

PLATEGRIPTM

For use with high-tensile and PVC belting. Designed with broader, heavier teeth for a stronger joint and reduced strain behind the splice.

The teeth overlap the edges of the plates and provide extra holding power on thin belts. Passing smoothly over conveyor pulleys, Plategrip fasteners allow natural troughing of belts and smooth operation on both sides, through trippers and scrapers, as well as over crowned or takeup pulleys.

All buckets of solid plate fasteners have pre-assembled bolts and bottom plates that utilize our patented system, which includes the use of a special thin metal washer to clinch the bolt to the bottom plate during installation of the belt fasteners. This has proven to be superior to the use of plastic or nylon washers, which can slide along the bolt threads.





Plategrip Fasteners can be used

on belts of any width and of varying thicknesses. They are available in a broad variety of standard and special metals to ensure long life, resistance to corrosion, and exceptional tolerance to abrasive materials.

25 STEEL SETS

NUMBER	
1E	
140E	
190E	
11/4E	
1½E	
2E	
21/4E	
21/2*	
3 *	
*10 Sets/B	ox

PACKAGING & INSTALLATION

- Es are shipped in easy-to-handle boxes of 25 sets, bottom plates assembled with sufficient top plates, nuts, template nails, and instructions. Multiple boxes are shipped in over-cartons containing four or eight boxes.
- **Cs** are shipped in watertight buckets of 100 assembled bottom plates with sufficient top plates, nuts, template nails, and instructions. Bucket Opener pricing can be found on page 45.
- Ls are shipped in watertight buckets of 50 assembled bottom plates with sufficient top plates, nuts, template nails, and instructions.



INSTALLATION TOOLS ARE SHOWN ON PAGES 8 TO 11.

100 STEEL SETS

I	NUMBER
1	IC
1	140C
1	190C
1	1¼C
1	1½C
2	2C
2	21/4 C
2	2½L*
3	BL*

*50 Sets/Bucket

25 SETS STAINLESS TOP PLATES BALANCE STEEL

NUMBER
1EST
140EST
190EST
1½EST
2EST
2¼EST

25 SETS STAINLESS TOP AND BOTTOM PLATES

NUMBER	
1ES	
140ES	
190ES	
1½ES	
2ES	
2¼ES	

100 STAINLESS SETS TOP AND BOTTOM PLATES



25 SETS DURGARD TOP PLATES **BALANCE STEEL**

NUMBER	
1EDT	
140EDT	
190EDT	
1¼EDT	
1½EDT	
2EDT	
2¼EDT	
2½DT*	
3DT*	

*10 Sets/Box

100 SETS DURGARD TOP PLATES BALANCE STEEL

^{*50} Sets/Bucket

25 SETS DURGARD TOP AND BOTTOM PLATES

NUMBER
1ED
140ED
190ED
1¼ED
1½ED
2ED
21/4ED
2½D*
3D*

^{*10} Sets/Box

100 SETS DURGARD TOP AND BOTTOM PLATES

NUMBER
1CD
140CD
190CD
1¼CD
1½CD
2CD
21/4CD
2½LD*
3LD*

^{*50} Sets/Bucket

SELECTING SIZE, QUANTITY & METAL

The two keys to
selecting proper size
are belt thickness and
pulley diameter. This
chart indicates the
Plategrip belt fastener
size number for
various combinations
of belt thickness and
pulley diameter.

MIN. PULLEY DIAMETER	BELT THICKNESS	PIW	PLATEGRIP SIZE
12"	³ / ₁₆ "- ⁷ / ₁₆ "	150	1
14"	3/16"-7/16"	225	140
18"	⁵ / ₁₆ "- ⁹ / ₁₆ "	375	190
14"	3/8"-1/2"	150	11/4
18"	⁷ / ₁₆ "- ¹¹ / ₁₆ "	300	1½
30"	⁹ / ₁₆ "- ¹³ / ₁₆ "	440	2
36"	⁹ /16" -1 ³ /16"	620	21/4
42"	3/4"-1"	450	2 ½
48"	≥ ¹⁵ /16"	560	3

A 90° splice is generally used where pulley diameter and belt thickness correspond to recommendations in the chart above.

The 45° splice should be used where pulley diameters are smaller than the recommended minimum diameter. The 45° splice will reduce flexing of belts behind the fastener and has the same strength as the corresponding 90° splice.

NUMBER OF FASTENER SETS REQUIRED FOR VARIOUS BELT WIDTHS

BELT WIDTH	SIZE NO.	1, 140, 190		11/4, 11/2, 2, 21/4		21/2, 3	
	SPLICE	90°	45°	90°	45°	90°	45°
	12"	10	12	8	10	6	7
	16"	13	17	10	14	8	10
	18"	15	19	12	16	9	12
	20"	16	22	13	18	10	13
	24"	20	26	16	21	13	17
	26"	22	29	17	23	14	18
	28"	23	31	18	25	15	20
	30"	25	33	20	27	16	21
	36"	30	41	24	33	19	26
	42"	35	48	28	39	22	31
	48"	40	55	32	44	26	35
	60"	50	69	40	55	32	44
	72"	60	83	48	68	39	53

STEEL is the most common and economical belt fastener material and is the standard for most applications. Steel fasteners are manufactured in a broad variety of sizes and shapes, and are suitable for use in new equipment or as replacement fasteners.

DURGARD is a special heat-treated steel with abrasion-resistant characteristics that provide several times the life of standard steel. Durgard Plategrip fasteners are not recommended for use in highly corrosive environments, but are instead specially formulated for abrasive situations.

NLESS STEEL fasteners are best for

applications where erosion is a major problem. Stainless steel is more resistant to abrasions, acids, chemicals, and magnetic attraction than standard steel. Plategrip fasteners are available in complete stainless steel sets, or with the top plate made of stainless steel and the balance standard steel.



Hinged Plategrip™ Fasteners are ideally suited

for applications where the loading and delivery points frequently change, such as mine, pit, quarry, and construction sites.

A compression-type fastener secured by bolts, the Hinged Plategrip provides tremendous holding power with good troughing action, while being readily separable after easy installation.

Note: Each matched set contains one complete joint with hinge pin, nuts and bolts, and filler tubing included.

STEEL MATCHED SETS

NUMBER X550-16 X550-18 X550-20 X550-24 X550-26 X550-30 X550-36 X550-42 X550-48 X550-54 X550-60 X550-72		
X550-18 X550-20 X550-24 X550-26 X550-30 X550-36 X550-42 X550-48 X550-54 X550-60	NUMBER	
X550-20 X550-24 X550-26 X550-30 X550-36 X550-42 X550-48 X550-54 X550-60	X550-16	
X550-24 X550-26 X550-30 X550-36 X550-42 X550-48 X550-54 X550-60	X550-18	
X550-26 X550-30 X550-36 X550-42 X550-48 X550-54 X550-60	X550-20	
X550-30 X550-36 X550-42 X550-48 X550-54 X550-60	X550-24	
X550-36 X550-42 X550-48 X550-54 X550-60	X550-26	
X550-42 X550-48 X550-54 X550-60	X550-30	
X550-48 X550-54 X550-60	X550-36	
X550-54 X550-60	X550-42	
X550-60	X550-48	
71000	X550-54	
X550-72	X550-60	
	X550-72	

STEEL MATCHED SETS

NUMBER
X375-12
X375-14
X375-16
X375-18
X375-20
X375-24
X375-26
X375-30
X375-36
X375-42
X375-48
X375-60

STEEL BULK PACKS (INCLUDES NUTS AND BOLTS)

NUMBER	DESCRIPTION
X375-2	25 SETS
X375-3	18 SETS
X550-1	50 SETS
X550-3	18 SETS

STAINLESS MATCHED SETS

NUMBER
X550-16S
X550-18S
X550-20S
X550-24S
X550-26S
X550-30S
X550-36S
X550-42S
X550-48S
X550-54S
X550-60S

STAINLESS MATCHED SETS

	NUMBER
l	X375-12S
١	X375-18S
	X375-24S
	X375-30S
	X375-36S
	X375-42S
	X375-48S
İ	X375-60S



INSTALLATION TOOLS ARE SHOWN ON PAGES 8 TO 11.

STAINLESS STEEL BULK PACKS (INCLUDES NUTS AND BOLTS)

NUMBER	DESCRIPTION
X375-2S	25 SETS
X375-3S	18 SETS
X550-1S	50 SETS

DURGARD BULK PACKS (INCLUDES NUTS AND BOLTS)

NUMBER	DESCRIPTION	
X550-1D	50 SETS	

DURGARD

NUMBER	
X550-18D	
X550-24D	
X550-30D	
X550-36D	
X550-42D	
X550-48D	
X550-60D	

Hinge Pins are made

of steel cable covered in nylon, the standard for long wear. Alternatives include bare steel or stainless steel.

NUMBER	STYLE
NC	NYLON-COVERED STEEL CABLE
NCS	NYLON-COVERED STAINLESS CABLE
SC	BARE STEEL CABLE
SSC	BARE STAINLESS STEEL CABLE

Order by specifying type of pin and width of belt. Example: NC-36

STEEL CABLE

SIZE
12"
14"
16"
18"
20"
24"
26"
30"
36"
42"
48"
54"
60"
72"

SELECTING SIZE AND METAL

HINGED PLATEGRIP SPECIFICATIONS

MIN. PULLEY DIAMETER	BELT THICKNESS	PIW	SIZE
6"	1/4"—13/32"	200	X375
9"	1/4"-5/8"	300	X550

belt fastener material. It is the standard for most applications. Steel fasteners are plated to resist moisture and are available in matched sets ordered by width of belt or as X550-1, X550-3, X375-2, or X375-3, in bulk packs.

DURGARD is a special heat-treated steel with abrasion-resistant characteristics that provide several times the life of standard steel. Hinged Durgard fasteners are not recommended for use in corrosive environments, but are instead specially formulated for abrasive situations.

stanless stell fasteners—nickel and chrome alloy—are best for applications where erosion is a major problem. Stainless steel is more resistant to abrasions, acids, chemicals, and magnetic attraction than standard steel. Plategrip fasteners are available in complete stainless sets.

STAINLESS STEEL CABLE

_	SIZE
	16"
	18"
	20"
	24"
	26"
	30"
	36"
	42"
	48"
	54"
	60"
	72"

Custom Installation Tools

All tools are engineered for ease of use for installation by means of either hand tools or power-assisted tools. Proper installation will yield the best life from your belt splice.



^{*}Note: X375 and X550 steel fasteners require the use of the PH160 or S100 to tighten nuts. X375S and X550S stainless steel fasteners require the use of the PS1 or P612 to tighten nuts.

Bolt Breaker

Used to break off excess bolt above fastener after assembly. Sold in packs of two.

NUMBER
#1
#2
#3

Boring Bit

Bores holes in all materials. Slot eases removal of scrap.

NUMBER
#1B
#2B
#3B

Power Boring Bit

Bores bolt holes in belting. Belt slugs eject through open slot.

NUMBER
#1PB
#2PB
#3PB

Hand Punch

Punches bolt holes in belting material. Wear eye protection when striking punch.

NUMBER
#10
#20
#30

Power Punch

Bores bolt holes in toughest material. Tapered hole ejects belt slugs.

NUMBER
#11
#22
#33

Power Hex Wrench

Has hex opening instead of spanner. Made with $\%_6$ " hex male top.

NUMBER	
PH160	
PH180	

Spanner Wrench

For use with carpenter's brace to tighten nuts.

NUMBER
S1S
S2S
S3S

Power Socket Wrench

Long-life socket wrenches are made of alloy steel and are heat-treated.

NUMBER	
SP160S	
SP180S	

Power Hex Spanner

Special heat-treated steel ensures long life. Hex drive designed for use with 5552 Chuck. Includes steel nut sleeve.

NUMBER
PS1
PS2
PS3

Hand Hex Wrench

For use with carpenter's brace to tighten nuts.

NUMBER
S100

Power Socket Spanner

Used with hand ratchet SKCU-RAT or power drive tool, these sockets are used where spanner is preferred to hexagonal drive.

NUMBER
P612
P614
P616

TOOL KITS

These special tools are offered in convenient money saving kits for both Plategrip and Hinged Plategrip. Each kit includes two Bolt Breakers, one Power Punch, and one Power Wrench.

All tool kits include a Power Hex Spanner except the TK-550, which requires a Power Hex Wrench PH160.

NUMBER	USE WITH
TK1	1, 140, 190 & RP1
TK2	1¼, 1½, 2, 2¼ & RP2
TK3	2½, 3
TK375S/550S	HINGED PLATEGRIP X375, X550 STAINLESS STEEL
TK375/550	HINGED PLATEGRIP X375, X550 STEEL

Quick Change Chuck

Adapts $\frac{1}{2}$ " square male drive power tool for tools with $\frac{7}{16}$ " male hexagonal tops.

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5552



Impact Wrench Kit

A battery-powered impact wrench to use with the 5552 Quick Change Chuck to punch holes and tighten nuts. Complete with $\frac{1}{2}$ " impact driver, two batteries, charger, and carrying case. 4.6 lbs. and 18 V. Bosch® three-year warranty.

NUMBER

22618



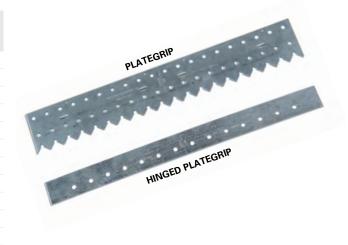
Templates

Furnished 90° unless otherwise specified. Curved templates are used only with X375 and X550 Plategrip fasteners. In ordering templates, always show size of fastener and width of belt.

Examples: one No.190 Template 30" = 190T-30"

X375 Template 36" = 336 X550 Template 36" = 536

BELT WIDTH	PLATE	GRIP 45°	HINGED PLATEGE X375	RIP CURVED X550
12"				
14"				
16"				
18"				
20"				
24"				
26"				
30"				
36"				
42"				
48"				
54"				
60"				
72"				



Repair Plates are used to prolong life of belts that have been torn, require patching of worn spots, or have "soft spots." Repair plates should be used only across the belt and never applied so they travel lengthwise over the pulley.

NUMBER	DESCRIPTION
RP1E	25 SETS
RP2E	25 SETS
RP1C	100 SETS
RP2C	100 SETS



Belt Tape 100' Roll

For eliminating ripples and sealing splices.

NUMBER	DESCRIPTION
P7	1, 140, 1¼
P11	190, 1½, 2, X550



Nut Buster

Allows replacement of selected plates, such as under skirt board wear points, by busting nuts from bolt assembly.

NUMBER	
NB1	
NB2	
NB3	



SHIPPING WEIGHT

PLATEGRIP SHIPPING WEIGHT (LBS.)

,	0		,
	10	25	100
SIZE	SETS	SETS	SETS
1	_	2.8	11.0
140	_	4.0	16.0
190	_	4.9	19.6
1¼	_	4.8	19.5
1½	_	5.5	22.0
2	_	7.5	30.0
21/4	_	10.8	42.3
2 ½	6.4	_	64.0
3	7.0	_	70.0
RP1	_	4.5	18.0
RP2	_	9.8	39.0

HINGED PLATEGRIP SHIPPING WEIGHT (LBS.)

SIZE	WEIGHT	SIZE	WEIGHT
X375-18	3.3	X550-18	3.3
X375-24	4.0	X550-24	4.3
X375-26	4.5	X550-26	4.9
X375-30	5.1	X550-30	5.5
X375-36	6.3	X550-36	6.5
X375-42	7.3	X550-42	7.8
X375-48	8.3	X550-48	8.8
_	_	X550-54	9.9
X375-60	10.2	X550-60	10.5

Extra Supplies

Plategrip Steel Nuts

Price per 100.

NUMBER
1N
140N
190N
1¼N
1½N
2N
21/4N
2½N
3N
RP1N
RP2N

Plategrip Steel Bolts

Price per 100.

NUMBER
1B
140B
190B
1¼B
1½B
2B
21/4B
2½B
3B
RP1B
RP2B

Plategrip Stainless Steel Nuts

Price per 100.

NUMBER	
1NS	
140NS	
190NS	
1½NS	
2NS	
21/4NS	

Plategrip Stainless Steel Bolts

Price per 100.

NUMBER
1BS
140BS
190BS
1½BS
2BS
21/4BS

Hinged Plategrip Steel Extra Supplies

Extra supplies for use with X375 and X550.

	NUMBER	DESCRIPTION
	X375N	NUTS 100/PACK
	X375B	BOLTS 100/PACK
	X550N	NUTS 100/PACK
	X550B	BOLTS 100/PACK
	X550C	CLIPS 100/PACK
	X550FT	FILLER TUBING / FOOT
	X550NC	CABLE/FOOT
	X550RW	RETAINER WASHERS 50/PACK

Hinged Plategrip Stainless Steel Extra Supplies

Extra supplies for use with X375S and X550S.

NUMBER	DESCRIPTION
X375NS	NUTS 100/PACK
X375BS	BOLTS 100/PACK
X550NS	NUTS 100/PACK
X550BS	BOLTS 100/PACK
X550NCS	CABLE/FOOT