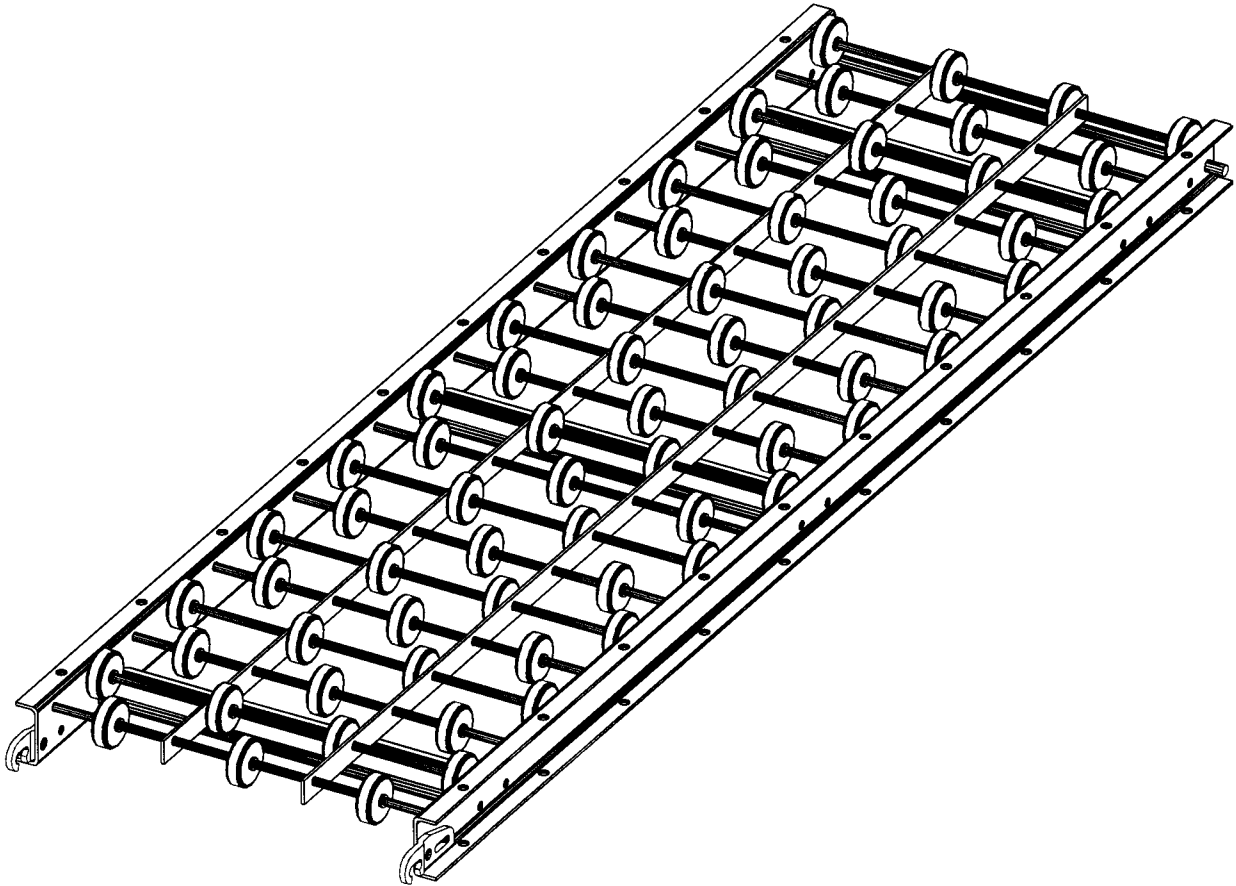


**Section 1 – Gravity Conveyor**

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1-3	Wheel Conveyor Straight Sections
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1-33	Ball Transfer Modular Sections for SD138 Conveyor Frames
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1-35	Ball Transfer Custom Tables
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**Gravity Wheel Conveyor Series Specifications:****Gravity Wheel Series Specifications**

Wheels: 1-15/16" Diameter Steel, Aluminum or Metzgar Nylo bearing and wheel.

Load rating for steel wheels is 60 lbs, Aluminum is 50 lbs and NYLO is 20lbs.

Axles: 5/16" headed bolts secured with lock nuts.

**Metzgar Conveyor Co. uses the largest diameter wheel axles in the industry.**

The Wheel is 13/32" above the top flange of the frame.

Spacers: 0.4375 outside diameter x .035 wall drawn aluminum tubing, effectively used to maintain strength and insure stable wheel patterns.

Center Band: 12 gage galvanized or 1/8" aluminum accurately punched to align holes with the side frame and spaced to give maximum rigidity to the conveyor section.

Frame: 12 gage galvanized formed channel 2-1/2" deep with 15/16" flanges.

Round Axle holes are 5/16" diameter punched on 3" centers.

Frame capacity for steel is 500 pounds with supports on 10 foot centers,

Aluminum frame capacity is 275 pounds with supports on 10 foot centers.

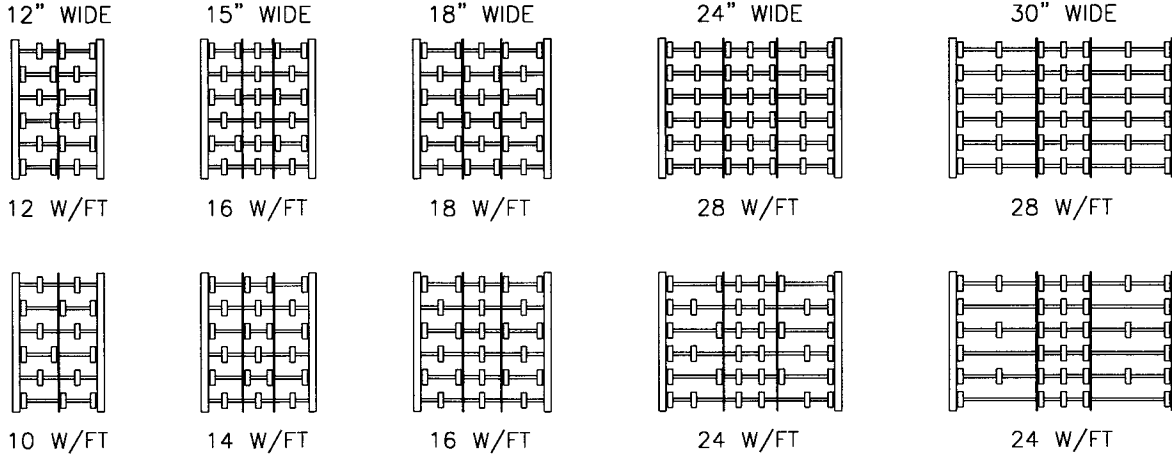
Crossmembers are rigid unitized double bolted design for strength.

Finish: Standard finish is galvanized steel or plain aluminum



**Gravity Wheel Conveyor Straight Section:**

**Standard Wheel Patterns**

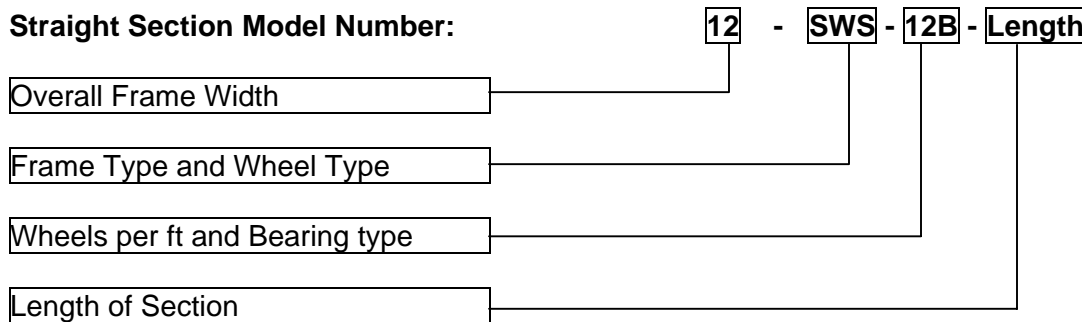


*The Standard Bed Length is 10 feet. Special Lengths are Available.*

**Wheel Frame Dimensions:**

Overall Width of the Frame	12	15	18	24	30
Width Between Frame	10 1/8"	13 1/8"	16 1/8"	22 1/8"	28 1/8"
Wheels Per Foot	10 or 12	14 or 16	16 or 18	24 or 28	24 or 28

**Straight Section Model Number:**



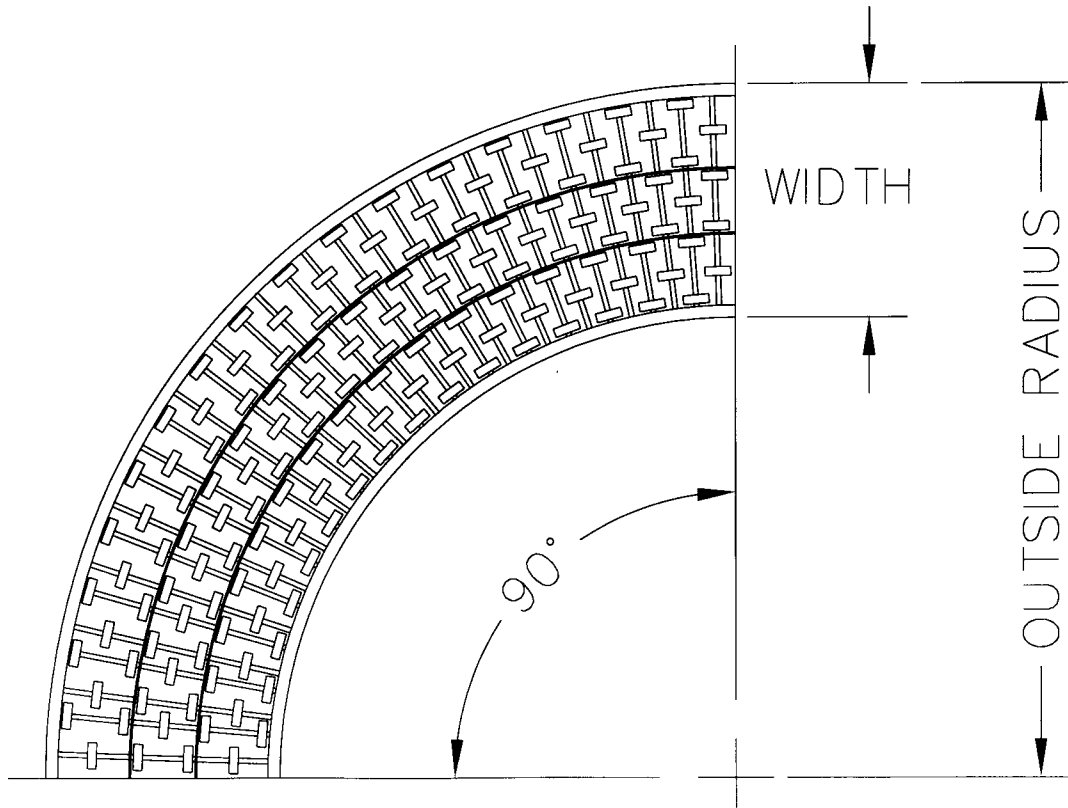
**Frame and Wheel Types:**

**SWS**= Steel Frames Steel Wheels  
**SWN**= Steel Frames NYLO Wheels  
**AWA**= Aluminum Frames Aluminum Wheels  
**B**=Ball Bearings    **N**=Nylo Bearings

**SWA**=Steel Frames Aluminum Wheels  
**AWS**=Aluminum Frames Steel Wheels  
**AWN**= Aluminum Frames NYLO Wheels



**Gravity Wheel Curves:**



**The Standard Curve is 90 degrees. Special Degree Curves are Available.**

**Wheel Curve Frame Dimensions:**

Overall Width of the Frame	12	15	18	24	30
Width Between Frame	10 1/8"	13 1/8"	16 1/8"	22 1/8"	28 1/8"
Wheels Per Foot	12	16	18	28	28
Outside Radius in Feet	4,5 or 6	4,5 or 6	4,5 or 6	4,5 or 6	5 or 6

**Curve Model Number:**

**C412 - SWS - 12B - 90**

- Outside Radius and Frame Width
- Frame Type and Wheel Type
- Wheels per ft and Bearing type
- Degree of Curve

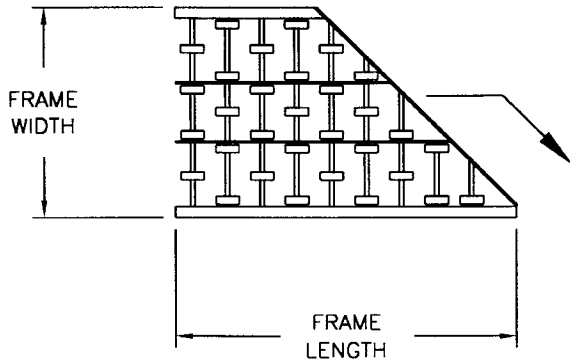
**Frame and Wheel Types:**

- SWS**= Steel Frames Steel Wheels
- SWN**= Steel Frames NYLO Wheels
- AWA**= Aluminum Frames Aluminum Wheels
- B**=Ball Bearings    **N**=Nylo Bearings

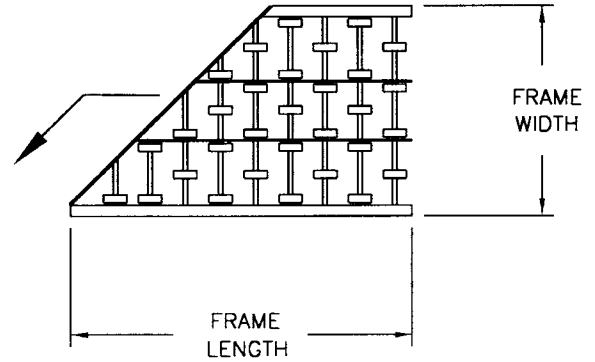
- SWA**=Steel Frames Aluminum Wheels
- AWS**=Aluminum Frames Steel Wheels
- AWN**= Aluminum Frames NYLO Wheels



**Gravity Wheel 45 Degree Spur:**



RIGHT HAND FLOW



LEFT HAND FLOW

Straight Butt Spurs are intended for travel from a gravity line onto a powered line. Spurs are not recommended for travel from gravity to gravity unless an operator manually pushes the product.

**Wheel Spur Frame Dimensions:**

Overall Width of the Frame	12	15	18	24	30
Width Between Frame	10 1/8"	13 1/8"	16 1/8"	22 1/8"	28 1/8"
Wheels Per Foot	12	16	18	28	28
Frame Length in Inches	22"	25"	28"	34"	40"

**Spur Model Number:**

**B4-12 - SWS - B - LH or RH**

Series and Frame Overall Width

Frame Type and Wheel Type

Bearing Type

**Specify Left hand or Right Hand assembly when Ordering.**

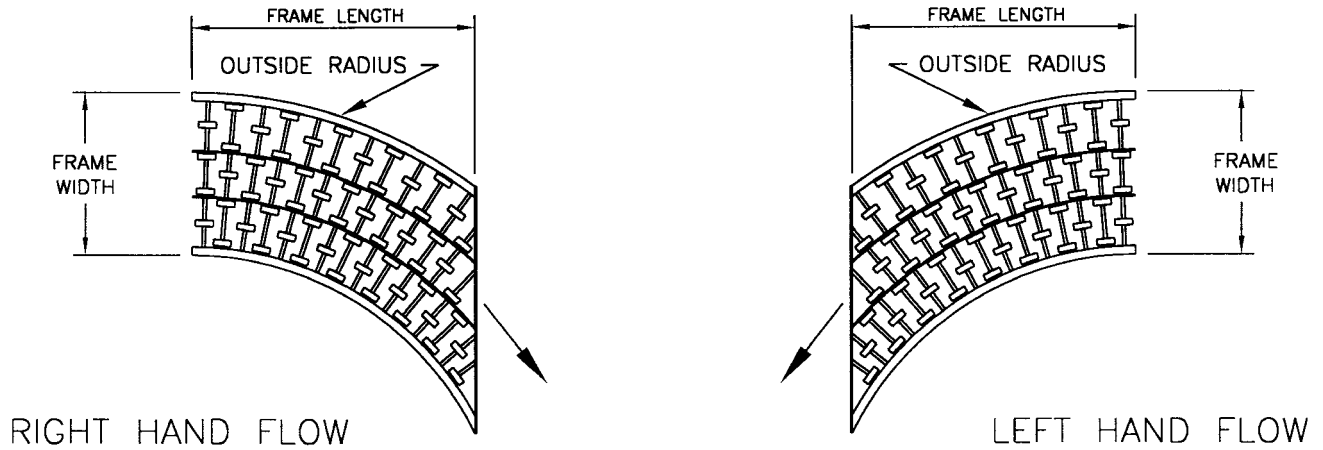
**Frame and Wheel Types:**

- SWS**= Steel Frames Steel Wheels
- SWN**= Steel Frames NYLO Wheels
- AWA**= Aluminum Frames Aluminum Wheels
- B**=Ball Bearings    **N**=Nylo Bearings

- SWA**=Steel Frames Aluminum Wheels
- AWS**=Aluminum Frames Steel Wheels
- AWN**= Aluminum Frames NYLO Wheels



**Gravity Wheel 90 Degree Curve Spur:**



Curved Butt Spurs are intended for travel from a gravity line onto a powered line. Spurs are not recommended for travel from gravity to gravity unless an operator manually pushes the product.

**Wheel Curve Spur Frame Dimensions:**

Overall Width of the Frame	12	15	18	24	30
Width Between Frame	10 1/8"	13 1/8"	16 1/8"	22 1/8"	28 1/8"
Wheels Per Foot	12	16	18	28	28
Frame Length in Inches	30"	30"	33"	37"	37"
Outside Radius of Curve	4'-0"	4'-0"	5'-0"	6'-0"	6'-0"

**Curve Spur Model Number:**

**B9-12 - SWS - B - LH or RH**

Series and Frame Overall Width

Frame Type and Wheel Type

Bearing Type

**Specify Left hand or Right Hand assembly when Ordering.**

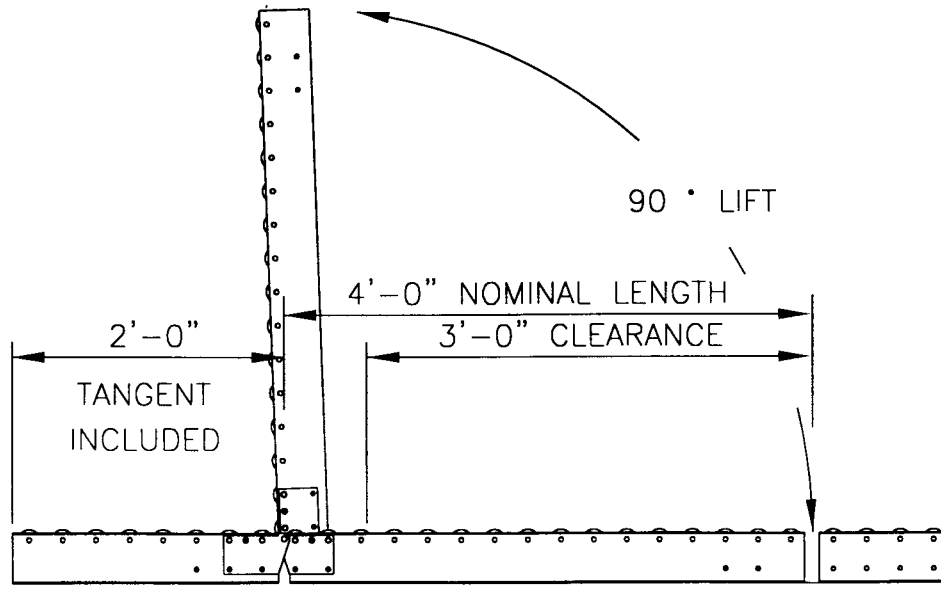
**Frame and Wheel Types:**

- SWS**= Steel Frames Steel Wheels
- SWN**= Steel Frames NYLO Wheels
- AWA**= Aluminum Frames Aluminum Wheels
- B**=Ball Bearings    **N**=Nylo Bearings

- SWA**=Steel Frames Aluminum Wheels
- AWS**=Aluminum Frames Steel Wheels
- AWN**= Aluminum Frames NYLO Wheels



**Gravity Wheel Hinge Gate Sections:**



Gate Sections are designed to give personnel safe access around equipment. Please consider all options to determine the best location for the required gate. A standard gate includes wheel conveyor, tangent section, hinge brackets and all required mounting hardware.

**Wheel Gate Frame Dimensions:**

Overall Width of the Frame	12	15	18	24	30
Width Between Frame	10 1/8"	13 1/8"	16 1/8"	22 1/8"	28 1/8"
Wheels Per Foot	10 or 12	14 or 16	16 or 18	24 or 28	24 or 28

**Gate Model Number:**

**HG4-12 - SWS - 10B**

Gate Series & Frame Overall Width

Frame Type and Wheel Type

Wheels per ft and Bearing type

**Frame and Wheel Types:**

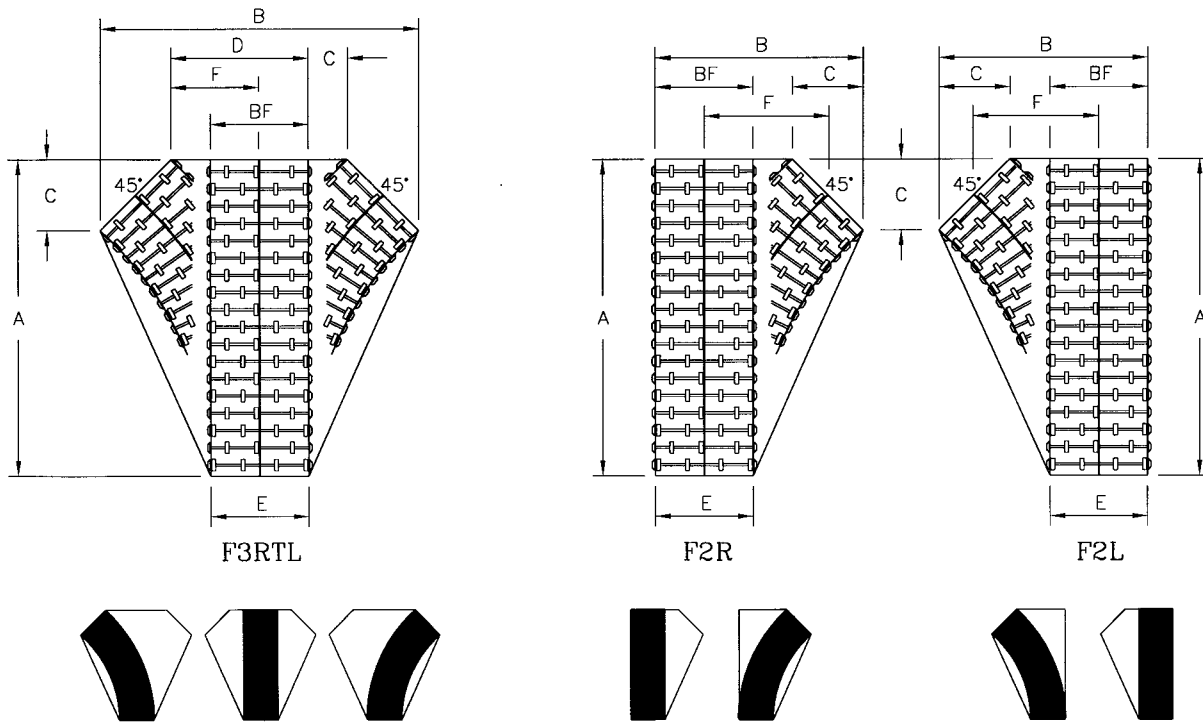
**SWS**= Steel Frames Steel Wheels  
**SWN**= Steel Frames NYLO Wheels  
**AWA**= Aluminum Frames Aluminum Wheels  
**B**=Ball Bearings   **N**=Nylo Bearings

**SWA**=Steel Frames Aluminum Wheels  
**AWS**=Aluminum Frames Steel Wheels  
**AWN**= Aluminum Frames NYLO Wheels

**Optional Gas Cylinder or Spring Assist lifting kit is available.**  
**Optional Gate Lengths are available.**



**Gravity Wheel Flexa-Switch:**



Metzgar Flexa-Switch is protected by US PATENT No. 2,669,334. The term Flexa-Switch is a registered trade name.

The Flexa-Switch is used where two or three lines of conveyor converge on one line or where a single line is feeding two or three lines. Metzgar offers two basic switches, the three way and the two way, both can be ordered with manual or powered actuation. Manual switching is standard unless otherwise specified. Power switching can be done with air cylinders or electric motors activated at the switch or remotely depending on the controls used. Air cylinder operated switches are available in two or three way operation, electrically operated switches are only available in two way operation.

**Flexa-Switch Model Number:**

**F2 - R - 12 - SW**

Flexa-Switch and 2 or 3 way

Right, Through or Left (R,T or L)

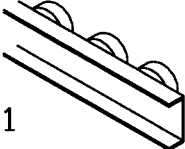
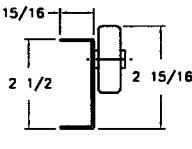
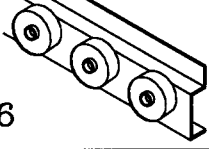
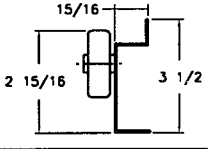

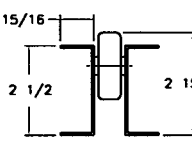
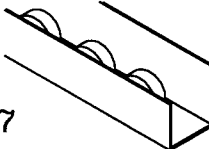
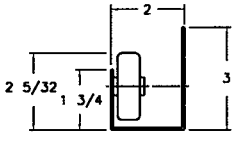
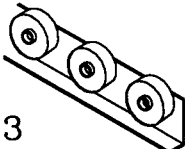
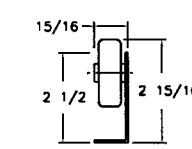
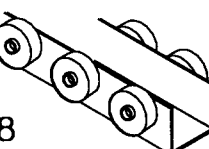
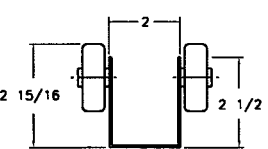
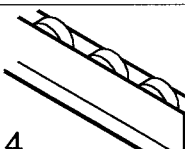
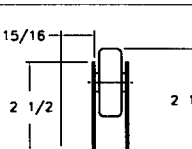
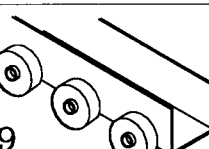
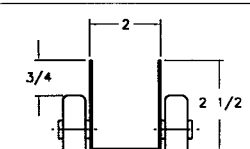
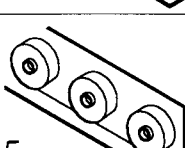
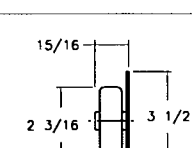
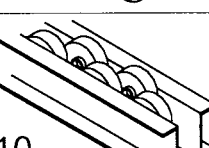
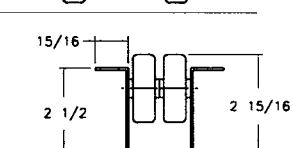
Overall Width(12",15",18",24" or 30")

Steel Wheels





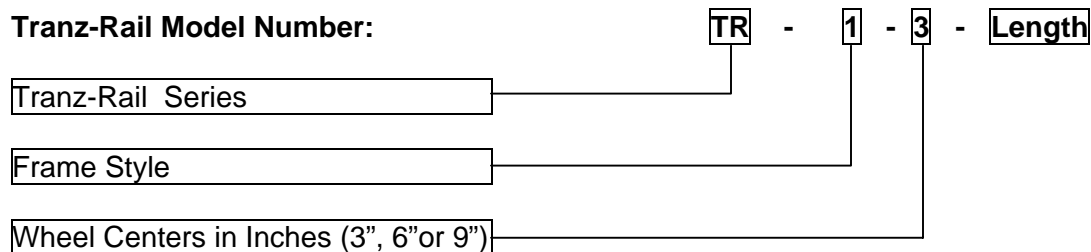
Tranz-Rail Sections:

STYLE	DIMENSIONS	STYLE	DIMENSIONS
			
			
			
			
			

**The Standard Tranz-Rail Length is 10 feet. Special Lengths are Available.**

Tranz-Rail economically solves conveying problems. When used in live storage racks they utilize all the available space with first in first out usage. Wheel rail is excellent for handling light pallets and their flexibility makes it ideal for assembly line operators. The variety of design gives a wide choice of models to fit your particular application.

**Tranz-Rail Model Number:**



**Tranz-Rail Series Specifications**

Wheels: 1-15/16" Diameter Steel wheel. Load rating for a steel wheel is 60 lbs

Axles: 5/16" headed bolts secured with lock nuts.

Frame: 12 gage galvanized steel.

Standard mounting holes 3" centers 3" from the end of the frame.

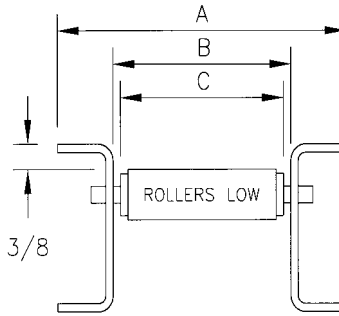
Finish: Standard finish is galvanized steel.

**Tranz-Rail Frame Style 10 Wheels are on 1-1/2" Staggered Centers.**

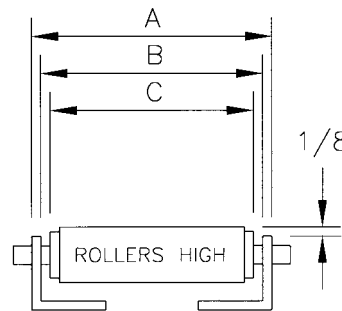


**Gravity Midget Roller Series Specifications:**

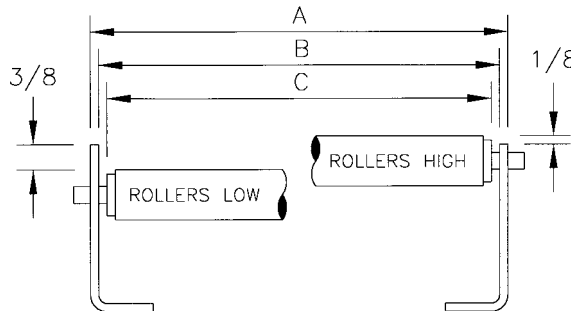
**“M” Style**



**“1M” Style**



**“2M” Style**



***The Standard Bed Length is 10 feet. Special Lengths are Available.***

**Midget Series Specifications**

Rollers: 3/4" Diameter x 20 gage galvanized steel or Aluminum 0.035" wall

Roller capacity is 20 lbs each

Bearings: Steel Roller bearings or Nylo bearings

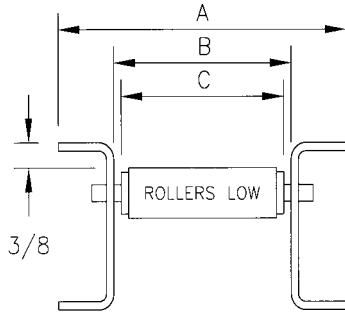
Axles: 1/4" Steel spring loaded.

Frame: 12 gage galvanized steel or 1/8" Aluminum.

Finish: Standard finish is galvanized steel or plain aluminum



**M Gravity Midget Roller Series:**



M Style Midget frame is 2 1/2" x 15/16" x 12 gage galvanized or 1/8" aluminum side angles with bolted crossmembers. Holes are punched on 0.857" centers for 14 rollers per foot or 1" centers for 4, 6, or 12 rollers per foot. Rollers are available mounted in the low location.

**Midget Frame Dimensions:**

Nominal Width of the Frame	7	12	16	20
Overall Width of Frame "A"	6 7/8"	12 3/8"	15 7/8"	19 5/8"
Inside Width of Frame "B"	5	10 1/2"	14	17 3/4"
Roller Length "C"	4 7/8"	10 3/8"	13 7/8"	17 5/8"

**Straight Section Model Number:**

**M** - **7** - **SRS** - **4** - **B** - **10**

Midget Series Frame Style

Frame Width

Frame and Roller Type

Rollers per foot (4,6,12 or 14)

Bearing Type B=Ball , N=Nylo

Length in feet (10ft Standard)

**Curve Section Model Number:**

**M** - **C3** - **7** - **SRS** - **B** - **90**

Midget Series Frame Style

Curve Radius (3',4' or 5')

Frame Width

Frame and Roller Type

Bearing Type B=Ball , N=Nylo

Degree of Curve – 90 is Standard

**Frame and Roller Types:**

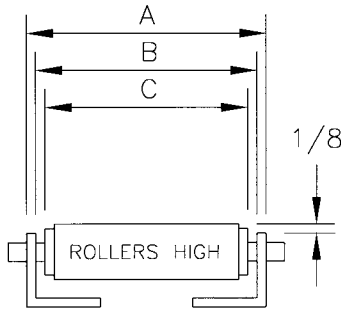
**SRS**= Steel Frames Steel Rollers

**ARA**= Aluminum Frames Aluminum Rollers

*When ordering supports specify for midget frame style.*



**1M Gravity Midget Roller Series:**



***1M frame is recommended for bench mounting only.***

1M Style Midget frame is 1" x 1" x 1/8" steel or aluminum side angles with welded crossmember straps. Holes are punched on 0.857" centers for 14 rollers per foot or 1" centers for 4, 6, or 12 rollers per foot. Rollers are mounted in the high location only.

**Midget Frame Dimensions:**

Nominal Width of the Frame	5	10	14	18
Overall Width of Frame "A"	5 ¼"	10 ¾"	14 ¼"	18"
Inside Width of Frame "B"	5	10 ½"	14	17 ¾"
Roller Length "C"	4 7/8"	10 3/8"	13 7/8"	17 5/8"

**Straight Section Model Number:**

**1M - 5 - SRS - 4 - B - 10**

Midget Series Frame Style

Frame Width

Frame and Roller Type

Rollers per foot (4,6,12 or 14)

Bearing Type B=Ball , N=Nylo

Length in feet (10ft Standard)

**Curve Section Model Number:**

**1M - C3 - 5 - SRS - B - 90**

Midget Series Frame Style

Curve Radius (3',4' or 5')

Frame Width

Frame and Roller Type

Bearing Type B=Ball , N=Nylo

Degree of Curve – 90 is Standard

**Frame and Roller Types:**

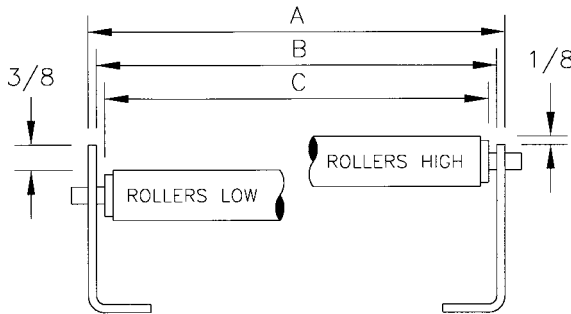
**SRS**= Steel Frames Steel Rollers

**ARA**= Aluminum Frames Aluminum Rollers

**Supports not available for this style midget frame.**



**2M Gravity Midget Roller Series:**



2M Style Midget frame is 2 1/2" x 15/16" x 12 gage galvanized or 1/8" aluminum side angles with bolted crossmembers. Holes are punched on 0.857" centers for 14 rollers per foot or 1" centers for 4, 6, or 12 rollers per foot. Rollers are available mounted in the high or low location.

**Midget Frame Dimensions:**

Nominal Width of the Frame	5	10	14	18
Overall Width of Frame "A"	5 1/4"	10 3/4"	14 1/4"	18"
Inside Width of Frame "B"	5	10 1/2"	14	17 3/4"
Roller Length "C"	4 7/8"	10 3/8"	13 7/8"	17 5/8"

**Straight Section Model Number:**

**2M - 5 - SRS - 4 - B - 10**

Midget Series Frame Style

Frame Width

Frame and Roller Type

Rollers per foot (4,6,12 or 14)

Bearing Type B=Ball , N=Nylo

Length in feet (10ft Standard)

**Curve Section Model Number:**

**2M - C3 - 5 - SRS - B - 90**

Midget Series Frame Style

Curve Radius (3',4' or 5')

Frame Width

Frame and Roller Type

Bearing Type B=Ball , N=Nylo

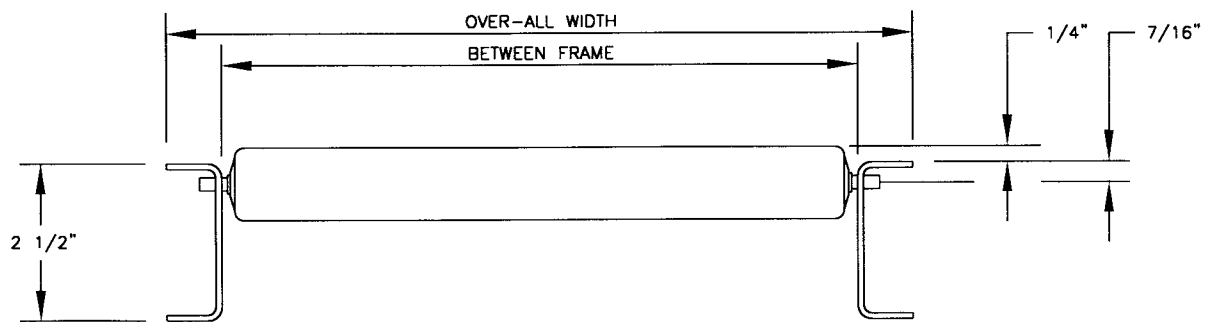
Degree of Curve – 90 is Standard

**Frame and Roller Types:**

**SRS**= Steel Frames Steel Rollers

**ARA**= Aluminum Frames Aluminum Rollers

*When ordering supports specify for midget frame style.*

**SD138 Gravity Standard Duty Roller Series:**

Standard duty roller conveyor offers excellent support for the bottom surfaces of the items to be transported. Therefore, items with irregular surfaces could transport very well on standard roller conveyor, providing the bottom surface does not conform to the shape of the rollers. Items may be manually pushed or the conveyor can be inclined to allow gravity to move the product.

**SD138 Gravity Roller Series Specifications**

Rollers: 1-3/8" diameter x 18 gage galvanized Steel or .049" wall Aluminum with ball bearings.

Load rating for each roller is 50 lbs.

Axles: 1/4" diameter steel.

The roller is mounted 1/4" above the top flange of the frame.

Frame: 12 gage galvanized or 1/8" aluminum formed channel 2-1/2" deep with 15/16" flanges.

Axle holes are 1/4" diameter punched on 1 1/2" centers.

Frame capacity for steel is 350 pounds, Aluminum frame capacity is 120 pounds.

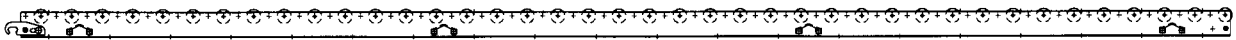
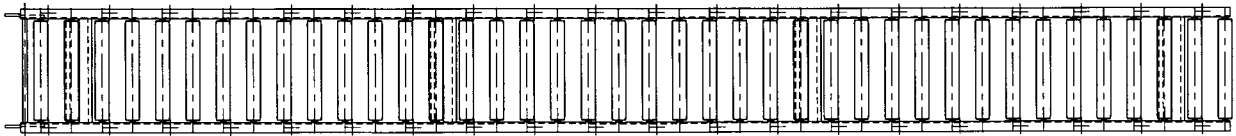
Crossmembers are rigid unitized double bolted design for strength.

Connectors: Hooks on one end and bar for the hook on the other end.

Finish: Standard finish is galvanized steel or plain aluminum



**SD138 Gravity Standard Duty Straight Section:**



*The Standard Bed Length is 10 feet. Special Lengths are Available.*

**SD138 Frame Dimensions:**

Overall Width of the Frame	12	15	18	21	24	27	30
Width Between Frame	10 1/8"	13 1/8"	16 1/8"	19 1/8"	22 1/8"	25 1/8"	28 1/8"

**Straight Section Model Number:**

**SD138 - 12 - SRS - 3 - 10**

Gravity Series

Frame Width

Frame and Roller Type

Rollers Center (1 1/2", 3" or 4 1/2")

Length in feet (10ft Standard)

**Frame and Roller Types:**

**SRS**= Steel Frames Steel Rollers

**ARA**= Aluminum Frames Aluminum Rollers



**SD138 Gravity Standard Duty Straight Roller Curve Section:**

The inside radius of the curve is 30 inches.

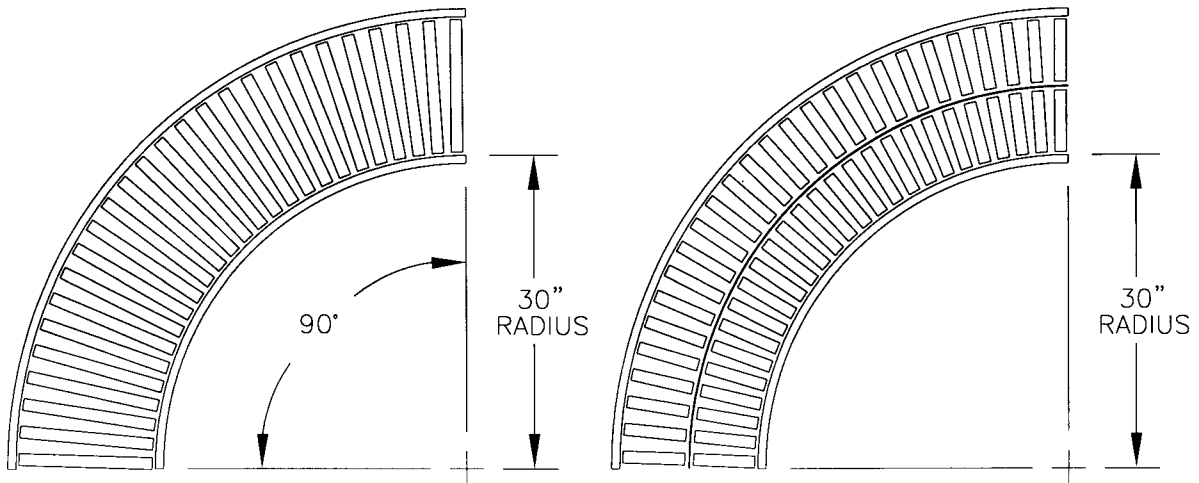
Curves contain hook bars at both ends.

90 Degree Curves contain 32 Rollers.

*The Standard Curve is 90 Degrees. Special Degree Curves are Available.*

**SD Frame Dimensions:**

Overall Width of the Frame	12	15	18	21	24	27	30
Width Between Frame	10 1/8"	13 1/8"	16 1/8"	19 1/8"	22 1/8"	25 1/8"	28 1/8"



**Straight Roller Curve Model Number:**

**SD138C - 12 - SRS - 90**

Gravity Series

Frame Width

Frame and Roller Type

Degree of Curve

**Split Straight Roller Curve Model Number:**

**SD138C - 12 - SRS - 2/90**

Gravity Series

Frame Width

Frame and Roller Type

Degree of Curve

**Frame and Roller Types:**

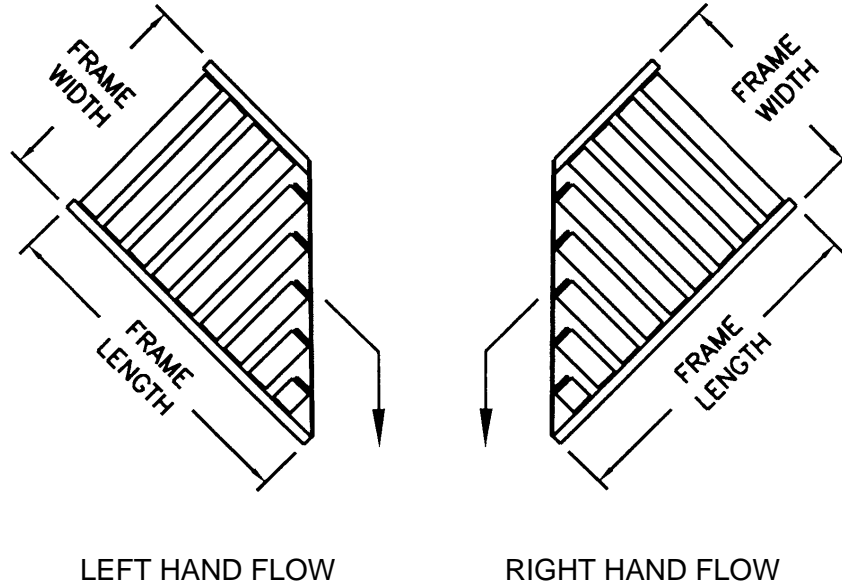
**SRS**= Steel Frames Steel Rollers

**ARA**= Aluminum Frames Aluminum Rollers





**SD138 Gravity Standard Duty Straight Roller Straight Spur Section:**



**SD138 Spur Frame Dimensions:**

Overall Width of the Frame	12	15	18	21	24	27	30
Width Between Frame	10 1/8"	13 1/8"	16 1/8"	19 1/8"	22 1/8"	25 1/8"	28 1/8"
Frame Length	22"	25"	28"	31"	34"	37"	40"

Butt Spurs are intended for travel from a gravity line onto a powered line, or from a power line onto a gravity line. Spurs are not recommended for travel from gravity to gravity unless an operator manually pushes the product. The rollers are on 1 1/2" Centers.

**Straight Spur Model Number:**

**SD138SS - 24 - SRS - RH**

Series Number

Overall Frame Width

Frame and Roller Type

Right Hand or Left Hand (RH or LH)

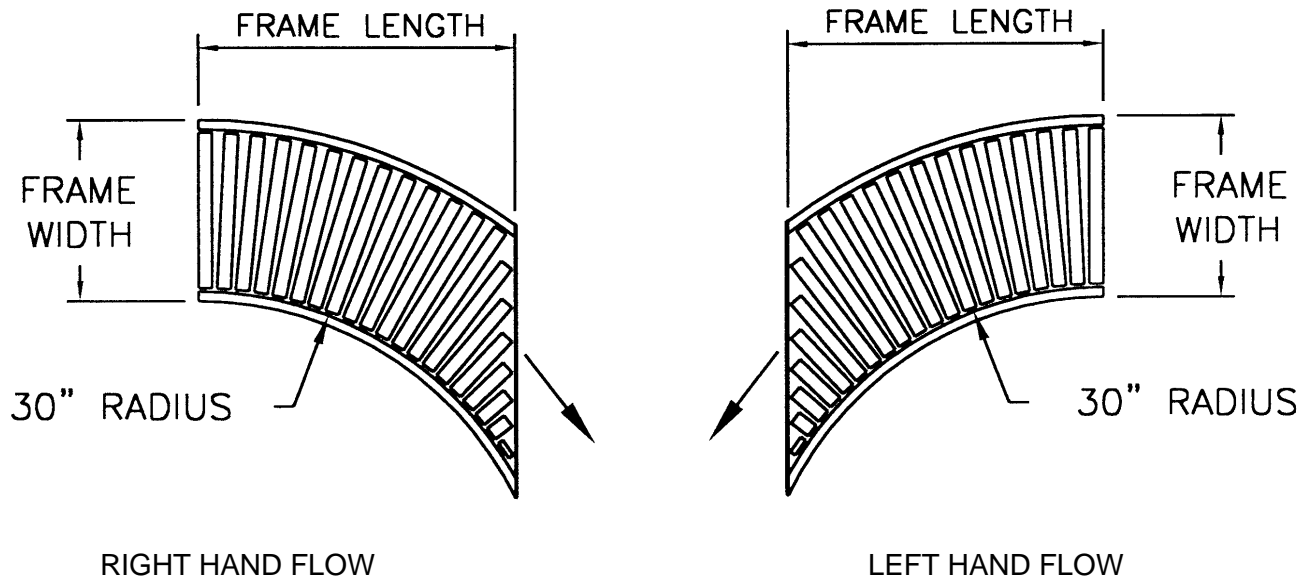
**Frame and Roller Types:**

**SRS**= Steel Frames Steel Rollers

**ARA**= Aluminum Frames Aluminum Rollers



**SD138 Gravity Standard Duty Straight Roller Curve Spur Section:**



**SD138 Curve Spur Frame Dimensions:**

Overall Width of the Frame	12	15	18	21	24	27	30
Width Between Frame	10 1/8"	13 1/8"	16 1/8"	19 1/8"	22 1/8"	25 1/8"	28 1/8"
Frame Length	30"	30"	30"	30"	30"	30"	30"

Butt Spurs are intended for travel from a gravity line onto a powered line, or from a power line onto a gravity line. Spurs are not recommended for travel from gravity to gravity unless an operator manually pushes the product. The rollers are on approximately 1 1/2" Centers.

**Curve Spur Model Number:**

**SD138SC - 24 - SRS - RH**

Series Number

Overall Frame Width

Frame and Roller Type

Right Hand or Left Hand (RH or LH)

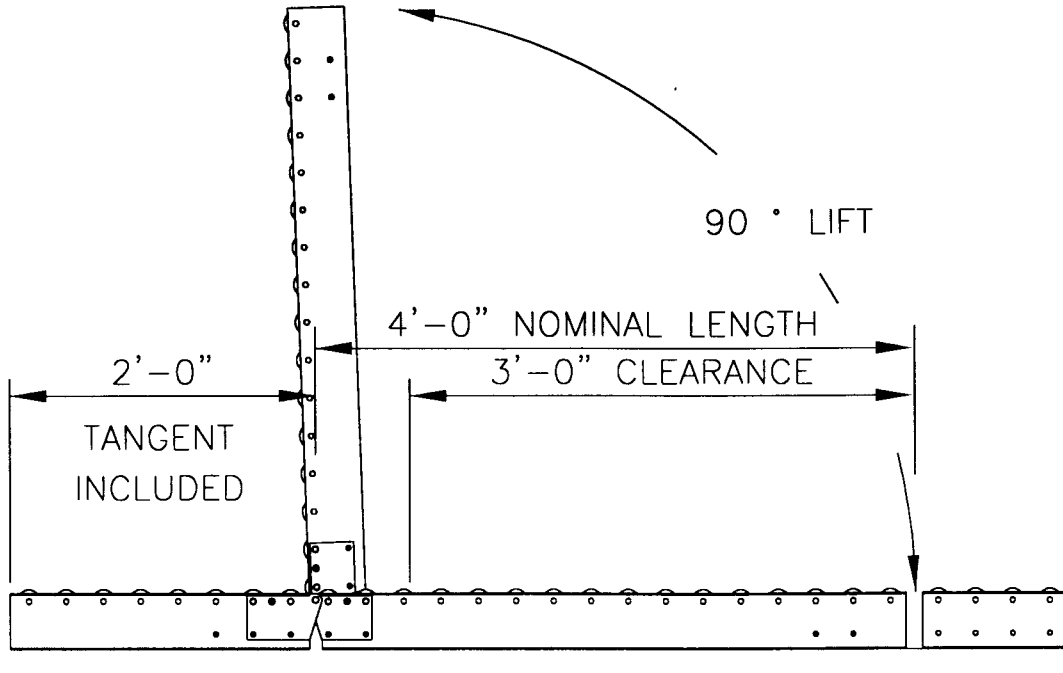
**Frame and Roller Types:**

**SRS**= Steel Frames Steel Rollers

**ARA**= Aluminum Frames Aluminum Rollers



**SD138 Gravity Hinge Gate Sections:**



Gate Sections are designed to give personnel safe access around equipment. Please consider all options to determine the best location for the required gate. A standard gate includes SD138 conveyor, tangent section, hinge brackets and all required mounting hardware.

**SD138 Frame Dimensions:**

Overall Width of the Frame	12	15	18	21	24	27	30
Width Between Frame	10 1/8"	13 1/8"	16 1/8"	19 1/8"	22 1/8"	25 1/8"	28 1/8"

**Gate Section Model Number:**

**SD138-HG4 - 12 - SRS - 3**

Gravity Series

Frame Width

Frame and Roller Type

Roller Center (1 1/2", 3" or 4 1/2")

**Frame and Roller Types:**

**SRS**= Steel Frames Steel Rollers

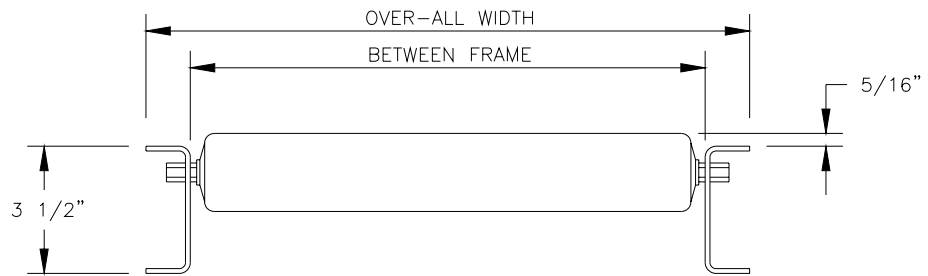
**ARA**= Aluminum Frames Aluminum Rollers

**Optional Gas Cylinder or Spring Assist lifting kit is available.**  
**Optional Gate Lengths are available.**

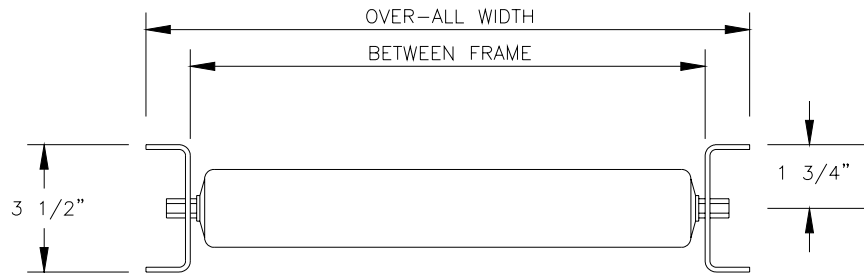


**MD190 Gravity Roller Specifications:**

**Standard:**



**Optional Rollers Low:**



Medium duty roller conveyor offers excellent support for the bottom surfaces of the items to be transported. Therefore, items with irregular surfaces could transport very well on medium roller conveyor, providing the bottom surface does not conform to the shape of the rollers. Items may be manually pushed or the conveyor can be sloped to allow gravity to move the product.

**MD190 Gravity Roller Series Specifications**

**Rollers:** 1.9" diameter x 16 gage galvanized Steel with ball bearings.

Load rating for each roller is 260 lbs.

Standard Roller Centers are 2 ¼", 3", 4 ½", 6" and 12"

**Axles:** Roller axles are 7/16" hex stock spring loaded for easy removal and assembly.

The roller mounting location is 5/16" above the top flange of the frame.

Optional rollers low locates rollers in the center of the frame.

**Frame:** 10 gage steel formed channel 3-1/2" deep with 1 ¼" flanges.

Axle holes are 7/16" Hex punched on 1 ½" or 2 ¼" centers.

The Frame capacity with supports on 10 foot centers is 700 pounds.

The Frame capacity with supports on 5 foot centers is 1100 pounds.

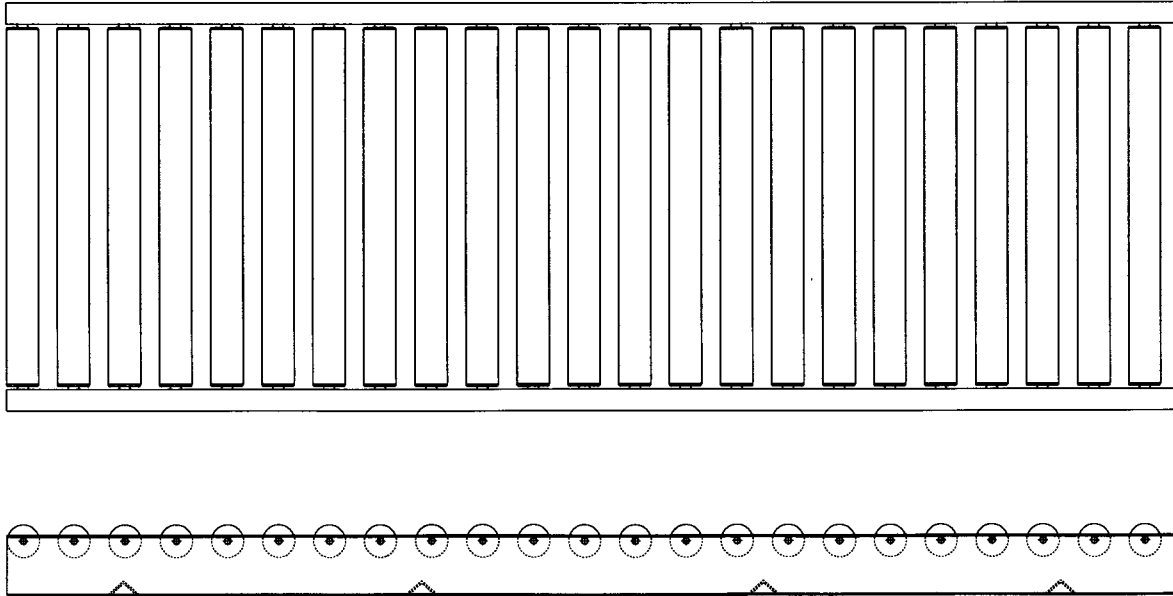
Crossmembers 1 ½" x 1 ½" x 3/16" structural angle are welded in for strength.

Standard Overall Widths are 12", 15", 18", 21", 24", 27", 30", 36", 42" and 48".

**Finish:** Standard finish for painted components is Metzgar Medium Blue or Vista Green



**MD190 Gravity Medium Duty Straight Section:**



**The Standard Bed Length is 10 feet. Special Lengths are Available.**

**MD190 Frame Dimensions:**

Overall Width of the Frame	12	15	18	21	24
Width Between Frame	9 ½"	12 ½"	15 ½"	18 ½"	21 ½"

Overall Width of the Frame	27	30	36	42	48
Width Between Frame	24 ½"	27 ½"	33 ½"	39 ½"	45 ½"

**Straight Section Model Number:**

**MD190 - 12 - SRS - 3 - 10**

Gravity Series

Frame Width

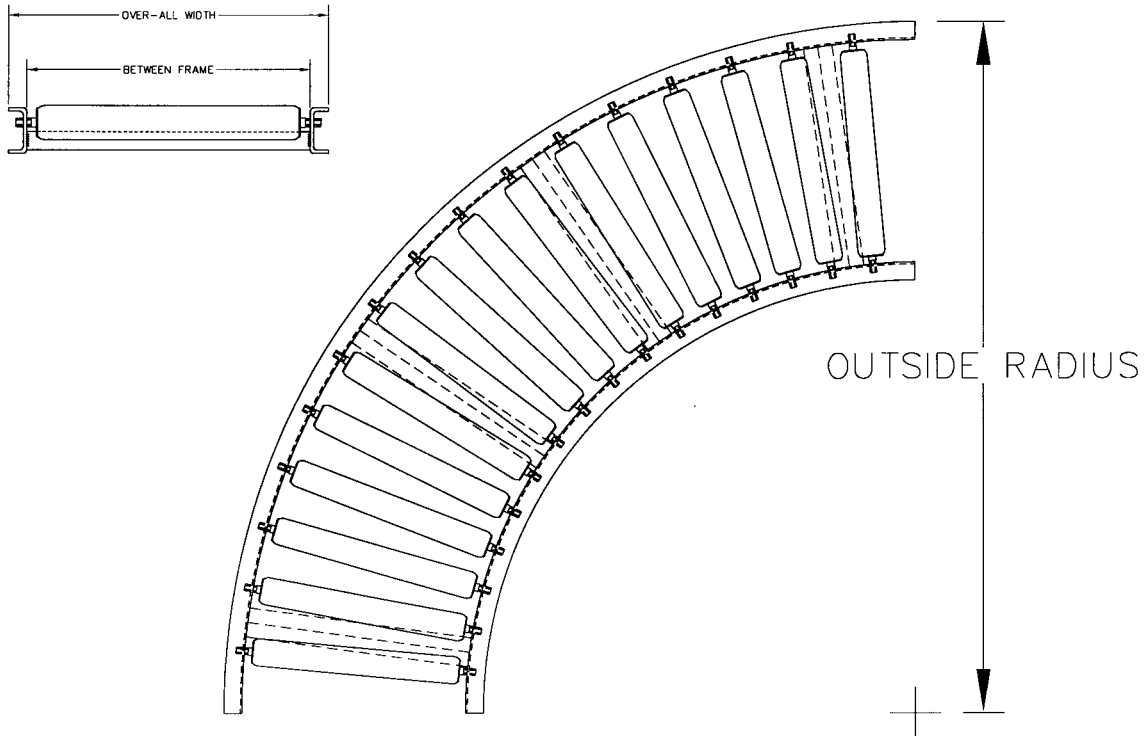
Steel Frame and Steel Roller

Roller Center (2 ¼", 3", 4 ½", 6" or 12")

Length in feet (10ft Standard)



**MD190 Gravity Medium Duty Straight Roller Curve Section:**



**The Standard Curve is 90 Degrees. Special Degree Curves are Available.**

**MD190 Frame Dimensions:**

Overall Width of the Frame	12	15	18	21	24
Width Between Frame	9 1/2"	12 1/2"	15 1/2"	18 1/2"	21 1/2"
Outside Radius in Feet	4',5' or 6'	4',5' or 6'	4',5' or 6'	5' or 6'	5' or 6'

Overall Width of the Frame	27	30	36	42	48
Width Between Frame	24 1/2"	27 1/2"	33 1/2"	39 1/2"	45 1/2"
Outside Radius in Feet	5' or 6'	5', or 6'	6'	7'	8'

**The 36", 42" and 48" wide curves have split rollers.**  
**The 42" and 48" curves are made of two 45 degree sections.**  
**4' Outside Radius curves contain 18 rollers**  
**5' Outside Radius curves contain 24 rollers**  
**6' Outside Radius curves contain 28 rollers**

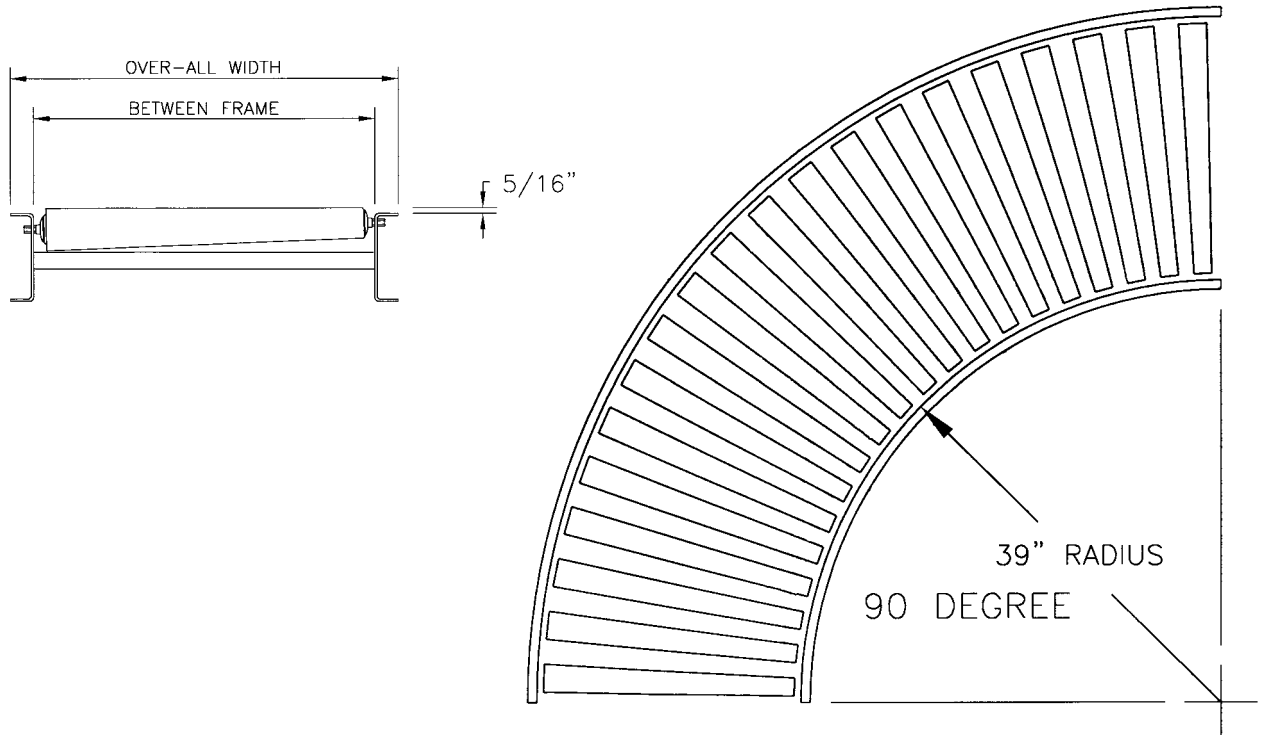
**Straight Roller Curve Model Number:**

**MD190C4 - 12 - SRS - 90**

- Gravity Series and Outside Radius
- Frame Width
- Steel Frame and Steel Roller
- Degree of Curve



**MD190 Gravity Medium Duty Tapered Roller Curve Section:**



**The Standard Curve is 90 Degrees.  
Special Degree Curves are Available.**

**MD190 Frame Dimensions:**

Overall Width of the Frame	12	15	18	21	24
Width Between Frame	9 1/2"	12 1/2"	15 1/2"	18 1/2"	21 1/2"

Overall Width of the Frame	27	30	36	42	48
Width Between Frame	24 1/2"	27 1/2"	33 1/2"	39 1/2"	45 1/2"

**The 36", 42" and 48" curves are made in two 45 degree sections.  
The standard tapered roller curve contains 20 rollers  
MD190 series tapered roller curves have a 39" radius to the inside of the frame.**

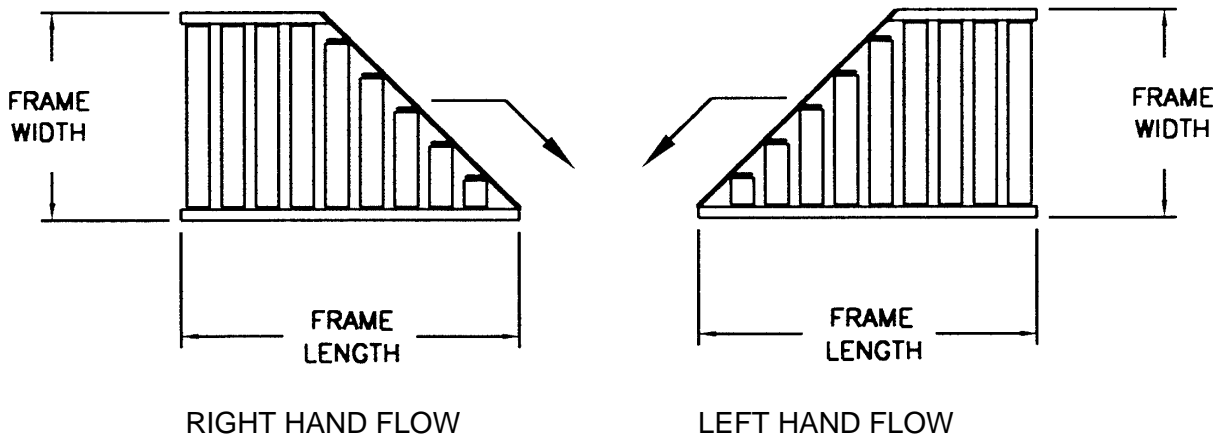
**Tapered Roller Curve Model Number:**

**MD190CT - 12 - SRS - 90**

- Gravity Series and Outside Radius
- Frame Width
- Steel Frame and Steel Roller
- Degree of Curve



**MD190 Gravity Medium Duty Straight Roller Straight Spur Section:**



**MD190 Frame Dimensions:**

Overall Width of the Frame	12	15	18	21	24
Width Between Frame	9 1/2"	12 1/2"	15 1/2"	18 1/2"	21 1/2"
Frame Length	22"	25"	28"	31"	34"

Overall Width of the Frame	27	30	36	42	48
Width Between Frame	24 1/2"	27 1/2"	33 1/2"	39 1/2"	45 1/2"
Frame Length	37"	40"	46"	52"	58"

Butt Spurs are intended for travel from a gravity line onto a powered line. Spurs are not recommended for travel from gravity to gravity unless an operator manually pushes the product. The rollers are on 3" Centers.

**Straight Spur Model Number:**

**MD190B4 - 12 - SRS - 45 - RH**

Gravity Series

Frame Width

Steel Frame and Steel Roller

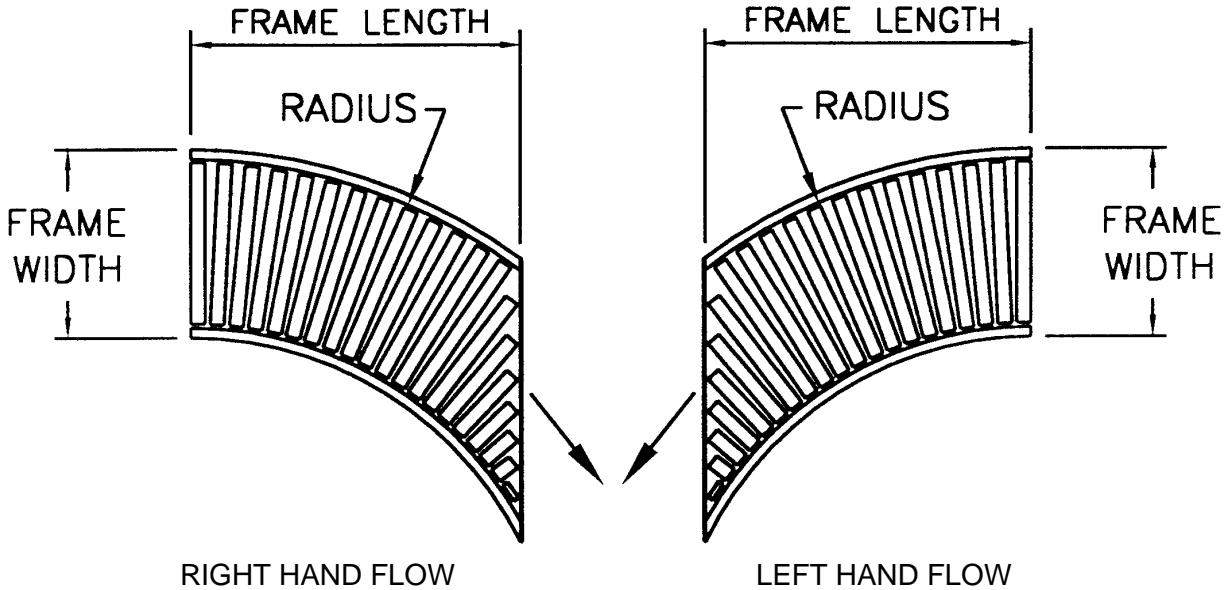
45 degree Spur

Right Hand or Left Hand (RH or LH)





**MD190 Gravity Medium Duty Straight Roller Curve Spur Section:**



**MD190 Frame Dimensions:**

Overall Width of the Frame	12	15	18	21	24
Width Between Frame	9 1/2"	12 1/2"	15 1/2"	18 1/2"	21 1/2"
Frame Length	30"	30"	33"	33"	37"
Outside Radius	48"	48"	60"	60"	72"

Overall Width of the Frame	27	30	36	42	48
Width Between Frame	24 1/2"	27 1/2"	33 1/2"	39 1/2"	45 1/2"
Frame Length	37"	37"	37"	43"	49"
Outside Radius	72"	72"	72"	84"	96"

Butt Spurs are intended for travel from a gravity line onto a powered line, Spurs are not recommended for travel from gravity to gravity unless an operator manually pushes the product.

**Curve Spur Model Number:**

**MD190B9 - 12 - SRS - 90 - RH**

Gravity Series

Frame Width

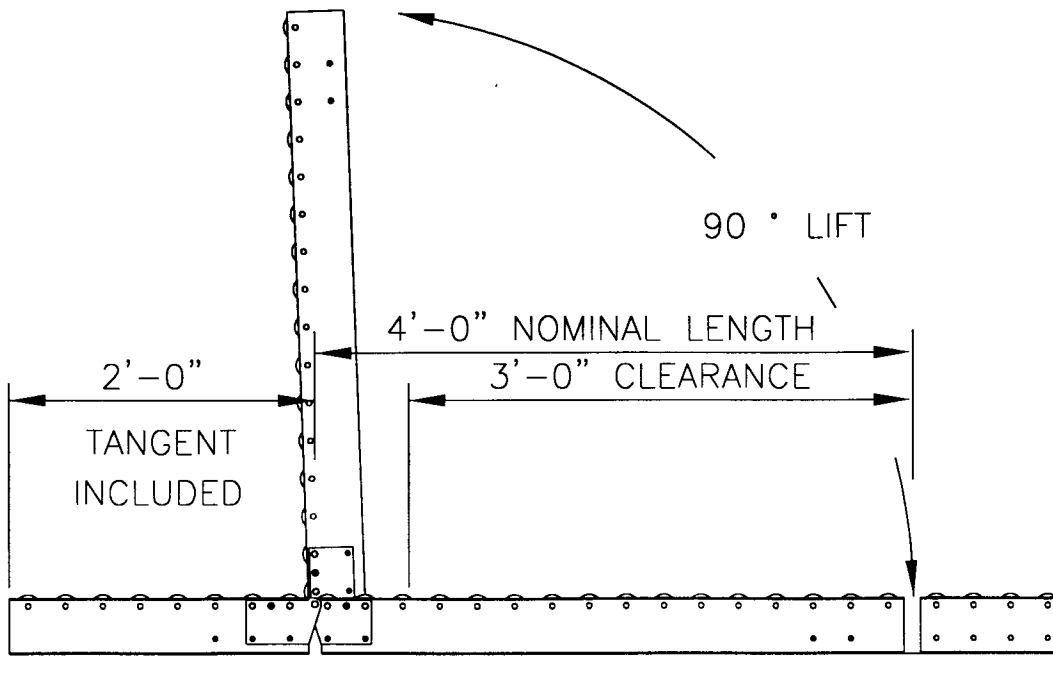
Steel Frame and Steel Roller

90 degree Spur

Right Hand or Left Hand (RH or LH)



**MD190 Gravity Hinge Gate Sections:**



Gate Sections are designed to give personnel safe access around equipment. Please consider all options to determine the best location for the required gate. A standard gate includes MD190 conveyor, tangent section, hinge brackets and all required mounting hardware.

**MD190 Frame Dimensions:**

Overall Width of the Frame	12	15	18	21	24
Width Between Frame	9 1/2"	12 1/2"	15 1/2"	18 1/2"	21 1/2"

Overall Width of the Frame	27	30	36	42	48
Width Between Frame	24 1/2"	27 1/2"	33 1/2"	39 1/2"	45 1/2"

**Gate Section Model Number:**

**MD190-HG4 - 12 - SRS - 3**

Gravity Series

Frame Width

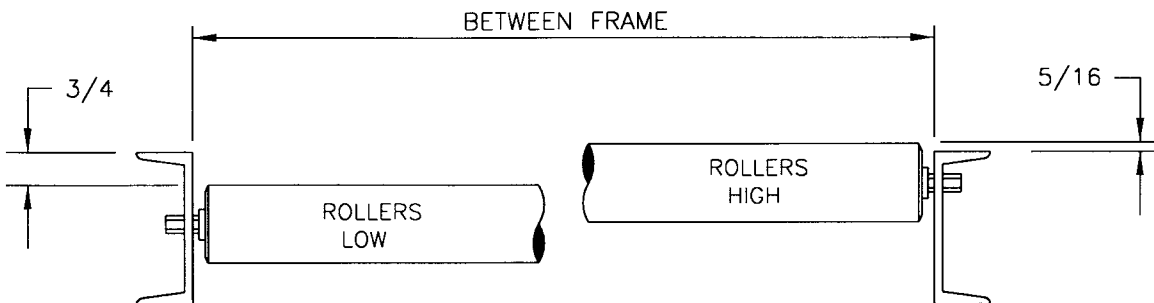
Steel Frame and Steel Roller

Roller Center(2 1/4",3" , 4 1/2" , 6"or12")

**Optional Gas Cylinder or Spring Assist lifting kit is available.  
Optional Gate Lengths are available.**



**HD250 Gravity Roller Specifications:**



**HD250 Gravity Roller Series Specifications**

Rollers: 2 1/2" diameter x 11 gage Steel with ball bearings.

Load rating per roller is 650 lbs.

Standard Roller Centers are 3", 4", 6", 9" and 12"

Axles: Roller axles are 11/16" hollow hex stock spring loaded for easy removal and assembly.

The roller mounting location is 5/16" above or 3/4" below the top flange of the frame.

Axles are pinned for 11", 13" and 15" between frame sizes.

Frame: 4" x 5.4 pounds per foot structural steel channel.

Axle holes are 11/16" Hex punched on 3", 4", 6", 9" and 12" centers.

Frame capacity with supports on 10 foot centers is 3,500 pounds.

Frame capacity with supports on 5 foot centers is 10,000 pounds.

Crossmembers 2" x 2" x 1/4" structural angle are welded in for strength.

Standard Between Frame Widths are:

11", 13", 15", 17", 19", 21", 23", 25", 27", 31", 33", 37", 39", 43", 47", 51", 55", and 59".

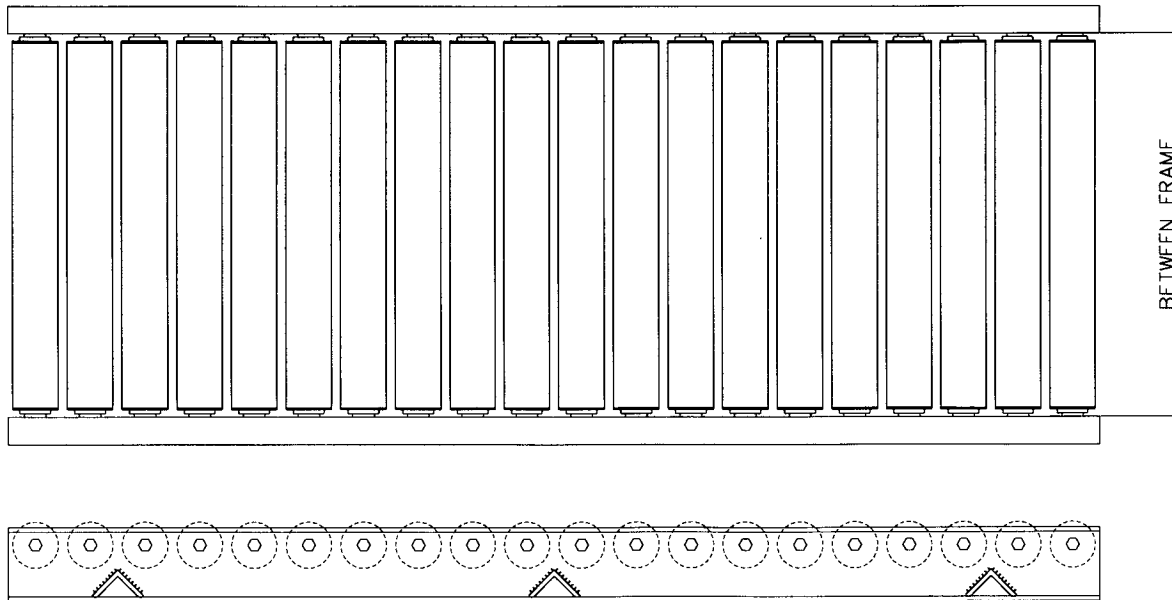
Finish: Standard finish for painted components is Metzgar Medium Blue or Vista Green

Optional 6" x 8.2 pounds per foot structural steel channel frames.

Optional 11/16" Solid Hex Axle is Available



**HD250 Gravity Heavy Duty Straight Section:**



( 5'-0" Long frame shown )

***The Standard Bed Length is 10 feet. Special Lengths are Available.***

HD250 Series standard between frame widths are:

11", 13", 15", 17", 19", 21", 23", 25", 27", 31", 33", 37", 39", 43", 47", 51", 55", and 59".

Add 3 1/8" to BF dimension for approximate overall width.

**Straight Section Model Number:**

**HD250 - 11 - 3 - H - 10**

Gravity Series

Between Frame Width

Roller Center(3", 4", 6", 9" or 12")

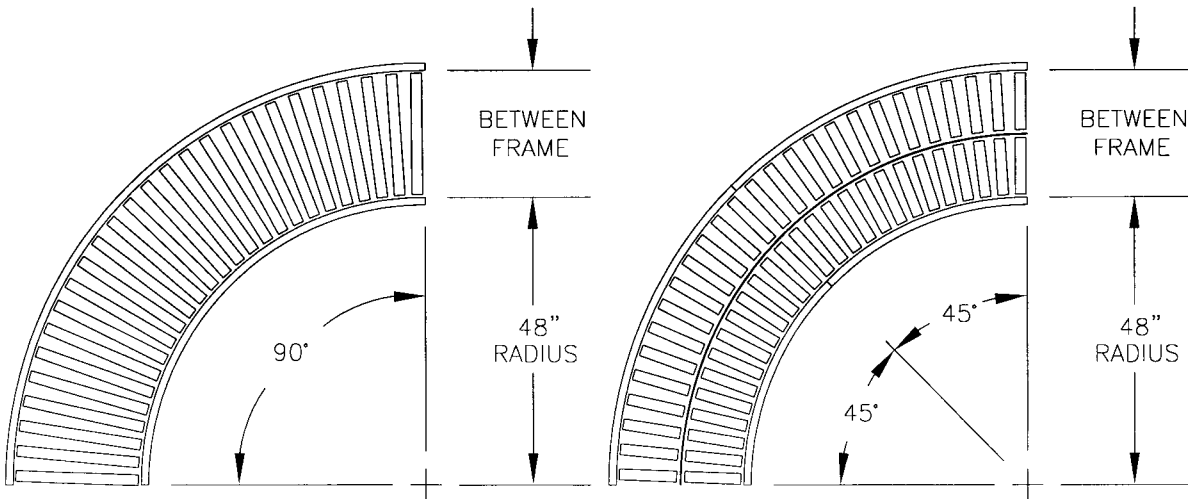
H=Rollers High, L= Rollers Low

Length in feet (10ft Standard)

***When ordering supports specify for HD250 frame style.  
Optional 6" Deep Side Frames are available.***



**HD250 Gravity Heavy Duty Straight Roller Curve Section:**



***The Standard Curve is 90 Degrees. Special Degree Curves are Available.***

HD250 Roller curves contain 26 rollers as standard.

The inside radius for HD250 series curves is 48 inches.

HD250 Series standard between frame widths are:

11", 13", 15", 17", 19", 21", 23", 25", 27", 31", 33", 37", 39", 43", 47", 51", 55", and 59".

Add 3 1/8" to BF dimension for approximate overall width.

***The 33" to 59" BF curves with rollers high have split rollers.***

***The 33" to 59" BF curves with rollers low have full width rollers.***

***The 33" to 59" BF curves are made in two 45 degree sections.***

**Straight Roller Curve Model Number:**

**HD250C - 11 - H - 90**

Gravity Series

Between Frame Width

H=Rollers High, L=Rollers Low

Degree of Curve



**Ball Transfer Unit Specifications:**

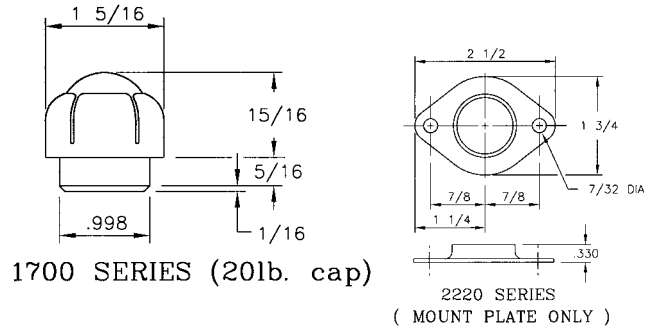
**1700 Series:**

Ball: 1" Diameter Delrin, Chrome plated Steel or Stainless Steel

Cup: Nylo for 1" Diameter Ball

Capacity: 20 pounds per Ball

Mounting: 0.998" Diameter Hole



**1700 Part Numbers:**

Nylo Cup Only	1700
1" Delrin Ball Only	1701
1" Chrome Plated Steel Ball Only	1702-C
1" Stainless Steel Ball Only	1702-S
Aluminum Shield Only	1703
Nylo Cup and Delrin Ball	1711
Nylo Cup and chrome Ball	1722-C
Nylo Cup and Stainless Ball	1722-S
2 hole Flange Mounting Plate Only	2220

**1700 Assembly Part Numbers:**

1700 Nylo Cup, Delrin Ball, 2 hole Flange Mount	2271
1700 Nylo Cup, Steel Ball, 2 hole Flange Mount	2272-C
1700 Nylo Cup, Stainless Ball, 2 hole Flange Mount	2272-S

**1900 Series:**

Ball: 1" or 1 1/2" Diameter Delrin or Chrome plated Steel

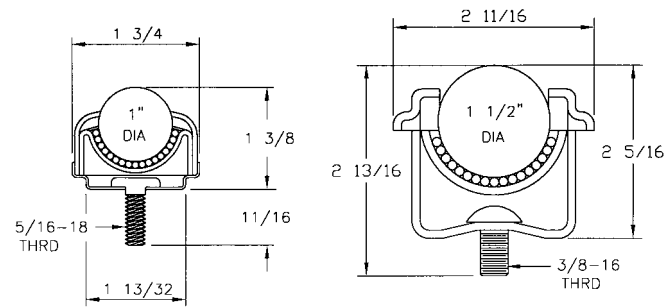
Cup: Steel for 1" or 1 1/2" Diameter Ball

Capacity: 1" Diameter Ball is 65 pounds per Ball

1 1/2" Diameter Ball is 250 pounds per Ball

Mounting: 1" Ball 5/16"-18 Stud Mount

1 1/2" Ball 3/8"-16 Stud Mount



**1900 Part Numbers:**

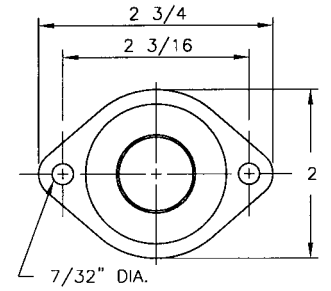
1" Chrome Ball, Steel Cup 5/16" Stud	1900-U
1" Delrin Ball, Steel Cup 5/16" Stud	1900-N-U
1 1/2" Chrome Ball, Steel Cup 3/8" Stud	1901-U



**Ball Transfer Unit Specifications:**

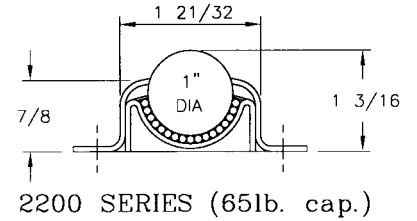
**2200 Series:**

Ball: 1" Diameter Delrin, Chrome plated Steel or Stainless Steel  
 Cup: Nylo for 1" Diameter Ball  
 Capacity: 1" Diameter Ball is 65 pounds per Ball  
 Mounting: 2 hole Flange mounted (7/32" Diameter Holes)



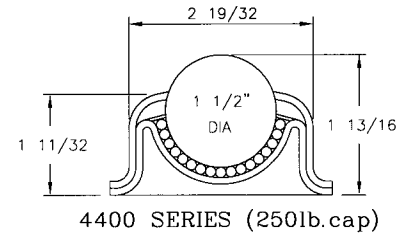
**2200 Part Numbers:**

1" Chrome Ball, Steel Cup Flange Mount	2200-U
1" Delrin Ball, Steel Cup Flange Mount	2200-N-U
1" Chrome Ball, Steel Cup Flange Mount w/o Seal	2201-U



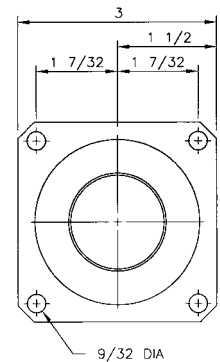
**4400 Series:**

Ball: 1 1/2" Diameter Delrin or Chrome plated Steel  
 Cup: Steel for 1 1/2" Diameter Ball  
 Capacity: 1 1/2" Diameter Steel Ball is 250 pounds per Ball  
 Mounting: 4 hole Flange mounted (9/32" Diameter Holes)



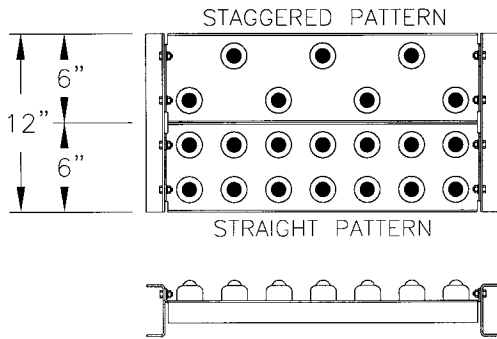
**4400 Part Numbers:**

1 1/2" Chrome Ball, Steel Cup Flange Mount	4400-U
1 1/2" Delrin Ball Flange Mount	4400-N-U





**Modular Ball Transfer Section for Wheel Conveyor:**



**Ball Transfer Modular Series Specifications for Wheel Conveyor:**

Ball Transfer: 1900 Series 1" Diameter ,65 pound capacity.

Standard Ball Mounting Patterns are 3" Straight and 3" Staggered.

Frame: 12 gage galvanized formed channel 2-1/2" deep with 15/16" flanges.

Overall Frame Widths 12", 15", 18", 24", and 30" available.

Finish: Standard finish is galvanized steel.

**Complete Ball Transfer Assemblies with Wheel Style Frame included:**

A1620 Series is Straight mounting Pattern.

A1621 Series is Staggered mounting Pattern.

**Ball Transfer Model Number:**

**A1620** - **15** - **12**

Wheel Frame Ball Transfer Series

Overall Frame Width

Length in Inches (6" Increments)

**Ball Transfer Assemblies for Wheel Style Conveyor Without Frames:**

These Segments would be placed in frames ordered in the previous section of this catalog.

S1620 Series is Straight mounting Pattern.

S1621 Series is Staggered mounting Pattern.

**Ball Transfer Model Number:**

**S1620** - **15** - **12**

Wheel Frame Ball Transfer Series

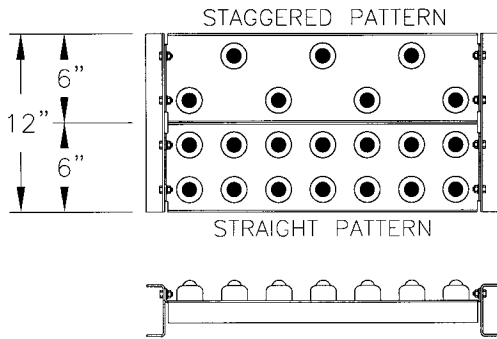
Overall Frame Width(12,15,18,24,30)

Length in Inches (6" Increments)





**Modular Ball Transfer Section for SD138 Roller Gravity Conveyor:**



**Ball Transfer Modular Series Specifications for SD138 Gravity Conveyor:**

Ball Transfer: 1900 Series 1" Diameter ,65 pound capacity.

Standard Ball Mounting Patterns are 3" Straight and 3" Staggered.

Frame: 12 gage galvanized formed channel 2-1/2" deep with 15/16" flanges.

Overall Frame Widths 12", 15", 18", 21", 24", 27" and 30" available.

Finish: Standard finish is galvanized steel.

**Complete Ball Transfer Assemblies with SD138 Style Frame included:**

A1610 Series is Straight mounting Pattern.

A1611 Series is Staggered mounting Pattern.

**Ball Transfer Model Number:**

**A1610 - 15 - 12**

Wheel Frame Ball Transfer Series

Overall Frame Width

Length in Inches (6" Increments)

**Ball Transfer Assemblies for SD138 Style Conveyor Without Frames:**

These Segments would be placed in frames ordered in the previous section of this catalog.

S1610 Series is Straight mounting Pattern.

S1611 Series is Staggered mounting Pattern.

**Ball Transfer Model Number:**

**S1610 - 15 - 12**

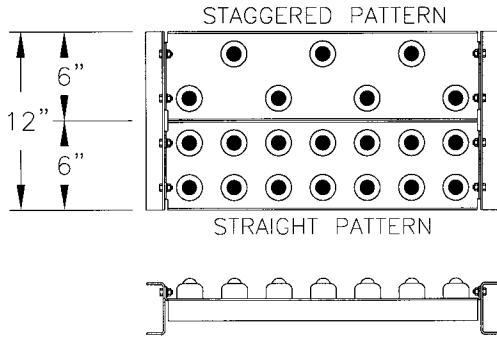
Wheel Frame Ball Transfer Series

Overall Frame Width(12,15,18,24,30)

Length in Inches (6" Increments)



**Modular Ball Transfer Section for MD190 Roller Gravity Conveyor:**



**Ball Transfer Modular Series Specifications for MD190 Gravity Conveyor:**

Ball Transfer: 1900 Series 1" Diameter ,65 pound capacity.

Standard Ball Mounting Patterns are 3" Straight and 3" Staggered.

Frame: 10 gage galvanized formed channel 3-1/2" deep with 1 1/4" flanges.

Overall Frame Widths 12", 15", 18", 21", 24", 27", 30", 33", 36", 39", 42", 45" and 48".

Finish: Standard finish for painted components is Metzgar Medium Blue or Vista Green

**Complete Ball Transfer Assemblies with MD190 Style Frame included:**

A1600 Series is Straight mounting Pattern.

A1601 Series is Staggered mounting Pattern.

**Ball Transfer Model Number:**

**A1600** - **15** - **12**

Wheel Frame Ball Transfer Series

Overall Frame Width

Length in Inches (6" Increments)

**Ball Transfer Assemblies for MD190 Style Conveyor Without Frames:**

These Segments would be placed in frames ordered in the previous section of this catalog.

S1600 Series is Straight mounting Pattern.

S1601 Series is Staggered mounting Pattern.

**Ball Transfer Model Number:**

**S1600** - **15** - **12**

Wheel Frame Ball Transfer Series

Overall Frame Width

Length in Inches (6" Increments)

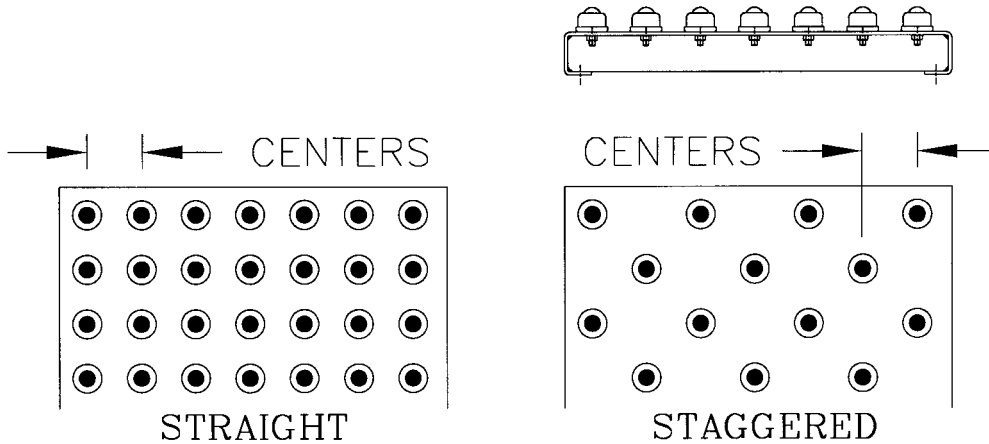


**Custom Ball Transfer Tables:**

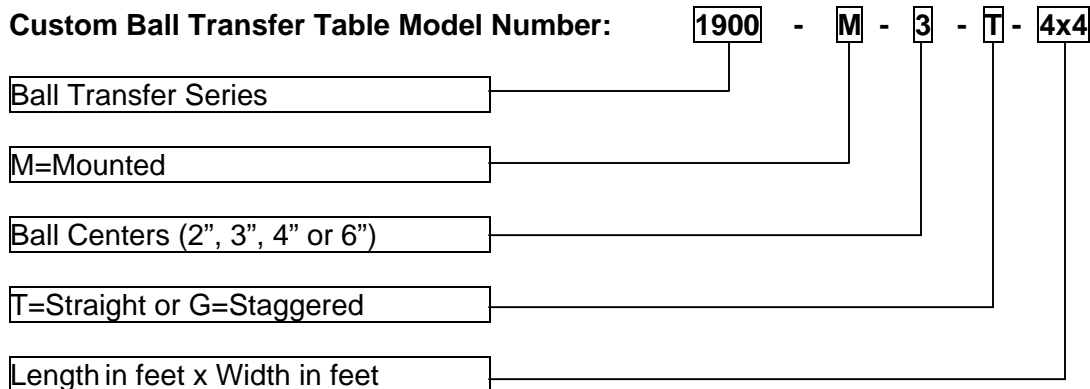
Frame: 7 gage (3/16") thick Steel with holes punched for proper centers and pattern.  
 2" x 1/4" Thick Flat Skirting and Stiffeners add strength and rigidity to the ball table.  
 Ball Transfer: 1711, 1722-C , 1722-S, 1900, 2200  
 Finish: Standard finish for painted components is Metzgar Medium Blue or Vista Green.  
 Mounting Patterns: Straight or Staggered.

**Balls Per Square Foot of Table:**

Ball Centers	Straight	Staggered
2	36	18
3	16	8
4	9	4 1/2"
6	4	2



**Custom Ball Transfer Table Model Number:**



**The maximum size of the table is 15 square feet. Larger sizes will be made in bolted together sections.**



**Gravity Options:**

**Frame Options:**

- Butt Bolt Frame Connectors
- Special Widths to match an Existing Conveyor
- Special Degree Curves
- Special Paint Colors
- Powder Coated Frames
- Bright Zinc Plating on Frames

**Roller Options:**

- Special Roller Lengths
- Pinned Roller Axles
- Plastisol Coating on Rollers
- Plastisol Coating on Wheels
- Urethane Coating on Rollers
- Urethane Wheel Cover
- Powder Coated Rollers
- Bright Zinc Plating on Rollers
- Semi Precision Roller Bearings
- ABEC-1 Precision Roller Bearings



**Gravity Replacement Parts:**

**1 15/16" Wheels**

Bore	¼" Diameter	5/16" Diameter
Steel	WS-25	WS-31
Aluminum	WA-25	WA-31
Nylo	WN-25	WN-31

**Midget Rollers**

Between Frame	¾" Dia. X 20 ga Steel Ball Bearings	¾" Dia. X .035 Aluminum Ball Bearings	¾" Dia. X .035 Aluminum NYLO Bearings & Stainless Axle
5"	M5R-SB	M5R-AB	M5R-AN-SS
10 ½"	M10R-SB	M10R-AB	M10R-AN-SS
14"	M14R-SB	M14R-AB	M14R-AN-SS
17 ¾"	M17R-SB	M17R-AB	M17R-AN-SS

**SD138 Gravity Rollers**

Overall Width	1 3/8" Diameter 18 Ga. Galvanized Steel	1 3/8" Diameter .049 Aluminum
12	SD138-12-RS	SD138-12-RA
15	SD138-15-RS	SD138-15-RA
18	SD138-18-RS	SD138-18-RA
21	SD138-21-RS	SD138-21-RA
27	SD138-27-RS	SD138-27-RA
30	SD138-30-RS	SD138-30-RA

**MD190 Gravity Rollers**

Overall Width	1.9" Diameter 16 Ga. Galvanized Steel	1.9" Diameter 13 Ga. Steel	1.625" X .042" Tapered Steel Roller
12	MD190-12-RS-16	MD190-12-RS-13	N/A
15	MD190-15-RS-16	MD190-15-RS-13	MD190-15-RST
18	MD190-18-RS-16	MD190-18-RS-13	MD190-18-RST
21	MD190-21-RS-16	MD190-21-RS-13	MD190-21-RST
24	MD190-24-RS-16	MD190-24-RS-13	MD190-24-RST
27	MD190-27-RS-16	MD190-27-RS-13	MD190-27-RST
30	MD190-30-RS-16	MD190-30-RS-13	MD190-30-RST
33	MD190-33-RS-16	MD190-33-RS-13	MD190-33-RST
36	MD190-36-RS-16	MD190-36-RS-13	MD190-36-RST
39	MD190-39-RS-16	MD190-39-RS-13	MD190-39-RST
42	MD190-42-RS-16	MD190-42-RS-13	MD190-42-RST
45	MD190-45-RS-16	MD190-45-RS-13	MD190-45-RST
48	MD190-48-RS-16	MD190-48-RS-13	MD190-48-RST

**HD250 Gravity Rollers**

Between Frame Width	2 1/2" Diameter 11 Ga. Steel
11	HD250-11-RS
13	HD250-13-RS
15	HD250-15-RS
17	HD250-17-RS
19	HD250-19-RS
21	HD250-21-RS
23	HD250-23-RS
25	HD250-25-RS
27	HD250-27-RS
31	HD250-31-RS
33	HD250-33-RS
37	HD250-37-RS
39	HD250-39-RS
43	HD250-43-RS
47	HD250-47-RS
51	HD250-51-RS
55	HD250-55-RS
59	HD250-59-RS



**Notes:**