	39.64
	2-1/2	3211-050	46.92
	3	3211-060	53.01
	3-1/2	3211-070	60.48
	4	3211-080	66.06
	5	3211-100	80.14
	10	3211-140	152.89
12	3211-150	181.35	
5/32	1/2	3211-300	22.70
	3/4	3211-310	26.08
	1	3211-320	30.45
	1-1/4	3211-330	31.96
	1-1/2	3211-340	36.41
	2	3211-360	44.05
	2-1/2	3211-370	52.45

Precision Ground Flat Stock - Low Carbon

AISI/SAE Type C-1018

Continued from Previous Page

Upsize Available Upon Request

24" LENGTH			
THICK.	WIDTH	ORDER NO.	PRICE EACH
5/16	4	3212-260	\$114.79
	5	3212-280	136.46
	6	3212-290	160.96
	7	3212-300	187.98
	8	3212-310	208.80
	10	3212-330	251.68
	12	3212-340	289.39
3/8	3/8	3212-350	36.85
	1/2	3212-360	40.39
	3/4	3212-370	44.53
	1	3212-380	52.39
	1-1/4	3212-390	57.51
	1-1/2	3212-400	62.21
	2	3212-420	73.78
	2-1/2	3212-430	88.46
	3	3212-440	94.83
	3-1/2	3212-450	111.06
	4	3212-460	120.45
	5	3212-480	148.09
1/2	6	3212-500	173.21
	7	3212-510	197.34
	8	3212-520	219.47
	9	3212-530	243.08
	10	3212-540	266.53
	1/2	3212-670	46.95
	3/4	3212-690	52.85
	1	3212-700	61.10
	1-1/4	3212-710	67.79
	1-1/2	3212-720	74.54
	2	3212-740	86.28
	2-1/2	3212-750	99.36
	3	3212-760	111.17

24" LENGTH			
THICK.	WIDTH	ORDER NO.	PRICE EACH
1/2	3-1/2	3212-770	\$126.38
	4	3212-780	137.90
	5	3212-800	165.98
	6	3212-810	192.38
	7	3212-820	210.17
	8	3212-830	243.08
	10	3212-850	291.75
	12	3212-860	334.67
5/8	5/8	3212-940	56.07
	3/4	3212-950	60.14
	1	3212-960	68.96
	1-1/4	3212-970	78.51
	1-1/2	3212-980	85.58
	2	3212-990	100.62
	2-1/2	3213-000	113.60
	3	3213-010	128.87
	3-1/2	3213-020	141.89
	4	3213-030	156.41
	5	3213-040	188.27
	6	3213-050	215.11
3/4	7	3213-060	242.53
	9	3213-080	305.59
	10	3213-090	328.00
	12	3213-100	381.28
	3/4	3213-110	66.08
	1	3213-120	81.87
	1-1/4	3213-130	88.94
	1-1/2	3213-140	97.87
	2	3213-160	114.08
	2-1/2	3213-170	129.67
	3	3213-180	146.90
	3-1/2	3213-190	163.01

24" LENGTH			
THICK.	WIDTH	ORDER NO.	PRICE EACH
3/4	4	3213-200	\$177.92
	5	3213-220	210.05
	6	3213-230	243.83
	7	3213-240	275.03
	8	3213-250	310.47
	9	3213-260	337.02
	10	3213-270	365.59
	12	3213-280	422.99
7/8	7/8	3213-290	88.00
	1	3213-300	93.07
	1-1/4	3213-310	101.46
	1-1/2	3213-320	109.49
	2	3213-330	129.35
	2-1/2	3213-340	145.09
	3	3213-350	160.68
	3-1/2	3213-360	178.62
	4	3213-370	196.68
	5	3213-380	241.83
	7	3213-400	309.96
	8	3213-410	348.63
1	9	3213-420	389.91
	10	3213-430	421.78
	1	3213-450	98.38
	1-1/4	3213-460	111.13
	1-1/2	3213-470	120.89
	2	3213-490	139.98
	2-1/2	3213-500	157.55
	3	3213-510	175.06
	3-1/2	3213-520	194.92
	4	3213-530	209.90
	6	3213-560	277.71
	8	3213-580	357.00

24" LENGTH			
THICK.	WIDTH	ORDER NO.	PRICE EACH
1	9	3213-590	\$399.22
	10	3213-600	430.55
	12	3213-610	483.83
1-1/4	1-1/4	3213-670	132.20
	1-1/2	3213-680	147.70
	2	3213-690	168.59
	2-1/2	3213-700	191.84
	3	3213-710	212.29
	3-1/2	3213-720	233.23
	4	3213-730	255.35
	5	3213-740	304.31
	6	3213-750	337.44
	7	3213-760	400.54
	8	3213-770	437.32
	9	3213-780	477.77
1-1/2	10	3213-790	518.09
	12	3213-800	592.20
	1-1/2	3213-830	171.86
	2	3213-840	198.79
	2-1/2	3213-850	223.95
	3-1/2	3213-870	273.32
	7	3213-910	466.32
	8	3213-920	501.48
	9	3213-930	551.56
	10	3213-940	595.51
	12	3213-950	741.70

Precision Ground Flat Stock - Air Hardening

AISI/SAE

Type A-2

Tolerances:

Thickness $\pm .001"$

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.

		18" LENGTH		36" LENGTH	
THICK	WIDTH	ORDER NO.	PRICE EACH	ORDER NO.	PRICE EACH
1/16	1/2	5330-010	\$17.81	5340-010	\$32.12
	3/4	5330-020	24.05	5340-020	43.22
	1	5330-030	27.56	5340-030	49.60
	1-1/4	5330-040	32.20	5340-040	57.96
	1-1/2	5330-050	37.08	5340-050	66.74
	2	5330-060	46.65	5340-060	83.97
3/32	2-1/2	5330-070	56.43	5340-070	101.55
	3	5330-080	59.81	5340-080	107.65
	4	5330-090	87.22	5340-090	157.03
	1/2	5330-100	23.52	5340-100	42.47
	3/4	5330-110	29.56	5340-110	53.23
	1	5330-120	35.61	5340-120	64.07
1/8	1-1/4	5330-130	41.42	5340-130	74.58
	1-1/2	5330-140	47.50	5340-140	85.44
	2	5330-150	59.52	5340-150	107.18
	2-1/2	5330-160	71.66	5340-160	129.03
	3	5330-170	83.70	5340-170	150.72
	4	5330-180	110.08	5340-180	198.10
1/4	1/2	5330-190	20.43	5340-190	36.68
	5/8	5330-200	22.72	5340-200	40.92
	3/4	5330-210	25.00	5340-210	45.05
	1	5330-220	29.67	5340-220	53.35
	1-1/4	5330-230	34.01	5340-230	61.12
	1-1/2	5330-240	38.61	5340-240	69.46
	1-3/4	5330-250	43.24	5340-250	77.89
	2	5330-260	47.91	5340-260	86.22
	2-1/2	5330-270	57.12	5340-270	102.81
	3	5330-280	66.40	5340-280	119.52
	3-1/2	5330-290	77.17	5340-290	138.97
	4	5330-300	86.67	5340-300	156.00
5/32	5	5330-310	105.49	5340-310	189.98
	6	5330-320	124.36	5340-320	224.00
	7	5330-330	169.14	5340-330	304.57
	8	5330-340	191.68	5340-340	345.20
	10	5330-350	236.52	5340-350	425.87
	12	5330-360	281.39	5340-360	506.66
	1/2	5330-370	26.19	5340-370	47.13
	3/4	5330-380	32.12	5340-380	57.87
	1	5330-390	38.20	5340-390	68.82
	1-1/4	5330-400	43.89	5340-400	79.11
	1-1/2	5330-410	49.81	5340-410	89.71
	1-3/4	5330-420	55.89	5340-420	100.59
3/8	2	5330-430	61.92	5340-430	111.50
	2-1/2	5330-440	73.89	5340-440	133.09
	3	5330-450	85.99	5340-450	154.83
	3-1/2	5330-460	98.05	5340-460	176.43
	4	5330-470	112.21	5340-470	202.05
	5	5330-480	136.77	5340-480	246.21
	6	5330-490	161.23	5340-490	290.31
	8	5330-500	265.85	5340-500	478.58
	3/16	5330-510	46.72	5340-510	84.20
	1/2	5330-520	27.61	5340-520	49.71

		18" LENGTH		36" LENGTH	
THICK	WIDTH	ORDER NO.	PRICE EACH	ORDER NO.	PRICE EACH
3/16	3/4	5330-530	33.44	5340-530	\$60.21
	1	5330-540	39.48	5340-540	71.11
	1-1/4	5330-550	45.03	5340-550	81.03
	1-1/2	5330-560	50.93	5340-560	91.72
	1-3/4	5330-570	56.93	5340-570	102.45
	2	5330-580	62.93	5340-580	113.30
1/4	2-1/2	5330-590	74.85	5340-590	134.74
	3	5330-600	86.76	5340-600	156.20
	3-1/2	5330-610	100.23	5340-610	180.45
	4	5330-620	112.82	5340-620	203.17
	5	5330-630	137.19	5340-630	247.04
	6	5330-640	161.53	5340-640	290.81
1/2	7	5330-650	208.16	5340-650	374.85
	8	5330-660	249.48	5340-660	449.20
	1/4	5330-670	46.56	5340-670	83.86
	1/2	5330-680	34.28	5340-680	61.62
	3/4	5330-690	41.39	5340-690	74.51
	1	5330-700	48.68	5340-700	87.65
3/8	1-1/4	5330-710	55.18	5340-710	99.38
	1-1/2	5330-720	62.45	5340-720	112.46
	1-3/4	5330-730	69.69	5340-730	125.41
	2	5330-740	76.82	5340-740	138.30
	2-1/2	5330-750	91.17	5340-750	164.18
	3	5330-760	105.49	5340-760	190.01
5/16	3-1/2	5330-770	119.35	5340-770	

Drill Rod - 36" Length

Oil Hardening - AISI/SAE Type 0-1 & Water Hardening - AISI/SAE Type W-1



Fractional Sizes

OIL HARDENING			WATER HARDENING	
FRACTIONAL SIZES	ORDER NO.	PRICE EACH	ORDER NO.	PRICE EACH
3/64	3220-003	\$1.32	-	-
1/16	3220-004	3.24	3223-004	\$1.71
5/64	3220-005	5.33	3223-005	2.90
3/32	3220-006	3.68	3223-006	3.11
7/64	3220-007	5.33	3223-007	4.50
1/8	3220-008	4.91	3223-008	3.45
9/64	3220-009	6.54	3223-009	4.64
5/32	3220-010	6.12	3223-010	4.36
11/64	3220-011	7.96	3223-011	5.81
3/16	3220-012	7.06	3223-012	5.12
13/64	3220-013	8.89	3223-013	6.54
7/32	3220-014	8.43	3223-014	6.35
15/64	3220-015	10.44	3223-015	7.98
1/4	3220-016	8.00	3223-016	6.28
17/64	3220-017	9.71	3223-017	7.16
9/32	3220-018	10.06	3223-018	7.32
19/64	3220-019	12.05	3223-019	8.91
5/16	3220-020	10.06	3223-020	8.18
21/64	3220-021	13.17	3223-021	10.77
11/32	3220-022	13.37	3223-022	10.90
23/64	3220-023	15.79	3223-023	12.96
3/8	3220-024	14.20	3223-024	10.90
25/64	3220-025	18.17	3223-025	14.22
13/32	3220-026	18.42	3223-026	14.17
27/64	3220-027	21.16	3223-027	16.68
7/16	3220-028	19.25	3223-028	14.81
29/64	3220-029	24.46	3223-029	19.22
15/32	3220-030	24.36	3223-030	18.72
31/64	3220-031	27.91	3223-031	21.83
1/2	3220-032	23.63	3223-032	17.87
33/64	3220-033	29.78	3223-033	22.84
17/32	3220-034	30.74	3223-034	23.16
35/64	3220-035	33.48	3223-035	25.55
9/16	3220-036	33.01	3223-036	24.80
37/64	3220-037	37.48	3223-037	28.62
19/32	3220-038	38.52	3223-038	28.91
39/64	3220-039	41.07	3223-039	31.80
5/8	3220-040	36.52	3223-040	25.17
41/64	3220-041	45.35	3223-041	31.88
21/32	3220-042	46.38	3223-042	32.04
43/64	3220-043	49.89	3223-043	35.00
11/16	3220-044	48.73	3223-044	33.56
45/64	3220-045	54.67	3223-045	38.45
23/32	3220-046	55.66	3223-046	38.45
47/64	3220-047	59.59	3223-047	41.87
3/4	3220-048	50.42	3223-048	34.90
49/64	3220-049	62.24	3223-049	43.79
25/32	3220-050	63.15	3223-050	43.73
51/64	3220-051	67.36	3223-051	47.41
13/16	3220-052	65.21	3223-052	45.10
53/64	3220-053	72.82	3223-053	51.29
27/32	3220-054	73.65	3223-054	51.02
55/64	3220-055	78.31	3223-055	55.17

OIL HARDENING			WATER HARDENING	
FRACTIONAL SIZES	ORDER NO.	PRICE EACH	ORDER NO.	PRICE EACH
7/8	3220-056	\$75.54	3223-056	\$52.36
57/64	3220-057	84.18	3223-057	59.22
29/32	3220-058	84.98	3223-058	58.86
59/64	3220-059	90.19	3223-059	63.50
15/16	3220-060	90.83	3223-060	62.90
61/64	3220-061	96.37	3223-061	67.88
31/32	3220-062	97.10	3223-062	67.13
63/64	3220-063	102.77	3223-063	72.41
1	3220-064	85.30	3223-064	60.91
1-1/64	3220-065	104.07	3223-065	75.49
1-1/32	3220-066	104.57	3223-066	74.58
1-3/64	3220-067	110.58	3223-067	80.25
1-1/16	3220-068	111.02	3223-068	79.29
1-5/64	3220-069	117.23	3223-069	85.03
1-3/32	3220-070	117.09	3223-070	83.95
1-7/64	3220-071	124.16	3223-071	90.10
1-1/8	3220-072	118.86	3223-072	84.80
1-9/64	3220-073	131.24	3223-073	95.20
1-5/32	3220-074	132.21	3223-074	94.31
1-11/64	3220-075	138.60	3223-075	100.52
1-3/16	3220-076	138.70	3223-076	99.09
1-13/64	3220-077	146.05	3223-077	105.94
1-7/32	3220-078	146.10	3223-078	104.20
1-15/64	3220-079	153.74	3223-079	111.49
1-1/4	3220-080	125.00	3223-080	92.64
1-17/64	3220-081	137.92	3223-081	104.04
1-9/32	3220-082	137.48	3223-082	101.96
1-19/64	3220-083	144.55	3223-083	109.00
1-5/16	3220-084	144.32	3223-084	107.06
1-21/64	3220-085	151.59	3223-085	114.31
1-11/32	3220-086	151.22	3223-086	112.16
1-23/64	3220-087	158.74	3223-087	119.79
1-3/8	3220-088	151.22	3223-088	112.16
1-25/64	3220-089	166.19	3223-089	125.37
1-13/32	3220-090	165.69	3223-090	122.74
1-27/64	3220-091	173.76	3223-091	131.01
1-7/16	3220-092	173.23	3223-092	128.39
1-29/64	3220-093	181.50	3223-093	136.80
1-15/32	3220-094	180.75	3223-094	133.98
1-31/64	3220-095	189.37	3223-095	142.81
1-1/2	3220-096	178.21	3223-096	122.54
1-9/16	3220-100	192.16	3223-100	132.20
1-5/8	3220-104	219.02	3223-104	150.70
1-11/16	3220-108	236.22	3223-108	162.51
1-3/4	3220-112	242.62	3223-112	167.04
1-13/16	3220-116	272.52	3223-116	187.45
1-7/8	3220-120	291.68	3223-120	200.62
1-15/16	3220-124	311.40	3223-124	214.30
2	3220-128	314.26	3223-128	216.64

Also Available
 • Metric Sizes
 • Special Diameters
 • Special Lengths

Fractional Sizes

Air Hardening -

AISI/SAE Type A-2

FRACTIONAL SIZES	DEC. EQUIV.	ORDER NO.	PRICE EACH
1/16	.0625	3225-100	\$ 4.60
5/64	.0781	3225-101	7.88
3/32	.0937	3225-102	7.41
7/64	.1093	3225-104	8.85
1/8	.1250	3225-105	8.09
9/64	.1406	3225-106	11.40
5/32	.1562	3225-107	11.56
11/64	.1718	3225-108	13.96
3/16	.1875	3225-109	12.30
13/64	.2031	3225-110	15.89
7/32	.2187	3225-111	17.16
15/64	.2343	3225-112	19.68
1/4	.2500	3225-113	16.87
17/64	.2656	3225-114	18.77
9/32	.2812	3225-115	21.08
19/64	.2968	3225-116	23.59
5/16	.3125	3225-117	21.76
21/64	.3281	3225-118	26.49
11/32	.3437	3225-119	29.01
23/64	.3593	3225-120	31.73
3/8	.3750	3225-121	30.93
25/64	.3906	3225-122	37.03
13/32	.4062	3225-123	40.09
27/64	.4218	3225-124	43.25
7/16	.4375	3225-125	42.10
29/64	.4531	3225-126	49.83
15/32	.4687	3225-127	53.42
31/64	.4843	3225-128	57.01
1/2	.5000	3225-129	52.73
17/32	.5312	3225-130	66.85
9/16	.5625	3225-131	66.70
19/32	.5937	3225-132	82.06
5/8	.6250	3225-133	81.41
21/32	.6562	3225-134	99.18
11/16	.6875	3225-135	98.53
23/32	.7187	3225-136	119.04
3/4	.7500	3225-137	114.10
13/16	.8125	3225-138	133.90
7/8	.8750	3225-139	155.29
1	1.0000	3225-140	201.60
1-1/16	1.0625	3225-141	227.59
1-1/8	1.1250	3225-142	255.15
1-1/4	1.2500	3225-143	264.66
1-3/8	1.3750	3225-144	320.32
1-1/2	1.5000	3225-145	377.98
1-3/4	1.7500	3225-146	514.37
2	2.0000	3225-147	666.73

Drill Rod - 36" Length

2

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	\$ 9.78	3224-001	\$7.47
2	3221-002	9.16	3224-002	6.88
3	3221-003	9.71	3224-003	7.09
4	3221-004	9.21	3224-004	6.76
5	3221-005	9.03	3224-005	6.54
6	3221-006	8.73	3224-006	6.44
7	3221-007	8.52	3224-007	6.28
8	3221-008	8.43	3224-008	6.10
9	3221-009	8.20	3224-009	5.97
10	3221-010	7.86	3224-010	5.80
11	3221-011	7.64	3224-011	5.72
12	3221-012	9.24	3224-012	6.70
13	3221-013	8.89	3224-013	6.47
14	3221-014	8.78	3224-014	6.35
15	3221-015	8.55	3224-015	6.24
16	3221-016	8.25	3224-016	5.97
17	3221-017	8.00	3224-017	5.81
18	3221-018	7.64	3224-018	5.26
19	3221-019	7.25	3224-019	5.01
20	3221-020	7.06	3224-020	5.10
21	3221-021	6.68	3224-021	4.84
22	3221-022	7.86	3224-022	5.80
23	3221-023	7.80	3224-023	5.72
24	3221-024	7.52	3224-024	5.49
25	3221-025	7.25	3224-025	5.26
26	3221-026	7.06	3224-026	5.10
27	3221-027	6.79	3224-027	4.84
28	3221-028	6.40	3224-028	4.59
29	3221-029	5.94	3224-029	4.27
30	3221-030	5.33	3224-030	3.80
31	3221-031	6.40	3224-031	5.49
32	3221-032	5.94	3224-032	5.05
33	3221-033	5.53	3224-033	4.69
34	3221-034	5.39	3224-034	4.59
35	3221-035	5.24	3224-035	4.44
36	3221-036	5.05	3224-036	4.27
37	3221-037	4.73	3224-037	4.04
38	3221-038	4.68	3224-038	3.84
39	3221-039	4.39	3224-039	3.73
40	3221-040	4.14	3224-040	3.68
41	3221-041	4.04	3224-041	3.52
42	3221-042	7.43	3224-042	4.04
43	3221-043	6.76	3224-043	3.73
44	3221-044	6.20	3224-044	3.52
45	3221-045	5.74	3224-045	3.11
46	3221-046	5.44	3224-046	2.92
47	3221-047	5.24	3224-047	2.83
48	3221-048	4.91	3224-048	2.70
49	3221-049	4.53	3224-049	2.45
50	3221-050	4.09	3224-050	2.26
51	3221-051	3.82	3224-051	2.13
52	3221-052	3.48	3224-052	1.97

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	\$ 10.40	3225-001	\$7.98
B	3222-002	10.83	3225-002	8.18
C	3222-003	11.09	3225-003	8.34
D	3222-004	11.45	3225-004	8.78
E	3222-005	POA	3225-005	POA
F	3222-006	9.03	3225-006	6.65
G	3222-007	9.33	3225-007	6.88
H	3222-008	9.71	3225-008	7.25
I	3222-009	10.17	3225-009	7.54
J	3222-010	10.52	3225-010	7.80
K	3222-011	10.86	3225-011	8.00
L	3222-012	11.48	3225-012	8.57
M	3222-013	11.95	3225-013	8.84
N	3222-014	12.52	3225-014	9.28
O	3222-015	12.28	3225-015	10.13
P	3222-016	12.71	3225-016	10.49
Q	3222-017	13.44	3225-017	11.08
R	3222-018	14.08	3225-018	11.54
S	3222-019	14.76	3225-019	12.20
T	3222-020	15.61	3225-020	12.89
U	3222-021	16.53	3225-021	13.65
V	3222-022	16.94	3225-022	13.26
W	3222-023	17.78	3225-023	13.85
X	3222-024	18.83	3225-024	14.70
Y	3222-025	19.48	3225-025	15.16
Z	3222-026	20.30	3225-026	15.88

Threaded Rod 36" Length



SIZE	PLAIN OIL FINISH		ZINC PLATED	
	ORDER NO.	PRICE EACH	ORDER NO.	PRICE EACH
6-36	3215-806	\$2.74	3215-906	\$3.48
8-32	3215-808	2.74	3215-908	3.48
10-21	3215-810	2.74	3215-910	3.48
10-32	3215-811	3.01	3215-911	3.83
12-24	3215-812	3.00	3215-912	3.80
1/4-20	3215-816	3.00	3215-916	3.80
1/4-28	3215-817	3.30	3215-917	4.18
5/16-18	3215-820	3.86	3215-920	4.78
5/16-24	3215-821	4.24	3215-921	5.26
3/8-16	3215-824	4.59	3215-924	5.58
3/8-24	3215-825	5.05	3215-925	6.14
7/16-14	3215-828	5.37	3215-928	6.61
7/16-20	3215-829	5.91	3215-929	7.27
1/2-13	3215-832	6.38	3215-932	8.00
1/2-20	3215-833	7.02	3215-933	8.80
9/16-12	3215-836	8.84	3215-936	10.95
9/16-18	3215-837	9.72	3215-937	12.05
5/8-11	3215-840	8.84	3215-940	10.95
5/8-18	3215-841	9.72	3215-941	12.05
3/4-10	3215-848	15.89	3215-948	18.97
3/4-16	3215-849	17.48	3215-949	20.87
7/8-9	3215-856	19.66	3215-956	23.93
7/8-14	3215-857	21.63	3215-957	26.32
1-8	3215-864	24.53	3215-964	29.71
1-14	3215-866	26.99	3215-966	32.68
1-1/8-7	3215-872	40.92	3215-972	54.22
1-1/8-12	3215-873	45.02	3215-973	59.64
1-1/4-7	3215-880	48.69	3215-980	64.18
1-1/4-12	3215-881	53.56	3215-981	70.60
1-3/8-6	3215-888	64.91	3215-988	85.49
1-3/8-12	3215-889	71.40	3215-989	94.04
1-1/2-6	3215-896	79.66	3215-996	102.35
1-1/2-12	3215-897	87.63	3215-997	112.58

Shim Stock

Brass Shim Stock

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.



6" x 100" ROLLS				6" x 180" ROLLS			
THICK.	ORDER NO.	PRICE EACH		THICK.	ORDER NO.	PRICE EACH	
.0010	3226-010	\$35.86		3226-401	\$66.42		
.0015	3226-015	36.06		3226-400	66.42		
.0020	3226-020	37.20		3226-402	66.42		
.0030	3226-030	38.37		3226-403	66.42		
.0040	3226-040	40.44		3226-404	70.37		
.0050	3226-050	41.87		3226-405	80.29		
.0060	3226-060	43.13		3226-406	87.25		
.0070	3226-070	45.19		3226-407	97.20		
.0080	3226-080	47.69		3226-408	97.20		
.0090	3226-090	51.22		3226-409	134.44		
.0100	3226-100	55.73		3226-410	103.71		
.0120	3226-120	60.37		3226-412	128.91		
.0150	3226-150	69.70		3226-415	143.29		
.0200	3226-200	78.78		3226-420	160.19		
.0250	3226-250	94.14		3226-425	194.19		
.0310	3226-310	111.41		3226-431	221.50		

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	\$72.82
15 pc. 6" x 12"	3226-360	99.09
12 pc. 6" x 18"	3226-361	140.67
15 pc. 6" x 18"	3226-362	208.50



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

3" x 50" ROLLS			6" x 50" ROLLS			6" x 60" ROLLS		
THICK.	ORDER NO.	PRICE EACH	THICK.	ORDER NO.	PRICE EACH	THICK.	ORDER NO.	PRICE EACH
.0020	3229-502	\$57.04	-	-	-	-	-	-
.0030	3229-503	59.98	-	-	-	-	-	-
.0040	-	-	3229-504*	\$64.56	-	-	-	-
.0050	-	-	3229-505	58.00	3229-605†	\$ 20.38	-	-
.0060	-	-	3229-506	57.42	-	-	-	-
.0070	-	-	3229-507	58.93	-	-	-	-
.0250	-	-	-	-	3229-625†	31.27	-	-
.0300	-	-	-	-	3229-630†	34.35	-	-

* 5" x 50"

† Limited Quantities

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	\$110.30

Flat Packs

(2 pcs./ 6" x 25")

Brass

THICK.	ORDER NO.	PRICE EACH
.012	3229-012	\$22.68
.015	3229-015	26.09
.020	3229-020	29.60
.025	3229-025	35.28
.031	3229-031	41.77
.032	3229-032†	47.36

† Limited Quantities

Steel Flat Pak

THICK.	ORDER NO.	PRICE EACH
.012	3229-112	\$11.37
.015	3229-115	10.62
.020	3229-120	11.93
.025	3229-125	12.77
.031	3229-131	13.41
.032	3229-132†	10.75

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



6" x 100" ROLLS			6" x 180" ROLLS			12" x 120" ROLLS		
THICK.	ORDER NO.	PRICE EACH	THICK.	ORDER NO.	PRICE EACH	THICK.	ORDER NO.	PRICE EACH
.0010	3227-010	\$30.21	3227-401	\$61.94	3227-501	\$113.46		
.0015	3227-015	35.89	3227-400	61.94	-	-		
.0020	3227-020	20.68	3227-402	39.94	3227-502	68.65		
.0025	3227-025	36.52	3227-435	79.73	-	-		
.0030	3227-030	22.33	3227-403	33.85	3227-503	71.71		
.0040	3227-040	22.47	3227-404	37.10	3227-504	69.68		
.0050	3227-050	19.66	3227-405	36.02	3227-505	62.32		
.0060	3227-060	19.26	3227-406	39.98	3227-506	63.70		
.0070	3227-070	23.02	3227-407	49.41	3227-507	72.39		
.0080	3227-080	23.55	3227-408	48.36	3227-508	81.50		
.0090	3227-090	42.73	3227-409	87.51	3227-509	119.89		
.0100	3227-100	20.26	3227-410	41.30	3227-510	71.35		
.0120	3227-112	20.75	3227-412	43.76	3227-512	71.09		
.0150	3227-150	18.81	3227-415	41.78	3227-515	64.87		
.0180	3227-180	52.48	3227-418	62.84	3227-518	142.57		
.0200	3227-200	21.29	3227-420	49.49	3227-520	74.51		
.0220	3227-220	164.86	3227-422	497.04	-	-		
.0250	3227-250	22.77	3227-425	50.68	3227-525	78.99		
.0310	3227-310	23.95	3227-431	54.22	3227-531	87.66		

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: 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 12" 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	\$174.25

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	\$73.48
15 pc. 6" x 12"	3227-365	88.57
12 pc. 6" x 18"	3227-361	109.10
15 pc. 6" x 18"	3227-362	131.52



6" x 50" ROLLS			6" x 60" ROLLS		
THICK.	ORDER NO.	PRICE EACH	THICK.	ORDER NO.	PRICE EACH
.0005	3228-005	\$154.71	3228-400	\$222.75	
.0010	3228-010	74.61	3228-401	107.43	
.0015	3228-015	68.34	3228-435	68.24	
.0020	3228-020	47.36	3228-402	65.31	
.0030	3228-030	45.42	3228-403	63.68	
.0040	3228-040	44.24	3228-404	73.32	
.0050	3228-050	50.94	3228-405	73.19	
.0060	3228-060	50.87	3228-406	75.53	
.0070	3228-070	52.42	3228-407	76.70	
.0080	3228-080	53.29	3228-408	86.43	
.0090	3228-090	59.98	3228-409	79.60	
.0100	3228-100	55.31	3228-410	83.21	
.0120	3228-120	57.79	3228-412	90.01	
.0150	3228-150	62.54	3228-415	106.91	
.0200	3228-200	74.21	3228-420	125.23	
.0250	3228-250	87.00	3228-425	142.73	
.0310	3228-310	99.11	3228-431	147.88	

Shim Stock

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 ORDER NO.	PRICE/ PKG.	"B" 3 x 3 x 3/4 ORDER NO.	PRICE/ PKG.	"C" 4 x 4 x 1-1/4 ORDER NO.	PRICE/ PKG.
.001	20	3229-900	\$3.83	3229-920	\$4.59	3229-940	\$6.04
.002	20	3229-901	3.83	3229-921	4.59	3229-941	6.04
.003	20	3229-902	3.83	3229-922	4.59	3229-942	6.04
.004	20	3229-903	3.83	3229-923	4.59	3229-943	6.04
.005	20	3229-904	3.83	3229-924	4.59	3229-944	6.04
.010	20	3229-905	3.83	3229-925	4.59	3229-945	6.04
.015	10	3229-906	3.83	3229-926	4.59	3229-946	6.04
.020	10	3229-907	4.28	3229-927	4.59	3229-947	6.50
.025	10	3229-908	4.28	3229-928	4.59	3229-948	6.50
.050	5	3229-909	4.60	3229-929	5.74	3229-949	8.04
.075	5	3229-910	5.20	3229-930	7.65	3229-950	11.08
.100	5	3229-911	6.13	3229-931	8.62	3229-951	14.53
.125	5	3229-912	6.73	3229-932	9.57	3229-952	16.45



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	\$1159.85
B	3229-934	1457.37
C	3229-954	2109.94



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	\$663.97
B	3229-935	811.54
C	3229-955	1156.21

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



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

ZINC-PLATED			STAINLESS STEEL		
SQ. SIZE	ORDER NO.	PRICE EACH	ORDER NO.	PRICE EACH	
1/8	3229-800	\$2.08	3229-454	\$6.75	
5/32	3229-804	2.79	-	-	
3/16*	3229-808	1.94	3229-456	6.78	
7/32	3229-812	3.05	-	-	
1/4*	3229-816	2.39	3229-458	9.71	
9/32	3229-820	3.70	-	-	
5/16*	3229-824	3.18	3229-460	19.85	
3/8*	3229-828	4.81	3229-462	22.04	
7/16*	3229-832	5.05	3229-464	30.78	
1/2*	3229-836	6.69	3229-466	40.39	
9/16	3229-840	12.09	-	-	
5/8	3229-844	10.19	3229-470	64.89	
11/16	3229-848	17.64	-	-	
3/4	3229-852	13.27	3229-474	80.48	
13/16	3229-856	25.92	-	-	
7/8	3229-860	17.70	3229-478	115.33	
1	3229-864	21.57	3229-482	147.09	
1-1/8	3229-868	39.20	-	-	
1-3/16	3229-872	62.81	-	-	
1-1/4	3229-876	50.61	-	-	
1-3/8	3229-880	56.97	-	-	
1-1/2	3229-884	67.93	-	-	
1-3/4	3229-888	93.67	-	-	
2	3229-892	133.46	-	-	
asst.*	3229-895	137.30	3229-498	495.75	

*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	\$6.58	14MM	3229-764	\$24.25
4MM	3229-754	3.74	16MM	3229-766	24.52
5MM	3229-755	3.96	18MM	3229-768	30.31
6MM	3229-756	4.44	20MM	3229-770	37.76
7MM	3229-757	11.00	22MM	3229-772	87.99
8MM	3229-758	6.40	25MM*	3229-775	49.95
10MM	3229-760	9.27			
12MM	3229-762	14.17			

*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" wide, .002" thick, in 50 and 100 ft. lengths



QTY.	ORDER NO.	PRICE EACH
100 sq. ft.	3229-990	\$955.05
50 sq. ft.	3229-989	502.71

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. • Hardened and tempered to RC 48-62
- Used in manufacturing and maintenance operations requiring the setting of close spacing, or checking very tight tolerances



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

1/2" x 12" STRIPS				1/2" x 25" COILS			
SIZE	ORDER NO.	PRICE EACH		ORDER NO.	PRICE EACH		
.001	3225-801	\$8.39		3225-851	\$186.08		
.0015	3225-845	4.48		3225-895	91.13		
.002	3225-802	4.48		3225-852	91.13		
.003	3225-803	4.48		3225-853	91.13		
.004	3225-804	3.64		3225-854	65.57		
.005	3225-805	3.64		3225-855	65.57		
.006	3225-806	3.64		3225-856	65.57		
.007	3225-807	3.22		3225-857	54.13		
.008	3225-808	3.22		3225-858	54.13		
.009	3225-809	3.22		3225-859	54.13		
.010	3225-810	3.22		3225-860	54.13		
.011	3225-811	3.22		3225-861	54.13		
.012	3225-812	3.22		3225-862	54.13		
.013	3225-813	3.22		3225-863	54.13		
.014	3225-814	3.22		3225-864	54.13		
.015	3225-815	3.22		3225-865	54.13		
.016	3225-816	3.22		3225-866	54.13		

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	\$117.67	3225-850	\$50.89 (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: \$81.64

Woodruff Key Set - 250 pcs.

Our Woodruff Keys are made of Zinc Plated Steel.

Kits contain the following sizes:

- | | | |
|--------------------|--------------------|-------------------|
| (10) 1/16" x 3/8", | (10) 3/32" x 5/8", | (5) 3/16" x 5/8", |
| (20) 3/32" x 3/8", | (30) 1/8" x 5/8", | (5) 5/32" x 7/8", |
| (10) 1/8" x 3/8", | (50) 5/32" x 5/8", | (5) 3/16" x 7/8", |
| (10) 1/16" x 1/2", | (20) 1/8" x 3/4", | (5) 7/32" x 7/8", |
| (15) 3/32" x 1/2", | (10) 5/32" x 3/4", | (5) 1/4" x 7/8", |
| (15) 1/8" x 1/2", | (20) 3/16" x 3/4", | (5) 1/4" x 3/4", |

Order No.: 3237-640 Price Each: \$89.54

