



Hinged Steel Conveyor Belt

/ Collaborate / Create / Convey

FLUENT CONVEYORS, LLC / WWW.FLUENTCONVEYORS.COM



(866)764-2980 / SALES@FLUENTCONVEYORS.COM / ©COPYRIGHT



Copyright

The Document and its content is copyright of Fluent Conveyors LLC – © Fluent Conveyors LLC. All rights reserved. Any redistribution or reproduction of part or all of the contents in any form is prohibited other than the following:

- You may print or download to a local hard disk extracts for your personal and non-commercial use only.
- You may copy the content to individual third parties for their personal use, but only if you acknowledge Fluent Conveyors LLC as the source of the material.

You may not, except with our express written permission, distribute or commercially exploit the content. Nor may transmit it or store it in any form of electronic retrieval system.

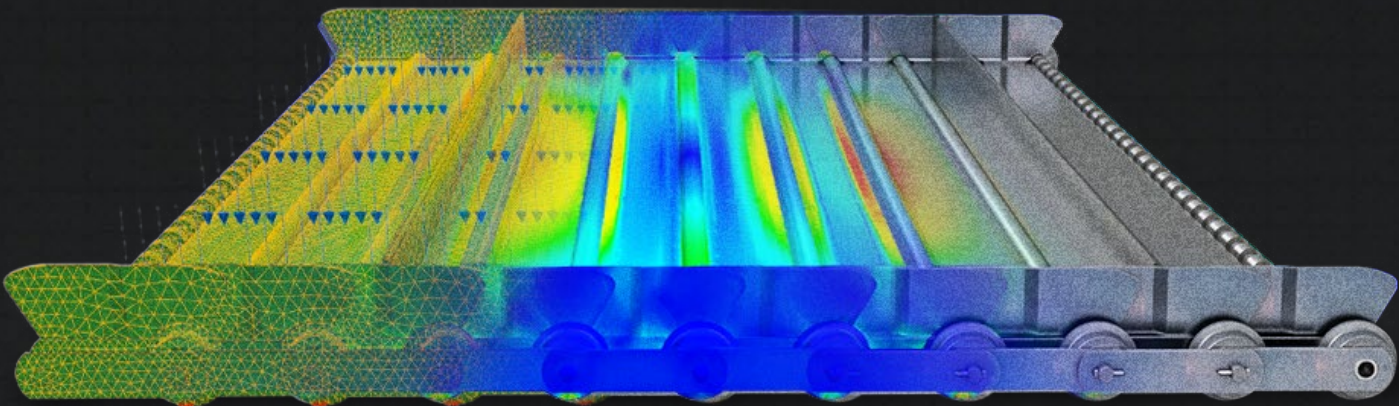


Hinged Steel Replacement Conveyor Belts

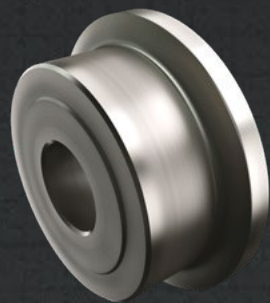
/ Collaborate / Create / Convey

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", 6" and 9" pitch options up to 96" wide. 1/4" - 3/8" 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 REINFORCEMENTS

DOUBLE ROW SIDE BARS

CUSTOM ANGLE CLEATS

HEAVY DUTY FORMED PANS

HEAVY DUTY IMPACT PADS

COTTER PINS

HARDENED SINTERED STEEL ROLLERS

THROUGH PINS

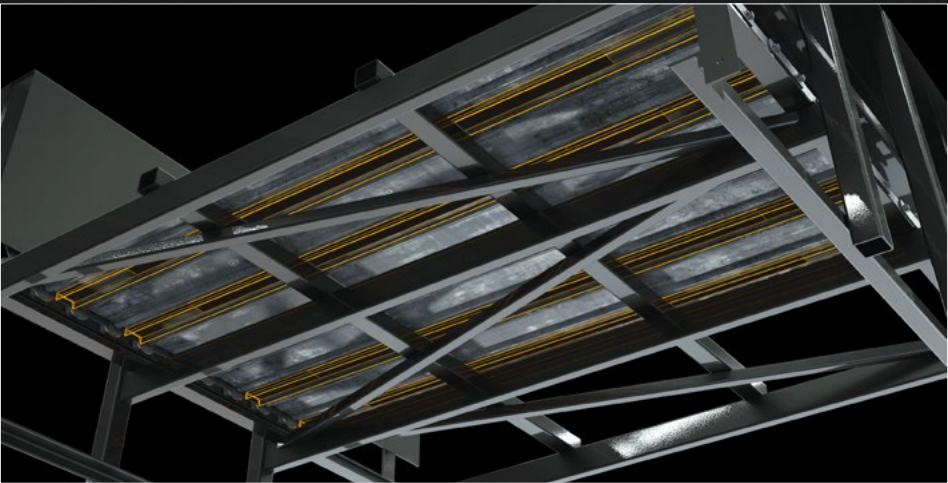
INTERLOCKING SIDE WINGS

HINGE SLEEVES



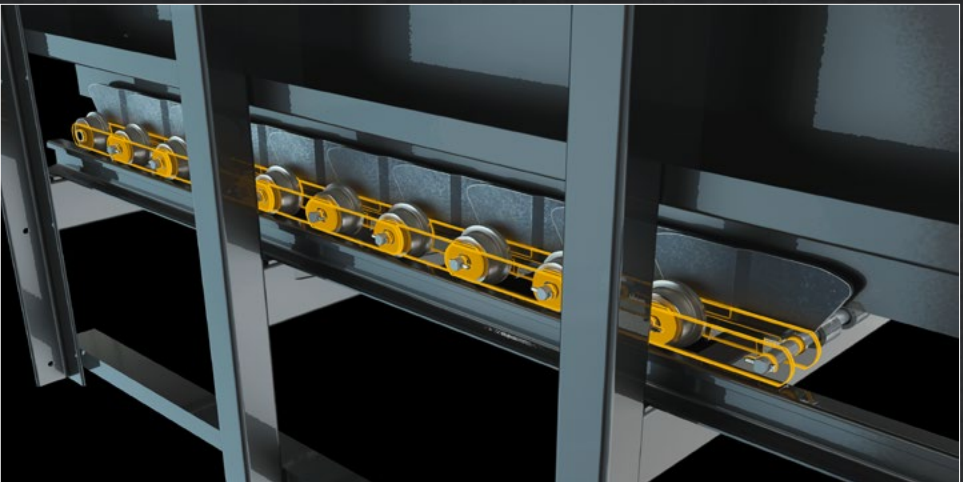
Solid Machined Bushings

0.38" - 1.0" ID x 0.55" - 1.38" OD Long 1018 solid, machined bushing. Carburized, hardened RC55-60, press fit into inner side bars.



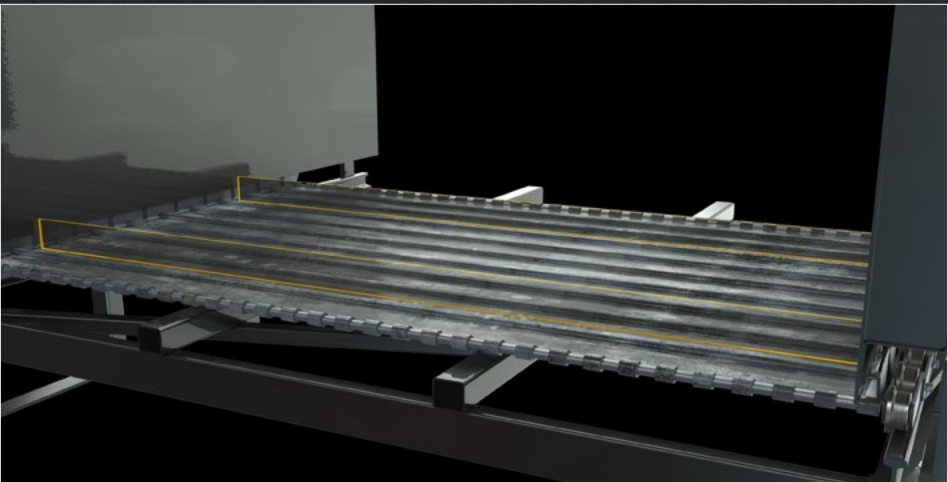
Optional C-Channel Reinforcements

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



Double Row Side Bars

Standard 2" x 1/4" thick C1045 precision die-punched sidebar. Additions include 2" x 3/8" thick and 2-1/2" x 1/2" thick. 1" x 5/32" thick on the smaller pitches.



Custom Angle Cleats

1/4" or 3/8" thick angle cleats in 2", 3" or 4" high options. Bar cleats available.

Key Features

SOLID MACHINED BUSHINGS

OPTIONAL C-CHANNEL REINFORCEMENTS

DOUBLE ROW SIDE BARS

CUSTOM ANGLE CLEATS

HEAVY DUTY FORMED PANS

HEAVY DUTY IMPACT PADS

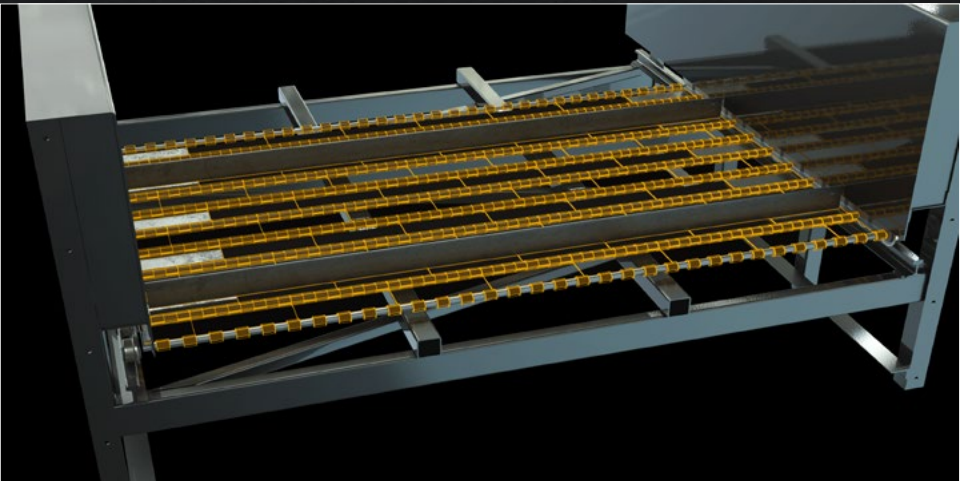
COTTER PINS

HARDENED SINTERED STEEL ROLLERS

THROUGH PINS

INTERLOCKING SIDE WINGS

HINGE SLEEVES



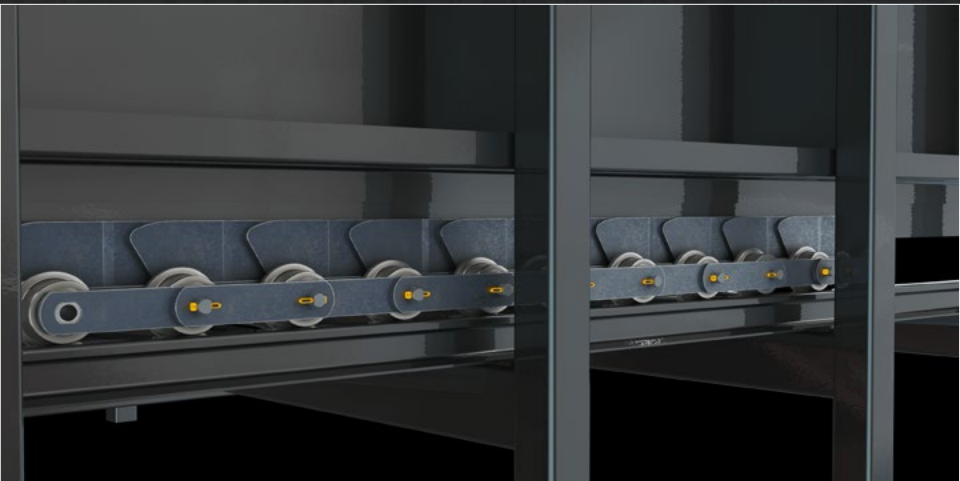
Heavy Duty Formed Pans

Fluent Conveyors offers $\frac{1}{8}$ ", $\frac{3}{16}$ " or $\frac{1}{4}$ " custom formed hinged pans. Max widths up to 120" wide.



Heavy Duty Impact Pads

Custom number of rows, $\frac{1}{4}$ ", $\frac{3}{8}$ ", $\frac{1}{2}$ ", $\frac{5}{8}$ ", $\frac{3}{4}$ " 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- $\frac{9}{16}$ ", 1- $\frac{3}{4}$ ", 2- $\frac{1}{16}$ ", 3", 3- $\frac{1}{2}$ ", 4" and 5" diameter options.

Key Features

SOLID MACHINED BUSHINGS

OPTIONAL C-CHANNEL REINFORCEMENTS

DOUBLE ROW SIDE BARS

CUSTOM ANGLE CLEATS

HEAVY DUTY FORMED PANS

HEAVY DUTY IMPACT PADS

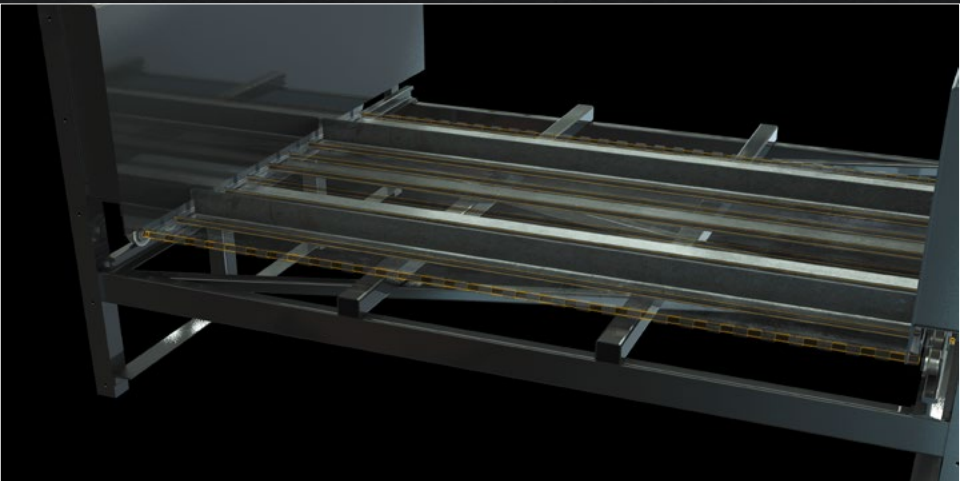
COTTER PINS

HARDENED SINTERED STEEL ROLLERS

THROUGH PINS

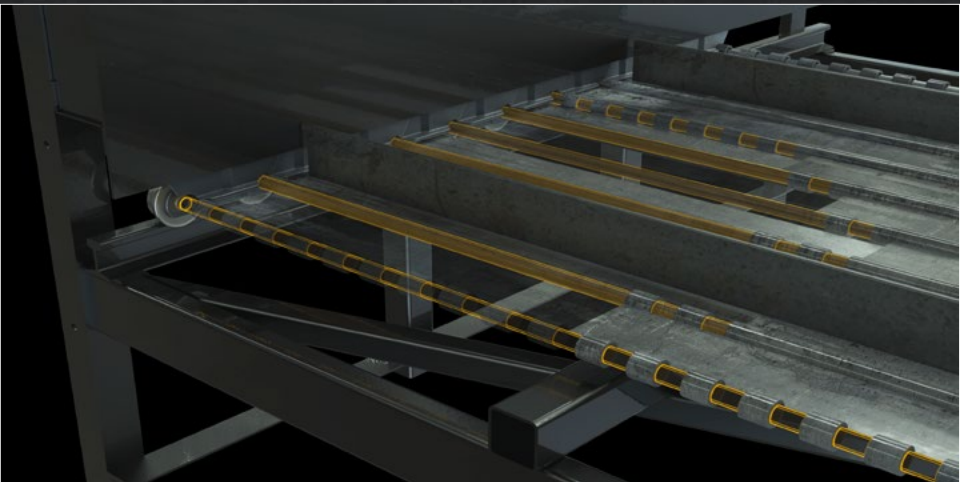
INTERLOCKING SIDE WINGS

HINGE SLEEVES



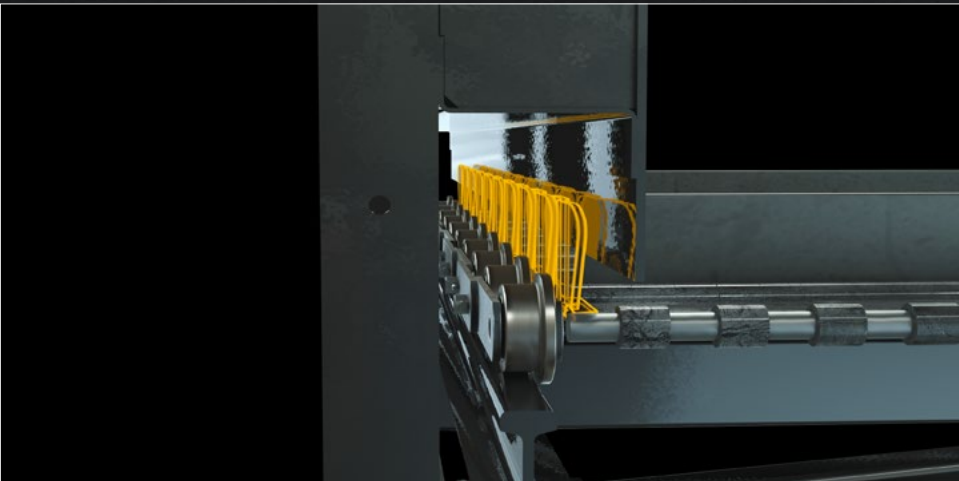
Through Pins

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



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.



Interlocking Side Wings

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

The Fluent Conveyors Product Family

/ Collaborate / Create / Convey



Heavy Duty Roller Chain
Conveyors



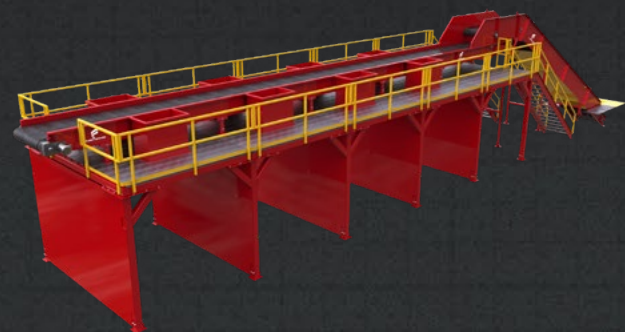
Light Duty Roller Chain
Conveyors



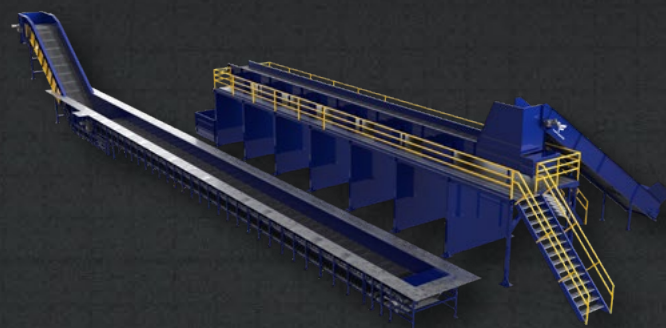
Trough Idler
Conveyors



Slider Bed
Conveyors



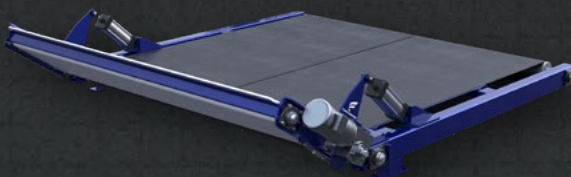
Standard Sort Systems



Custom Sort Systems



Package Handling
Conveyors



Custom Conveyors

Technical Specifications & Belt Modification Options

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

Width Options	<ul style="list-style-type: none">6"24"	<ul style="list-style-type: none">12"30"	<ul style="list-style-type: none">18"36"	<ul style="list-style-type: none">48"84"	<ul style="list-style-type: none">60"96"	<ul style="list-style-type: none">72"108"	<ul style="list-style-type: none">Custom widths from 36" up to 120" width with all increments within that range. The 2.5" pitch can go in 3" width increments.
Cleat Options	<ul style="list-style-type: none">2"3"			<ul style="list-style-type: none">4"			<ul style="list-style-type: none">¼" – ⅜" thick angle.Flat bar cleats also available.
Pitch Options	<ul style="list-style-type: none">2-½"4"			<ul style="list-style-type: none">6"9"			
Hinge Pan Thickness	<ul style="list-style-type: none">⅛"⅜"			<ul style="list-style-type: none">¼"			
Side Wing Height	<ul style="list-style-type: none">1-½"2-½"			<ul style="list-style-type: none">4"6"			
Chain Pull	<ul style="list-style-type: none">6,000#9,000#			<ul style="list-style-type: none">13,000#14,000#			<ul style="list-style-type: none">25,000#
Side Bar Thickness	<ul style="list-style-type: none">¼"⅜"			<ul style="list-style-type: none">½"			
Hardened Bushing Sizes	<ul style="list-style-type: none">0.39"-1.0" ID x 0.55"-1.38" OD						
Pin Diameter Options	<ul style="list-style-type: none">⅜"			<ul style="list-style-type: none">¾"1"			
Roller Diameter Options	<ul style="list-style-type: none">1-⅑"1-¾"			<ul style="list-style-type: none">2-⅑"3"			<ul style="list-style-type: none">4"5"
Custom Modifications	<ul style="list-style-type: none">C-Channel, no wings, top impact pads, inverted angle, bar cleats.						

Replacement Hinge Belt Roller Chain Conveyor Belt

Step A: Belt Specs (see page 12)

1	Pan Thickness	inches	mm
2	Belt Width (Inside Sealing Wings)	inches	mm
3	Belt Width (Overall Width)	inches	mm
4	Roller Spacing	inches	mm
5	Belt Length	inches	mm

Step C: Side Bar Specs (see page 14)

10	Chain Pitch	inches	mm
11	Side Bar Width	inches	mm
12	Side Bar Thickness	inches	mm
13	Single Or Double Row	inches	mm

Step B: Roller Specs (see page 13)

6	Roller Diameter	inches	mm
7	Flange Roller Diameter (If Applicable)	inches	mm
8	Roller Width	inches	mm
9	Overall Roller Width (Includes Flanged Roller)	inches	mm

Step D: Sealing Wings Specs (see page 15)

14	Sealing Wing Height	inches	mm
15	Sealing Wing Thickness	inches	mm

Step E: Cleat Specs (see page 16)

16	Height Of Cleat (Angle Iron Shown)	inches	mm
17	Thickness Of Cleat	inches	mm
18	Total Length	inches	mm
19	Offset From Sealing Wing	inches	mm

Step F: Belt Underside Support Specs (see page 17)

20	Support Type / Size (C-Channel Shown)	inches	mm
21	Support Spacing (Every Other Pitch Shown)	inches	mm
22	Support Length	inches	mm

Step G: Belt Underside Wear Pad Specs (see page 18)

23	Wear Pad Thickness	inches	mm
24	Wear Pad Quantity (Two Per Pitch Shown)	inches	mm
25	Wear Pad Spacing	inches	mm
26	Wear Pad Location	inches	mm
27	Wear Pad Size	inches	mm

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 NEEDED:

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

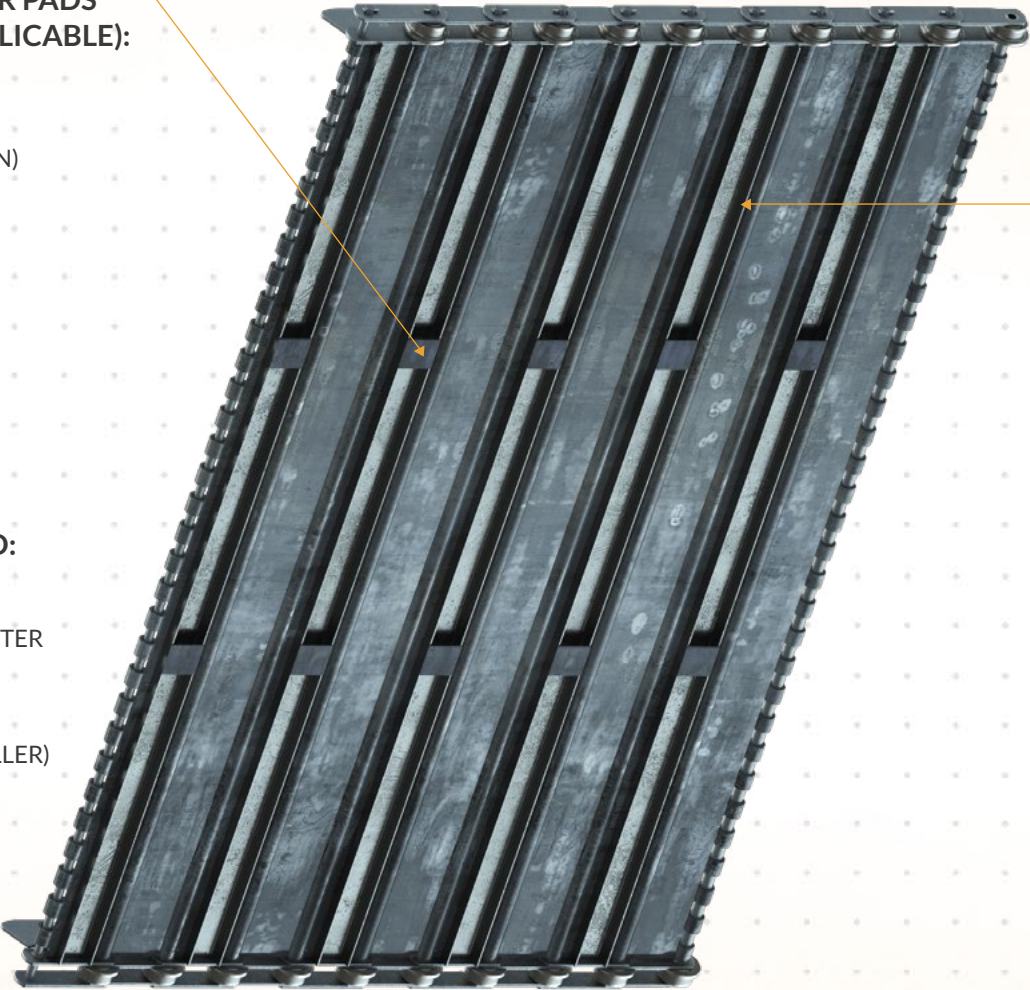
BELT UNDERSIDE SUPPORT SPECS NEEDED:

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

STEP C

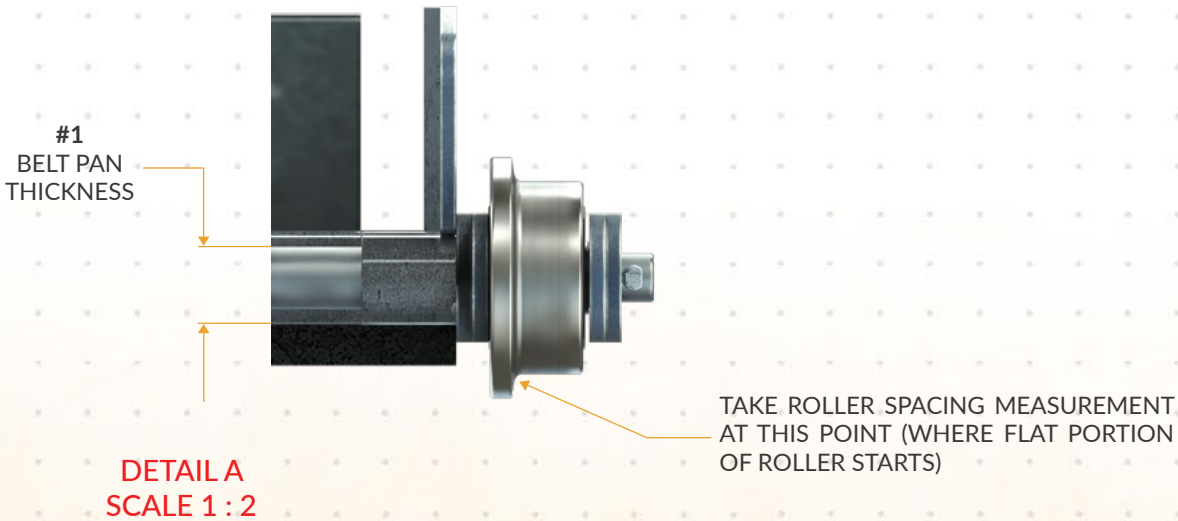
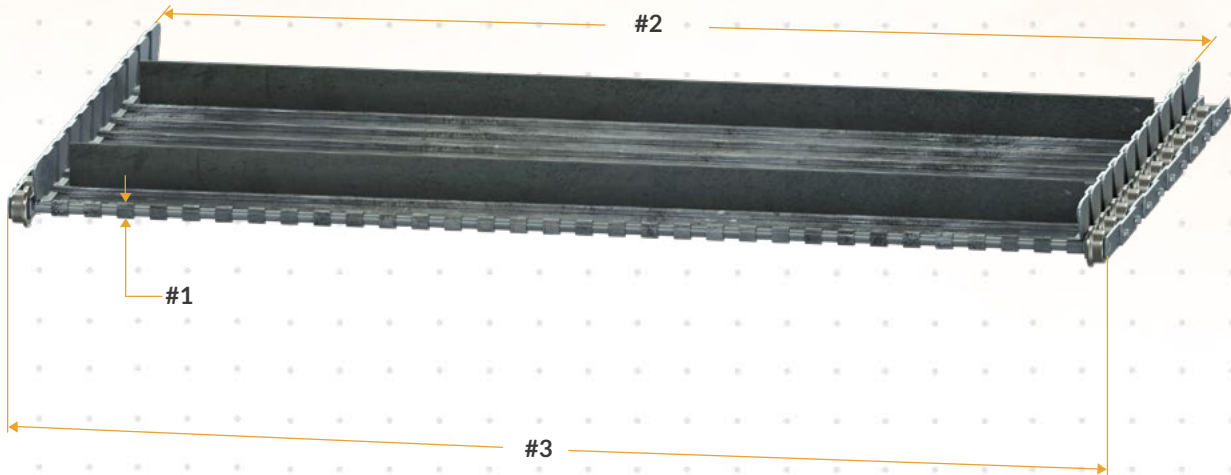
SIDE BARS SPECS NEEDED:

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

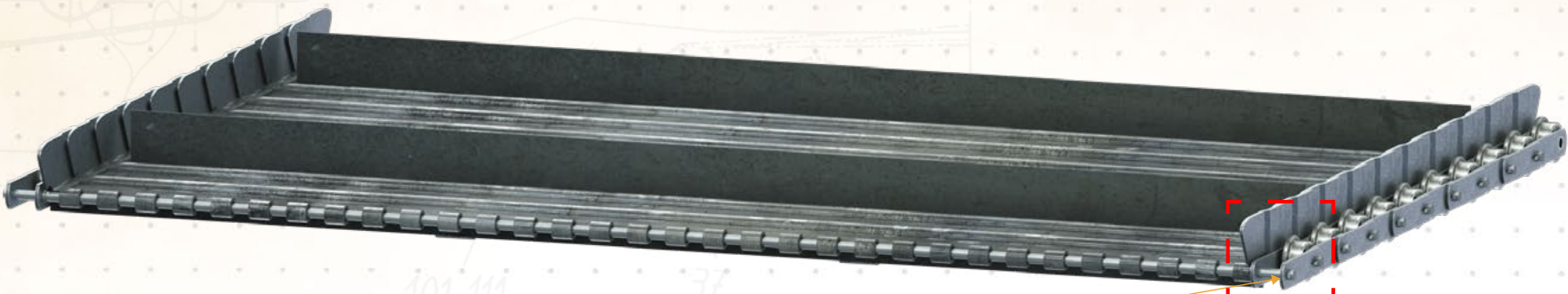


STEP A: BELT SPECS

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



STEP B: ROLLER SPECS

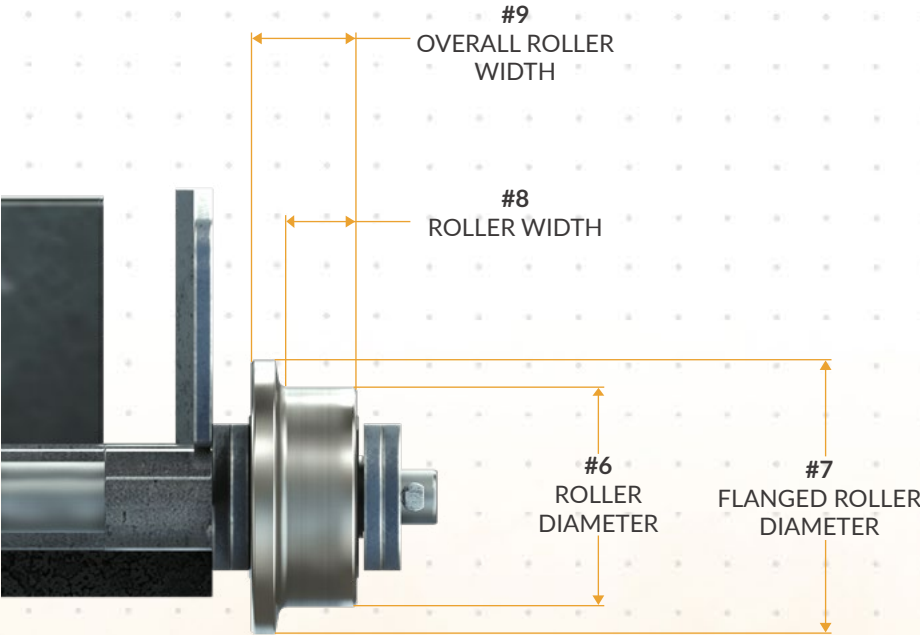
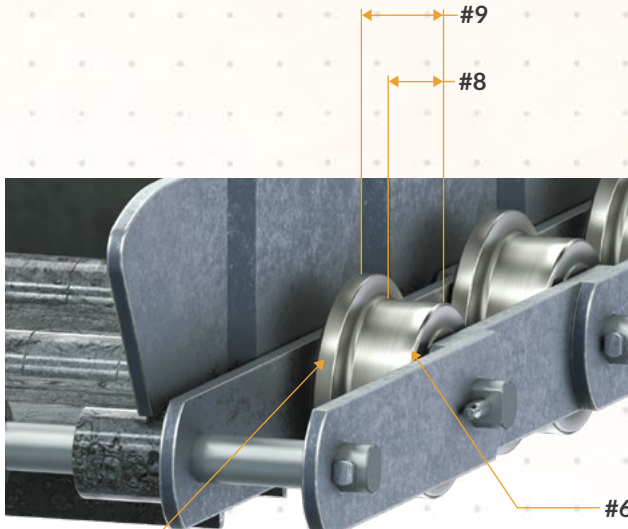


ROLLER SPECS NEEDED:

- 6: ROLLER DIAMETER
- 7: FLANGED ROLLER DIAMETER (IF APPLICABLE)
- 8: ROLLER WIDTH
- 9: OVERALL ROLLER WIDTH (INCLUDES FLANGED ROLLER)



DETAIL B
SCALE 1 : 2



DETAIL C
SCALE 1 : 2

STEP C: SIDE BAR SPECS



SIDE BARS SPECS NEEDED:

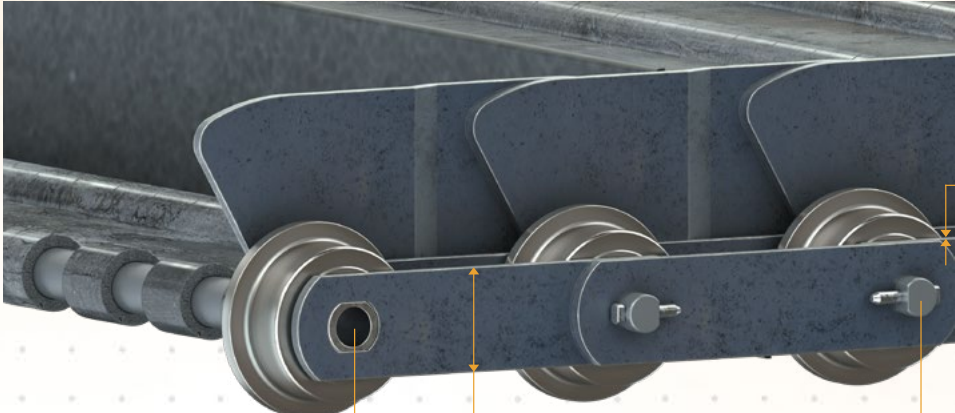
- 10: CHAIN PITCH
- 11: SIDE BAR WIDTH
- 12: SIDE BAR THICKNESS
- 13: SINGLE OR DOUBLE CHAIN ROW



#10
CHAIN PITCH

#11
SIDE BAR
WIDTH

DETAIL D
SCALE 1 : 4



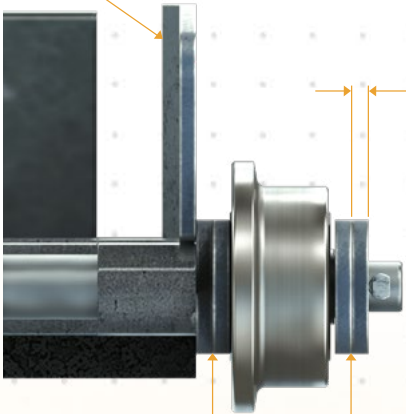
#11

#12

#10
CHAIN PITCH

*SEALING WINGS
ARE NOT COUNTED AS
DOUBLE CHAIN ROW

DETAIL E
SCALE 1 : 2



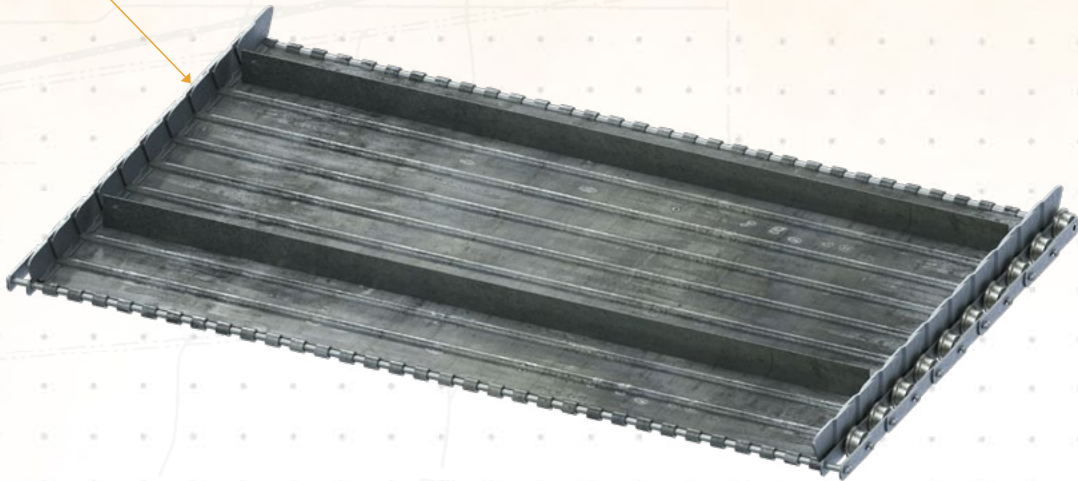
#12
SIDE BAR
THICKNESS

#13
DOUBLE CHAIN
ROW SHOWN

STEP D: SEALING WING SPECS

SEALING WINGS SPECS NEEDED
(IF APPLICABLE):

- 14: SEALING WING HEIGHT
- 15: SEALING WING THICKNESS



DETAIL F
SCALE 1 : 2

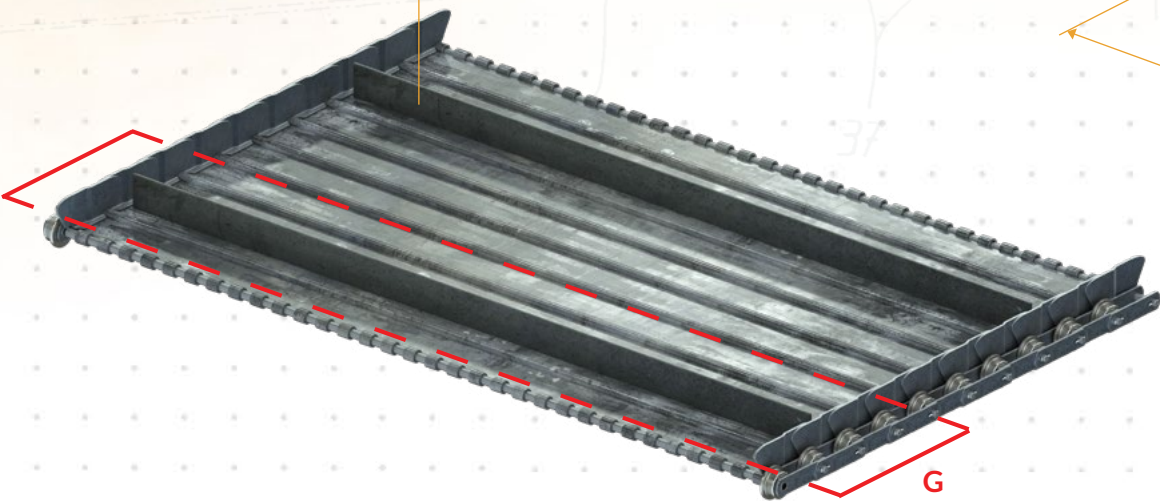
#14
SEALING WING HEIGHT
(MEASURED FROM
ROLLER CL)



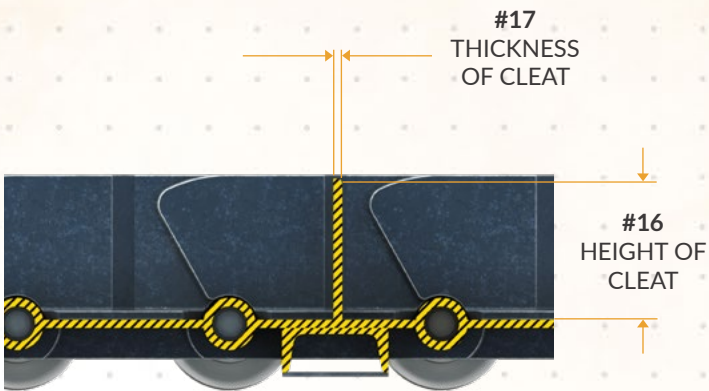
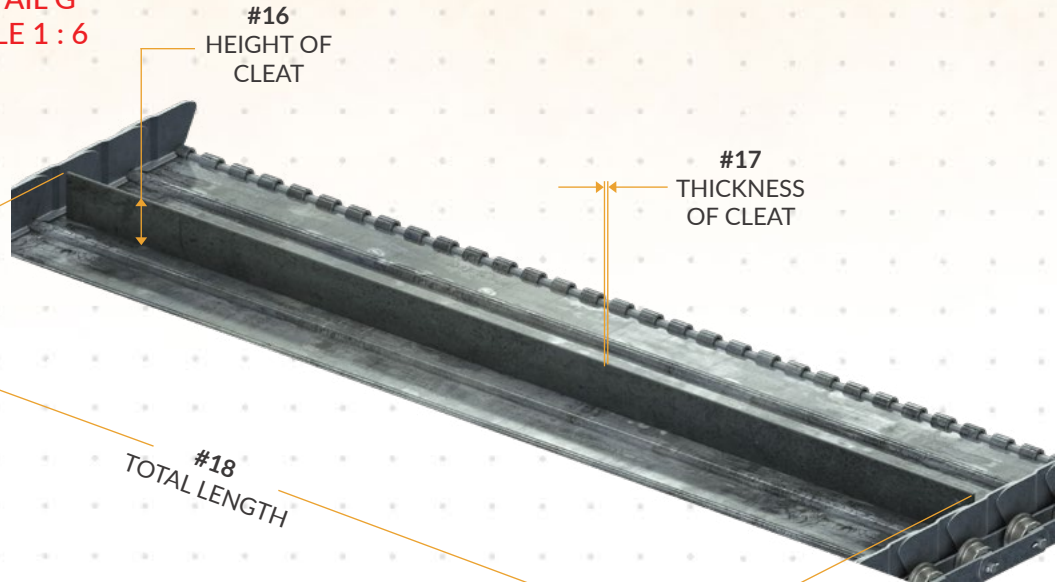
STEP E: CLEAT SPECS

CLEAT SPECS NEEDED (IF APPLICABLE):

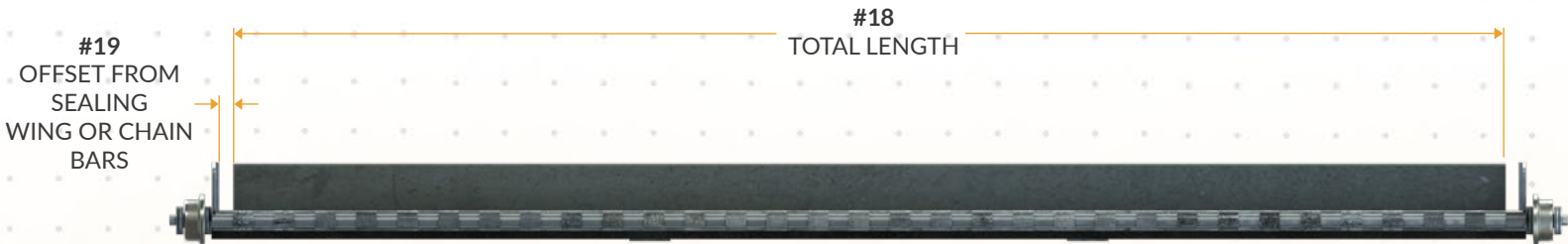
- 16: HEIGHT OF CLEAT (ANGLE IRON SHOWN)
- 17: THICKNESS OF CLEAT
- 18: TOTAL LENGTH
- 19: OFFSET FROM SEALING WING



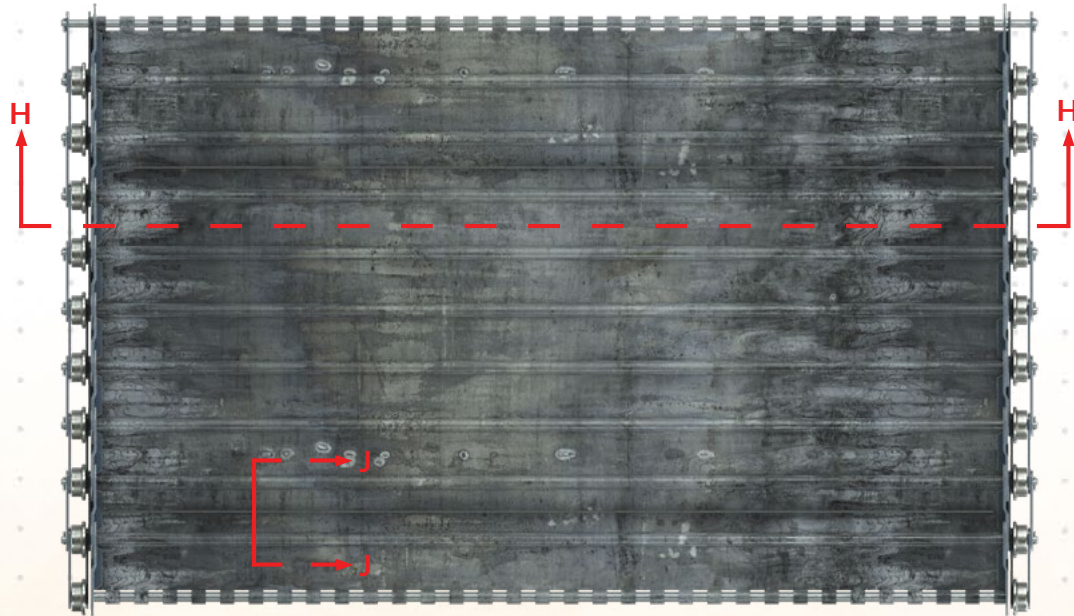
DETAIL G
SCALE 1 : 6



SECTION J-J
SCALE 1 : 3



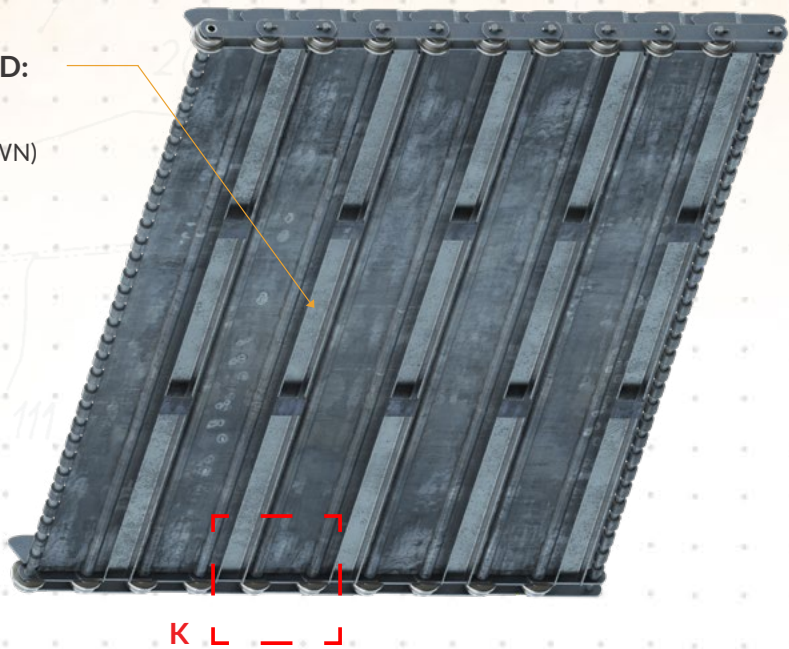
SECTION H-H
SCALE 1 : 5



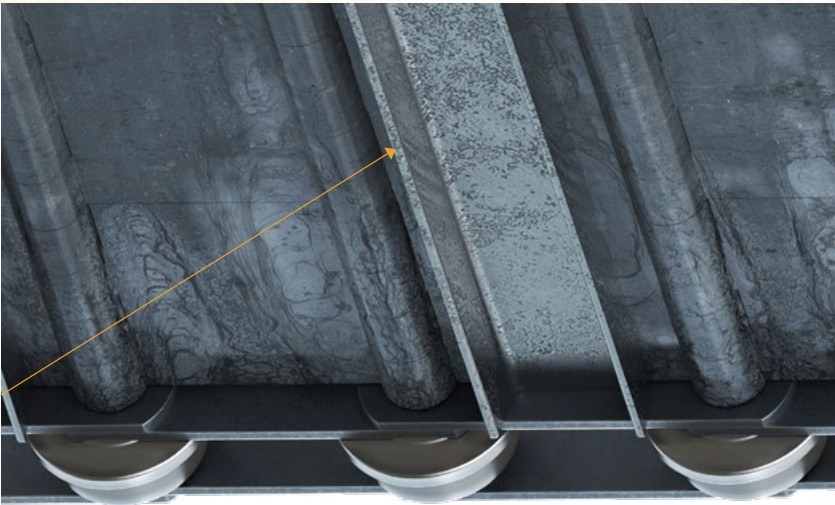
STEP F: BELT UNDERSIDE SUPPORT SPECS

BELT UNDERSIDE SUPPORT SPECS NEEDED:

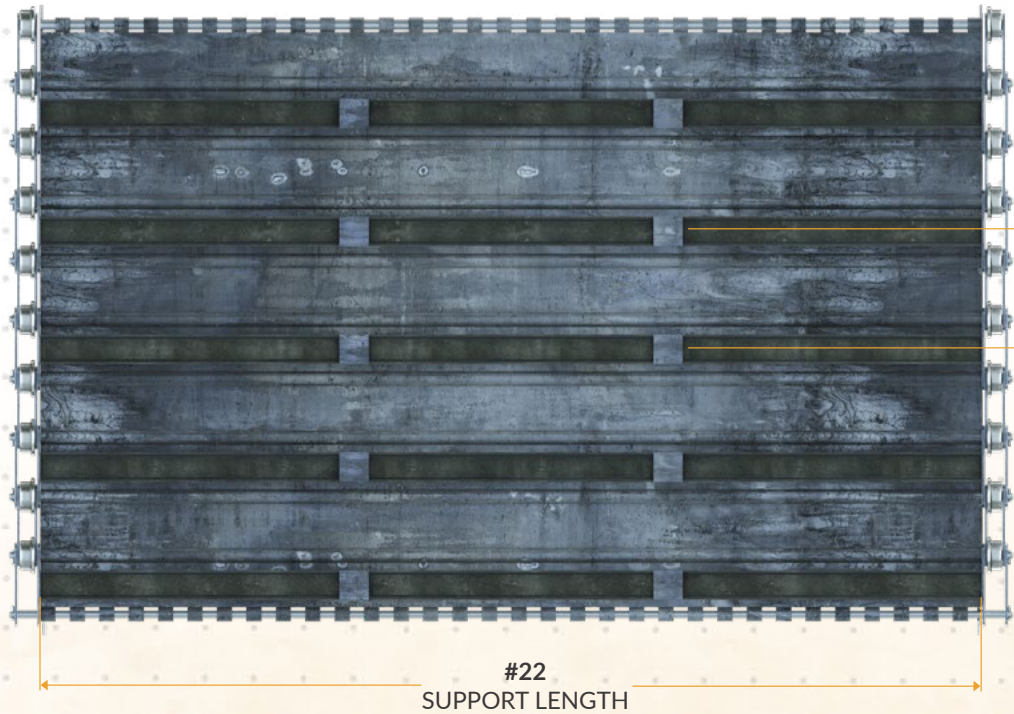
- 20: SUPPORT TYPE / SIZE (C-CHANNEL SHOWN)
- 21: SUPPORT SPACING (EVERY OTHER PITCH SHOWN)
- 22: SUPPORT LENGTH



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

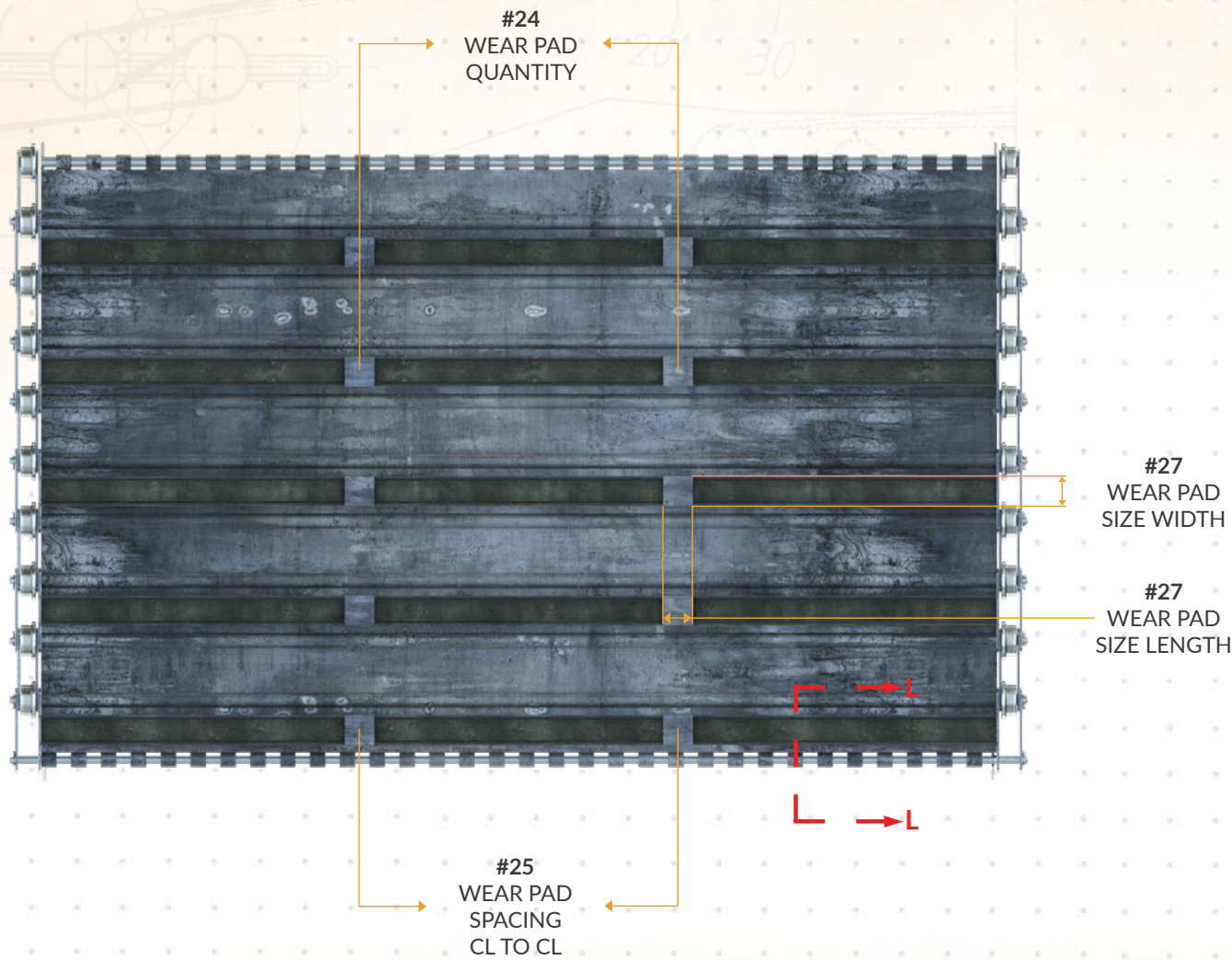


DETAIL K
SCALE 1 : 3



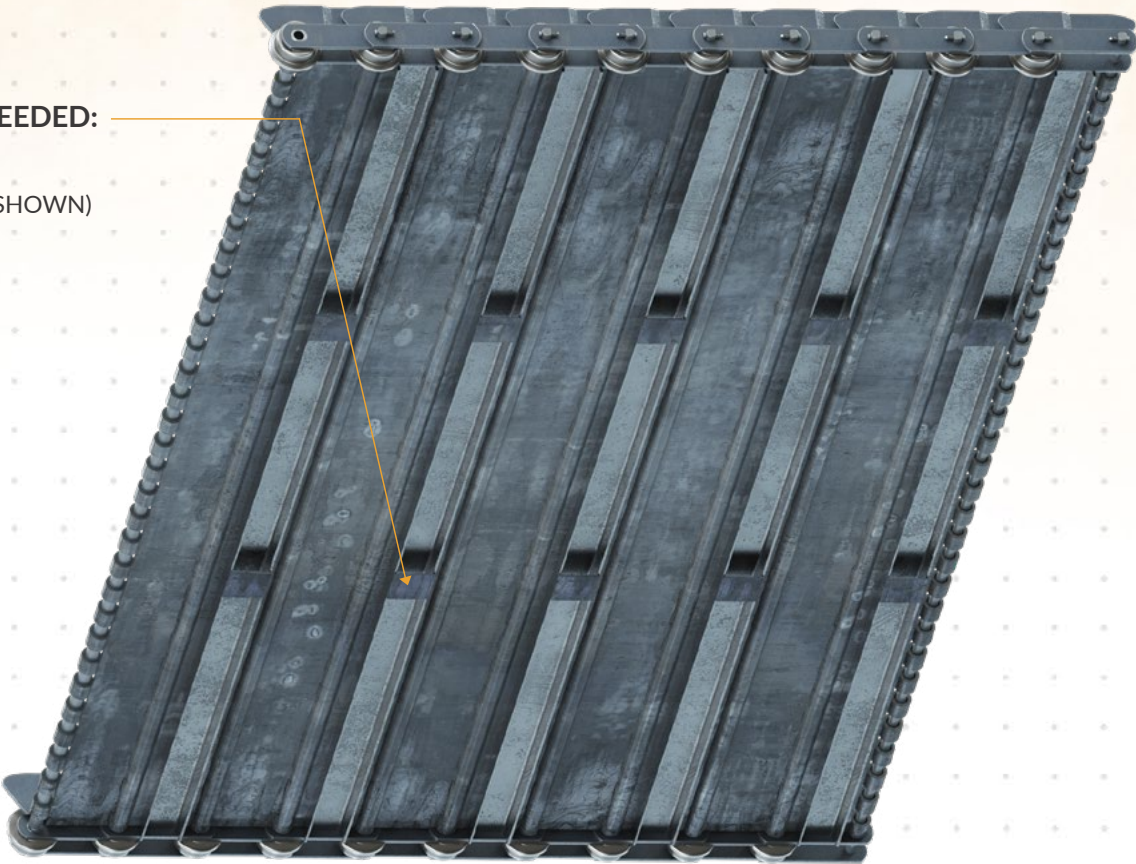
#21
SUPPORT SPACING
EVERY OTHER
CHAIN PITCH SHOWN

STEP G: BELT UNDERSIDE WEAR PAD SPECS



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



#26
WEAR PAD LOCATION
(FROM ROLLER CL TO BOTTOM
OF WEAR PAD)



SECTION L-L
SCALE 1 : 3

#23
WEAR PAD
THICKNESS

