Hinged Steel Conveyor Belt
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Hinged Steel Replacement Conveyor Belts

Meet our most flexible chain belt made. Designed to mold to your unique systems. Fluent hinged steel conveyor belts are ideal for recycling, ferrous and non-ferrous, mixed solid waste, sheared scrap, refuge and nearly all other applications with less than 10% glass shards.

Hinged steel belts come in 4 inch, 6-inch and 9-inch pitch options up to 96” wide. 3/8” - 3/4” Thick Precision formed pans, precision die punched wings, single flanged and sintered steel rollers, solid locking pins and add-on options such as cleats, upgraded chain, C-channel backing, larger rollers and more.

Solutions / Replacement Belt Parts

Hardened Sintered Rollers
Assembled Hinged Steel Section
Heavy Duty C-Channel
C1045 Precision Chain
Hinge Sleeve
1/4” or 3/8” Thick Coped Angle Cleats
Key Features

- **SOLID MACHINED BUSHINGS**
- **OPTIONAL C-CHANNEL REINFORCEMENT**
- **DOUBLE ROW SIDE BARS**
- **CUSTOM ANGLE CLEATS**
- **HEAVY DUTY FORMED PANS**
- **HEAVY DUTY IMPACT PADS**
- **COTTER PINS**
- **HARDENED SINTERED STEEL ROLLERS**
- **THROUGH PINS**
- **INTERLOCKING SIDE WINGS**
- **HINGE SLEEVES**

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**Solid Machined Bushings**

.38 - 1.0 ID x .55 - 1.38 OD Long 1018 solid, machined bushing. Carburized, hardened RC55-60, press fit into inner side bars.

**Double Row Side Bars**

Standard 2" x ¼" thick C1045 precision die-punched sidebar. Additions include 2" x 3/8" thick and 2.5" x ½" thick. 1" x 5/32" thick on the smaller pitches

**Optional C-Channel Reinforcement**

C 3" x 5# up C 6" x 8.2# heavy duty channel every other pitch

**Custom Angle Cleats**

¼" or 3/8" thick angle cleats in 2", 3" or 4" high options. Bar cleats available
Heavy Duty Formed Pans
Fluent Conveyors offers 1/8", 3/16" or ¼" custom formed hinged pans. Max widths up to 120" wide.

Heavy Duty Impact Pads
Custom number of rows, ¼", 3/8", ½", 5/8", ¾" and 1" thick formed impact shoes every other pitch.

Cotter Pins
Easy maintenance of chain and to secure the rods to the rollers. Solid locking pins available.

Hardened Sintered Steel Rollers
Flanged and hardened steel rollers in 1-9/16", 1-¼", 2-1/16", 3", 3 ½", 4" and 5" diameter options.
**Key Features**

- **SOLID MACHINED BUSHINGS**
- **OPTIONAL C-CHANNEL REINFORCEMENT**
- **DOUBLE ROW SIDE BARS**
- **CUSTOM ANGLE CLEATS**
- **HEAVY DUTY FORMED PANS**
- **HEAVY DUTY IMPACT PADS**
- **COTTER PINS**
- **HARDENED SINTERED STEEL ROLLERS**

**Through Pins**

C1045 CRS 3/4" diameter. Pins end milled flat to lock into outer side bar drilled for 1/4"x1" solid locking pin.

**Interlocking Side Wings**

1-1/2", 2-½", 3", 4" & 6" high precision die formed interlocking off set wing 1/8" - 1/4" thick wing fully mig welded to hinge to prevent scrap build up.

**Hinge Sleeve**

Engineered structural tubing thicker wall than other conveyor belt manufacturers. While still being interchangeable, it offers superior wear characteristics, and extends the entire width of the belt.
The Fluent Conveyor Product Family

- Roller Chain
- Light Duty Roller Chain Conveyors
- Trough Idler Conveyors
- Slider Bed Conveyors
- Standard Sort Systems
- Custom Sort Systems
- Package Handling Conveyors
- Custom Conveyors
# Technical Specifications & Belt Modification Options

Please note not all belts can be configured with each option.

<table>
<thead>
<tr>
<th>Width Options</th>
<th>6&quot;</th>
<th>12&quot;</th>
<th>18&quot;</th>
<th>24&quot;</th>
<th>30&quot;</th>
<th>36&quot;</th>
<th>48&quot;</th>
<th>60&quot;</th>
<th>72&quot;</th>
<th>84&quot;</th>
<th>96&quot;</th>
<th>108&quot;</th>
<th>Custom widths from 36&quot; up to 120&quot; width with all increments within that range. The 2.5&quot; pitch can go in 3&quot; width increments.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleat Options</td>
<td>2&quot;</td>
<td></td>
<td></td>
<td>3&quot;</td>
<td></td>
<td></td>
<td></td>
<td>4&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>¼&quot; – 3/8&quot; thick angle. Flat bar cleats also available.</td>
</tr>
<tr>
<td>Pitch Options</td>
<td>2-1/2 inch</td>
<td></td>
<td></td>
<td>4 inch</td>
<td></td>
<td></td>
<td></td>
<td>6 inch</td>
<td></td>
<td></td>
<td>9 inch</td>
<td></td>
<td>Flat bar cleats also available.</td>
</tr>
<tr>
<td>Hinge Pan Thickness</td>
<td>1/8&quot;</td>
<td></td>
<td></td>
<td>3/16&quot;</td>
<td></td>
<td></td>
<td></td>
<td>1/4 thick&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Flat bar cleats also available.</td>
</tr>
<tr>
<td>Side Wing Height</td>
<td>1-1/2&quot;</td>
<td></td>
<td></td>
<td>2-1/2&quot;</td>
<td></td>
<td></td>
<td></td>
<td>4&quot;</td>
<td></td>
<td></td>
<td>6&quot;</td>
<td></td>
<td>Flat bar cleats also available.</td>
</tr>
<tr>
<td>Chain Pull</td>
<td>6,000#</td>
<td></td>
<td></td>
<td>9,000#</td>
<td></td>
<td></td>
<td></td>
<td>13,000#</td>
<td></td>
<td></td>
<td>14,000#</td>
<td></td>
<td>25,000#</td>
</tr>
<tr>
<td>Side Bar Thickness</td>
<td>1/4&quot;</td>
<td></td>
<td></td>
<td>1/2&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Flat bar cleats also available.</td>
</tr>
<tr>
<td>Hardened Bushing Sizes</td>
<td>.39 up to 1.0 inside diameter x .55-1.38 outside diameter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Flat bar cleats also available.</td>
</tr>
<tr>
<td>Pin Diameter Options</td>
<td>3/8&quot;</td>
<td></td>
<td></td>
<td>¼&quot;</td>
<td></td>
<td>1&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Flat bar cleats also available.</td>
</tr>
<tr>
<td>Roller Diameter Options</td>
<td>1-9/16&quot;</td>
<td></td>
<td></td>
<td>2 1/16&quot;</td>
<td></td>
<td></td>
<td></td>
<td>4&quot;</td>
<td></td>
<td></td>
<td>3&quot;</td>
<td></td>
<td>5&quot;</td>
</tr>
<tr>
<td>Custom Modifications</td>
<td>C-channel, no wings, top impact pads, inverted angle, bar cleats.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Flat bar cleats also available.</td>
</tr>
</tbody>
</table>
## Replacement Hinge Belt Roller Chain Conveyor Belt

### Step A: belt specs (see page 12)

<table>
<thead>
<tr>
<th></th>
<th>Specification</th>
<th>Unit 1</th>
<th>Unit 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pan Thickness</td>
<td>inches</td>
<td>mm</td>
</tr>
<tr>
<td>2</td>
<td>Belt Width (Inside Sealing Wings)</td>
<td>inches</td>
<td>mm</td>
</tr>
<tr>
<td>3</td>
<td>Belt Width (Overall Width)</td>
<td>inches</td>
<td>mm</td>
</tr>
<tr>
<td>4</td>
<td>Roller Spacing</td>
<td>inches</td>
<td>mm</td>
</tr>
<tr>
<td>5</td>
<td>Belt Length</td>
<td>inches</td>
<td>mm</td>
</tr>
</tbody>
</table>

### Step B: roller specs (see page 13)

<table>
<thead>
<tr>
<th></th>
<th>Specification</th>
<th>Unit 1</th>
<th>Unit 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Roller Diameter</td>
<td>inches</td>
<td>mm</td>
</tr>
<tr>
<td>7</td>
<td>Flange Roller Diameter (if Applicable)</td>
<td>inches</td>
<td>mm</td>
</tr>
<tr>
<td>8</td>
<td>Roller Width</td>
<td>inches</td>
<td>mm</td>
</tr>
<tr>
<td>9</td>
<td>Overall Roller Width (Includes Flanged Roller)</td>
<td>inches</td>
<td>mm</td>
</tr>
</tbody>
</table>

### Step C: side bar specs (see page 14)

<table>
<thead>
<tr>
<th></th>
<th>Specification</th>
<th>Unit 1</th>
<th>Unit 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Chain Pitch</td>
<td>inches</td>
<td>mm</td>
</tr>
<tr>
<td>12</td>
<td>Side Bar Width</td>
<td>inches</td>
<td>mm</td>
</tr>
<tr>
<td>13</td>
<td>Side Bar Thickness</td>
<td>inches</td>
<td>mm</td>
</tr>
<tr>
<td>14</td>
<td>Single Or Double Row</td>
<td>inches</td>
<td>mm</td>
</tr>
</tbody>
</table>

### Step D: sealing wings specs (see page 15)

<table>
<thead>
<tr>
<th></th>
<th>Specification</th>
<th>Unit 1</th>
<th>Unit 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>Sealing Wing Height</td>
<td>inches</td>
<td>mm</td>
</tr>
<tr>
<td>16</td>
<td>Sealing Wing Thickness</td>
<td>inches</td>
<td>mm</td>
</tr>
</tbody>
</table>
### Step E: cleat specs (see page 16)

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Units</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Height Of Cleat (\text{Angle Iron Shown})</td>
<td>inches</td>
<td>mm</td>
</tr>
<tr>
<td>2</td>
<td>Thickness Of Cleat</td>
<td>inches</td>
<td>mm</td>
</tr>
<tr>
<td>3</td>
<td>Total Length</td>
<td>inches</td>
<td>mm</td>
</tr>
<tr>
<td>4</td>
<td>Offset From Sealing Wing</td>
<td>inches</td>
<td>mm</td>
</tr>
</tbody>
</table>

### Step F: belt underside support specs (see page 17)

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Units</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>Support Type / Size (\text{C-Channel Shown})</td>
<td>inches</td>
<td>mm</td>
</tr>
<tr>
<td>21</td>
<td>Support Spacing (\text{Every Other Pitch Shown})</td>
<td>inches</td>
<td>mm</td>
</tr>
<tr>
<td>22</td>
<td>Support Length</td>
<td>inches</td>
<td>mm</td>
</tr>
</tbody>
</table>

### Step G: belt underside wear pad specs (see page 18)

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Units</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>Wear Pad Thickness</td>
<td>inches</td>
<td>mm</td>
</tr>
<tr>
<td>24</td>
<td>Wear Pad Quantity (\text{Two Per Pitch Shown})</td>
<td>inches</td>
<td>mm</td>
</tr>
<tr>
<td>25</td>
<td>Wear Pad Spacing</td>
<td>inches</td>
<td>mm</td>
</tr>
<tr>
<td>26</td>
<td>Wear Pad Location</td>
<td>inches</td>
<td>mm</td>
</tr>
<tr>
<td>27</td>
<td>Wear Pad Size</td>
<td>inches</td>
<td>mm</td>
</tr>
</tbody>
</table>
**HINGED BELT COMPONENT OVERVIEW**

**STEP E**
CLEAT SPECS NEEDED (IF APPLICABLE):
- 16: HEIGHT OF CLEAT (ANGLE IRON SHOWN)
- 17: THICKNESS OF CLEAT
- 18: TOTAL LENGTH
- 19: OFFSET FROM SEALING WING

**STEP D**
SEALING WINGS SPECS NEEDED (IF APPLICABLE):
- 14: SEALING WING HEIGHT
- 15: SEALING WING THICKNESS

**STEP A**
BELT SPECIFICATIONS
- 1: PAN THICKNESS
- 2: BELT WIDTH (INSIDE SEALING WINGS)
- 3: BELT WIDTH (OVERALL WIDTH)
- 4: ROLLER SPACING
- 5: BELT LENGTH

**STEP C**
SIDE BARS SPECS NEEDED:
- 10: CHAIN PITCH
- 11: SIDE BAR WIDTH
- 12: SIDE BAR THICKNESS
- 13: SINGLE OR DOUBLE ROW

**STEP B**
ROLLER SPECS NEEDED
- 6: ROLLER DIAMETER
- 7: FLANGED ROLLER DIAMETER (IF APPLICABLE)
- 8: ROLLER WIDTH
- 9: OVERALL ROLLER WIDTH (INCLUDES FLANGED ROLLER)

**STEP F**
BELT UNDERSIDE SUPPORT SPECS NEEDED:
- 20: SUPPORT TYPE / SIZE (C-CHANNEL SHOWN)
- 21: SUPPORT SPACING (EVERY OTHER PITCH SHOWN)
- 22: SUPPORT LENGTH

**STEP G**
BELT UNDERSIDE WEAR PADS SPECS NEEDED (IF APPLICABLE):
- 23: WEAR PAD THICKNESS
- 24: WEAR PAD QUANTITY (TWO PER PITCH SHOWN)
- 25: WEAR PAD SPACING
- 26: WEAR PAD LOCATION
- 27: WEAR PAD SIZE

**STEP D**
SEALING WINGS SPECS NEEDED (IF APPLICABLE):
- 14: SEALING WING HEIGHT
- 15: SEALING WING THICKNESS
STEP A: BELT SPECS

BELT SPECS NEEDED:
1: PAN THICKNESS
2: BELT WIDTH (INSIDE SEALING WINGS)
3: BELT WIDTH (OVERALL WIDTH)
4: ROLLER SPACING
5: BELT LENGTH

#1
BELT PAN THICKNESS

#2
BELT WIDTH (INSIDE SEALING WINGS OR SIDE BARS)

#3
BELT WIDTH (OVERALL WIDTH)

#4
ROLLER SPACING (INSIDE FLANGE ROLLER SHOWN)

TAKE ROLLER SPACING MEASUREMENT AT THIS POINT (WHERE FLAT PORTION OF ROLLER STARTS)

DETAIL A SCALE 1:2
STEP B: ROLLER SPECS

ROLLER SPECS NEEDED:

6: ROLLER
7: FLANGED ROLLER
(IF APPLICABLE)
8: ROLLER WIDTH
9: OVERALL ROLLER WIDTH
(INCLUDES FLANGED ROLLER)
STEP C: SIDE BAR SPEC

SIDE BARS SPECS NEEDED:

10: CHAIN PITCH
11: SIDE BAR WIDTH
12: SIDE BAR THICKNESS
13: SINGLE OR DOUBLE CHAIN ROW

*SEALING WINGS ARE NOT COUNTED AS DOUBLE CHAIN ROW
STEP D: SEALING WING SPECS

SEALING WINGS SPECS NEEDED (IF APPLICABLE):
14: SEALING WING HEIGHT
15: SEALING WING THICKNESS

DETAIL F
SCALE 1:2

#14 SEALING WING HEIGHT
(MEASURED FROM ROLLER CL)

#15 SEALING WING THICKNESS
**STEP E: CLEAT SPECS**

CLEAT SPECS NEEDED (IF APPLICABLE):
16: HEIGHT OF CLEAT (ANGLE IRON SHOWN)
17: THICKNESS OF CLEAT
18: TOTAL LENGTH
19: OFFSET FROM SEALING WING

---

**SECTION H-H**
SCALE 1 : 5

**SECTION J-J**
SCALE 1 : 3

**DETAIL G**
SCALE 1 : 6

#18
TOTAL LENGTH

#16
HEIGHT OF CLEAT

#17
THICKNESS OF CLEAT

---

#19
OFFSET FROM SEALING WING
STEP F: BELT UNDERSIDE SUPPORT SPECS

BELT UNDERSIDE SUPPORT SPECS NEEDED:

20: SUPPORT TYPE / SIZE
   (C-CHANNEL SHOWN)
21: SUPPORT SPACING
   (EVERY OTHER PITCH SHOWN)
22: SUPPORT LENGTH

#20 C-CHANNEL SHOWN
   *COULD BE ANGLE IRON OR FLAT BAR

#21 SUPPORT SPACING
   EVERY OTHER CHAIN PITCH SHOWN

#22 SUPPORT LENGTH

DETAIL K
SCALE 1:3
STEP G: BELT UNDERSIDE WEAR PAD NEEDED SPECS (IF APPLICABLE)

BELT UNDERSIDE SUPPORT SPECS NEEDED:
23: WEAR PAD THICKNESS
24: WEAR PAD QUANTITY (TWO PER PITCH SHOWN)
25: WEAR PAD SPACING
26: WEAR PAD LOCATION
27: WEAR PAD SIZE LENGTH & WIDTH