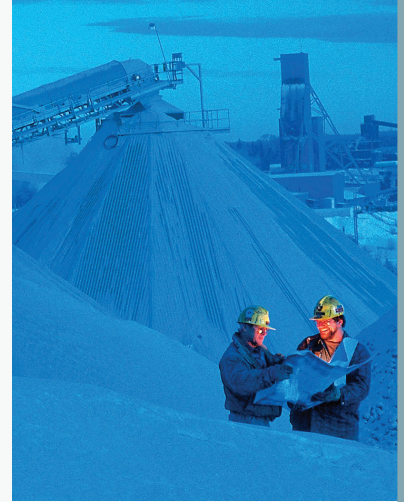


# PLATEGRIP™



**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 assure long life, resistance to corrosion, and exceptional tolerance to abrasive materials.

## 25 STEEL SETS

NUMBER
1E
140E
190E
1¼E
1½E
2E
2½*
3*

\*10 Sets/Box

## 100 STEEL SETS\*

NUMBER
1C
140C
190C
1¼C
1½C
2C
2½C
3C

\*Bottom plate pre-assembled

## 25 SETS STAINLESS TOP PLATES BALANCE STEEL

NUMBER
1EST
140EST
190EST
1½EST
2EST

## 25 SETS STAINLESS TOP AND BOTTOM PLATES

NUMBER
1ES
140ES
190ES
1½ES
2ES

## 100 STAINLESS SETS\* TOP AND BOTTOM PLATES

NUMBER
1CS
140CS
190CS
1½CS
2CS

\*Bottom plate pre-assembled

## PACKAGING & INSTALLATION

**Es** are shipped in easy-to-handle boxes of 25 sets of plates with sufficient clips, nuts, bolts, template nails, and instruction sheets. 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 43.

Installation tools are shown on pages 8 to 11. Get installation instructions for these and other Conveyor Accessories products online at:

[www.conveyoraccessories.com/instructions](http://www.conveyoraccessories.com/instructions)



## 25 SETS DURGARD TOP PLATES BALANCE STEEL

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

\*10 Sets/Box

## 100 SETS DURGARD TOP PLATES BALANCE STEEL\*

NUMBER
1CDT
140CDT
190CDT
1¼CDT
1½CDT
2CDT
2½CDT
3CDT

\*Bottom plate pre-assembled

## 25 SETS DURGARD TOP AND BOTTOM PLATES

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

\*10 Sets/Box

## 100 SETS DURGARD TOP AND BOTTOM PLATES\*

NUMBER
1CD
140CD
190CD
1¼CD
1½CD
2CD
2½CD
3CD

\*Bottom plate pre-assembled

# 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 (MM)	BELT THICKNESS (MM)	PLATEGRIP SIZE
300	4.7–11.0	1
355	4.7–11.0	140
460	7.9–14.3	190
355	9.5–12.7	1¼
460	11.0–17.5	1½
760	14.3–20.6	2
1070	19.0–25.4	1½
1220	23.8 and >	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 SETS OF FASTENERS REQUIRED FOR VARIOUS BELT WIDTHS

SIZE NO.	1, 140, 190		1¼, 1½, 2		2½, 3	
	90°	45°	90°	45°	90°	45°
300	10	12	8	10	6	7
400	13	17	10	14	8	10
450	15	19	12	16	9	12
500	16	22	13	18	10	13
600	20	26	16	21	13	17
650	22	29	17	23	14	18
700	23	31	18	25	15	20
750	25	33	20	27	16	21
900	30	41	24	33	19	26
1050	35	48	28	39	22	31
1200	40	55	32	44	26	35
1500	50	69	40	55	32	44
1800	60	83	48	68	39	53

BELT WIDTH

**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.

**STAINLESS 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 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

### 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 & 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
X375-18S
X375-24S
X375-30S
X375-36S
X375-42S
X375-48S
X375-60S



INSTALLATION TOOLS ARE SHOWN ON PAGES 8 TO 11.

## STAINLESS STEEL BULK PACKS (INCLUDES NUTS & BOLTS)

NUMBER	DESCRIPTION
<b>X375-2S</b>	25 SETS
<b>X375-3S</b>	18 SETS
<b>X550-1S</b>	50 SETS

## DURGARD BULK PACKS (INCLUDES NUTS & BOLTS)

NUMBER	DESCRIPTION
<b>X550-1D</b>	50 SETS

## DURGARD

NUMBER
<b>X550-18D</b>
<b>X550-24D</b>
<b>X550-30D</b>
<b>X550-36D</b>
<b>X550-42D</b>
<b>X550-48D</b>
<b>X550-60D</b>

**Hinge Pins** are made of steel cable covered in nylon, the standard for long wear. Alternatives include bare steel or stainless steel.

NUMBER	STYLE
<b>NC</b>	NYLON-COVERED STEEL CABLE
<b>NCS</b>	NYLON-COVERED STAINLESS CABLE
<b>SC</b>	BARE STEEL CABLE
<b>SSC</b>	BARE STAINLESS STEEL CABLE

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

## STEEL CABLE

SIZE (MM)
<b>300</b>
<b>350</b>
<b>400</b>
<b>450</b>
<b>500</b>
<b>600</b>
<b>650</b>
<b>750</b>
<b>900</b>
<b>1050</b>
<b>1200</b>
<b>1350</b>
<b>1500</b>

# SELECTING SIZE AND METAL

## HINGED PLATEGRIP SPECIFICATIONS

MIN. PULLEY DIAMETER (MM)	BELT THICKNESS (MM)	KN/M	SIZE (MM)
150	6.4–10.3	34	<b>X375</b>
225	6.4–15.9	52	<b>X550</b>

**STEEL** is the most common and economical 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.

**STAINLESS STEEL** 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.

Get installation instructions for these and other Conveyor Accessories products online at:

[www.conveyoraccessories.com/instructions](http://www.conveyoraccessories.com/instructions)

## STAINLESS STEEL CABLE

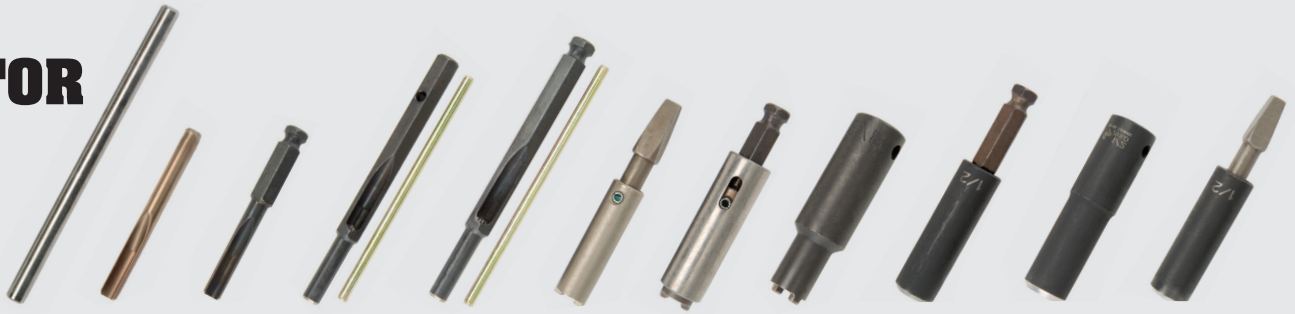
SIZE (MM)
<b>400</b>
<b>450</b>
<b>500</b>
<b>600</b>
<b>650</b>
<b>750</b>
<b>900</b>
<b>1050</b>
<b>1200</b>
<b>1350</b>
<b>1500</b>



## 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.

### TOOL SELECTOR



FASTENER SIZE (MM)	BOLT BREAKER	BORING BIT	POWER BORING BIT	HAND PUNCH	POWER PUNCH	SPANNER WRENCH	POWER HEX SPANNER	POWER SOCKET SPANNER	POWER HEX WRENCH	POWER SOCKET WRENCH	HAND HEX WRENCH
1, 140, 190, X550, X375, RP1	1	1B	1PB	10	11	S1S	PS1	P612	PH160	SP160S	S100
1¼, 1½, 2, RP2	2	2B	2PB	20	22	S2S	PS2	P614	PH180	SP180S	—
2½, 3	3	3B	3PB	30	33	S3S	PS3	P616	—	—	—

### Bolt Breaker

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

#### NUMBER

#1  
#2  
#3

### Power Boring Bit

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

#### NUMBER

#1PB  
#2PB  
#3PB

### Boring Bit

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

#### NUMBER

#1B  
#2B  
#3B

### 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

## Spanner Wrench

For use with carpenter's brace to tighten nuts.

NUMBER
S1S
S2S
S3S

## Power Hex Spanner

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

NUMBER
PS1
PS2
PS3

## 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

## Power Hex Wrench

Has hex opening instead of spanner. Made with 11.1mm hex male top.

NUMBER
PH160
PH180

## Power Socket Wrench

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

NUMBER
SP160S
SP180S

## Hand Hex Wrench

For use with carpenter's brace to tighten nuts.

NUMBER
S100

# 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 & RP2
TK3	2½, 3
TK550S	HINGED PLATEGRIP X375, X550 STAINLESS STEEL
TK550	HINGED PLATEGRIP X375, X550 STEEL

## Quick Change Chuck

Adapts 12.7mm square male drive power tool for tools with 11.1mm male hexagonal tops.



NUMBER

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 12.7mm impact driver, two batteries, charger, and carrying case. 4.6Kg. Bosch three-year warranty.



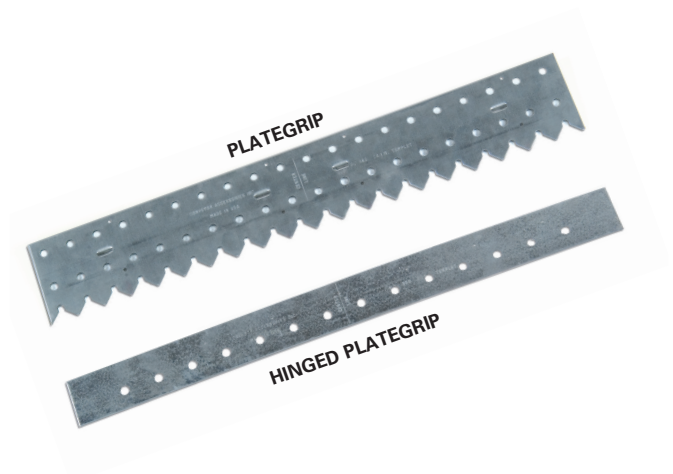
NUMBER

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. Example: one no. 1½ Template 750mm 90°.

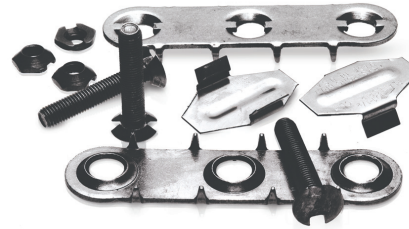
BELT WIDTH (MM)	PLATEGRIP		HINGED PLATEGRIP CURVED	
	90°	45°	X375	X550
300				
350				
400				
450				
500				
600				
650				
750				
900				
1050				
1200				
1350				
1500				
1800				





**Repair Plates** are used to prolong life of belts which 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.

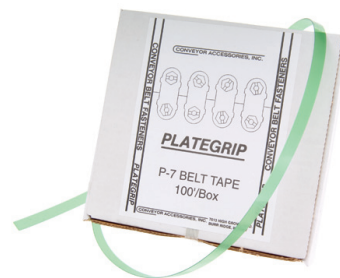
NUMBER	DESCRIPTION
RP1E	25 SETS
RP2E	25 SETS
RP1C	100 SETS
RP2C	100 SETS



## Belt Tape 33m Roll

For eliminating ripples and sealing splices.

NUMBER	DESCRIPTION
P7	1, 140, 11/4
P11	190, 11/2, 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 (KG)

SIZE	10 SETS	25 SETS	100 SETS
1	—	1.3	5.0
140	—	1.8	7.3
190	—	2.2	8.9
1¼	—	2.1	8.9
1½	—	2.5	10.0
2	—	3.4	13.6
2½	2.9	—	29.0
3	3.2	—	31.8
RP1	—	2.0	8.2
RP2	—	4.5	17.7

## HINGED PLATEGRIP SHIPPING WEIGHT (KG)

SIZE	WEIGHT	SIZE (MM)	WEIGHT
X375-450	1.5	X550-450	1.5
X375-600	1.8	X550-600	1.9
X375-26	2.0	X550-26	2.2
X375-750	2.3	X550-750	2.5
X375-900	2.9	X550-900	3.0
X375-1050	3.3	X550-1050	3.5
X375-1200	3.8	X550-1200	4.0
—	—	X550-1350	4.5
X375-1500	4.6	X550-1500	4.8

## Extra Supplies

### Plategrip Steel Nuts

Price per 100

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

### Plategrip Steel Bolts

Price per 100

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

### Plategrip Stainless Steel Nuts

Price per 100

NUMBER
1NS
140NS
190NS
1½NS
2NS

### Plategrip Stainless Steel Bolts

Price per 100

NUMBER
1BS
140BS
190BS
1½BS
2BS

### Hinged Plategrip Steel Extra Supplies

Extra supplies for use with X375 and X550

NUMBER	DESCRIPTION
X550N	NUTS 100/PACK
X550B	BOLTS 100/PACK
X550C	CLIPS 100/PACK
X550FT	FILLER TUBING/300mm
X550NC	CABLE/300mm
X550RW	RETAINER WASHERS 50/PACK

### Hinged Plategrip Stainless Steel Extra Supplies

Extra supplies for use with X375S and X550S

NUMBER	DESCRIPTION
X550NS	NUTS 100/PACK
X550BS	BOLTS 100/PACK
X550NCS	CABLE/300mm