



# Hinged Steel Conveyor Belt

/ Collaborate / Create / Convey

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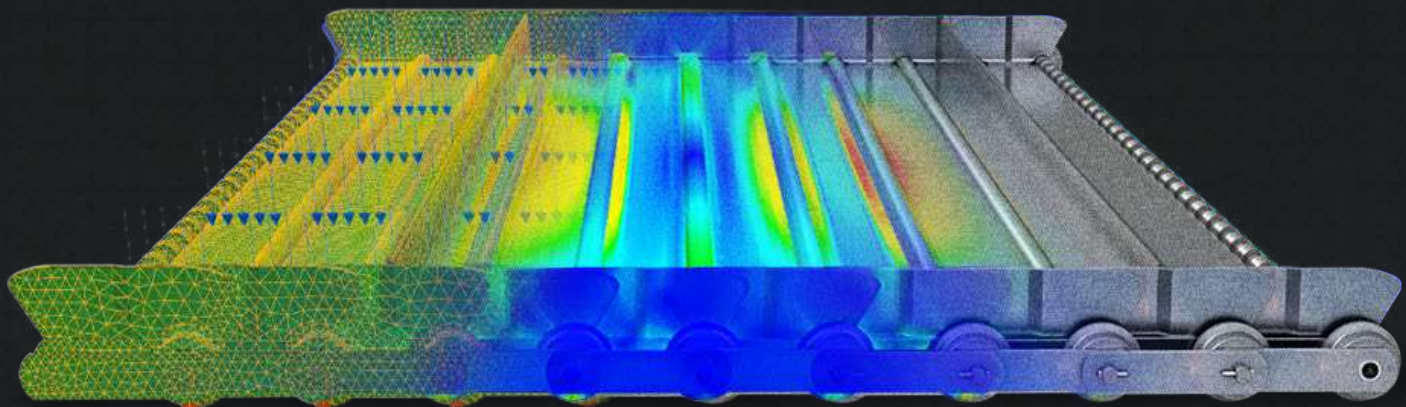


# Hinged Steel Replacement Conveyor Belts

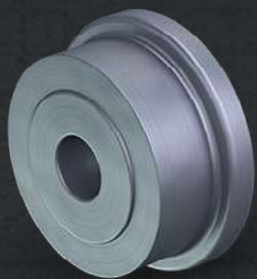
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Meet our most flexible chain belt made. Designed to mold to your unique systems. Fluent hinged steel conveyor belts are ideal for recycling, ferrous and non-ferrous, mixed solid waste, sheared scrap, refuge and nearly all other applications with less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

Hinged steel belts come in 4 inch, 6-inch and 9-inch pitch options up to 96" wide. 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



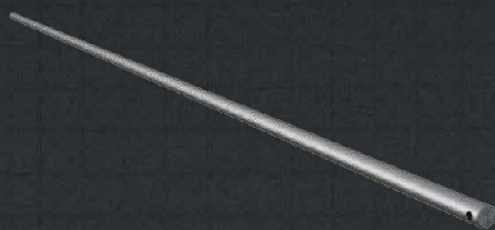
Assembled Hinged  
Steel Section



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 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



### 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.



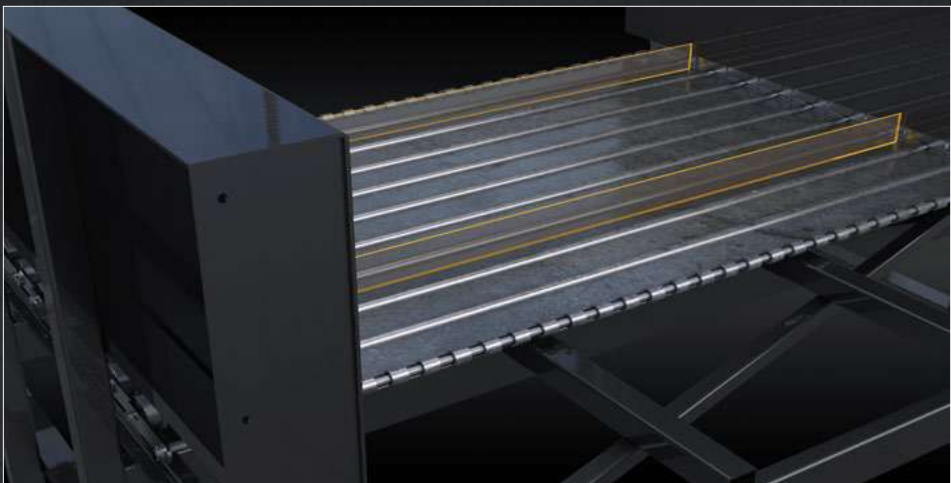
### Optional C-Channel Reinforcement

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 2.5" 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 REINFORCEMENT

DOUBLE ROW SIDE BARS

CUSTOM ANGLE CLEATS

**HEAVY DUTY FORMED PANS**

**HEAVY DUTY IMPACT PADS**

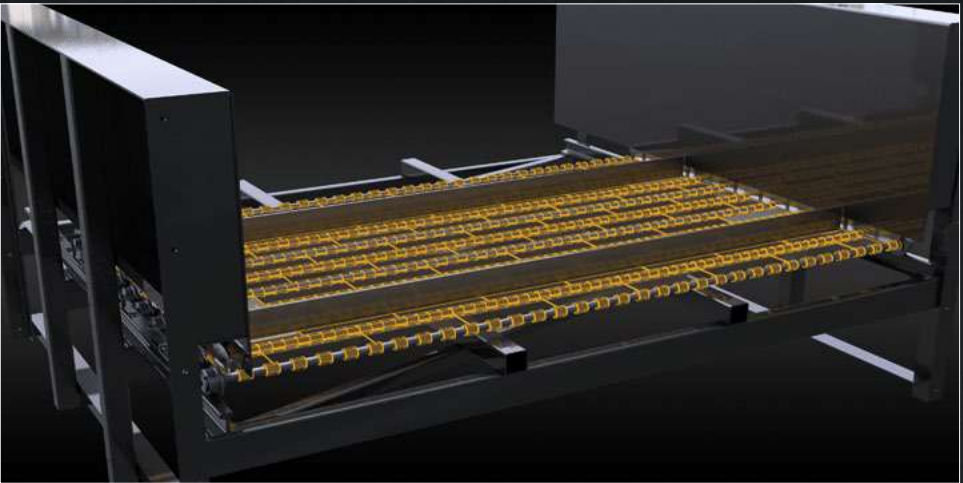
**COTTER PINS**

**HARDENED SINTERED STEEL ROLLERS**

THROUGH PINS

INTERLOCKING SIDE WINGS

HINGE SLEEVES



## Heavy Duty Formed Pans

Fluent Conveyors offers 1/8", 3/16" or 1/4" custom formed hinged pans. Max widths up to 120" wide.



## Heavy Duty Impact Pads

Custom number of rows, 1/4", 3/8", 1/2", 5/8", 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 1-9/16", 1-3/4", 2-1/16", 3", 3 1/2", 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

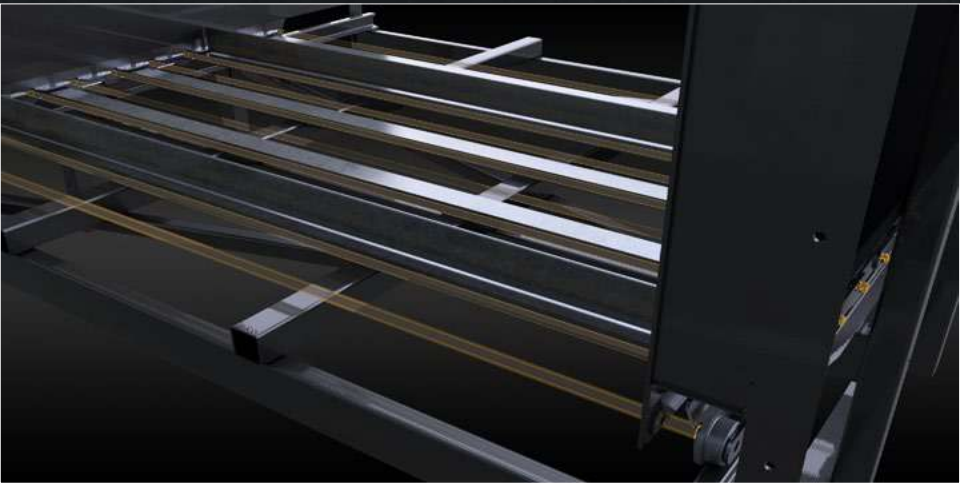
COTTER PINS

HARDENED SINTERED STEEL ROLLERS

THROUGH PINS

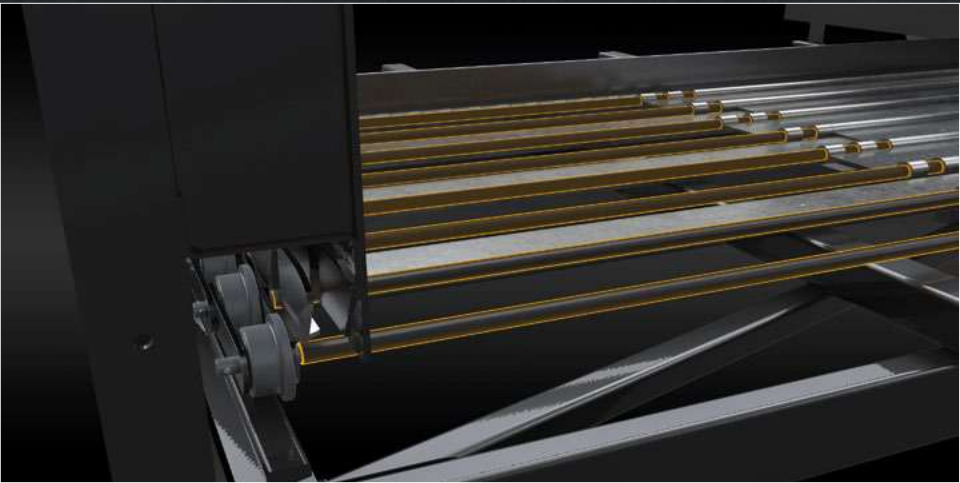
INTERLOCKING SIDE WINGS

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 off set wing 1/8" - 1/4" thick wing fully mig welded to hinge to prevent scrap build up.

# The Fluent Conveyor Product Family

/ Collaborate / Create / Convey



Roller Chain



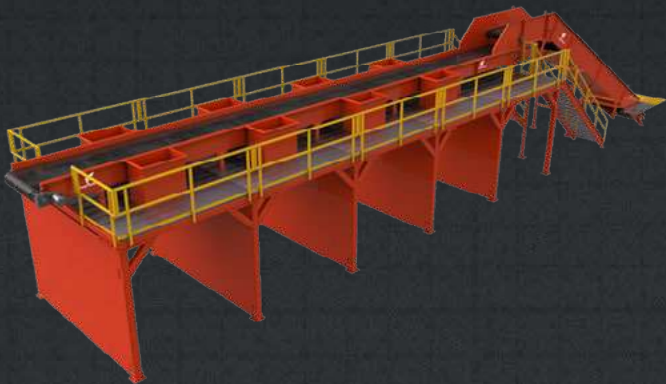
Light Duty Roller Chain  
Conveyors



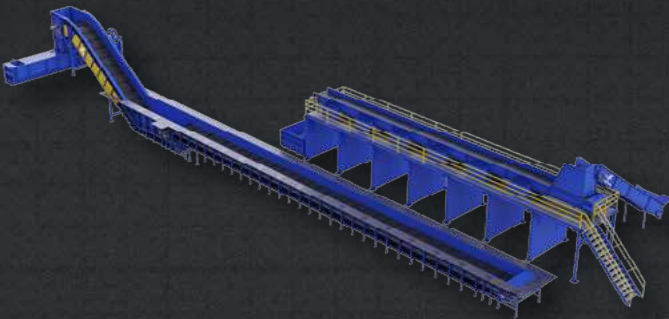
Trough Idler Conveyors



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.

Width Options	<ul style="list-style-type: none"><li>• 6"</li><li>• 12"</li><li>• 18"</li><li>• 24"</li><li>• 30"</li><li>• 36"</li></ul>	<ul style="list-style-type: none"><li>• 48"</li><li>• 60"</li><li>• 72"</li><li>• 84"</li><li>• 96"</li><li>• 108"</li></ul>	<ul style="list-style-type: none"><li>• Custom widths from 36" up to 120" width with all increments within that range. The 2.5" pitch can go in 3" width increments.</li></ul>
Cleat Options	<ul style="list-style-type: none"><li>• 2"</li><li>• 3"</li></ul>	<ul style="list-style-type: none"><li>• 4"</li></ul>	<ul style="list-style-type: none"><li>• ¼" – 3/8" thick angle.</li><li>• Flat bar cleats also available.</li></ul>
Pitch Options	<ul style="list-style-type: none"><li>• 2-1/2 inch</li><li>• 4 Inch</li></ul>	<ul style="list-style-type: none"><li>• 6 Inch</li><li>• 9 Inch</li></ul>	
Hinge Pan Thickness	<ul style="list-style-type: none"><li>• 1/8"</li><li>• 3/16"</li></ul>	<ul style="list-style-type: none"><li>• 1/4 thick"</li></ul>	
Side Wing Height	<ul style="list-style-type: none"><li>• 1-1/2"</li><li>• 2-1/2"</li></ul>	<ul style="list-style-type: none"><li>• 4"</li><li>• 6"</li></ul>	
Chain Pull	<ul style="list-style-type: none"><li>• 6,000#</li><li>• 9,000#</li></ul>	<ul style="list-style-type: none"><li>• 13,000#</li><li>• 14,000#</li></ul>	<ul style="list-style-type: none"><li>• 25,000#</li></ul>
Side Bar Thickness	<ul style="list-style-type: none"><li>• 1/4"</li><li>• 3/8"</li></ul>	<ul style="list-style-type: none"><li>• 1/2"</li></ul>	
Hardened Bushing Sizes	<ul style="list-style-type: none"><li>• .39 up to 1.0 inside diameter x .55-1.38 outside diameter</li></ul>		
Pin Diameter Options	<ul style="list-style-type: none"><li>• 3/8"</li></ul>	<ul style="list-style-type: none"><li>• ¾"</li><li>• 1"</li></ul>	
Roller Diameter Options	<ul style="list-style-type: none"><li>• 1-9/16"</li><li>• 1- ¾"</li></ul>	<ul style="list-style-type: none"><li>• 2 1/16"</li><li>• 3"</li></ul>	<ul style="list-style-type: none"><li>• 4"</li><li>• 5"</li></ul>
Custom Modifications	<ul style="list-style-type: none"><li>• C-channel, no wings, top impact pads, inverted angle, bar cleats.</li></ul>		

# 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
12	Side Bar Width	inches	mm
13	Side Bar Thickness	inches	mm
14	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)

15	Sealing Wing Height	inches	mm
16	Sealing Wing Thickness	inches	mm

Step E: cleat specs (see page 16)

1	Height Of Cleat (Angle Iron Shown)	inches	mm
2	Thickness Of Cleat	inches	mm
3	Total Length	inches	mm
4	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

- 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:

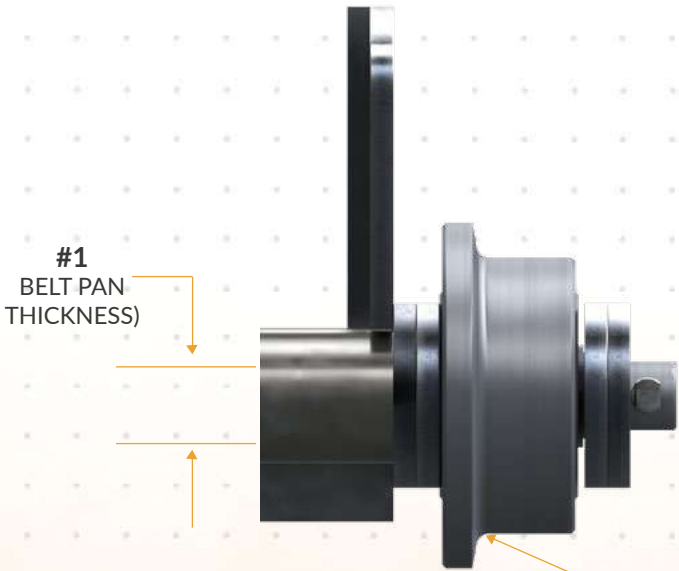
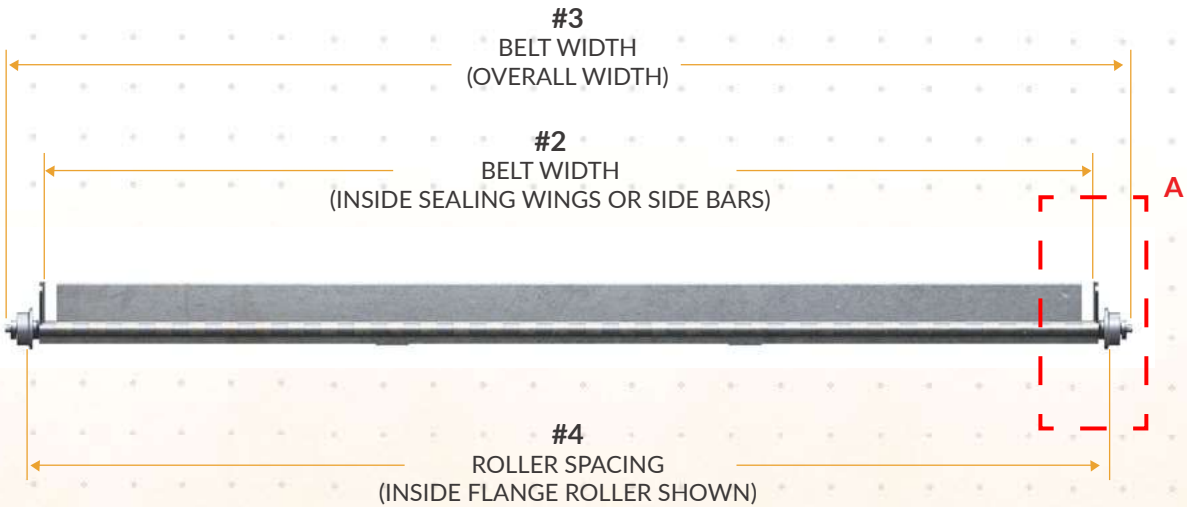
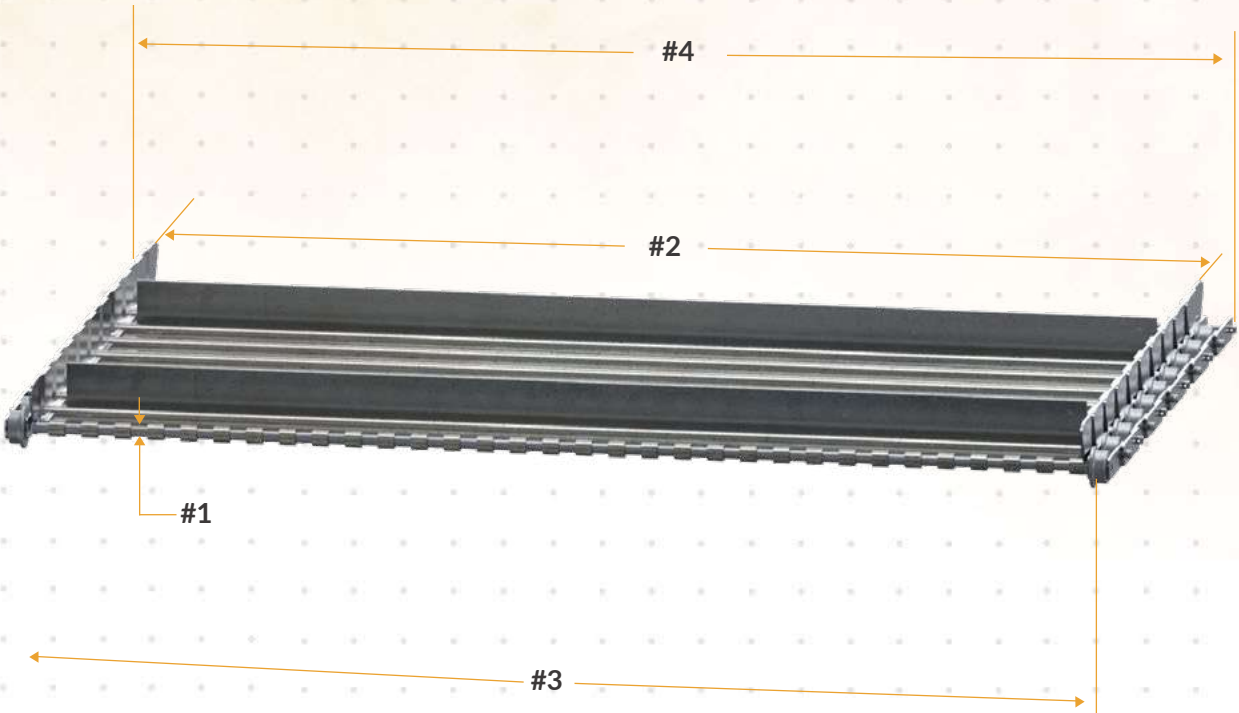
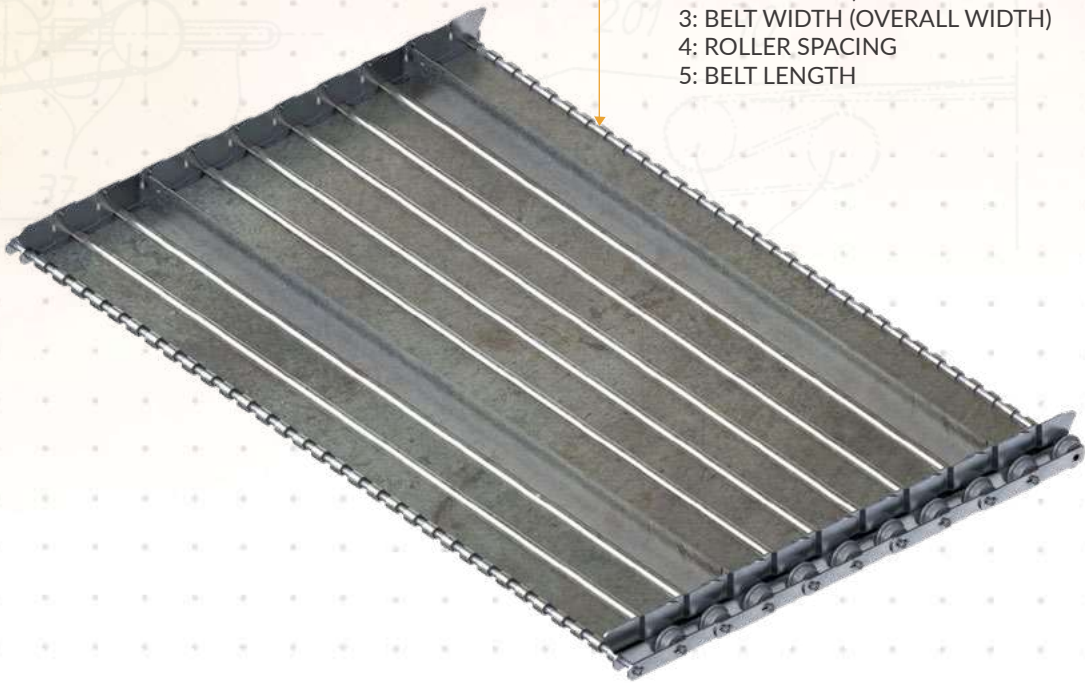
- 10: CHAIN PITCH
- 11: SIDE BAR WIDTH
- 12: SIDE BAR THICKNESS
- 13: SINGLE OR DOUBLE ROW



# 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



**DETAIL A  
SCALE 1 : 2**

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

# STEP B: ROLLER SPECS

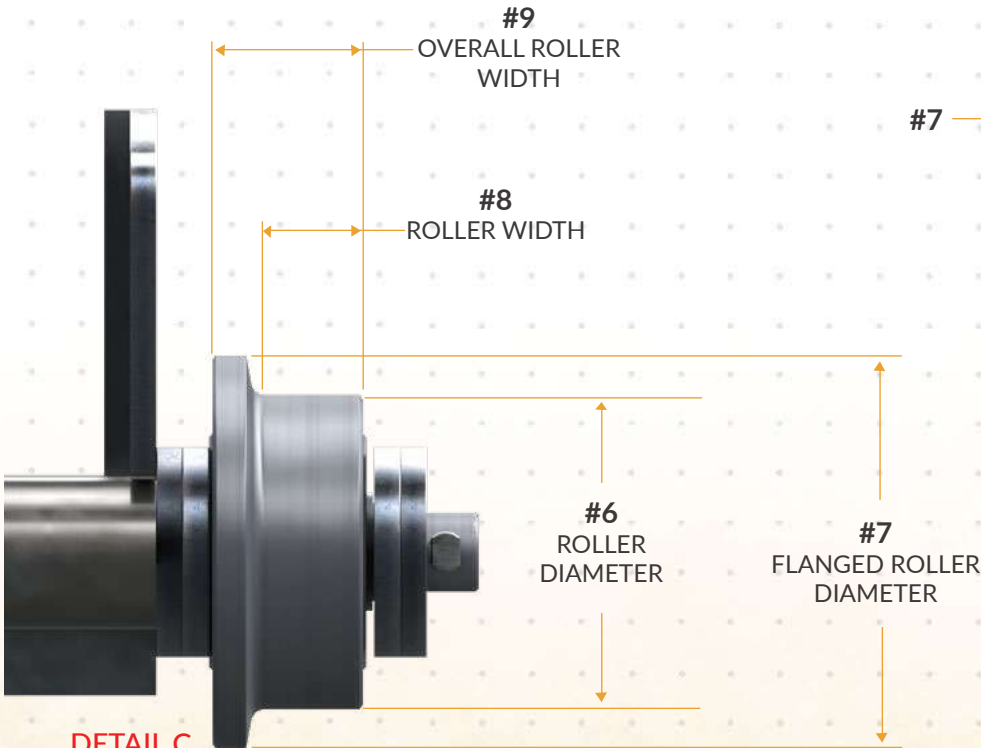
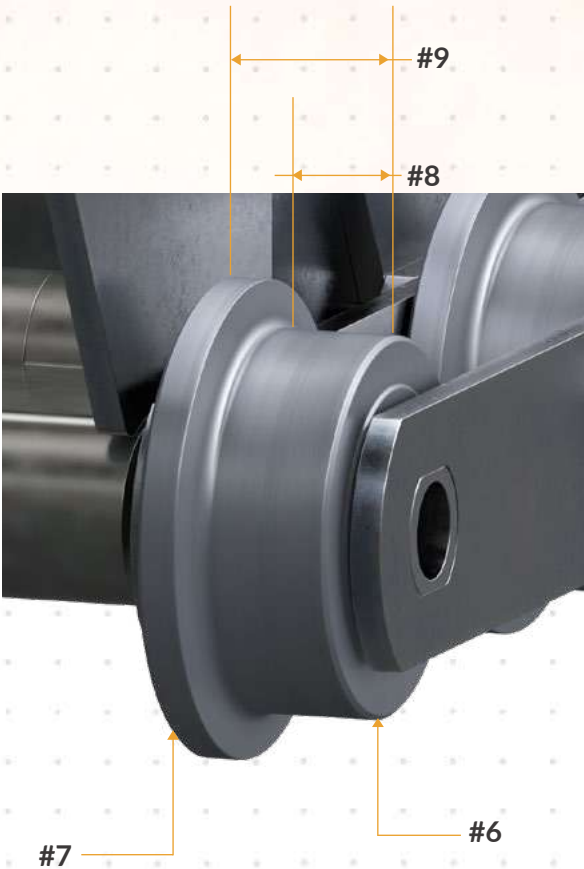


ROLLER SPECS NEEDED:

- 6: ROLLER
- 7: FLANGED ROLLER (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 SPEC

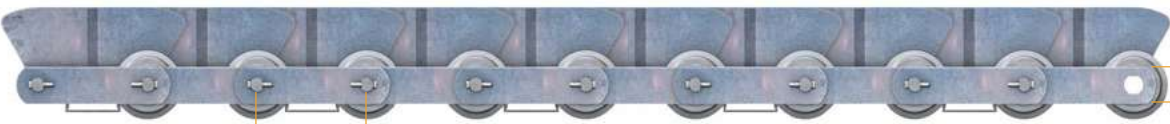


D

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



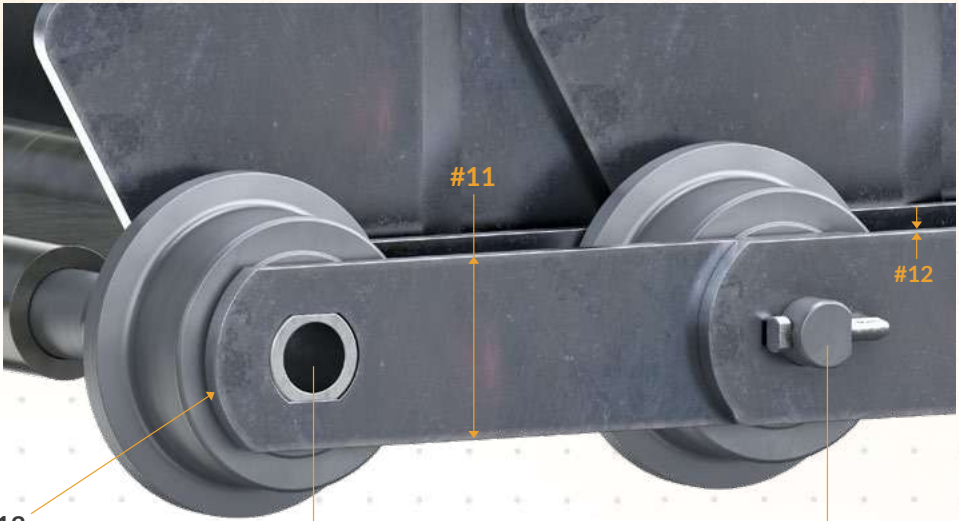
E



#10  
CHAIN PITCH

#11  
SIDE BAR  
WIDTH

DETAIL D  
SCALE 1 : 4



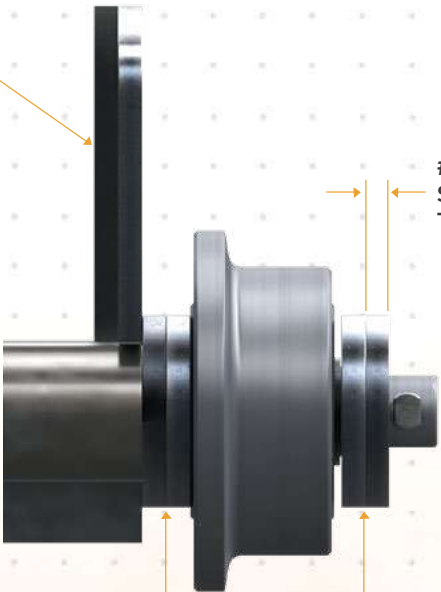
#13  
SINGLE ROW  
SHOWN

#10  
CHAIN PITCH

#11

#12

\*SEALING WINGS  
ARE NOT COUNTED AS  
DOUBLE CHAIN ROW



#12  
SIDE BAR  
THICKNESS

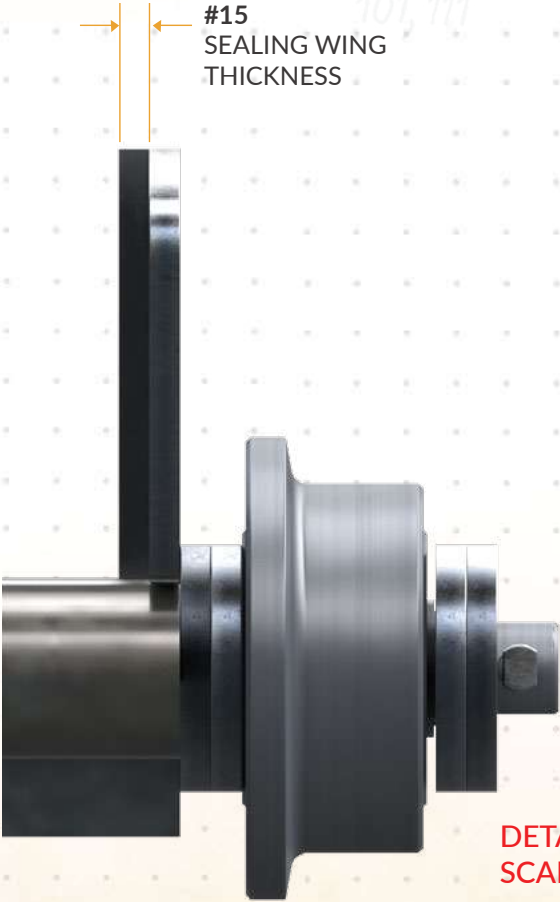
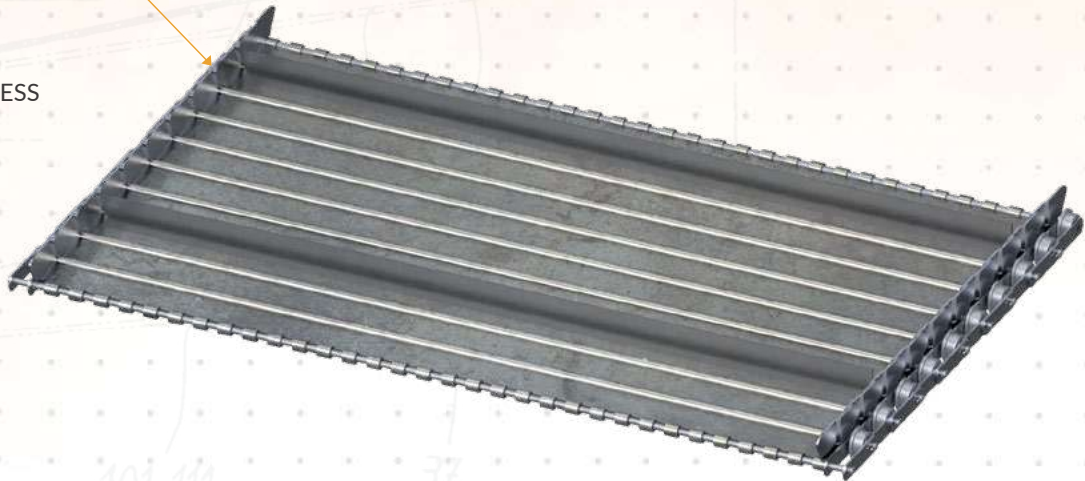
#13  
DOUBLE CHAIN  
ROW SHOWN

DETAIL E  
SCALE 1 : 2

# STEP D: SEALING WING SPECS

SEALING WINGS SPECS NEEDED  
(IF APPLICABLE):

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



DETAIL F  
SCALE 1 : 2

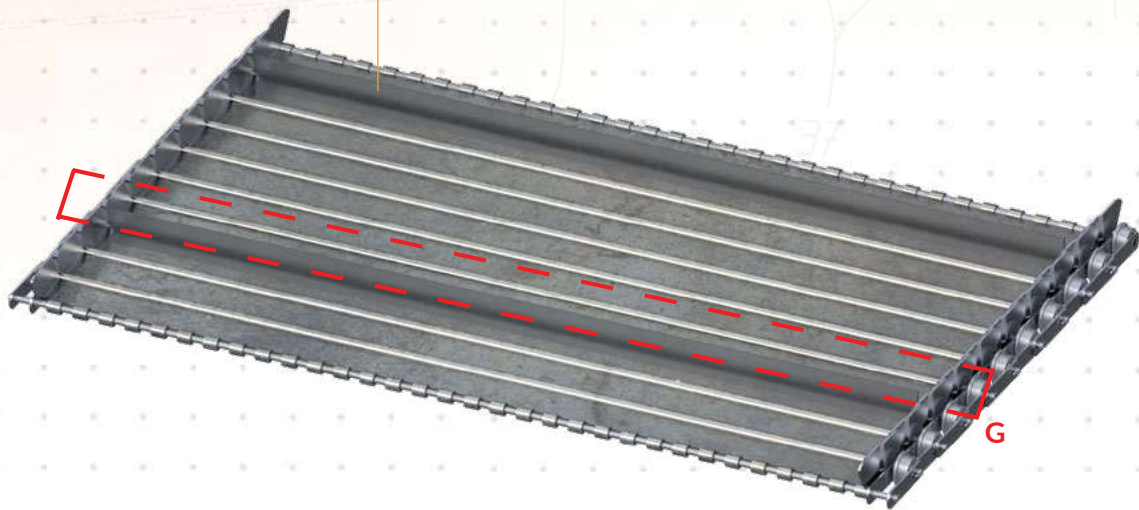
#14  
SEALING WING  
HEIGHT  
(MEASURED FROM  
ROLLER CL )



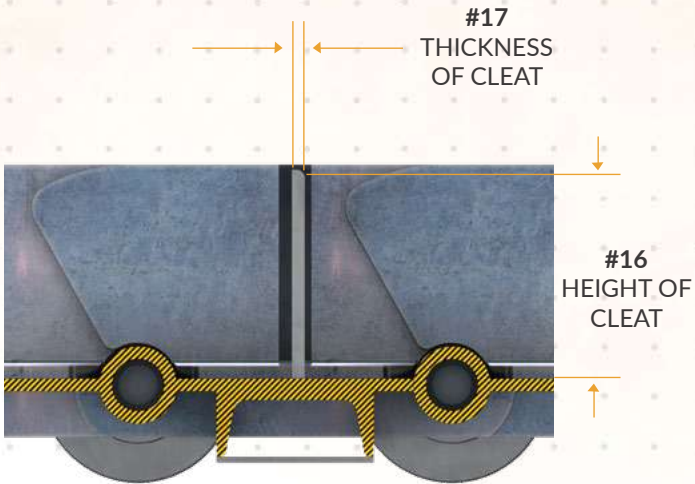
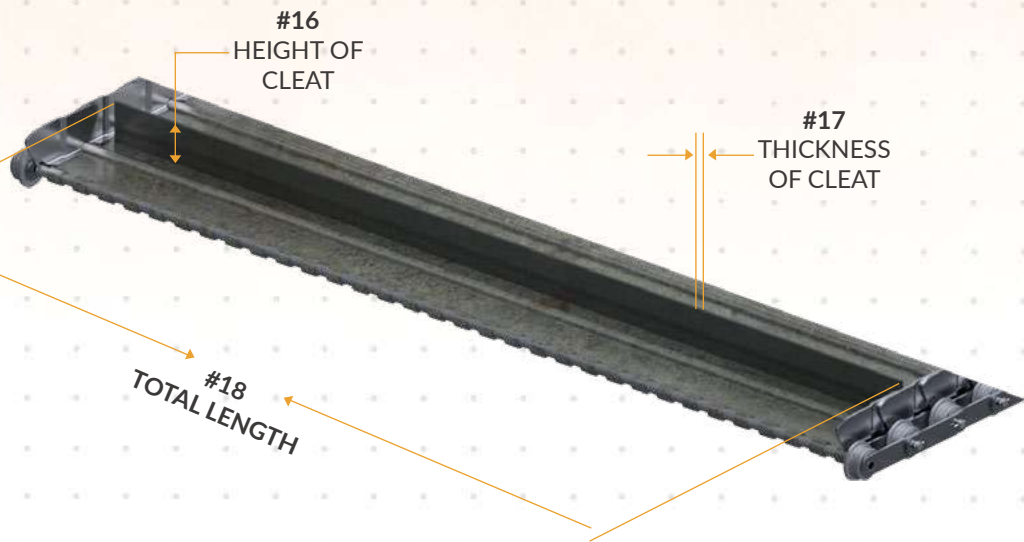
# STEP E: CLEAT SPECS

CLEAT SPECS NEEDED (IF APPLICABLE):

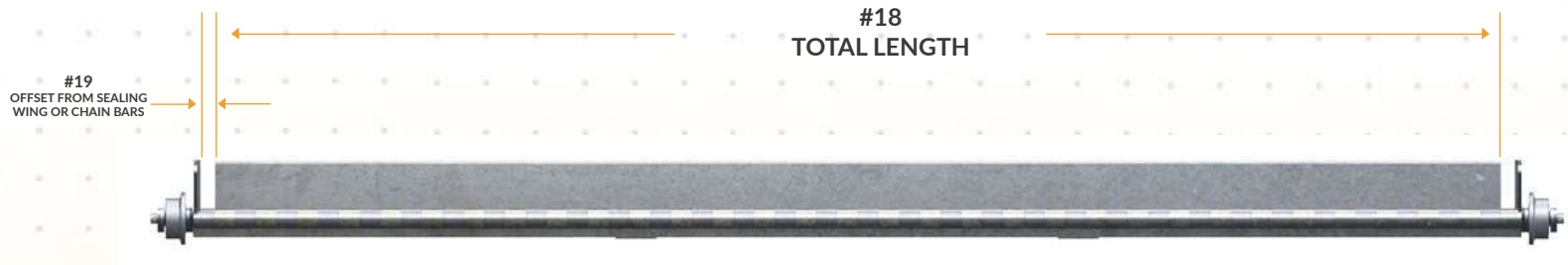
- 16: HEIGHT OF CLEAT (ANGLE IRON SHOWN)
- 17: THICKNESS OF CLEAT
- 18: TOTAL LENGTH
- 19: OFFSET FROM SEALING WING



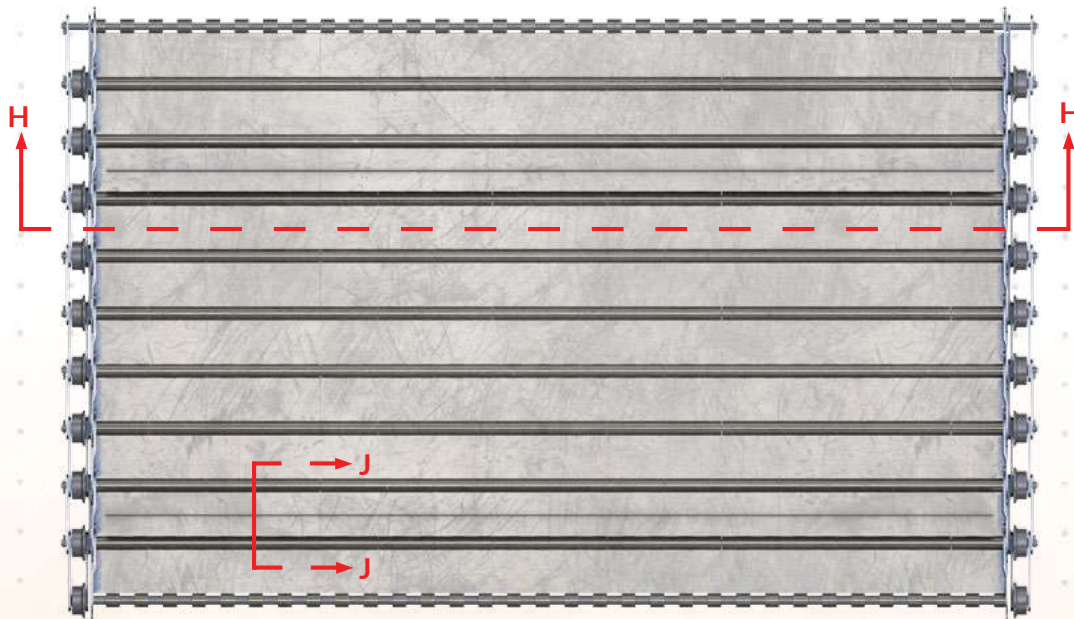
DETAIL G  
SCALE 1 : 6



SECTION J-J  
SCALE 1 : 3



SECTION H-H  
SCALE 1 : 5

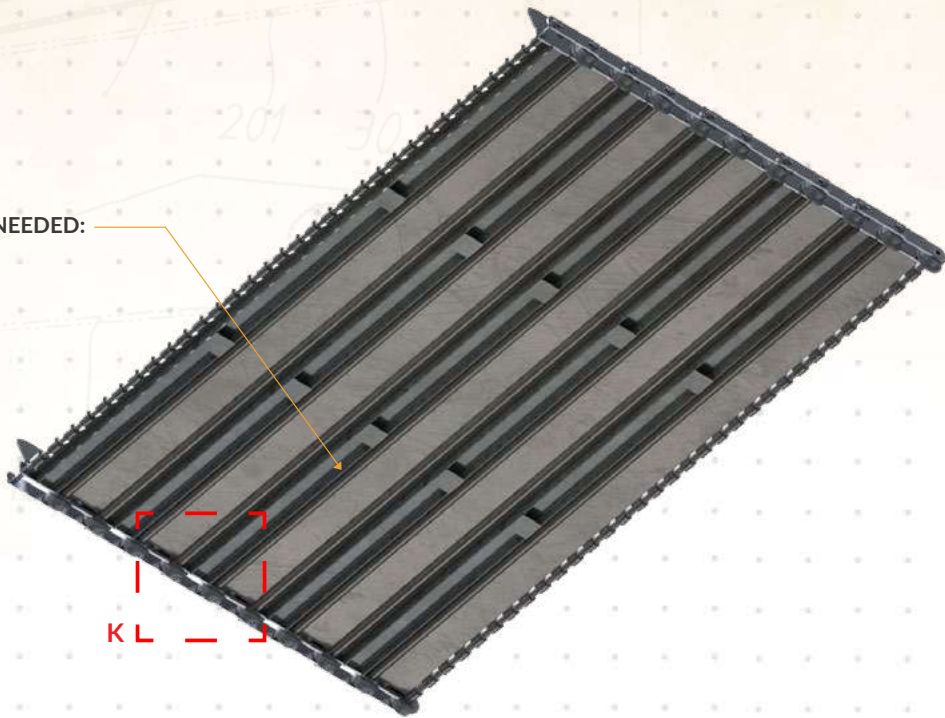


# STEP F: BELT UNDERSIDE SUPPORT SPECS

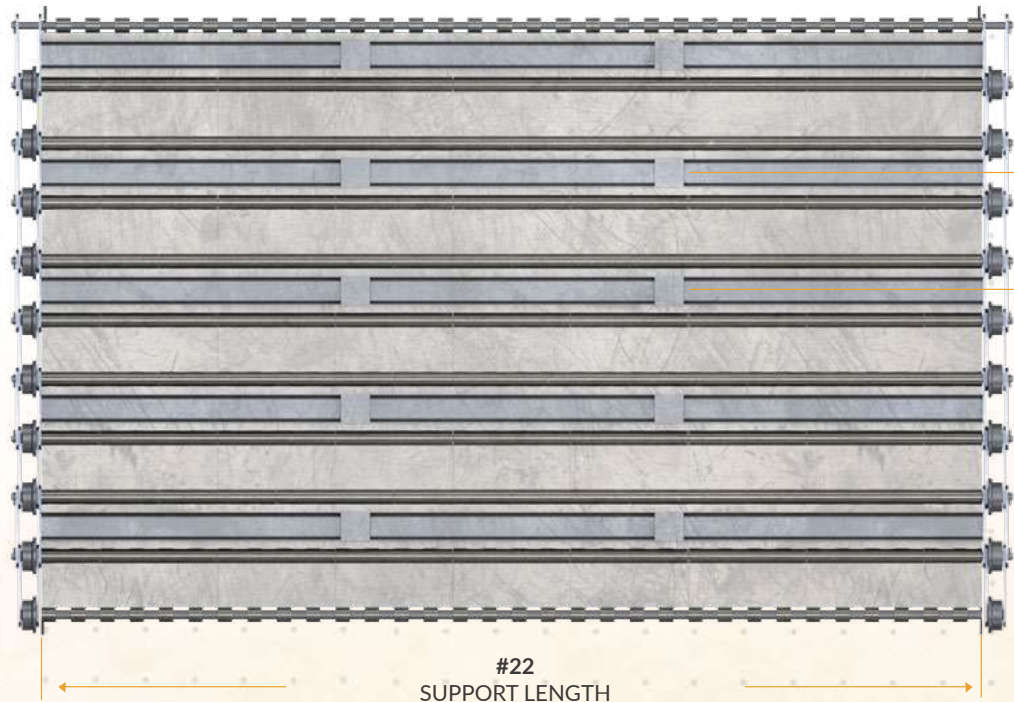
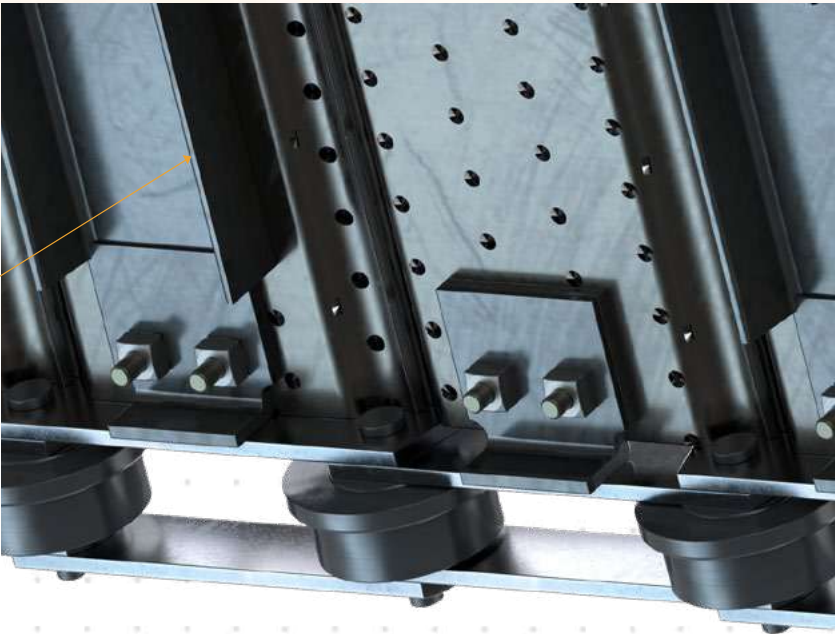
DETAIL K  
SCALE 1 : 3

BELT UNDERSIDE SUPPORT SPECS NEEDED:

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



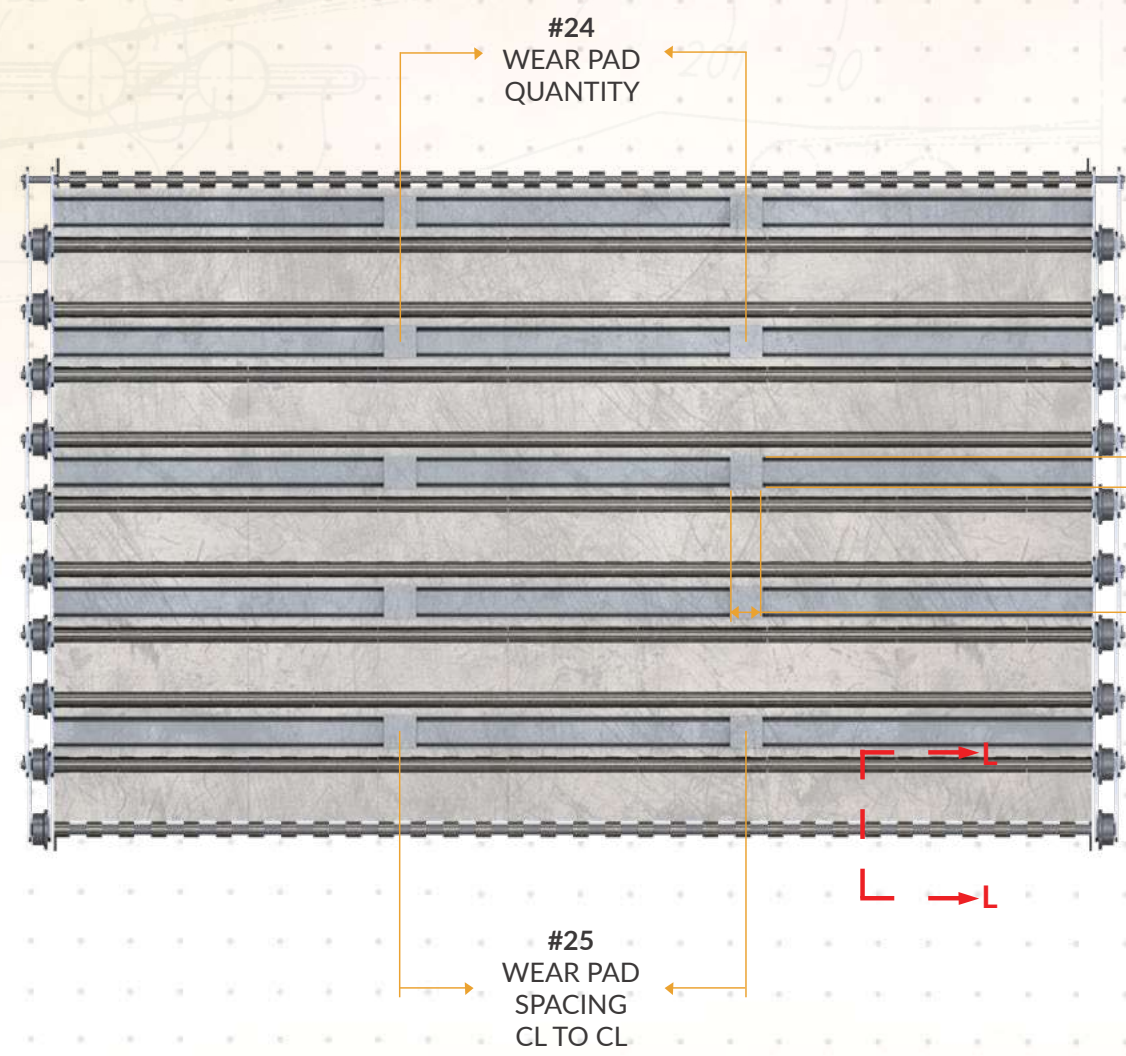
#20  
C-CHANNEL SHOWN  
\*COULD BE ANGLE IRON  
OR FLAT BAR



#21  
SUPPORT SPACING  
EVERY OTHER  
CHAIN PITCH SHOWN

#22  
SUPPORT LENGTH

# STEP G: BELT UNDERSIDE WEAR PAD NEEDED SPECS ( IF APPLICABLE)

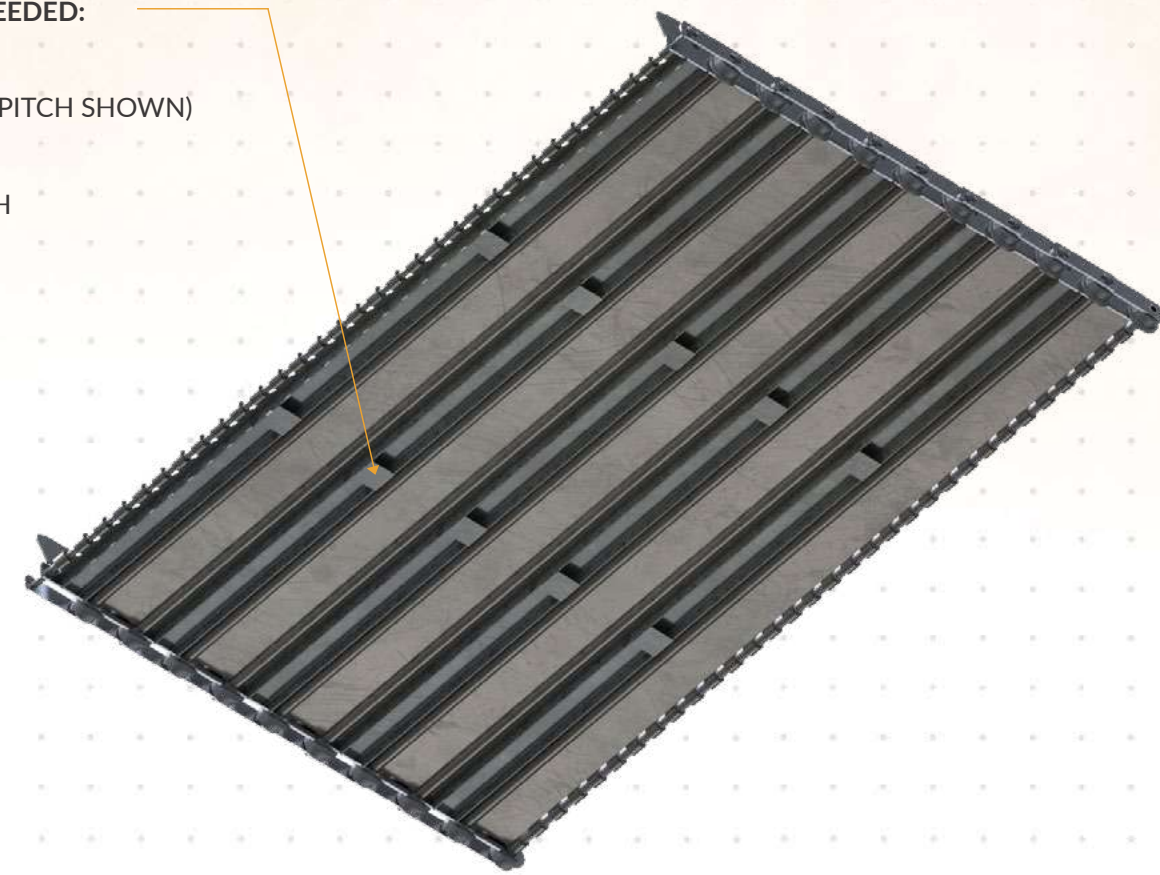


## BELT UNDERSIDE SUPPORT SPECS NEEDED:

- 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

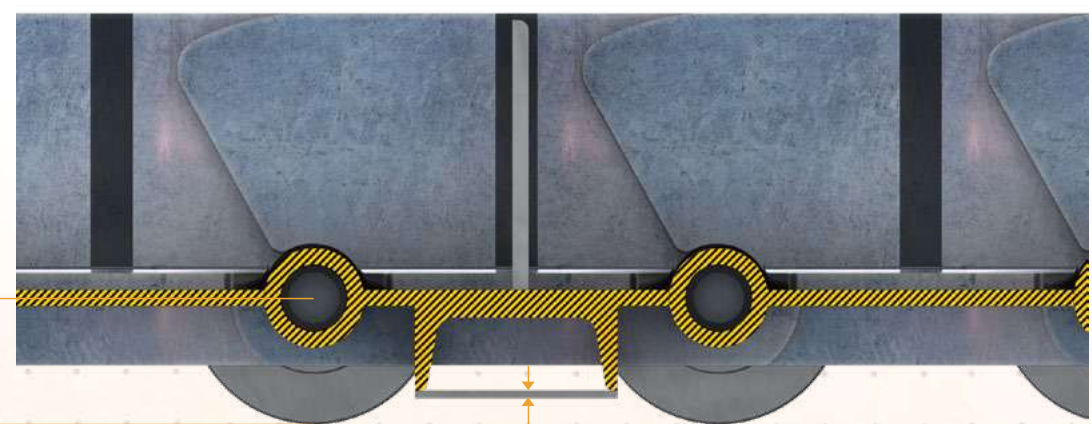
#27  
WEAR PAD  
SIZE WIDTH

#27  
WEAR PAD  
SIZE LENGTH



SECTION L-L  
SCALE 1 : 3

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



#23  
WEAR PAD  
THICKNESS

