GRAVITY CONVEYOR

SECTION CONTENT

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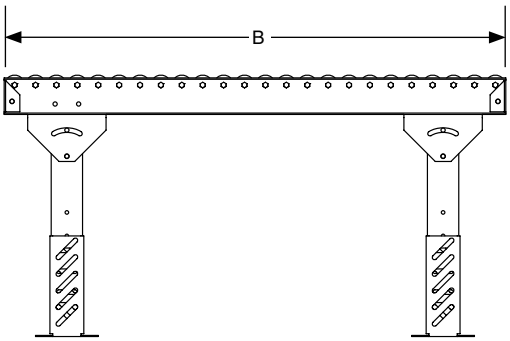
Omni Metalcraft corp.

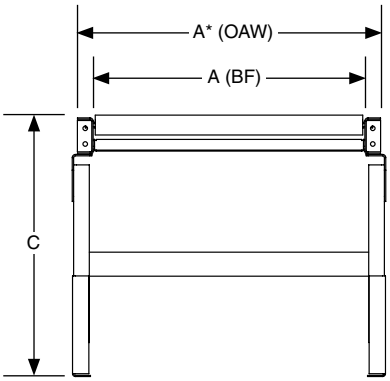
GRC GRAVITY ROLLER CONVEYOR

WHY GRC?

- Economical solution for manual product transport or gravity flow
- Versatility allows items from small to large and light to heavy to be handled
- Supports products with irregular surfaces including loosely bagged products
- Bolts to Omni standard leg supports or most mounting surfaces
- Common applications include moving or staging products and aiding in the transport of goods

GRAVITY ROLLER CONVEYOR - STRAIGHT



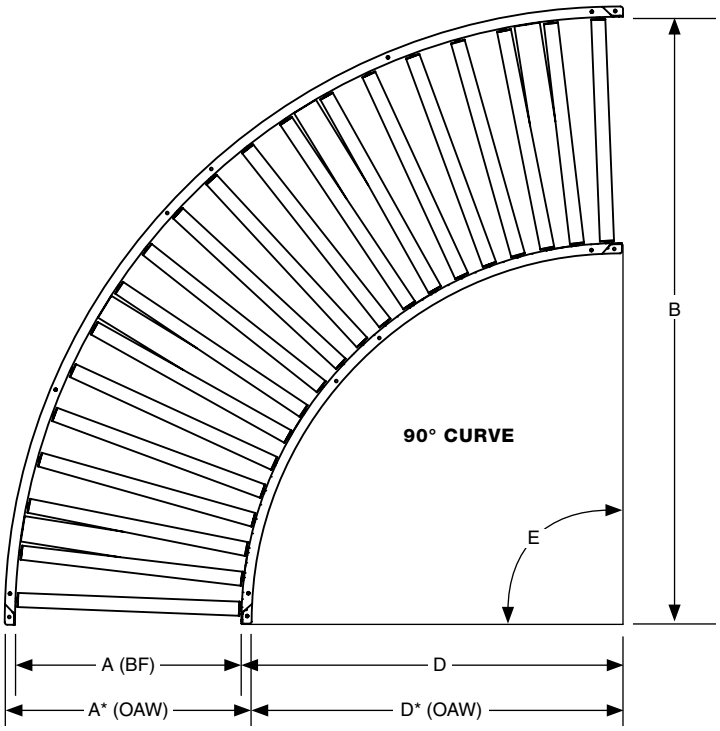


	1.4"*	1.9"	2 1/2"	2 9/16"
A	12" - 30"	6" - 51"	13" - 55"	
B	1' - 12'			
C	9" - 84"	17" - 86"		

A = Between Frame (BF) or Overall Width (OAW) (1" Increments)
B = Overall Length (OAL) (Any Increment)
C = Top of Roller (TOR)

*1.4" gravity roller conveyor dimensions are based on OAW

GRAVITY ROLLER CONVEYOR - CURVE

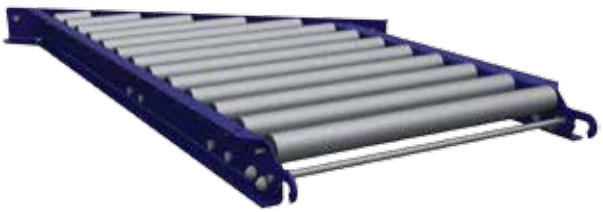


	1.4"*	1.9"	2 1/2"	2 9/16"
A	12" - 30"	6" - 51"	13" - 55"	
B	48", 60"	45 1/2" - 87"	61" - 99"	
C	9" - 84"	17" - 86"		
D	30", 33", 36", 39"	32 1/2", 48"		
E	30°, 45°, 60° and 90°			

A = Between Frame (BF) or Overall Width (OAW) (1" Increments)
B = Outside Radius (OR)
C = Top of Roller (TOR)
D = Inside Radius (IR)
E = Degree

*1.4" gravity roller conveyor dimensions are based on OAW
Taper and straight rollers available for curves

GRAVITY ROLLER CONVEYOR - STRAIGHT AND CURVE SPUR



	1.4"*			1.9"	
	30°	45°	90°	45°	90°
A	12" - 30"			13" - 39"	
B	9" - 84"			17" - 86"	

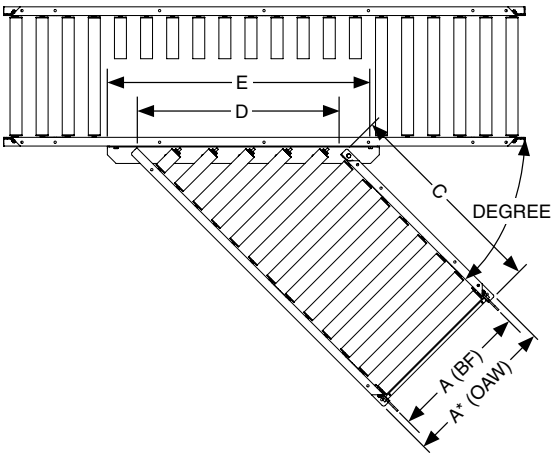
A = Between Frame (BF) or Overall Width (OAW) (1" Increments)
B = Top of Roller (TOR)
C = Short Rail Length
D = Throat
E = Shelf Bracket Length

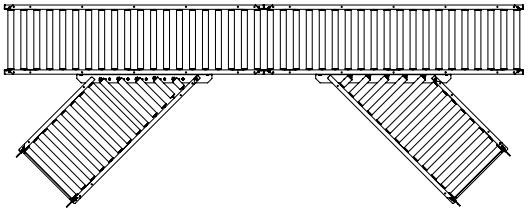
*1.4" gravity roller conveyor dimensions are based on OAW

1.4" ROLLER

30° STRAIGHT SPUR CONVEYOR				45° STRAIGHT SPUR CONVEYOR		
A (in.)	C (in.)	D (in.)	E (in.)	C (in.)	D (in.)	E (in.)
Overall Width	Short Rail Length	Throat	Shelf Bracket Length	Short Rail Length	Throat	Shelf Bracket Length
12	24	20.8	29.3	24	14.4	22.9
	36			36		
	60			60		
15	24	26.8	35.3	24	18.7	27.2
	36			36		
	60			60		
18	24	32.8	41.3	24	22.9	31.4
	36			36		
	60			60		
21	24	38.8	47.3	24	27.2	35.7
	36			36		
	60			60		
24	24	44.8	53.3	24	31.4	39.9
	36			36		
	60			60		
30	24	56.8	65.3	24	39.9	48.4
	36			36		
	60			60		

STRAIGHT SPUR
30° and 45° only





RIGHT HAND **LEFT HAND**

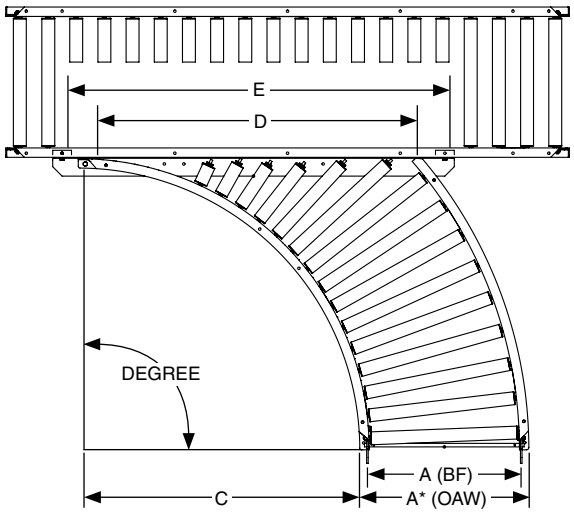
1.9" ROLLER

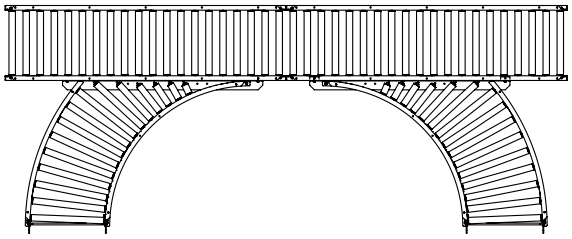
45° STRAIGHT SPUR CONVEYOR			
A (in.)	C (in.)	D (in.)	E (in.)
Between Frame Width	Short Rail Length	Throat	Shelf Bracket Length
13	24	18.6	31.5
	36		
	60		
15	24	22.8	31.5
	36		
	60		
17	24	24.2	31.5
	36		
	60		
19	24	27.1	40
	36		
	60		
21	24	29.9	40
	36		
	60		
23	24	32.7	40
	36		
	60		
25	24	35.5	48.5
	36		
	60		
27	24	38.3	48.5
	36		
	60		
29	24	41.1	48.5
	36		
	60		
31	24	48.5	61.2
	36		
	60		
33	24	51	61.2
	36		
	60		
35	24	53.8	61.2
	36		
	60		
37	24	52.5	61.2
	36		
	60		
39	24	55.3	61.2
	36		
	60		

Spurs available with larger diameter rollers based on application

SPUR SPECIFICATIONS

CURVE SPUR
90° only





RIGHT HAND **LEFT HAND**

	1.4"*			1.9"	
	30°	45°	90°	45°	90°
A	12" - 30"			13" - 39"	
B	9" - 84"			17" - 86"	

A = Between Frame (BF) or Overall Width (OAW) (1" Increments)
B = Top of Roller (TOR)
C = Inside Radius (IR)
D = Throat
E = Shelf Bracket Length

*1.4" gravity roller conveyor dimensions are based on OAW
Taper and straight rollers available for curve spurs

1.4" ROLLER			
90° CURVE SPUR CONVEYOR			
A (in.)	C (in.)	D (in.)	E (in.)
Overall Width	Inside Radius (IR)	Throat	Shelf Bracket Length
12	37	29.6	36.8
15	34	32.9	40
18	31	35.6	42.7
21	40	43.7	51
24	37	46.2	53.4
30	31	50.3	57.5

1.9" ROLLER			
90° CURVE SPUR CONVEYOR			
A (in.)	C (in.)	D (in.)	E (in.)
Between Frame Width	Inside Radius (IR)	Throat	Shelf Bracket Length
13	32.5	31.8	42.5
15		34.5	42.5
17		37.1	42.5
19		39.7	48.6
21		41.9	48.6
23		44.6	54.7
25		46.9	54.7
27		49.5	54.7
29	48	59.4	69.8
31		61.9	69.8
33		64.4	69.8
35		66.9	77.1
37		69.3	77.1
39		71.7	77.1

Spurs available with larger diameter rollers based on application

ROLLER AND FRAME SPECIFICATIONS

ROLLER DIAMETER (in.)	AXLE DETAIL		TUBE DETAIL		ROLLER SPACING	MAXIMUM LOAD PER ROLLER
	Size (in.)	Type	Wall Thickness	Material	Centers (in.)	(lbs.)
1.4	1/4	Round	18 ga.	Galvanized	1.5, 3, 4, 4.5, 6, 8, 9,12	94
1.4	1/4	Round	18 ga.	Aluminum	1.5, 3, 4, 4.5, 6, 8, 9,12	94
1.9	7/16	Hex	16 ga.	Galvanized	2*, 3, 4, 4.5, 6, 8, 9,12	269
1.9	7/16	Hex	16 ga., 13 ga., 9 ga.	Mild Steel	2*, 3, 4, 4.5, 6, 8, 9,12	269
2.5	11/16	Hex	11 ga.	Mild Steel	3, 4, 6, 8, 9,12	645
2.6	11/16	Hex	7 ga.	Mild Steel	3, 4, 6, 8, 9,12	645
1.9 Taper (2 1/2 - 1 11/16)	7/16	Hex	14 ga.	Mild Steel or Zinc Plated	3	290
1.4 Taper (1 1/2 - 1)	5/16	Hex	18 ga.	Zinc Plated	1.5, 3	150

*2 1/8 for between frame over 40"

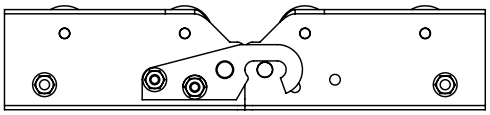
ROLLER DIAMETER	ROLLERS HIGH FRAME	ROLLERS LOW FRAME	FRAME HEIGHT	FRAME TO TOR
1.4"	2 1/2" x 1" x 12 ga. galvanized steel or 1/8" thick aluminum or powder coated steel	4" x 1" x 12 ga. galvanized steel or 1/8" thick aluminum or powder coated steel	2 1/2"	3/32"
			4"	-1 13/32"
1.9"	3 1/2" x 1 1/2" x 10 ga. galvanized or powder coated steel	4 1/2" x 1 1/2" x 10 ga. galvanized or powder coated steel	3 1/2"	1/4"
			4 1/2"	-3/4"
2 1/2", 2 9/16"	4" x 1 1/2" x 7 ga. powder coated steel		4"	1/4"
				-3/4"

FRAME LOAD CAPACITY CHART

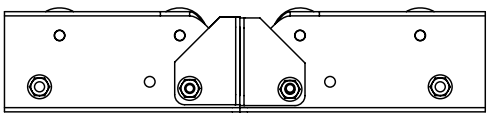
ROLLER DIAMETER	FRAME MATERIAL	SUPPORT CENTERS	FRAME CAPACITY* Maximum Uniformly Distributed Load
1.4"	Steel	5' 10'	1300 350
	Aluminum	5' 10'	710 160
1.9"	Steel	5' 10'	3300 1200
2 1/2", 2 9/16"	Steel	5' 10'	5200 2100

*Capacity listed could be lower due to roller capacity and BF

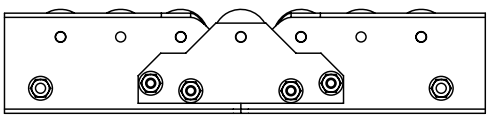
END COUPLER AND ROLLER STYLES



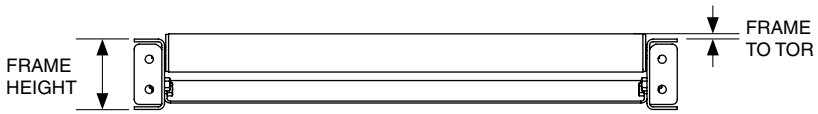
HOOK AND ROD
For portable quick disconnect



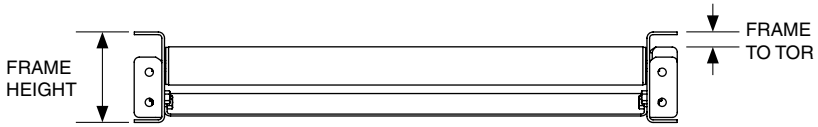
END CAP
For permanent installation applications



BRIDGE PLATE
For permanent installation application. Required to hold roller spacing across the splice.



ROLLERS HIGH



ROLLERS LOW

FINISHES - Galvanized steel standard. Powder coat available.

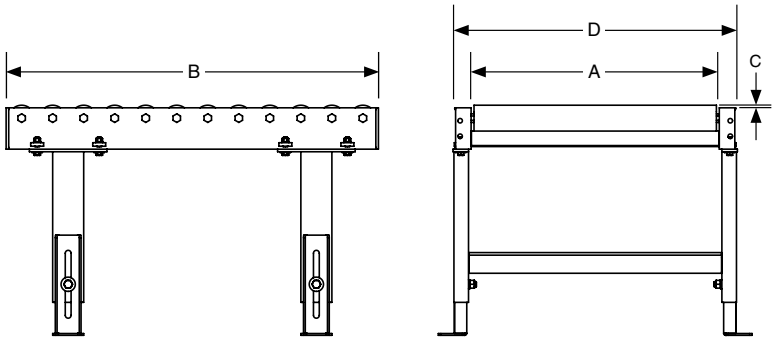
Expanded product parameters available. For more information see Tech Handbook.

GRCW GRAVITY ROLLER CONVEYOR-WELDED CONSTRUCTION

WHY GRCW?

- Roller size and centers optimized to handle nearly any load
- Robust, welded construction using structural steel with nearly unlimited between frame dimensions, length options and roller diameters
- Roller coatings, heat-treat, frame cut outs and modifications, fork loading protection and other specialized provisions are our “standard”
- Mounts to Omni standard leg supports or most surfaces
- Common applications include floor mounted pallet transport, rack-mounted product storing and staging, workstations and assembly lines

WELDED GRAVITY ROLLER - STRAIGHT



	1"	1.4"	1.9"	2 1/2"	2 9/16"	3 1/2"	4"
A	6" - 39"	6" - 48"	6" - 78"	6" - 108"	6" - 102"	6" - 156"	6" - 168"
B	6" - 144"	6" - 144"	6" - 240"	6" - 240"	6" - 240"	7" - 240"	8" - 240"
C	1/32"	3/16"	5/16"	5/8"	9/16"	1/2"	3/4"
D	8"- 41"	8" - 50"	9" - 81"	9" - 111"	9" - 111"	10" - 160"	10" - 172"

A = Between Frame (BF) (Any Increment)*
B = Overall Length (OAL) (Any Increment)
C = Frame to Top of Roller (TOR)
D = Overall Width (OAW)

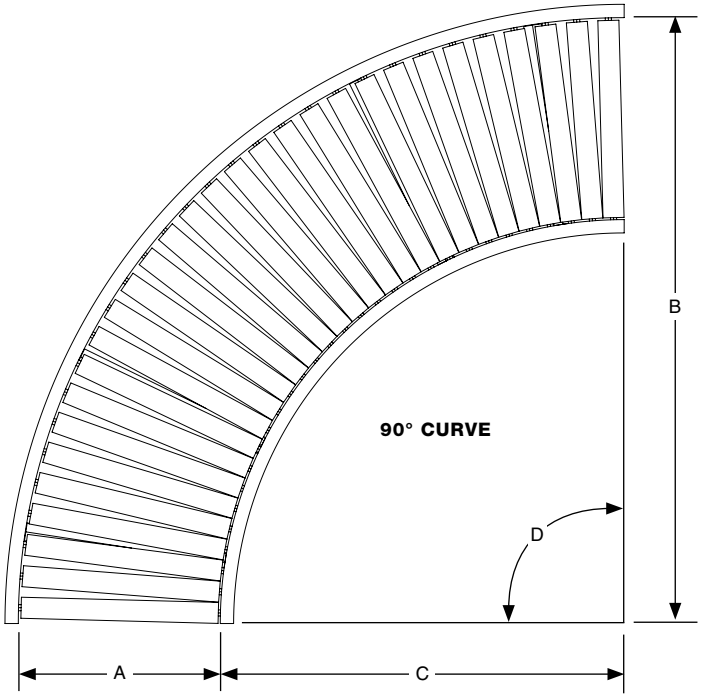
*Custom widths available

WELDED GRAVITY ROLLER - CURVE

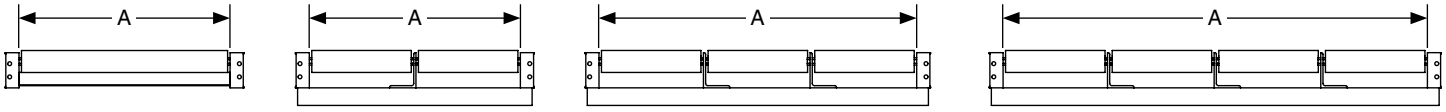
	1"	1.4"	1.9"	2 1/2"	2 9/16"	3 1/2"	4"
A	6" - 39"	6" - 48"	6" - 78"	6" - 108"	6" - 102"	6" - 156"	6" - 168"
B	18"	18"	24"	24"	24"	42"	42"
C	12" - 174"	12" - 174"	18" - 294"	18" - 294"	18" - 294"	36" - 294"	36" - 294"
D	10° - 180°	10°- 180°	10° - 180°	20° - 180°	20° - 180°	30° - 180°	30° - 180°

A = Between Frame (BF) (Any Increment)*
B = Outside Radius (OR) (Minimum)
C = Inside Radius (IR)
D = Degree

Taper and straight rollers available for curves
*Custom widths available



MULTI-LANE OPTIONS

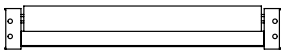
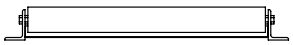
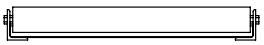
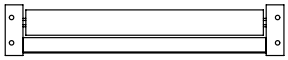
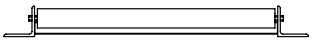
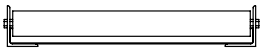
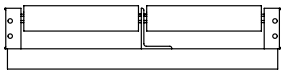
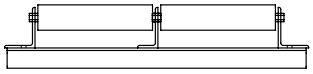
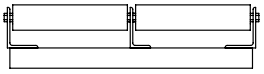
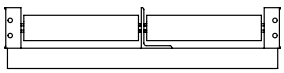
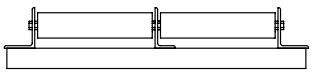
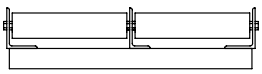


A (in.) Between Frame Width							
Lane	**1"**	**1.4"**	**1.9"**	**2 1/2"**	**2 9/16"**	**3 1/2"**	**4"**
Single	6 - 39	6 - 39	6 - 51	6 - 96	6 - 96	6 - 156	6 - 168
Double	15 - 78	15 - 78	15 - 96	15 Minimum*			
Triple	18 Minimum*						
Quadruple	27 Minimum*						

*See sales for maximum

Some configurations will require special short lengths in order to ship via common carrier
Some configurations will require special intermediate frame construction
Some configurations can share a common axle across multiple lanes

STYLE CHART

STYLE	CHANNEL	ANGLE TOED OUT	ANGLE TOED IN
SINGLE LANE HIGH			
SINGLE LANE LOW			
MULTI-LANE HIGH			
MULTI-LANE LOW			

STANDARD CONFIGURATIONS

1" AND 1.4" ROLLERS													
Product	**Roller**					**Frame Size and Capacity Per Foot**							
						Formed Channel		Formed Angle			Structural Angle		
Max Product Weight (lbs.)	Roller Dia. (in.)	Axle Size (in.)	Between Frame Range (in.)	Capacity Per Roller (lbs.)	Minimum Roller Centers (in.)	Size Options (in.)	Capacity Per Foot (lbs.) Supports on 10' Centers	Size Options (in.)	Capacity Per Foot (lbs.) Supports on 5' Centers	Capacity Per Foot (lbs.) Supports on 10' Centers	Size Options (in.)	Capacity Per Foot (lbs.) Supports on 5' Centers	Capacity Per Foot (lbs.) Supports on 10' Centers
Up to 300	1	1/4 Ø	6 - 21	59	1.25	2.5 x 1 x 12 Ga.	35	2 x 2 x 10 Ga.	32	16	2 x 2 x 1/4	60	30
						4 x 1 x 12 Ga.	112						
			22 - 30	37	1.26	2.5 x 1 x 12 Ga.	35						
						4 x 1 x 12 Ga.	112						
			31 - 39	20	1.27	2.5 x 1 x 12 Ga.	35						
						4 x 1 x 12 Ga.	112						
		5/16 Ø	6 - 21	59	1.28	2.5 x 1 x 12 Ga.	35						
						4 x 1 x 12 Ga.	112						
			22 - 30	58	1.29	2.5 x 1 x 12 Ga.	35						
						4 x 1 x 12 Ga.	112						
			31 - 39	58	1.30	2.5 x 1 x 12 Ga.	35						
						4 x 1 x 12 Ga.	112						
		5/16 Hex	6 - 21	59	1.31	2.5 x 1 x 12 Ga.	35						
						4 x 1 x 12 Ga.	112						
			22 - 30	58	1.32	2.5 x 1 x 12 Ga.	35						
						4 x 1 x 12 Ga.	112						
			31 - 39	58	1.33	2.5 x 1 x 12 Ga.	35						
						4 x 1 x 12 Ga.	112						
Up to 300	1.4	1/4 Ø	6 - 9	114	1.5	2.5 x 1 x 12 Ga.	35	2 1/2 x 2 1/2 x 7 Ga.	96	48	2 1/2 x 2 1/2 x 3/16	96	48
						4 x 1 x 12 Ga.	112						
			10 - 20	44	1.6	2.5 x 1 x 12 Ga.	35						
						4 x 1 x 12 Ga.	112						
			21 - 39	14	1.7	2.5 x 1 x 12 Ga.	35						
						4 x 1 x 12 Ga.	112						
		5/16 Hex	6 - 9	119	1.8	2.5 x 1 x 12 Ga.	35						
						4 x 1 x 12 Ga.	112						
			10 - 20	119	1.9	2.5 x 1 x 12 Ga.	35						
						4 x 1 x 12 Ga.	112						
			21 - 39	53	1.10	2.5 x 1 x 12 Ga.	35						
						4 x 1 x 12 Ga.	112						
Up to 600	1.4	3/8 Ø	6 - 9	148	1.11	3.5 x 1.5 x 10 Ga.	122	2 1/2 x 2 1/2 x 7 Ga.	96	48	2 1/2 x 2 1/2 x 3/16	96	48
						4 x 1 x 12 Ga.	112						
			10 - 20	146	1.12	3.5 x 1.5 x 10 Ga.	122						
						4 x 1 x 12 Ga.	112						
			21 - 48	62	1.13	3.5 x 1.5 x 10 Ga.	122						
						4 x 1 x 12 Ga.	112						

Expanded product parameters available

STANDARD CONFIGURATIONS

1.9", 2 1/2" AND 2 9/16" ROLLERS

Product	Roller					Frame Size and Capacity Per Foot									
						Formed Channel		Formed Angle			Structural Channel		Structural Angle		
Max Product Weight (lbs.)	Roller Dia. (in.)	Axle Size (in.)	Between Frame Range (in.)	Capacity Per Roller (lbs.)	Minimum Roller Centers (in.)	Size Options (in.)	Capacity Per Foot (lbs.) Supports on 10' Centers	Size Options (in.)	Capacity Per Foot (lbs.) Supports on 5' Centers	Capacity Per Foot (lbs.) Supports on 10' Centers	Size Options (in.)	Capacity Per Foot (lbs.) Supports on 10' Centers	Size Options (in.)	Capacity Per Foot (lbs.) Supports on 5' Centers	Capacity Per Foot (lbs.) Supports on 10' Centers
Up to 1500	1.9	7/16 Hex	6 - 36	267	2	3.5 x 1.5 x 10 Ga.	122	4 x 3 x 1/4	230	115	3 x 4.1	170	4 x 3 x 5/16	280	140
						4 x 1.5 x 7 Ga.	248				4 x 5.4	272			
			37 - 51	155		3.5 x 1.5 x 10 Ga.	122				3 x 4.1	170			
						4 x 1.5 x 7 Ga.	248				4 x 5.4	272			
			52 - 65	75		3.5 x 1.5 x 10 Ga.	122				3 x 4.1	170			
						4 x 1.5 x 7 Ga.	248				4 x 5.4	272			
		5/8 Ø	6 - 36	262		3.5 x 1.5 x 10 Ga.	122				3 x 4.1	170			
						4 x 1.5 x 7 Ga.	248				4 x 5.4	272			
			37 - 51	120		3.5 x 1.5 x 10 Ga.	122				3 x 4.1	170			
						4 x 1.5 x 7 Ga.	248				4 x 5.4	272			
			52 - 65	50		3.5 x 1.5 x 10 Ga.	122				3 x 4.1	170			
						4 x 1.5 x 7 Ga.	248				4 x 5.4	272			
		3/4 Ø	6 - 36	348		3.5 x 1.5 x 10 Ga.	122				3 x 4.1	170			
						4 x 1.5 x 7 Ga.	248				4 x 5.4	272			
			37 - 51	183		3.5 x 1.5 x 10 Ga.	122				3 x 4.1	170			
						4 x 1.5 x 7 Ga.	248				4 x 5.4	272			
			52 - 78	39		3.5 x 1.5 x 10 Ga.	122				3 x 4.1	170			
						4 x 1.5 x 7 Ga.	248				4 x 5.4	272			
Up to 3500	2 1/2	7/16 Hex	6 - 42	275	2 3/4	3.5 x 1.5 x 10 Ga.	122	5 x 3 x 1/4	908	454	5 x 6.7	408	5 x 3 x 5/16	1112	556
						4 x 1.5 x 7 Ga.	248				6 x 8.2	586			
			43 - 66	108		3.5 x 1.5 x 10 Ga.	122				5 x 6.7	408			
						4 x 1.5 x 7 Ga.	248				6 x 8.2	586			
			67 - 96	30		3.5 x 1.5 x 10 Ga.	122				5 x 6.7	408			
						4 x 1.5 x 7 Ga.	248				6 x 8.2	586			
		11/16 Hex	6 - 42	700		3.5 x 1.5 x 10 Ga.	122				5 x 6.7	408			
						4 x 1.5 x 7 Ga.	248				6 x 8.2	586			
			43 - 66	373		3.5 x 1.5 x 10 Ga.	122				5 x 6.7	408			
						5 x 1.5 x 1/4	545				6 x 8.2	586			
			67 - 102	54		3.5 x 1.5 x 10 Ga.	122				5 x 6.7	408			
						5 x 1.5 x 1/4	545				6 x 8.2	586			
		3/4 Ø	6 - 42	700		3.5 x 1.5 x 10 Ga.	122				5 x 6.7	408			
						5 x 1.5 x 1/4	545				6 x 8.2	586			
			43 - 66	599		3.5 x 1.5 x 10 Ga.	122				5 x 6.7	408			
						5 x 1.5 x 1/4	545				6 x 8.2	586			
			67 - 108	54		3.5 x 1.5 x 10 Ga.	122				5 x 6.7	408			
						5 x 1.5 x 1/4	545				6 x 8.2	586			
Up to 3500	2 9/16	11/16 Hex	6 - 42	634	2 3/4	3.5 x 1.5 x 10 Ga.	122	5 x 3 x 1/4	908	454	5 x 6.7	408	5 x 3 x 5/16	1112	556
						4 x 1.5 x 7 Ga.	248				6 x 8.2	586			
			43 - 66	625		3.5 x 1.5 x 10 Ga.	122				5 x 6.7	408			
						4 x 1.5 x 7 Ga.	248				6 x 8.2	586			
			67 - 102	106		3.5 x 1.5 x 10 Ga.	122				5 x 6.7	408			
						4 x 1.5 x 7 Ga.	248				6 x 8.2	586			
		1/2 Ø	6 - 42	200		3.5 x 1.5 x 10 Ga.	122				5 x 6.7	408			
						4 x 1.5 x 7 Ga.	248				6 x 8.2	586			
			43 - 66	65		3.5 x 1.5 x 10 Ga.	122				5 x 6.7	408			
						4 x 1.5 x 7 Ga.	248				6 x 8.2	586			
			67 - 72	34		3.5 x 1.5 x 10 Ga.	122				5 x 6.7	408			
						4 x 1.5 x 7 Ga.	248				6 x 8.2	586			
Up to 5000	2 9/16	3/4 Ø	6 - 42	600	2 3/4	3.5 x 1.5 x 10 Ga.	122	5 x 3 x 1/4	908	454	5 x 6.7	408	5 x 3 x 5/16	1112	556
						5 x 1.5 x 1/4	545				6 x 8.2	586			
			43 - 66	500		3.5 x 1.5 x 10 Ga.	122				5 x 6.7	408			
						5 x 1.5 x 1/4	545				6 x 8.2	586			
			67 - 102	90		3.5 x 1.5 x 10 Ga.	122				5 x 6.7	408			
						5 x 1.5 x 1/4	545				6 x 8.2	586			

Expanded product parameters available

STANDARD CONFIGURATIONS

3 1/2" AND 4" ROLLERS										
Product	**Roller**					**Frame Size and Capacity Per Foot**				
						Structural Channel		Structural Angle		
Max Product Weight (lbs.)	Roller Dia. (in.)	Axle Size (in.)	Between Frame Range (in.)	Capacity Per Roller (lbs.)	Minimum Roller Centers (in.)	Size Options (in.)	Capacity Per Foot (lbs.) Supports on 10' Centers	Size Options (in.)	Capacity Per Foot (lbs.) Supports on 5' Centers	Capacity Per Foot (lbs.) Supports on 10' Centers
Up to 6000	3 1/2	1-1/16 Hex	6 - 42	1184	3 3/4	7 x 9.8	824	6 x 4 x 1/2	1680	840
						8 x 11.5	1122			
			43 - 78	1165		7 x 9.8	824			
						8 x 11.5	1122			
			79 - 144	104		7 x 9.8	824			
						8 x 11.5	1122			
		1-3/16 Ø	6 - 42	2465		7 x 9.8	824			
						8 x 11.5	1122			
			43 - 78	2263		7 x 9.8	824			
						8 x 11.5	1122			
			79 - 144	199		7 x 9.8	824			
						8 x 11.5	1122			
Up to 10000	3 1/2	1-7/16 Ø	6 - 42	5813	3 3/4	7 x 9.8	824	6 x 4 x 1/2	1680	840
						8 x 11.5	1122			
			43 - 78	3043		7 x 9.8	824			
						8 x 11.5	1122			
			79 - 156	172		7 x 9.8	824			
						8 x 11.5	1122			
Up to 10000	4	1 1/8 Hex	6 - 48	5081	4 1/2	10 x 15.3	970	N/A		
						12 x 20.7	1650			
			49 - 84	2448		10 x 15.3	970			
						12 x 20.7	1650			
			85 - 144	260		10 x 15.3	970			
						12 x 20.7	1650			
		1 3/16 Ø	6 - 48	4482		10 x 15.3	970			
						12 x 20.7	1650			
			49 - 84	2153		10 x 15.3	970			
						12 x 20.7	1650			
			85 - 144	223		10 x 15.3	970			
						12 x 20.7	1650			
Up to 15000	4	1 7/16 Ø	6 - 48	5927	4 1/2	10 x 15.3	970			
						12 x 20.7	1650			
			49 - 84	3303		10 x 15.3	970			
						12 x 20.7	1650			
			85 - 168	260		10 x 15.3	970			
						12 x 20.7	1650			

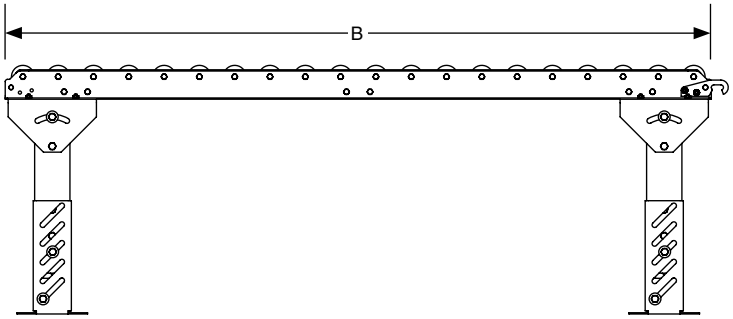
Expanded product parameters available
Capacities not recommended for a sloped application

GSC GRAVITY SKATEWHEEL CONVEYOR

WHY GSC?

- Economical, lightweight, non-powered conveyor suitable for conveying light products
- Ideal for portable applications
- Close axle centers and tight wheel patterns allows small products to be handled
- Multiple wheel pattern choices for your product
- Built to your length or easily field cut to length
- Bolts to Omni standard leg supports or most mounting surfaces
- Common applications include truck loading and unloading, rack-mounted product storing and staging, workstations and assembly lines

GRAVITY SKATEWHEEL CONVEYOR - STRAIGHT

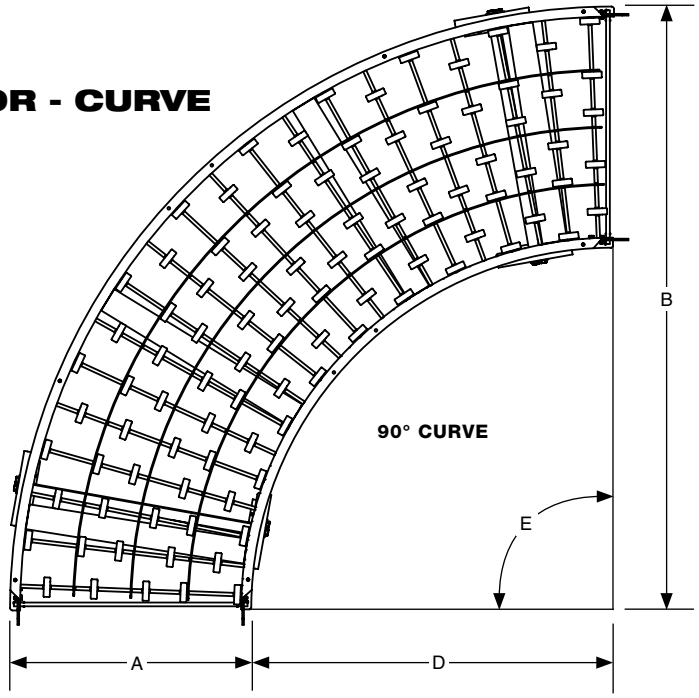


A	12" - 30"
B	1' - 12'
C	9" - 85"

A = Overall Width (OAW) (1" Increments)*
B = Overall Length (OAL) (Any Increment)
C = Top of Wheel (TOW)

*Custom widths available

GRAVITY SKATEWHEEL CONVEYOR - CURVE



A	12" - 30"
B	48", 60"
C	9" - 85"
D	30" - 39"
E	30°, 45°, 60° and 90°

A = Overall Width (OAW) (1" Increments)*
B = Outside Radius (OR)
C = Top of Wheel (TOW)
D = Inside Radius (IR)
E = Degree

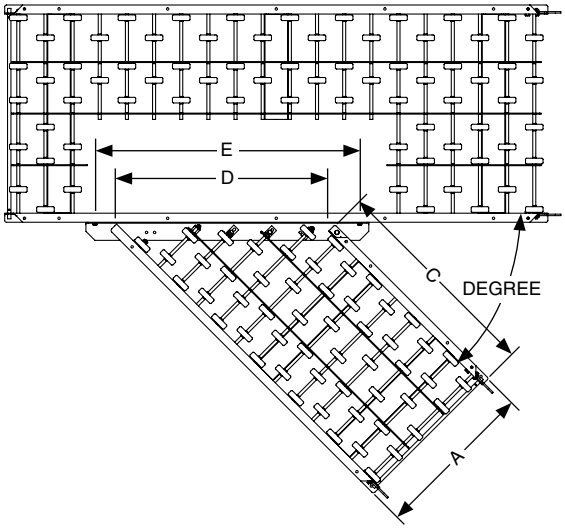
*Custom widths available

GRAVITY SKATEWHEEL CONVEYOR - STRAIGHT AND CURVE SPUR

	30°	45°	90°
A	12", 15", 18", 21", 24", 30"		
B	9" - 85"		

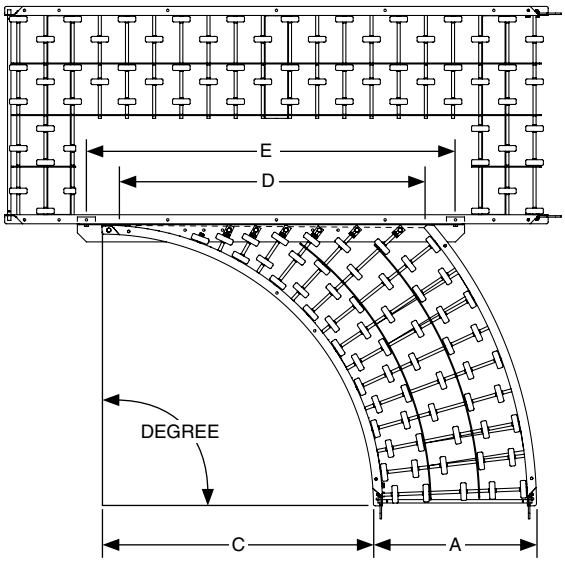
A = Overall Width (OAW)
B = Top of Wheel (TOW)
C = Short Rail Length / Inside Radius (IR)
D = Throat
E = Shelf Bracket Length

STRAIGHT SPUR
30° and 45° only

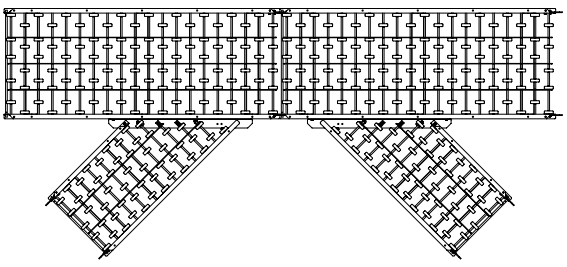


30° STRAIGHT SPUR CONVEYOR				45° STRAIGHT SPUR CONVEYOR		
A (in.)	C (in.)	D (in.)	E (in.)	C (in.)	D (in.)	E (in.)
Overall Width	Short Rail/Inside Radius (IR)	Throat	Shelf Bracket Length	Short Rail/Inside Radius (IR)	Throat	Shelf Bracket Length
12	24	20.8	29.3	24	14.4	22.9
	36			36		
	60			60		
15	24	26.8	35.3	24	18.7	27.2
	36			36		
	60			60		
18	24	32.8	41.3	24	22.9	31.4
	36			36		
	60			60		
21	24	38.8	47.3	24	27.2	35.7
	36			36		
	60			60		
24	24	44.8	53.3	24	31.4	39.9
	36			36		
	60			60		
30	24	56.8	65.3	24	39.9	48.4
	36			36		
	60			60		

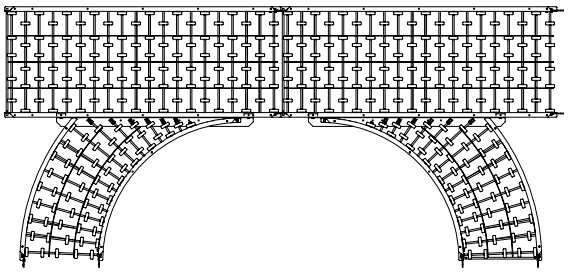
CURVE SPUR
90° only



90° CURVE SPUR CONVEYOR			
A (in.)	C (in.)	D (in.)	E (in.)
Overall Width	Short Rail/Inside Radius (IR)	Throat	Shelf Bracket Length
12	37	29.6	36.8
15	34	32.9	40
18	31	35.6	42.8
21	40	43.7	51
24	37	46.2	53.4
30	31	50.3	57.5



RIGHT HAND **LEFT HAND**



RIGHT HAND **LEFT HAND**

CONVEYOR SPECIFICATIONS

WHEEL HEIGHT	AXLE SPACING	WHEELS PER FOOT MINIMUM	WHEELS PER FOOT MAXIMUM	FRAME	FRAME HEIGHT "E"	FRAME TO TOW "F"
Wheels High	1 1/2"	12	72	2 1/2" x 1" x 12 ga., galvanized steel or powder coated steel	2 1/2"	3/8"
	3"	6	36			
	4"*	4	27			
Wheels Low	1 1/2"	12	72	4" x 1" x 12 ga., galvanized steel or powder coated steel	4"	-1 1/8"
	3"	6	36			
	4"*	4	27			
Wheels High	1 1/2"	12	72	2 1/2" x 1" x 1/8" aluminum	2 1/2"	3/8"
	3"	6	36			
	4"*	4	27			
Wheels Low	1 1/2"	12	72	4" x 1" x 1/8" aluminum	4"	-1 1/8"
	3"	6	36			
	4"*	4	27			

*Only available on straight skatewheel conveyor. Curve spacing is nominal.

WHEELS PER FOOT

1 1/2" AXLE SPACING					
12" Overall Width	15" Overall Width	18" Overall Width	21" Overall Width	24" Overall Width	30" Overall Width
12	12	24	24	32	32
16	16	28	28	36	40
20	20	32	32	40	48
24	24	36	40	48	56
32	32	40	48	56	72

3" AXLE SPACING					
12" Overall Width	15" Overall Width	18" Overall Width	21" Overall Width	24" Overall Width	30" Overall Width
6	6	12	12	16	16
8	8	14	14	18	20
10	10	16	16	20	24
12	12	18	20	24	28
16	16	20	24	28	36

4" AXLE SPACING					
12" Overall Width	15" Overall Width	18" Overall Width	21" Overall Width	24" Overall Width	30" Overall Width
4	4	9	9	12	12
6	6	11	11	14	15
8	8	12	12	15	18
9	9	14	15	18	21
12	12	15	18	21	27

WHEEL OPTIONS

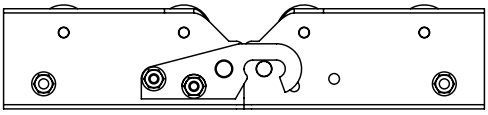
TYPE	DIAMETER	MATERIAL	BEARING	CAPACITY
Steel	1 15/16"	Zinc plated steel	Oiled steel ball bearings	50
Aluminum	1 15/16"	Aluminum	Oiled steel ball bearings	50
White	1 15/16"	Nylon	Oiled steel ball bearings	40
Black	1 15/16"	Nylon	Oiled steel ball bearings	40
Steel wheel with orange urethane cover	2 3/16"*	Zinc plated steel with orange urethane cover	Oiled steel ball bearings	50

*1/8" thick urethane cover on 1 15/16" diameter wheel

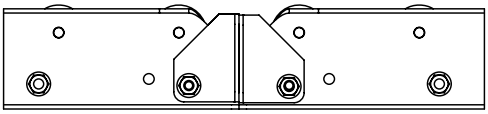
LOAD CAPACITY CHART

FRAME MATERIAL	SUPPORT CENTERS	FRAME CAPACITY
		Maximum Uniformly Distributed Load (lbs.)
Steel	5'	1300
Steel	10'	350
Aluminum	5'	710
Aluminum	10'	160

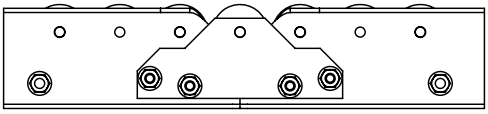
END COUPLER STYLES



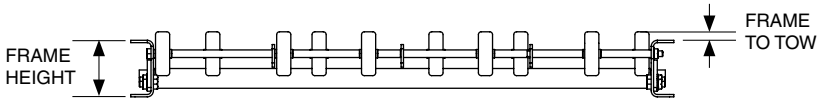
HOOK AND ROD
For portable quick disconnect



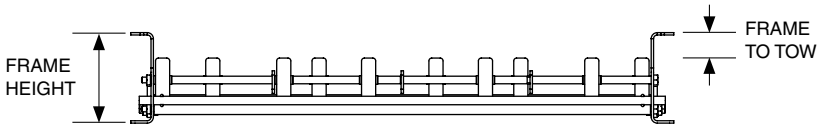
END CAP
For permanent installation applications



BRIDGE PLATE
For permanent installation application. Required to hold roller spacing across the splice.



WHEELS HIGH



WHEELS LOW

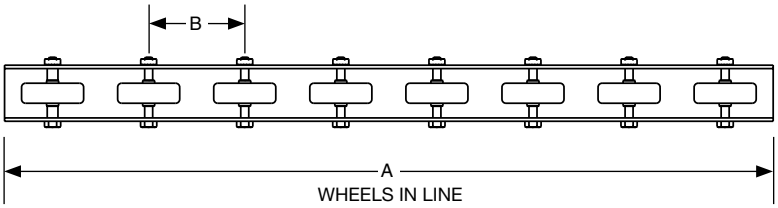
FINISHES - Galvanized steel standard. Powder coat available.

Expanded product parameters available. For more information see Tech Handbook.

FR GRAVITY FLOWRAIL

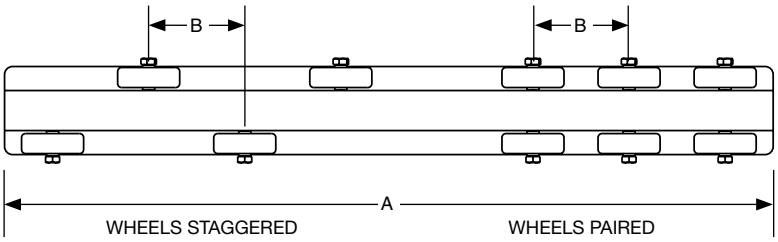
WHY FR?

- Five different channel and wheel mounting styles
- Built to your length or easily field cut to length
- Bolts to Omni standard leg supports or most mounting surfaces
- Common applications include use as guiderail on other conveyor, storage racking or floor mounted conveyor



A	1' - 12'
B	3"

A = Overall Length (OAL) (Any Increment)
B = Wheel Spacing



WHEEL OPTIONS

TYPE	DIAMETER	MATERIAL	BEARING	CAPACITY
Steel	1 15/16"	Zinc plated steel	Oiled steel ball bearings	50
Aluminum	1 15/16"	Aluminum	Oiled steel ball bearings	50
White	1 15/16"	Plastic	Oiled steel ball bearings	40
Black	1 15/16"	Plastic	Oiled steel ball bearings	40
Steel wheel with orange urethane cover	2 3/16"*	Zinc plated steel with orange urethane cover	Oiled steel ball bearings	50

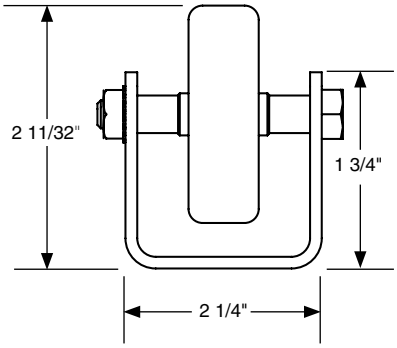
*1/8" thick urethane cover on 1 15/16" diameter wheel

LOAD CAPACITY CHART

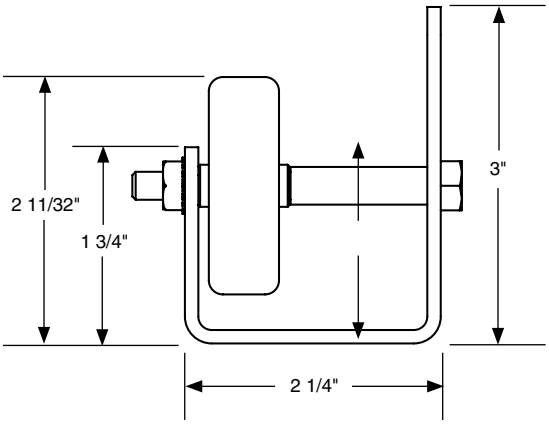
SUPPORT CENTERS	MAXIMUM LOAD PER FOOT				
	Style 1	Style 2	Style 3	Style 4	Style 5
3'	179	200*	200*	400*	200*
4'	100	168	200*	278	200*
5'	62	107	200*	142	144
6'	36	74	166	82	83
7'	22	54	104	51	52
8'	15	42	70	34	35
10'	7	23	35	17	18

*Wheel capacity is limiting factor

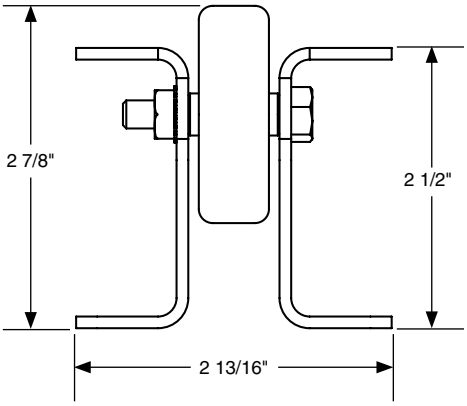
WHEEL STYLES



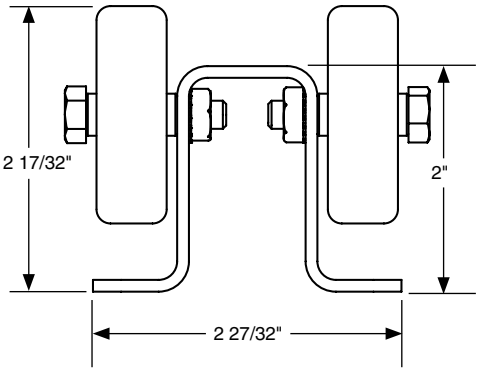
STYLE 1
U-Channel



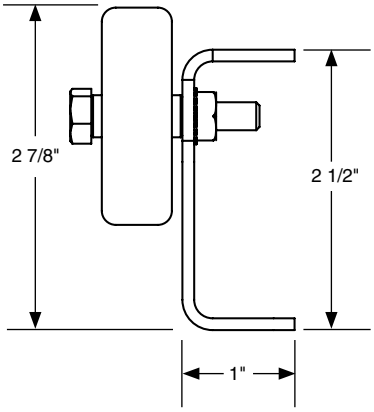
STYLE 2
J-Channel



STYLE 3
Opposing Channels



STYLE 4
Top Hat



STYLE 5
Single Channel

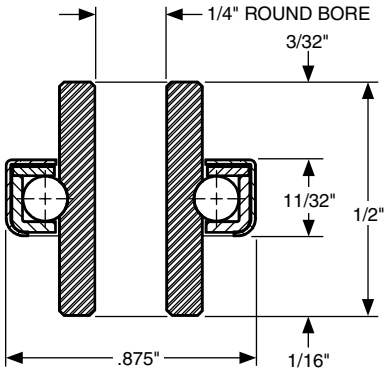
STYLE	FRAME DESCRIPTION	WHEEL ORIENTATION
1	U-Channel, 12 ga. galvanized steel	In line
2	J-Channel, 12 ga. galvanized steel	In line
3	Opposing Channels, 12 ga. galvanized steel	In line
4	Top Hat, 14 ga. galvanized steel	Paired or Staggered
5	Single Channel, 12 ga. galvanized steel	In line

FINISHES - Galvanized steel standard. Powder coat available.

Expanded product parameters available

BODY DIAMETER = .875"

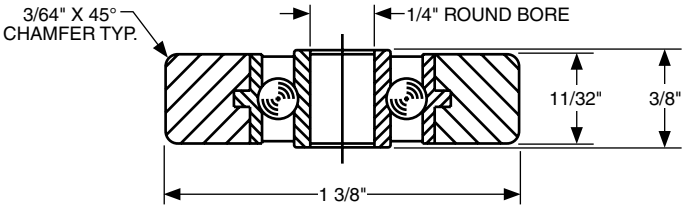
- Non-precision wheel
- 45 lbs. per bearing load rating
- Eight 5/32" dia. hardened steel balls
- Pressed steel outer shell



Part No. 102149

BODY DIAMETER = 1.375"

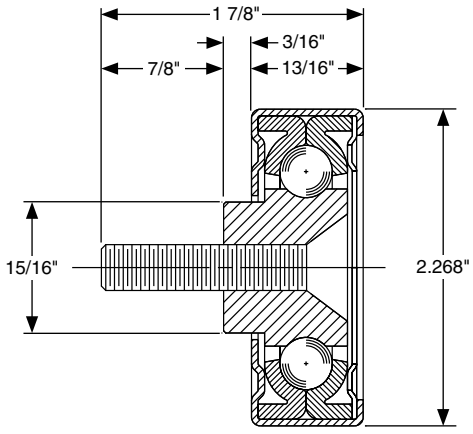
- Precision ground bearing
- 75 lbs. per bearing load rating
- Six 5/32" dia. hardened steel balls
- Molded nylon outer shell



Part No. 113062

BODY DIAMETER = 2.268"

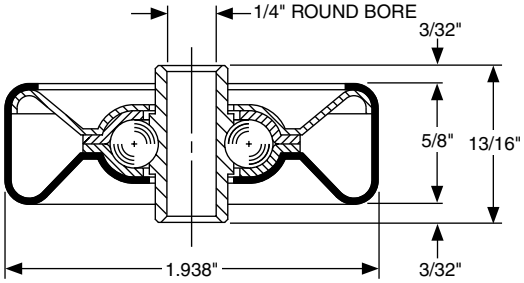
- Non-precision wheel
- 3/8-16 threaded stud
- 290 lbs. per bearing load rating
- Eleven 3/8" dia. hardened steel balls
- Pressed steel outer shell



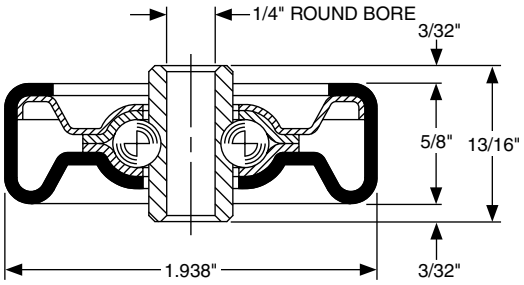
Part No. 102150

BODY DIAMETER = 1.938"

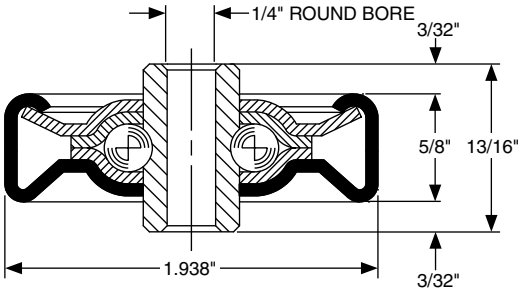
- Non-precision wheel
- Seven 1/4" dia. hardened steel balls
- Pressed steel outer shell
- Rubber and neoprene boots available
- Skatewheels available with black or white plastic



Part No. 102143
Galvanized Wheel
50 lbs. Per Wheel Load Capacity



Part No. 102144
Aluminum Wheel
55 lbs. Per Wheel Load Capacity



Part No. 102226
Galvanized Wheel
150 lbs. Per Wheel Load Capacity

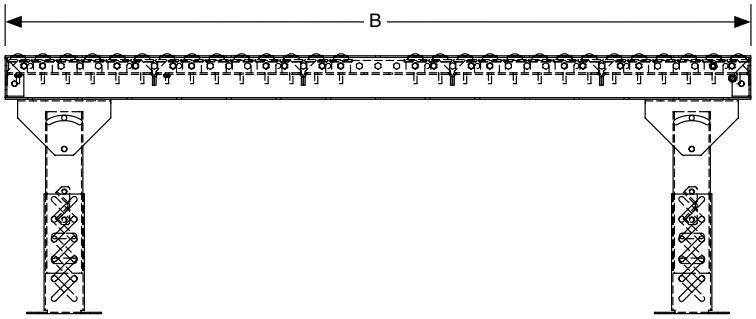
BTT BALL TRANSFER TABLE

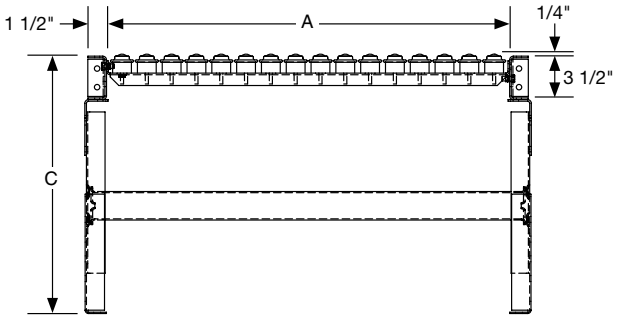
WHY BTT?

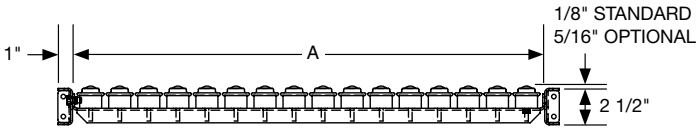
- Economical solution where products must be manually transferred
- Utilized when products need to be manually rotated or positioned
- Multiple ball spacing choices, lengths and widths available
- Secure stud-style mounting
- Bolts to Omni standard leg supports or most mounting surfaces
- Common applications include workstations, assembly lines, manual product staging and feeding

A	10" - 48"
B	1' - 12'
C	10" - 86"

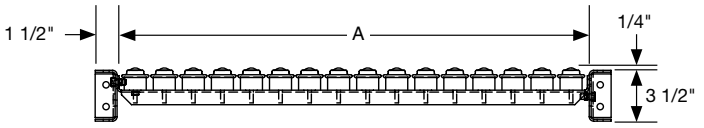
A = Between Frame (BF) (1" increments)
B = Overall Length (OAL) (Any increment)
C = Top of Ball







CROSS SECTION FOR 2 1/2" X 1" X 12 GA. FRAME



CROSS SECTION FOR 3 1/2" X 1 1/2" X 10 GA. FRAME

LOAD CAPACITY CHART

FRAME SIZE	SUPPORT CENTER	FRAME CAPACITY Maximum Uniformly Distributed Load Per Foot (lbs.)	BALL CAPACITY Maximum Load Per Ball
2 1/2" x 1" x 12 Ga.	5'	260	65
	10'	35	
3 1/2" x 1 1/2" x 10 Ga.	5'	660	
	10'	120	

Maximum product weight should not exceed 195 lbs. as product may only rest on 3 ball transfers at one time

STANDARD SPECIFICATIONS

BALL UNITS - 1" dia. standard ball, zinc plated, 1/4-20 stud, 65 lbs. per ball unit load rating

FRAME - 3 1/2" high x 1 1/2" flange x 10 ga. or 2 1/2" high x 1" flange x 12 ga. galvanized steel formed channel

PANS - 10 ga. galvanized steel formed

BETWEEN FRAME WIDTH - 10" to 48" in 1" increments

Expanded product parameters available

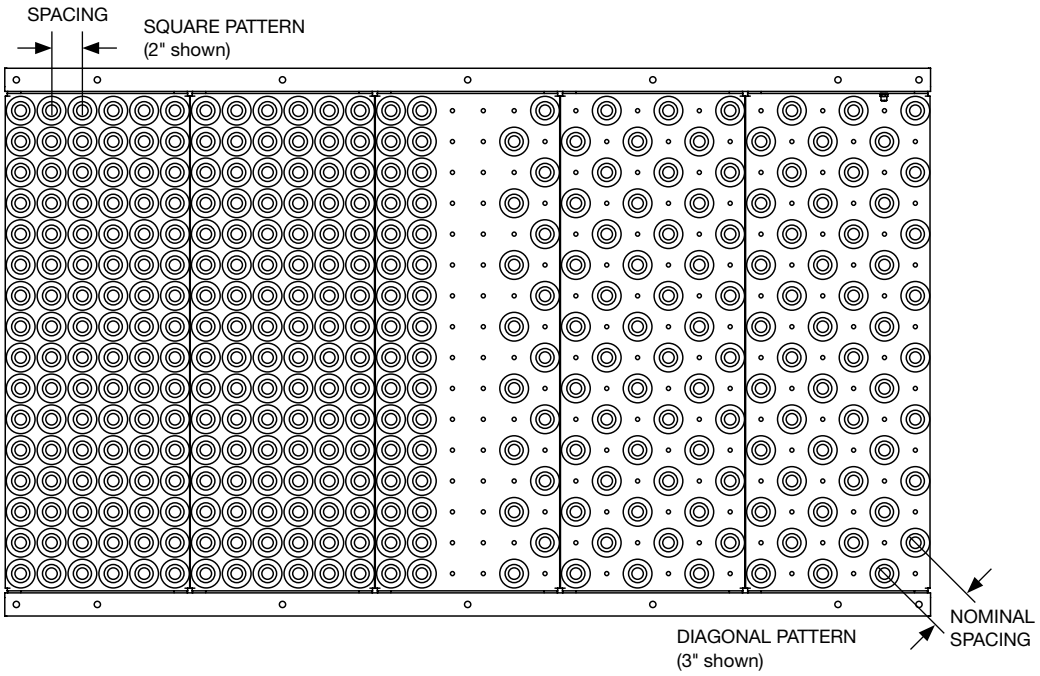
OVERALL LENGTH - 1' to 12' in any increment

BALL SPACING - Square spacing of 2", 3", 4" and 6". Nominal diagonal spacing of 3" and 6".

SUPPORTS - Adjustable H-style, bolted, 10" to 86" from floor to top of ball. One support at every bed joint and at ends of conveyor. Supports are shipped loose.

FINISHES - Galvanized steel standard. Powder coat available.

BALL PATTERNS AND SPACING



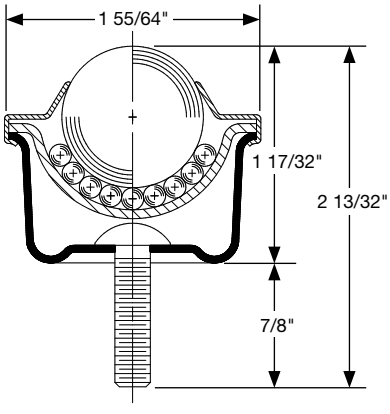
Ball Spacing	
Square	2", 3", 4", 6"
***Diagonal**	3", 6"

*Values are nominal. 2.8" and 5.7" actual.

BALL TRANSFER UNITS

1" DIA. BALL TRANSFER

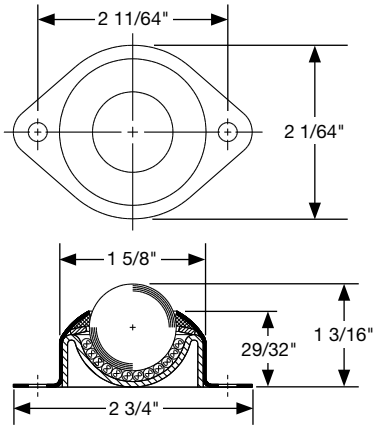
- 1/4 - 20 stud
- 65 lbs. per ball transfer load rating
- Pressed steel outer shell
- 250° F maximum temperature
- Available with nylon ball



Part No. 102106

1" DIA. BALL TRANSFER

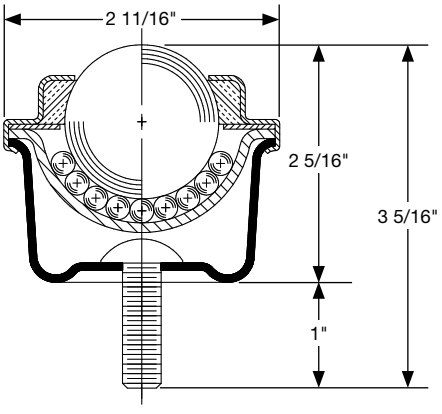
- Two hole - flange mounted
- 75 lbs. per ball transfer load rating
- Pressed steel outer shell
- Sealed protective cover
- 250° F maximum temperature
- Available with nylon ball



Part No. 102231

1 1/2" DIA. BALL TRANSFER

- 3/8 - 16 stud
- 250 lbs. per ball transfer load rating
- Carbon steel outer shell
- Sealed protective cover
- 250° F maximum temperature



Part No. 111681

STANDARD SUPPORTS

H STYLE LEG SUPPORT (BOLT-TOGETHER CONSTRUCTION) - For skatewheel, 1 3/8", 1.9", 2 1/2" or 2 9/16" roller conveyors

LIGHT DUTY (LHST) AND MEDIUM DUTY (MHST)

3" x 12 ga. formed channel galvanized bolt-together leg supports

HEAVY DUTY (HHST)

3 1/2" x 7 ga. formed channel mild steel, powder coated bolt-together leg supports

H-STYLE LEG ADJUSTMENTS	
Skatewheel, 1 3/8" and 1.9" Roller Conveyor Top of Leg	2 1/2" and 2 9/16" Roller Conveyor Top of Leg
6" - 8"	N/A
8" - 10"	N/A
10" - 12 1/4"	N/A
12 1/4" - 16 1/4"	
14 1/4" - 20 1/4"	
18 1/4" - 24 1/4"	
22 1/4" - 28 1/4"	
26 1/4" - 32 1/4"	
30 1/4" - 42 1/4"	
38 1/4" - 50 1/4"	
46 1/4" - 58 1/4"	
54 1/4" - 66 1/4"	
62 1/4" - 74 1/4"	
70 1/4" - 82 1/4"	

H STYLE LEG SUPPORT (WELDED CONSTRUCTION) - For welded roller conveyor

PIVOT TOP

RIGID TOP

3" or 4" pivot or rigid top and 5" or 6" rigid top only, structural channel supports

Supports are shipped loose

OPTIONAL EQUIPMENT AND DEVICES

SIDE GUIDES - Available in fixed or adjustable with multiple contact surfaces. Allows product to be guided and kept in place within the conveying surface. Side guides are bolted to the conveyor frame.

Fixed Angle Side Guides - Standard 2" high or 6" high, 12 ga. formed angle

Fixed Channel Side Guides - Standard 2 1/2" high or 3 1/2" high, 12 ga. formed channel

Adjustable Channel Side Guides - Standard 1 5/8" high x 1" high, 12 ga. formed channel, width and height adjustable

Adjustable Angle Side Guides - Angle guides typically formed angle, width adjustable

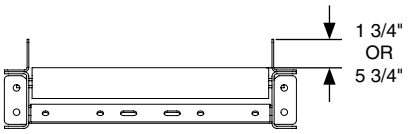
UHMW Lined Fixed Angle Side Guides - Replaceable UHMW face provides wear protection for angle guides

Adjustable Rail UHMW Side Guides - Replaceable UHMW face provides wear protection on rails, width and height adjustable

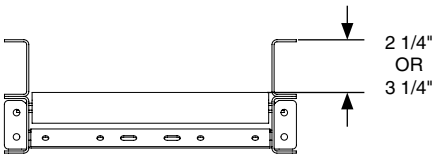
Skatewheel Side Guides - Vertically mounted skatewheels

Bead Rail Side Guides - Vertically mounted, tightly spaced small wheels supported by axles and a metal channel

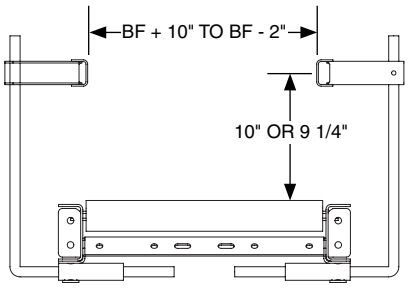
Roller Side Guides - Vertically mounted rollers



FIXED ANGLE SIDE GUIDES

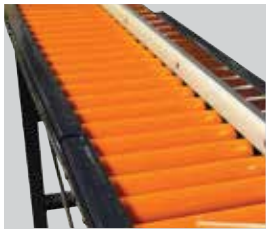


FIXED CHANNEL SIDE GUIDES

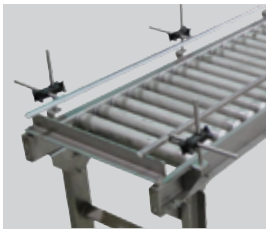


ADJUSTABLE CHANNEL SIDE GUIDES

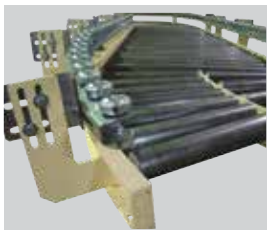
ADJUSTABLE ANGLE SIDE GUIDES



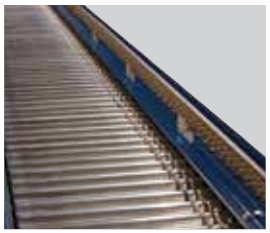
UHMW LINED FIXED ANGLE SIDE GUIDES



ADJUSTABLE RAIL UHMW SIDE GUIDES



SKATEWHEEL SIDE GUIDES



BEAD RAIL SIDE GUIDES

ROLLER SIDE GUIDES

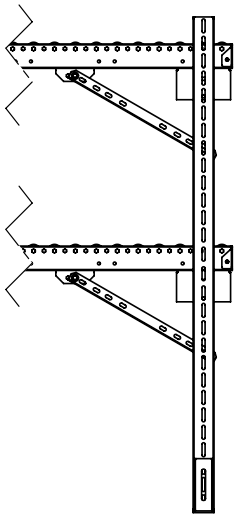
SIDE GUIDES

SUPPORTS - Available in single or multi-tier and with caster options for portability. Supports are designed to be bolted to the conveyor frame. Supports are shipped loose.

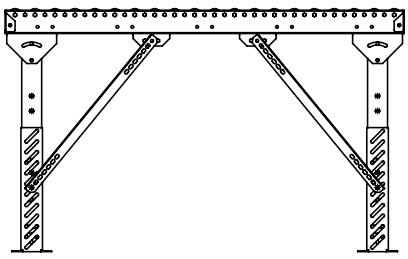
Multi-Tier Supports - 3" x 1 1/2" x 12 ga. formed channel leg uprights (1500 lbs. capacity)

Knee Brace Supports - Formed angle brace adds stability to conveyor and leg supports

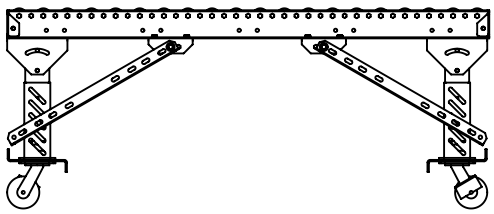
Portable H-Stands - 3" x 1 1/2" x 12 ga. formed channel leg uprights (800 lbs. capacity)



MULTI-TIER SUPPORTS



KNEE BRACE SUPPORTS



PORTABLE H-STANDS

SUPPORTS

OPTIONAL EQUIPMENT AND DEVICES

WELDED STRUCTURAL STEEL WITH JACKBOLTS

TRIPOD LEG SUPPORTS

SUPPORTS

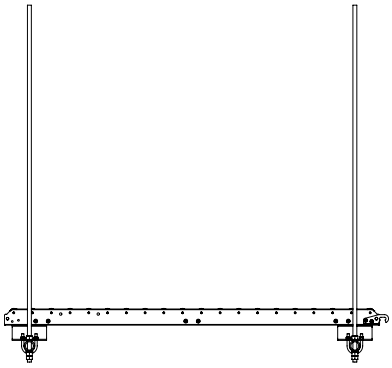
SUPPORTS (CONTINUED)

Tripod Leg Supports - For skatewheel or 1 3/8" dia. roller conveyor (350 lbs. capacity)

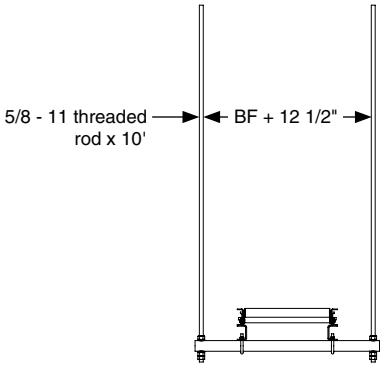
TRIPOD LEG ADJUSTMENTS

Top of Leg
11" - 17"
17" - 29"
23" - 39"
29" - 51"
39" - 71"

Welded Structural Steel with Jackbolts - 4", 5" or 6" structural channel, welded construction with structural angle spreaders. Rigid top, optional pivot top. +/-1" or +/-2" adjustment.



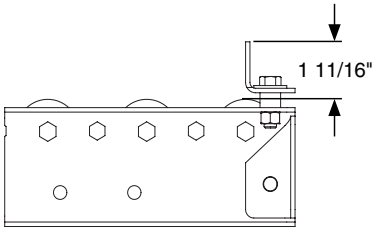
SIDE VIEW



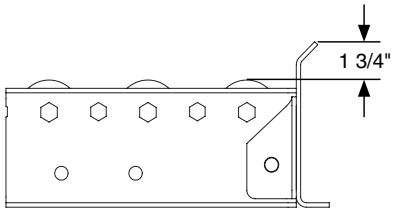
END VIEW

CEILING HANGERS

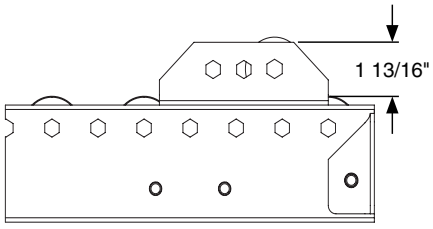
CEILING HANGERS - Allows conveyor to be suspended from the ceiling. Threaded rod is attached to support steel under the conveyor frame. Ceiling attachments to threaded rod by others.



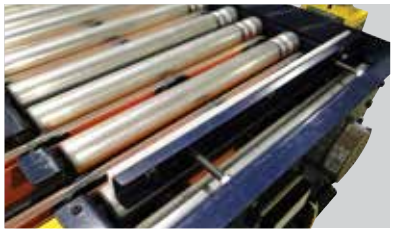
FIXED ANGLE STOP



FIXED CHANNEL STOP



FIXED ROLLER STOP



ADJUSTABLE END STOP

END STOPS

END STOPS - Allows product to stop at the end of a conveyor line. Fixed and adjustable end stops are available.

Fixed Angle Stop - Formed angle end stop bolted to top flange of conveyor frame

Fixed Channel Stop - Formed channel end stop bolted to conveyor end coupling

Fixed Roller Stop - 1.9" dia. rollers mounted in formed angle brackets, bolted to the top flange of conveyor frame

Adjustable End Stop - Formed steel adjustable end stop bolted to conveyor frame with manually adjusted stop position. Height is not adjustable.

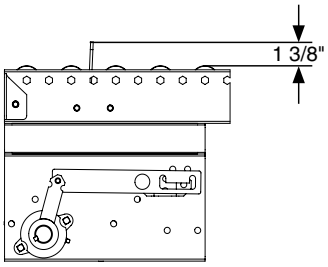
OPTIONAL EQUIPMENT AND DEVICES

PIN AND BLADE STOPS - Pneumatically or manually operated pin, blade and roller stop that pops up between rollers in order to accumulate product

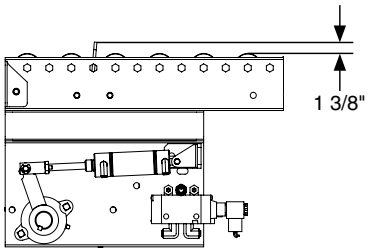
Manual Pop-Up Blade Stop - Used to stop products in the conveying line. Mounted to underside of conveyor. Side handle for manually raising blade. Load capacity is rated for maximum accumulated back pressure of 75 lbs.

Pneumatic Pop-Up Blade Stop - Used to stop products in the conveying line. Mounted to underside of conveyor. Pneumatic cylinder raises blade. Load capacity is rated for maximum accumulated back pressure of 75 lbs.

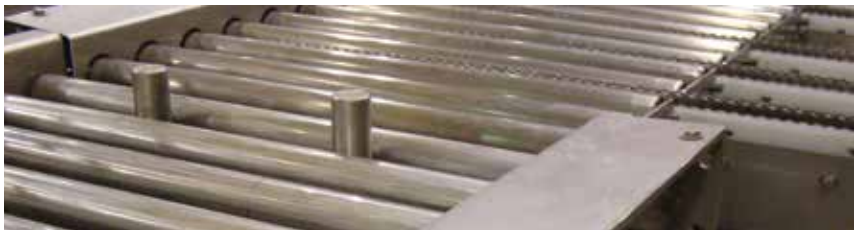
Pin Stop - Mounted to underside of conveyor. Pneumatic cylinder raises pins. Typically utilized on round product.



MANUAL POP-UP BLADE STOP



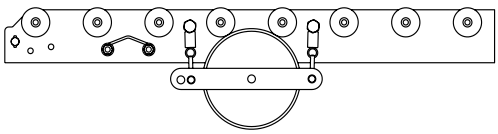
PNEUMATIC POP-UP BLADE STOP



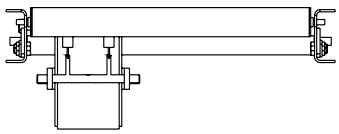
PIN STOP

PIN AND BLADE STOPS

BRAKE ROLLERS - Installed below gravity conveyor rollers to provide speed control of the product



SIDE VIEW

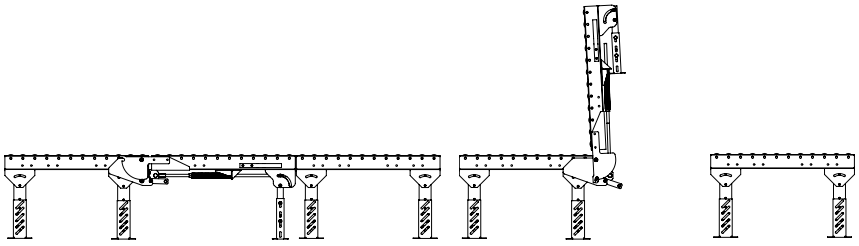


END VIEW

BRAKE ROLLERS

LIFT GATES

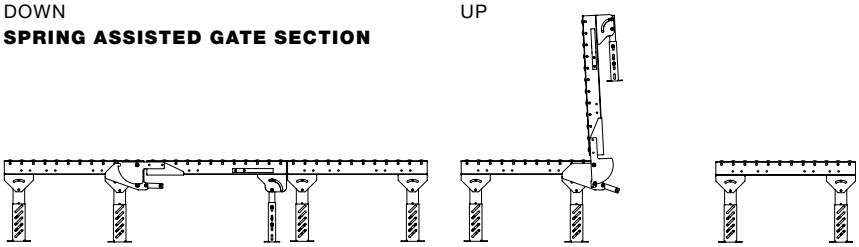
SPRING ASSISTED GATE SECTION - Gate sections provide easy access for personnel and equipment. The gate rests against a support which is mounted to the next conveyor in line. Springs provide counter-balancing forces to assist in raising and lowering of the gate.



DOWN UP

SPRING ASSISTED GATE SECTION

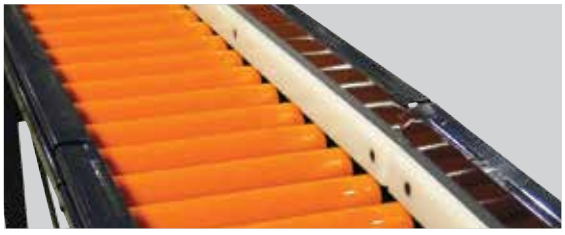
MANUAL GATE SECTION - Gate sections provide easy access for personnel and equipment. The gate rests against a support which is mounted to the next conveyor in line.



DOWN UP

MANUAL GATE SECTION

ROLLER COATINGS OR SLEEVES - Rollers available with urethane and vinyl sleeves. Coatings available in cast urethane, millable urethane, black rubber, food grade and other materials based on the application.



ROLLER COATINGS OR SLEEVES

ROLLER OPTIONS - Non-precision, semi-precision and ABEC precision bearings available. Mild steel, galvanized steel, stainless steel, aluminum, industrial pipe and PVC tubes available. Zinc, chrome and nickel plating available.

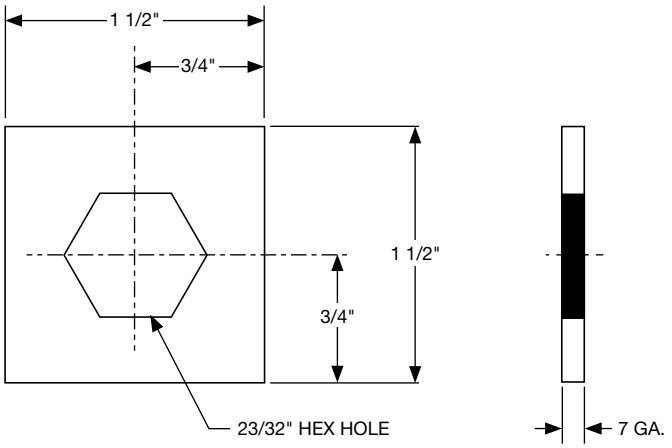
STAINLESS STEEL - Conveyors are available in stainless steel materials in washdown applications or harsh environments

DECLINES - Available upon request

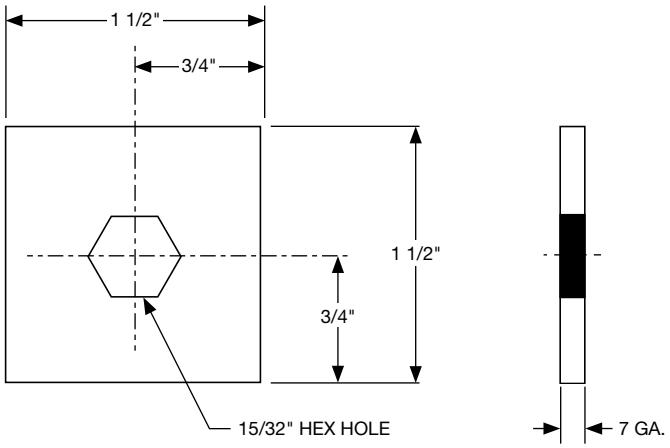
BALL TRANSFER TABLE OPTIONS - Bolt-in pans with units only (less sideframes)

FINISHES - Powder coat and epoxy available

ROLLER HEX TABS



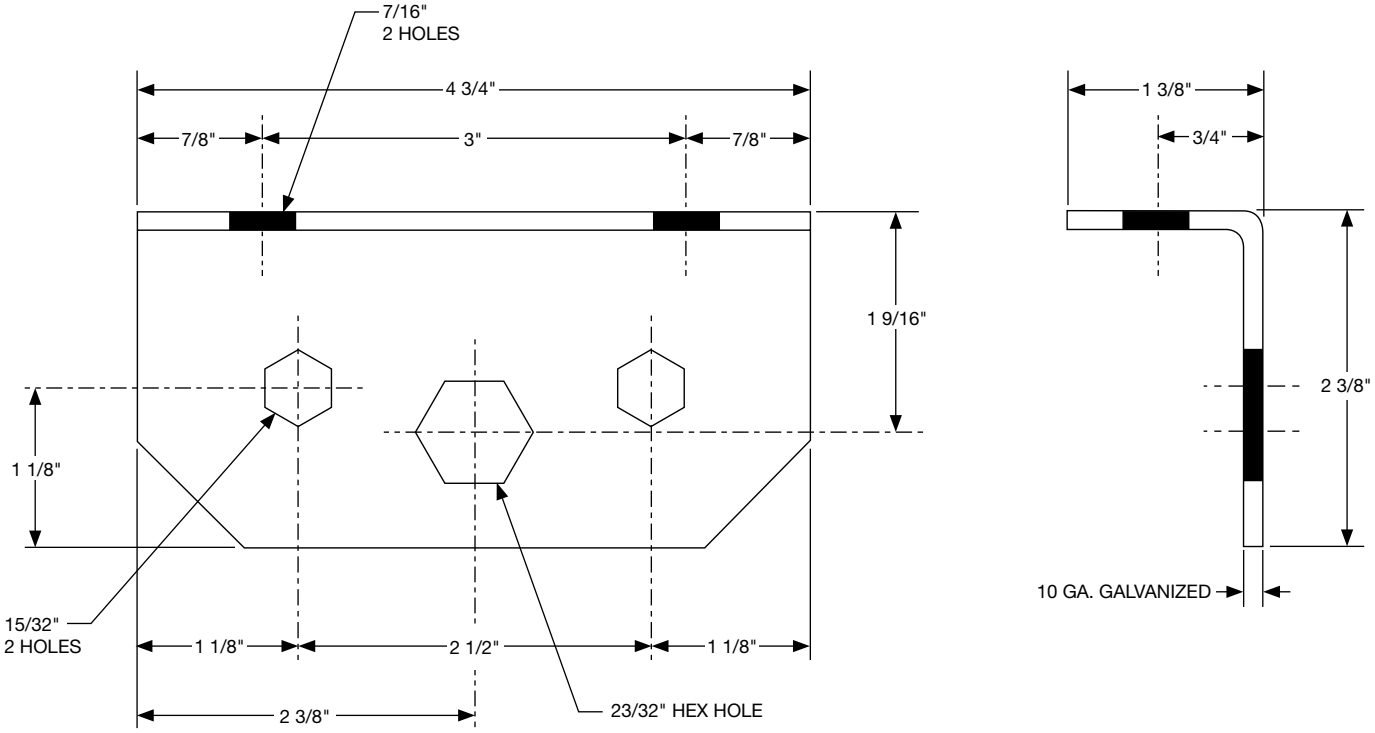
Part No. 21334
For 11/16" Axle



Part No. 26064
For 7/16" Axle

Tack welded to existing frames with worn holes or used to modify round holes for hex axles

MOUNTING BRACKETS



Part No. 28750

Bolted to existing frames with worn holes or used to modify round holes for hex axles