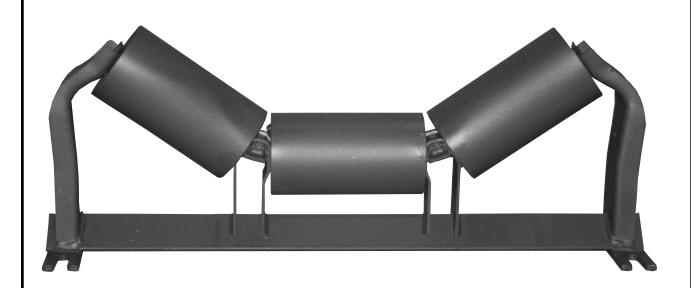


# Belt Conveyor Components, Whisperol® Conveyor Rollers and Spray Nozzles



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#### **CEMA AND REX IDLER CLASSIFICATION**

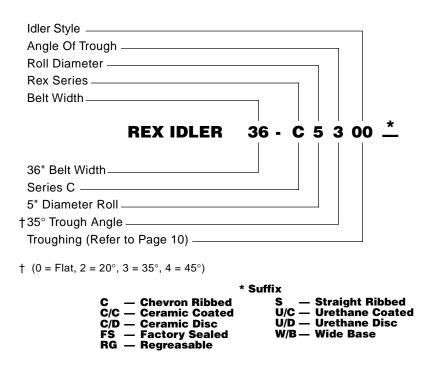
Service Class	CEMA Class	Rex Series	Roll Diam. Inches	Rex Bearing Type	Belt Widths Inches
	В	В	4 5	Ball	18-48
Light Duty	В	B+	4 5	Roller	18-48
M " D .	С	С	5 6	Roller	18-60
Medium Duty	D	D	5 6	Roller	18-72
Heavy Duty	E	E	6 7	Roller	36-72

For idler selection procedure and idler load ratings, see pages 71 – 81. For product specifications see pages 82 – 83.

# **IDENTIFICATION GUIDE AND ORDERING INFORMATION**

The following is an example of the Rex Idler Numbering System.

# Rex Idler Model: 36-C5300FS This number describes the idler as follows:



Note: Specify factory sealed or regreasable sealing option.

# **IDLER INTERCHANGE**

Interchangeability is one of the most important features of the Rex Idler line, specifically in the dimensional areas of:

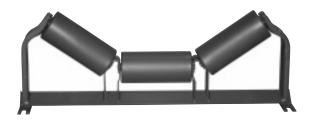
- a. Backing Distance from the bottom of the base pad to the top of the center roll of troughing idlers.
- b. Bolt Hole Spacing across the width of the conveyor frame for troughing and return idlers. (Belt width plus 9")

Rex Idlers conform to the CEMA dimensional standards and are interchangeable with competitive idlers listed below.

Manufacturer	СЕМА В	СЕМА С	CEMA D	CEMA E
Rexnord	Series B	Series C	Series D	Series E
Continental Conveyor	B Plus	Н	H Plus	SDX
Goodman Conveyor	В	С	D	E
Hewitt-Robins	В	2000	3000	4000
FMC-Link Belt	B2000	C3000	D3000	E4000
Precismeca	PB	PC	PD	PE
Precision Idler	В	С	_	_
Stephens- Adamson	2174-2175	4205-4206	5195-5196	6326-6327
Superior Machinery	60/61/71	80/81	_	_

#### THE REX LINE

There is a Rex Idler to meet your service requirements ranging from intermittent conveying of light materials to continuous conveying of very heavy materials.

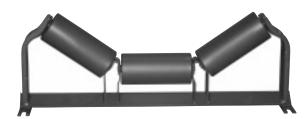


#### **Series B**

The Light Duty line exceeds CEMA B specifications using heavy duty ball bearings, available with 4" and 5" diameter rolls. Furnished in a wide selection of styles in 18" to 48" belt widths.

Available factory sealed only.

Refer Pages: 12 - 21.



#### Series B+

Series B+ combines a CEMA B frame with the Rex patented "G" Seal to give longer life. Available in 4" and 5" diameter rolls. Furnished in 18"-48" belt widths.

Available in regreasable or factory sealed.

Same envelope dimensions as Series B, Pages: 12 – 21.

(Available with polyethylene rolls - B+ only.)



#### **Series C**

The Medium Duty line exceeds CEMA C specifications using precision tapered roller bearings, available with 5" and 6" diameter rolls. Furnished in a wide selection of styles in 18" to 60" belt widths.

Available in regreasable or factory sealed.

Refer Pages: 22 - 42

(Available with polyethylene rolls, pages 44 - 46.)



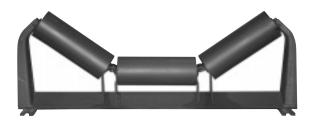
## **Series D**

The Medium Duty line exceeds CEMA D specifications utilizing the Series C idler construction with heavier shafts to provide higher load capacity. Furnished in a wide selection of styles in 24" to  $60^\circ$  belt widths.

Available in regreasable or factory sealed.

Refer Pages: 22 - 42

(Available with polyethylene rolls, pages 44 - 46.)



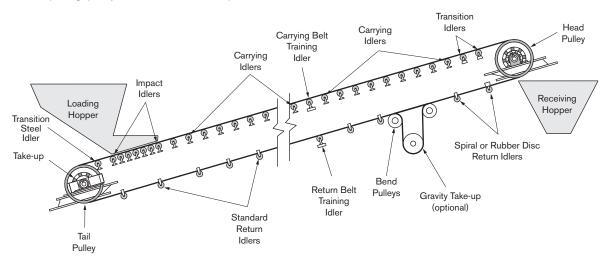
#### Series E

The Heavy Duty line exceeds CEMA E specifications using heavy duty precision tapered roller bearings, available with 6" and 7" diameter rolls. Furnished in a wide selection of styles in 36" to 96" belt widths.

Refer Pages: 48 - 60

### THE BELT CONVEYOR

The following is a simplified conveyor, used to illustrate basic belt conveyor components. Unlimited variations of elevation, loading, discharge, idlers and idler spacing, pulleys, and accessories are possible.



#### **TYPES OF IDLERS**

# Carrying Idlers (Troughing or Flat)

Support the belt in the section of the conveyor that transports the material. These idlers may be flat or troughed to shape the belt to prevent spillage and are available in  $20^{\circ}$ ,  $35^{\circ}$  and  $45^{\circ}$  trough angles with equal or unequal roll lengths. Normal spacing is 3 to 5 feet.

Refer Pages:

14, 16, 18, 24, 26, 28, 30, 32, 34, 36, 50, 52, 54, 55, 57, 61



(Troughing or Flat)

Prevent damage to the belt at the loading point. These idlers may be troughing or flat types with grooved, molded rubber rolls. It is standard practice to use impact idlers at all loading and transfer points when the impact force exceeds 40 foot pounds.

To insure maximum **belt protection** for optimum life and to reduce skirtboard leakage the **impact idlers** should be at least **six inch diameter** and spaced at **one foot intervals.** 

Refer Pages:

14, 16, 24, 26, 28, 30, 32, 34, 36, 50, 52, 54, 55, 57, 61







#### **TYPES OF IDLERS**

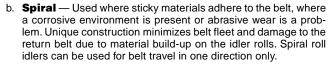
#### **Return Idlers**

Support the empty belt between the discharge point and the tail pulley. Normal spacing is 10 feet.

 a. Steel — Used where materials are not sticky, corrosive, or abrasive.

Available with urethane covering. Six inch diameter also available in ¼" wall thickness.

Refer Pages: 18, 36, 41, 56, 61

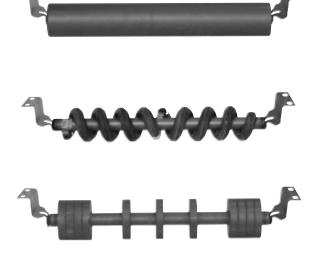


Refer Pages: 21, 39

c. **Disc** — Used under the same conditions as the spiral idler. These idlers can be used for belt travel in either direction. Massed end discs are standard.

Ceramic, urethane and rubber disc rolls available.

Refer Pages: 21, 40, 56

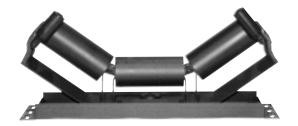


# Carrying Belt Training Idlers (Troughing or Flat)

Assist in keeping the belt centered on the conveyor. Actuating shoe type is used on belt traveling in either direction. Positive type is used on belt traveling in one direction only and is illustrated. Normal spacing is 100 feet and not within 50 feet of the head or tail pulley.

(Urethane rolls enhance trainer effectiveness.)

Refer Pages: 15, 17, 20, 25, 27, 29, 31, 33, 35, 37, 38, 51, 53, 60



#### **Return Belt Training Idlers**

Used for the same purposes as are Carrying Training Idlers. They are of the actuating shoe type, belt travel — either direction, and the positive and inclined pivot types, belt travel — one direction only. The positive type is illustrated. Normal spacing is 100 feet and not within 50 feet of the head or tail pulley.

(Urethane rolls enhance trainer effectiveness.)

Can also be furnished with spiral or disc rolls.

Refer Pages: 19, 20, 37, 38, 39, 40, 42, 58, 59



NOTE: Ceramic and urethane covered rolls available — see page 62. Polyethylene rolls available — see pages 44 – 46.

# **IDLER INDEX**

	ldler Number	Description	Roll Diam. In.	Roll Material	Page	ldler Number	Description	Roll Diam. In.	Roll Material	Page
Return   Catemary - Solid Shaft	O3144	Return, Catenary	3	Rubber	69	B+5202	Trough Impact, 20°	5	Rubber	14
Pad										24
B-4020								5		24
Fact   Live Shart								5		26
B-4403  Felt Training, Actualing Shoe										26
B-4040								5		46
Seel   4   Steel   4   Steel   6   DS210   Torugh Training, 20°, Acutating Shoe   5   Steel   F40H								5		15 25
B-4400   Return   Live Shaft   A   Sieel   4   Sieel   6   DS211   Torough Training, 20°, Lnequal Roll Lg. 5   Sieel   B-4400   Torough, 20°   Torough, 20°   Sieel								5		25
F4046    Return, Live Shaft		I						5		27
8+406  Return Training, Inclined Plvot								5		27
8-4405  Return Training, Actuating Shoe										15
84-400   Tough, 20"   A   Steel   14   CS104   Tough, 20"   Tough, 2										25
84200   Tough, 20°   4   Steel   14   C5213   Tough Training, 20°, Positive Arm   5   Steel   14   Steel   14   Steel   15   Steel   15   Steel   15   Steel   16   C5218   Tough Training, 20°, Positive Arm   5   Poly, 17   Steel   16   C5218   Tough Training, 20°, Positive Arm   5   Poly, 18   Poly, 20			4							25
B44210   Trough Training, 20", Actuating Shoe			4							_
B44212   Trough Training, 20°; Actualing Shoe   4   Steel   15   B4200   Trough, 35°   Trough, 35°   Steel   15   B4300   Trough, 35°   Actualing Shoe   4   Steel   16   C5284   Trough Training, 20°; Positive Arm   5   Poly.   Trough, 35°   Steel   16   C5284   Trough Training, 20°; Positive Arm   5   Poly.   Trough, 35°   Steel   16   C5284   Trough, 35°   Steel   Trou								5	Steel	27
B44300   Trough, 35"   A   Steel   15   Steel   15   Steel   15   Steel   16   Steel   17   Steel   16   Steel   17   St	B+4210		4	Steel	15	D5213				
8+4310   Trough Training, 35°, Actuating Shoe   4   Steel   17   8+6300   Flat   Trough Training, 35°, Positive Arm   5   Steel   18   S5000   Flat   Steel	B+4212		4	Steel	15			5	Steel	27
B-4312   Trough Training, 35°, Actuating Shoe   4   Steel   17   B-5300   Trough, 35°   5   Steel   B-4312   Trough Training, 35°, Positive Arm   5   Steel   18   C5300   Flat   Steel   St	B4300	Trough, 35°	4	Steel	16	C5218	Trough Training, 20°, Actuating Shoe	5	Poly.	46
B-44312   Tough Training, 35°, Positive Arm   5   Steel   17   Steel   18   D5300   Tough, 35°   Tough, 35°   Steel   18   D5300   Tough, 35°   Tough, 35°   Tough, 35°   Steel   18   D5300   Tough, 35°   Unequal Roll Length   5   Steel   18   D5300   Tough, 35°   Unequal Roll Length   5   Steel   18   D5300   Tough, 35°   Unequal Roll Length   5   Steel   18   D5300   Tough, 35°   Unequal Roll Length   5   Steel   18   D5300   Tough, 35°   Unequal Roll Length   5   Steel   18   D5300   Tough, 35°   Unequal Roll Length   5   Steel   18   D5300   Tough, 35°   Unequal Roll Length   5   Steel   18   D5300   Tough, 35°   Unequal Roll Length   5   Steel   18   D5300   Tough Impact, 35°   Unequal Roll Length   5   Rubber   Tough Impact, 35°   Unequal Roll Length   5   Ru	B+4300	Trough, 35°	4	Steel	16	C5264	Trough Training, 20°, Positive Arm	5	Poly.	46
8-44312   Tough Training, 35°, Positive Arm   5   Steel   17   8-5300   Tough, 35°   5   Steel   8-6000   Flat   5   Steel   5   Steel   18   D5300   Tough, 35°   Unequal Roll Length   5   Steel	B+4310	Trough Training, 35°, Actuating Shoe	4	Steel	17	B5300	Trough, 35°	5	Steel	16
Steel   Stee	B+4312			Steel	17		Trough, 35°	5	Steel	16
Solition   Steel   36   C5301   Trough, 35°, Unequal Roll Length   5   Steel   C5021   Flat, Live Shaft   5   Rubber   C5022   Flat, Impact   5   Rubber   36   D5301   Trough, 35°, Unequal Roll Length   5   Rubber   C5025   Flat, Impact   5   Rubber   36   D5301   Trough, 135°, Live Shaft   5   Rubber   36   D5301   Trough Impact, 35°   5   Rubber   5	B5020	Flat		Steel	18	C5300	Trough, 35°			28
DS020   Flat, Live Shaft			5					5		28
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F5022   Flat, Impact Live Shaft		I								30
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500025   Flat, Impact   5   Rubber   36   C\$303   Trough Impact, 38", Unequal Roll Lg. 5   Rubber   15   Rubber								5		28
Social   Flat Training, Actuating Shoe   5   Steel   Steel   20   C5303   Flat Training, Actuating Shoe   5   Steel   38   B45310   Flat Training, Positive Arm   5   Steel   37   Steel   38   Steel   37   Steel   37   Steel   37   Steel   38   Steel   37   Steel   38   Steel   39   S								5		28
Second   Flat Training, Actuating Shoe   5   Steel   20   C5306   Torough, 35°   Steel   C5303   Flat Training, Actuating Shoe   5   Steel   38   B45031   Flat Training, Actuating Shoe   5   Steel   38   B45031   Flat Training, Positive Arm   5   Steel   20   D5301   Flat Training, Positive Arm   5   Steel   37   C5311   Flat Training, Positive Arm   5   Steel   Trough Training, 35°, Actuating Shoe   5   Steel   Trough Training, 35°, Actuating Shoe, Unequal Roll Length   5   Steel   Trough Training, 35°, Actuating Shoe, Unequal Roll Length   5   Steel   Trough Training, 35°, Positive Arm   5   Steel   Trough Training, 35°, Positive Ar			5					5		30
Select   S		I						5		30
										46
B-B5031   Flat Training, Positive Arm   5   Steel   37   CS311   Trough Training, 35°, Actuating Shoe, Unequal Roll Length   5   Steel			5					5		17
DS031   Flat Training, Positive Arm   5   Steel   37   CS311   Trough Training, 35°, Actuating Shoe, Unequal Roll Length   5   Steel   BB5040   Return   5   Steel   18   B+5312   Trough Training, 35°, Actuating Shoe, Unequal Roll Length   5   Steel   BB5040   Return   5   Steel   18   B+5312   Trough Training, 35°, Positive Arm   5   Steel   BB5040   Return   5   Steel   18   B+5312   Trough Training, 35°, Positive Arm   5   Steel   BB5040   Return   5   Steel   18   B+5312   Trough Training, 35°, Positive Arm   5   Steel   BB5043   Return, Live Shaft   5   Steel   61   CS312   Trough Training, 35°, Positive Arm   5   Steel   BB5043   Return, Disc   5   Rubber   21   Rubber   40   Return, Disc   5   Rubber   40   Return, Ribbed Covered   6-1/2   Rubber   36   CS304   Return, Ribbed Covered   6-1/2   Rubber   41   DS400   Return Training, Inclined Pivot   5   Steel   36   DS402   Return Training, Inclined Pivot   5   Steel   37   Return Training, Inclined Pivot   5   Steel   38   DS402   Return Training, Actuating Shoe   5   Steel   37   Return Training, Positive Arm   5   Steel   37   Return Training, Positive Arm   5   Steel   38   DS402   Return Training, Positive Arm   5   Steel   37   Return Training, Disc, Inclined Pivot   5   Steel   37   Return Training, Positive Arm   5   Steel   38   Scala   Return Training, Positive Arm   5   Steel   37   Return Training, Positive Arm   5   Steel   37   Return Training, Disc, Inclined Pivot   5   Steel   37   Return Training, Positive Arm   5   Steel   38   Scala   38   Scala   Sca										29 29
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Seption				,		D3311		5	Stool	31
B-5-040   Return						B±5312				17
Steel   Stee										29
F8041		I								29
Be5043			5					Ū	0.00.	
Return, Disc   S   Rubber   C5043   Return, Disc   Rubber   S   Rubber   C5044   Return, Disc   S   Rubber   C5045   Return   Disc   S   Rubber   C5045   Return   Disc   S   Rubber   C5046   Return   Ribbed Covered   C6-1/2   Rubber   C5046   Return, Ribbed Covered   C6-1/2   Rubber   C5047   Return   Ribing, Inclined Pivot   S   Steel   Sele   S								5	Steel	31
C5043         Return, Disc         5         Rubber         40         C5348         Unequal Roll Length         5         Steel         Poly.           C5045         Return         5         Rubber         36         C5364         Trough Training, 35°, Actuating Shoe         5         Poly.           C5046         Return, Ribbed Covered         6-1/2         Rubber         41         D5400         Trough, 45°         5         Steel           C5047         Return         5         Poly.         46         D5401         Trough, 45°         Unequal Roll Length         5         Steel           C5047         Return Training, Inclined Pivot         5         Steel         36         C5401         Trough, 45°, Unequal Roll Length         5         Steel           B+5050         Return Training, Inclined Pivot         5         Steel         38         D5402         Trough, 45°, Unequal Roll Length         5         Rubber           C5050         Return Training, Inclined Pivot         5         Steel         38         C5402         Trough Impact, 45°         5         Rubber           C5051         Return Training, Actuating Shoe         5         Steel         38         C5403         Trough Impact, 45°, Unequal Roll Length         5						D5313				
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D6057	Return Training, Spiral, Positive Arm	5-1/2	Rubber	39	D6412	Trough Training, 45°, Positive Arm	6	Steel	33
D6058	Return Training, Ribbed	7-1/2	Rubber	42	C6413	Trough Training, 45°, Positive Arm,			
C6059	Return Training, Positive Arm	6	Poly.	46		Unequal Roll Length	6	Steel	35
C6070	Return Training, Actuating Shoe	6	Poly.	46	D6413	Trough Training, 45°, Positive Arm,			
C6200	Trough, 20°	6	Steel	24		Unequal Roll Length	6	Steel	35
D6200	Trough, 20°	6	Steel	24	C6418	Trough Training, 45°, Actuating Shoe	6	Poly.	46
E6200	Trough, 20°	6	Steel	55	C6464	Trough Training, 45°, Positive Arm	6	Poly.	46
C6201	Trough, 20°, Unequal Roll Length	6	Steel	26	E7020	Flat	7	Steel	57
D6201 C6202	Trough, 20°, Unequal Roll Length Trough Impact, 20°	6 6	Steel Rubber	26 24	E7021 F7022	Flat, Live Shaft Flat, Impact Live Shaft	7 7	Steel Rubber	61 61
D6202	0 ' '					Flat, Impact Live Shart	7	Rubber	
C6203	Trough Impact, 20° Lineaual Poll I a	6	Rubber Rubber	24	E7025 E7040	Return	7	Steel	57 56
D6203	Trough Impact, 20°, Unequal Roll Lg. Trough Impact, 20°, Unequal Roll Lg.	6 6	Rubber	26 26	E7040 E7041	Return, Live Shaft	7	Steel	56 61
C6206	Trough, 20°	6	Poly.	46	E7041	Return, Disc	7	Rubber	56
C6210	Trough Training, 20°, Actuating Shoe	6	Steel	25	E7046	Return, Beater	7	Rod	60
D6210	Trough Training, 20°, Actuating Shoe	6	Steel	25	E7051	Return Training, Actuating Shoe	7	Steel	59
E6210	Trough Training, 20°, Actuating Shoe	6	Steel	51	E7052	Return Training, Positive Arm	7	Steel	58
C6211	Trough Training, 20°, Actuating Shoe,	J	3.001	.	E7056	Return Training, Disc., Positive Arm	7	Rubber	58
	Unequal Roll Length	6	Steel	27	E7200	Trough, 20°	7	Steel	50
D6211	Trough Training, 20°, Actuating Shoe,	•			E7202	Trough, Impact, 20°	7	Rubber	50
	Unequal Roll Length	6	Steel	27	E7210	Trough Training, 20°, Actuating Shoe	7	Steel	51
C6212	Trough Training, 20°, Positive Arm	6	Steel	25	E7212	Trough Training, 20°, Positive Arm	7	Steel	51
D6212	Trough Training, 20°, Positive Arm	6	Steel	25	E7300	Trough, 35°	7	Steel	52
	Trough Training, 20°, Positive Arm	6	Steel	51	E7302	Trough Impact, 35°	7	Rubber	52
E6212			1	I		l= ~ - ' - '			
C6213	Trough Training, 20°, Positive Arm,				E7310	Trough Training 35°, Actuating Shoe	7	Steel	53

# **IDLER INDEX**

# **IDLER STYLES AND PAGE LOCATION**

				PAGE NUMBER										
Style No.	Idler Desci	ription						Se	ries					
(Last 2					B and B+	-		C	& D		E			
Digits)	Туре	Ro	oll				-	Angle o	f Troug	h				
	Туре	Material	Length	<b>0</b> °	20°	35°	<b>0</b> °	20°	35°	45°	<b>0</b> °	<b>20</b> °	35°	45°
00	Troughing	Steel	Equal		14	16		24	28	32		50	52	
01	Troughing	Steel	Unequal					27	31	35				
02	Troughing Impact	Rubber	Equal		14	16		24	28	32		50	52	
03	Troughing Impact	Rubber	Unequal					26	30	34				
04	Troughing, Catenary - 25°	Rubber		•••			•••							
06	Troughing	Poly- ethylene	Equal					46	46	46				
10	Troughing Training, Actuating Shoe	Steel	Equal		15	17		25	29	33		51	53	
11	Troughing Training, Actuating Shoe	Steel	Unequal					27	31	35				
12	Troughing Training, Positive Arm	Steel	Equal		15	17		25	29	33		51	53	
13	Troughing Training, Positive Arm	Steel	Unequal					27	31	35				
18	Troughing Training, Actuating Shoe	Poly- ethylene	Equal					46	46	46				
20	Flat	Steel		18			36				57			
21	Flat, Live Shaft (order as 41)	Steel	•••				61							
22	Flat, Impact Live Shaft	Rubber	•••	•••			61				61			
25	Flat, Impact	Rubber					36				57			
27	Flat	Poly- ethylene					46							
30	Flat, Training, Actuating Shoe	Steel		20			38							
31	Flat, Training, Positive Arm	Steel		20			37				60			
35	Flat, Training,	Poly-												
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36	Flat, Training,	Poly-					46							
40	Positive Arm Return	ethylene Steel	•••	 18			46 36				57			
41	Return, Live Shaft	Steel					61							
42	Return, Spiral	Rubber	•••	•••			39							
43	Return, Disc	Rubber		 21			40				56			
44	Return, Catenary	Rubber												
45	Return	Rubber					36							
46	Return, Ribbed (C or S)	Rubber					41							
46	Return, Beater, Rod	Steel (E)									60			
47	Return	Poly-					46							
		ethylene											'''	
49	Return, Impact	Rubber					36							
50	Return Training, Inclined Pivot	Steel		20			38							
51	Return Training, Actuating Shoe	Steel		19			38				59			
52	Return Training, Positive Arm	Steel		19			37				58			
53	Return Training, Spiral, Inclined Pivot	Rubber					39							
54	Return Training, Disc, Inclined Pivot	Rubber					40							
55	Return Training, Disc,	Rubber									EO			
56	Actuating Shoe Return Training, Disc,		•••		•••						59			
57	Positive Arm Return Training Spiral,	Rubber	•••	•••			40				58			
E0	Positive Arm	Rubber					39							
58 50	Return Training, Ribbed	Rubber	•••				42							
59	Return Training, Positive Arm	Poly- ethylene					46							
64 70	Troughing Training, Positive Arm Return Training,	Poly- ethylene Poly-	Equal	•••			46							
, 0	Actuating Shoe	ethylene					46							

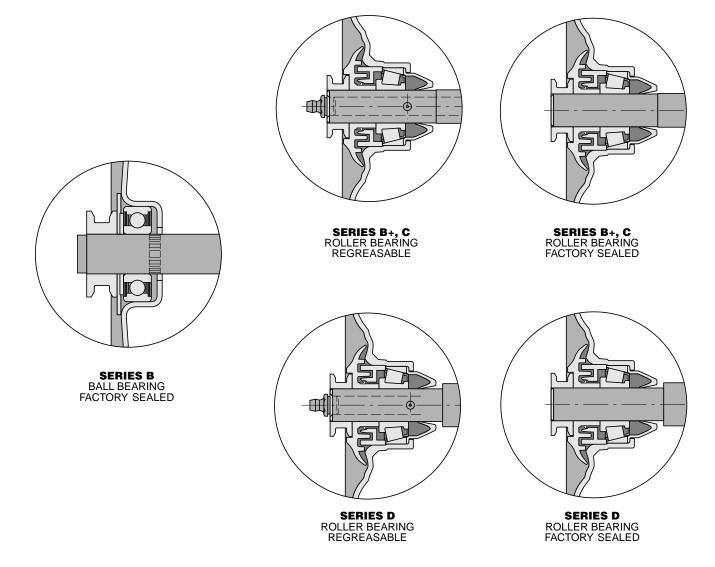
# **REX IDLER SEALS**

# SEAL FEATURES OF B, B+, C AND D

FACTORY SEALED: B SERIES has a 17mm "Sealed For Life" ball bearing protected by metal and polymeric covers.

#### A SPECIAL COMBINATION LABYRINTH AND OUTER SHIELD: B+, C AND D SERIES

**REGREASABLE** and **FACTORY SEALED** — The seal has a (5) passage labyrinth with a wiping component — filled with grease to block contaminants from reaching the bearing. The inner and outer seals are close tolerance, injection molded non-metallic components to retard corrosion. The labyrinth and rear seal retain the lubrication within the bearing cavity. The protective outer shield provides an additional barrier to further delay the penetration of contaminants.



#### **REGREASABLE**

Regreasable idlers with the unique labyrinth/shield design are excellent for long overland conveyors. For installations where water is present or where frequent washdowns are required, regreasing is recommended.

Periodic regreasing will flush the bearings and seals of contaminants to provide extended roll life.

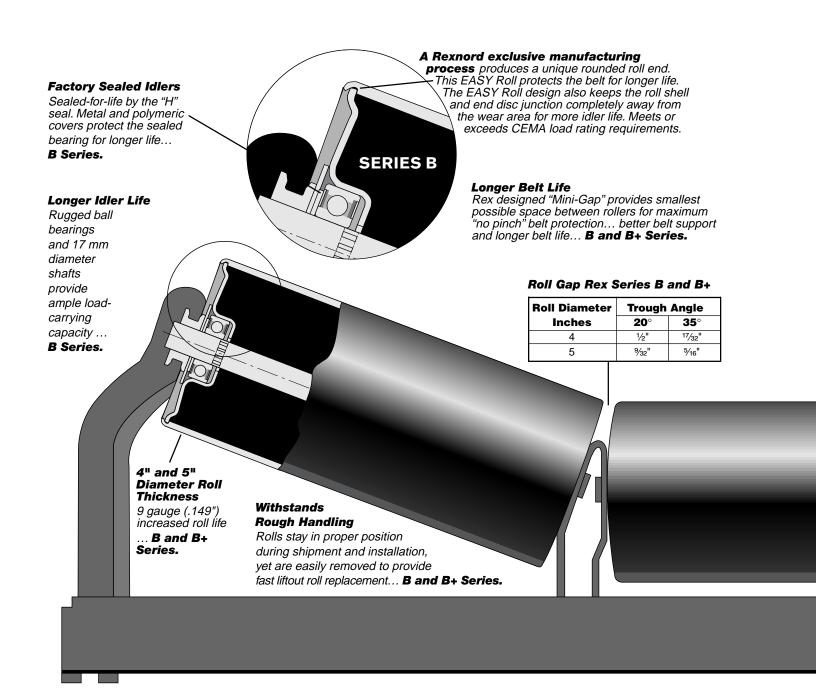
#### FACTORY SEALED

Factory sealed idlers with the same seal design and a solid shaft are a viable economic alternative for those installations where periodic regreasing will not be provided.

# ECONO-B Series – CEMA B Factory Sealed 20° and 35° Trough – 4" and 5" Roll Diameter – 17 mm Solid Shaft

# Longer Belt and Idler Life

The ECONO-B is the economical choice for light to moderate duty. A factory sealed ball bearing designed for optimum idler life means no lubrication is necessary.



#### Interchangeability

...built to fit existing conveyor frame without cutting or fitting. Conforms to CEMA B dimensions... **B and B+ Series.** 

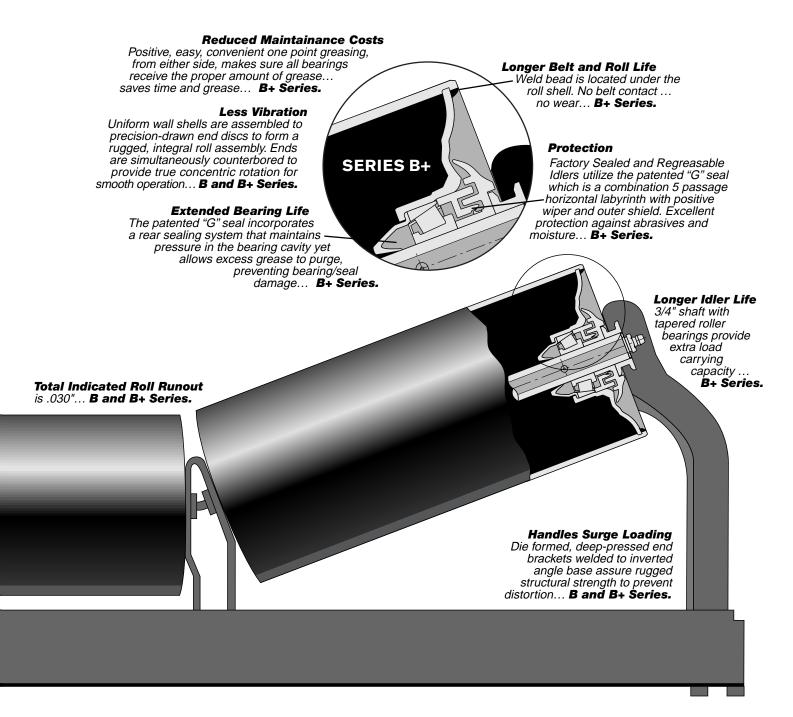
### Self-Cleaning Base

Inverted angle base prevents build-up of spillage... eliminates possible jamming of idler rolls... **B and B+ Series.** 

# Series B+ – FACTORY SEALED or REGREASABLE $20^{\circ}$ and $35^{\circ}$ Trough – $4^{\circ}$ and $5^{\circ}$ Roll Diameter – $3/4^{\circ}$ Shaft

# More Capacity with an Option of Relubrication

The Rex B+ offers a tapered roller bearing and the patented "G" seal in the same envelope dimensions as the Series B. Available as factory sealed with solid shaft or regreasable. Exceeds CEMA load rating requirements.



	Roll Diameter
Polyethylene*	5"
Ceramic	4, 5"
Urethane	4, 5"
Rubber	4, 5"

\*Options available in B+ only.

Note: Grease transfer tube on regreasable idler only ... B+ Series. Simple Belt Training Adjustment of idlers is fast and easy using slotted mounting holes. Precision jig welded frame assures positive, accurate alignment... B and B+ Series.

Series B+ Idlers - 3/4" Shaft - Factory Sealed or Regreasable

## **SERIES B and B+**

# 20° TROUGHING IDLER — EQUAL LENGTH ROLLS

REGREASABLE FACTORY SEALED

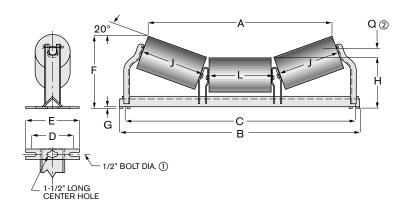
B+4200 RG B4200 FS

B+4200 FS

4-Inch Steel Rolls

B+5200 RG B5200 FS B+5200 FS

5-Inch Steel Rolls



#### Dimensions in Inches — Average Weight in Pounds

Belt		١		_		)	_	ı	F	_	ŀ	1	_	_	_	Idler	Wgt.
Width	4" Roll	5" Roll	В	O	Recom.	Minimum	E	4" Roll	5" Roll	G	4" Roll	5" Roll	J	_	Q	4" Roll	5" Roll
18	211/16	20¾	281/2	27	6	5%	73/4	95/16	93/4	1/4	613/16	75/16	7	7	15/16	28	31
20	231/16	22¾	30½	29	6	5%	73/4	95/16	93/4	1/4	613/16	75/16	7	9	15/16	29	33
24	2613/16	261/2	341/2	33	6	5%	73/4	10	10½	1/4	613/16	75/16	9	9	11/4	33	37
30	32%	321/4	401/2	39	6	5%	73/4	1011/16	111/8	1/4	613/16	75/16	11	11	19/16	38	43
36	38%	38	47	45	71/2	53/4	91/4	113/4	121/4	5/16	71/4	73/4	13	13	115/16	47	53
42	441/8	43¾	53	51	71/2	53/4	91/4	121/2	1215/16	5/16	71/4	73/4	15	15	21/4	52	59
48	49%	491/2	59	57	71/2	53/4	91/4	131/8	13%	5/16	71/4	73/4	17	17	25/8	58	66

<sup>1)</sup> Use washers with 1/2" bolts.

☐ Shaded sizes are most commonly used and are more readily available.

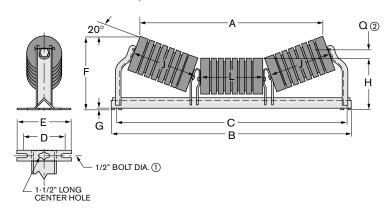
② Location of head pulley in relation to idler center roll.

## 20° TROUGHING IMPACT IDLER — EQUAL LENGTH ROLLS

REGREASABLE FACTORY SEALED

B+5202 RG B+5202 FS

5-Inch Rubber Rolls



#### **Dimensions in Inches — Average Weight in Pounds**

Belt	_	ь	_	D		_	_	_		_	_		Idler
Width	A	В	C	Recom.	Minimum	E	F	G	н	J	L	Q	Wgt.
18	20%	281/8	27	6	5%	73/4	93/4	1/4	75/16	7	7	15/16	37
20	225/8	30½	29	6	5%	73/4	93/4	1/4	75/16	7	9	15/16	39
24	261/2	341/2	33	6	5%	73/4	10½	1/4	75/16	9	9	11/4	41
30	323/16	401/2	39	6	5%	73/4	111/8	1/4	75/16	11	11	19/16	57
36	3715/16	47	45	71/2	53/4	91/4	121/4	5/16	73/4	13	13	115/16	65
42	4311/16	53	51	71/2	53/4	91/4	1215/16	5/16	73/4	15	15	21/4	74
48	497/16	59	57	71/2	53/4	91/4	13%	5/16	73/4	17	17	25/8	87

① Use washers with 1/2" bolts.

Note: Dimensions subject to change. Certified drawings are supplied with orders upon request.

<sup>☐</sup> Shaded sizes are most commonly used and are more readily available.

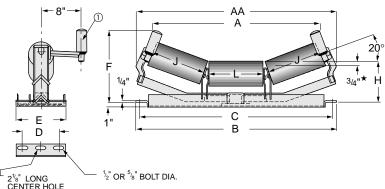
 $<sup>\</sup>ensuremath{\textcircled{2}}$  Location of head pulley in relation to idler center roll.

# SERIES B+ 20° TROUGHING TRAINING IDLER — EQUAL LENGTH ROLLS

Positive  $\operatorname{Arm}^{\textcircled{1}}$  Type — Belt Travel One Direction Only

BELT TRAVEL

→ 8" → □



REGREASABLE FACTORY SEALED

B+4212 RG B+4212 FS

4-Inch Steel Rolls

B+5212 RG B+5212 FS

5-Inch Steel Rolls

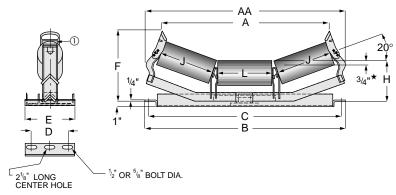
Dimensions in Inches — Average Weight in Pounds

Belt	Belt A					D		_	_			_	_	Idler	Wgt.
Width	A	AA	В	С	Recom.	Minimum	Maximum	E	F	4" Roll	5" Roll	J	L	4" Roll	5" Roll
18	233/16	28%16	281/2	27	7½	5¾	85/8	10	13%	75/8	81/8	7	7	75	80
20	253/16	30%16	301/2	29	71/2	53/4	85/8	10	13%	<b>7</b> 5/8	81/8	7	9	78	84
24	2815/16	345/16	341/2	33	71/2	53/4	85/8	10	14	<b>7</b> 5/8	81/8	9	9	81	87
30	3411/16	401/16	401/2	39	71/2	53/4	85%	10	1411/16	<b>7</b> 5⁄8	81/8	11	11	102	110
36	401/2	457/8	461/2	45	71/2	53/4	85/8	10	157/16	<b>7</b> 5/8	81/8	13	13	111	120
42	461/4	51 <sup>13</sup> / <sub>16</sub>	521/2	51	71/2	5¾	10¾	141/2	167/16	8	81/2	15	15	121	132
48	52	57%16	58½	57	71/2	5¾	10¾	14½	171/8	8	81/2	17	17	132	144

<sup>★</sup>Approximate distance to the top of the center roll of other idlers.

# 20° TROUGHING TRAINING IDLER — EQUAL LENGTH ROLLS

# Actuating Shoe<sup>①</sup> Type — Belt Travel Either Direction



REGREASABLE FACTORY SEALED

B+4210 RG B+4210 FS

4-Inch Steel Rolls

B+5210 RG B+5210 FS

5-Inch Steel Rolls

Dimensions in Inches — Average Weight in Pounds

Belt	_		_			D		_	_	ı	1	_	_	Idler	Wgt.
Width	A	AA	В	С	Recom.	Minimum	Maximum	E	F	4" Roll	5" Roll	J	<u> </u>	4" Roll	5" Roll
18	23¾	289/16	281/2	27	7½	53/4	85/8	10	121/16	75/8	81/8	7	7	75	80
20	25¾	30%16	30½	29	71/2	5¾	85/8	10	121/16	75/8	81/8	7	9	78	84
24	29¾	345/16	341/2	33	71/2	53/4	85/8	10	123/4	<b>7</b> 5⁄8	81/8	9	9	81	87
30	351/4	401/16	401/2	39	71/2	53/4	85/8	10	137/8	75/8	81/8	11	11	102	110
36	41	457/8	461/2	45	71/2	5¾	85/8	10	141/16	<b>7</b> 5⁄8	81/8	13	13	111	120
42	46¾	51 <sup>13</sup> / <sub>16</sub>	521/2	51	71/2	53/4	10¾	141/2	153/16	8	81/2	15	15	121	132
48	521/2	57%16	58½	57	7½	5¾	10¾	141/2	157/8	8	81/2	17	17	132	144

<sup>★</sup>Approximate distance to the top of the center roll of other idlers.

 $<sup>\</sup>hfill \square$  Shaded sizes are most commonly used and are more readily available.

<sup>☐</sup> Shaded sizes are most commonly used and are more readily available.

#### SERIES B and B+

## 35° TROUGHING IDLER — EQUAL LENGTH ROLLS

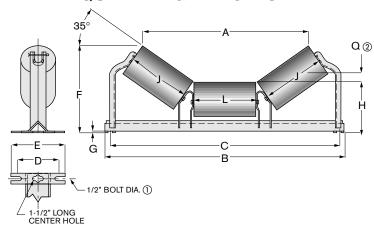
REGREASABLE **FACTORY SEALED** 

B+4300 RG B4300 FS B+4300 FS

4-Inch Steel Rolls

B+5300 RG B5300 FS B+5300 FS

5-Inch Steel Rolls



#### Dimensions in Inches — Average Weight in Pounds

Belt	-	4	_	_		D		ı	F	_	H	1	_	_	_	Idler	Wgt.
Width	4" Roll	5" Roll	В	С	Recom.	Minimum	E	4" Roll	5" Roll	G	4" Roll	5" Roll	J	L	Q	4" Roll	5" Roll
18	191/2	187/8	281/2	27	6	5%	73/4	11	117/16	1/4	613/16	75/16	7	7	11/2	28	32
20	211/2	20%	301/2	29	6	5%	73/4	11	117/16	1/4	613/16	75/16	7	9	11/2	30	34
24	243/4	243/16	341/2	33	6	5%	73/4	121/8	129/16	1/4	613/16	75/16	9	9	21/8	34	38
30	30	29½	401/2	39	6	5%	73/4	131/4	13¾	1/4	613/16	75/16	11	11	211/16	39	44
36	351/4	34¾	47	45	71/2	53/4	91/4	141/8	151/4	5/16	71/4	73/4	13	13	31/4	48	54
42	409/16	40	53	51	71/2	53/4	91/4	16	167/16	5/16	71/4	73/4	15	15	313/16	54	61
48	457/8	451/4	59	57	71/2	5¾	91/4	171/8	17%16	5/16	71/4	73/4	17	17	47/16	59	67

① Use washers with ½" bolts.

☐ Shaded sizes are most commonly used and are more readily available.

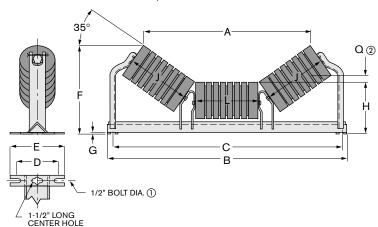
2 Location of head pulley in relation to idler center roll.

# 35° TROUGHING IMPACT IDLER — EQUAL LENGTH ROLLS

REGREASABLE FACTORY SEALED

B+5302 FS B+5302 RG

5-Inch Rubber Rolls



#### **Dimensions in Inches — Average Weight in Pounds**

Belt	_	R			D	F	E	G	н	-1		0	Idler
Width	_ ^			Recom.	Minimum	_		<u> </u>			_	-	Wgt.
18	187/8	28½	27	6	5%	73/4	117/16	1/4	75/16	7	7	11/2	37
20	201/8	30½	29	6	5%	73/4	117/16	1/4	75/16	7	9	11/2	40
24	243/16	341/2	33	6	5%	73/4	129/16	1/4	75/16	9	9	21/8	45
30	291/2	401/2	39	6	5%	73/4	13¾	1/4	75/16	11	11	211/16	58
36	34¾	47	45	71/2	53/4	91/4	151/4	5/16	73/4	13	13	31/4	66
42	40	53	51	71/2	53/4	91/4	167/16	5/16	73/4	15	15	313/16	75
48	451/4	59	57	71/2	53/4	91/4	17%	5/16	73/4	17	17	47/16	88

<sup>(1)</sup> Use washers with 1/2" bolts.

☐ Shaded sizes are most commonly used and are more readily available.

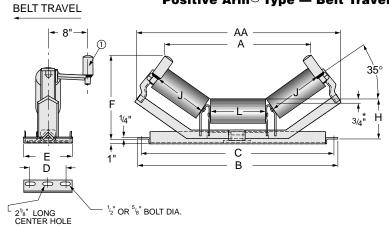
Note: Dimensions subject to change. Certified drawings are supplied with orders upon request.

<sup>2</sup> Location of head pulley in relation to idler center roll.

#### **SERIES B+**

# 35° TROUGHING TRAINING IDLER — EQUAL LENGTH ROLLS

Positive Arm<sup>①</sup> Type — Belt Travel One Direction Only



REGREASABLE **FACTORY SEALED** 

B+4312 RG B+4312 FS

4-Inch Steel Rolls

B+5312 RG B+5312 FS

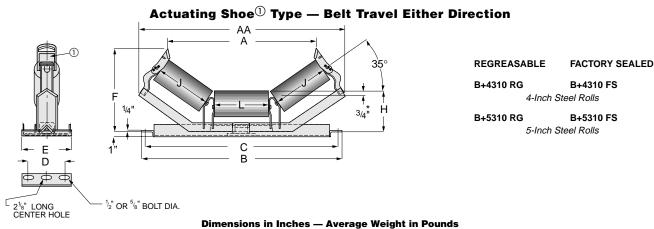
5-Inch Steel Rolls

**Dimensions in Inches — Average Weight in Pounds** 

Belt	_		_			D		_	_	ı	4	_	_	Idler	Wgt.
Width	A	AA	В	С	Recom.	Minimum	Maximum	E	F	4" Roll	5" Roll	7	L	4" Roll	5" Roll
18	20	3013/16	281/2	27	7½	53/4	85/8	10	1415/16	75/8	81/8	7	7	78	86
20	22	3213/16	301/2	29	71/2	53/4	85/8	10	14 <sup>15</sup> / <sub>16</sub>	75/8	81/8	7	9	80	88
24	2313/16	361/8	341/2	33	71/2	5¾	85/8	10	171/8	<b>7</b> 5⁄8	81/8	9	9	83	93
30	291/16	41%	401/2	39	71/2	53/4	85/8	10	183/16	<b>7</b> 5/8	81/8	11	11	105	115
36	35¾	4611/16	461/2	45	71/2	53/4	85/8	10	195/16	75/8	81/8	13	13	113	124
42	411/16	52%	521/2	51	71/2	5¾	10¾	141/2	19 <sup>15</sup> / <sub>16</sub>	8	81/2	15	15	128	140
48	465/16	5711/16	58½	57	7½	5¾	10¾	141/2	211/16	8	81/2	17	17	140	156

<sup>★</sup>Approximate distance to the top of the center roll of other idlers.

# 35° TROUGHING TRAINING IDLER — EQUAL LENGTH ROLLS



Belt	_		_			D		_	_	ı	1		_	Idler	Wgt.
Width	A	AA	В	С	Recom.	Minimum	Maximum	E	F	4" Roll	5" Roll	7	L	4" Roll	5" Roll
18	20%	297/16	281/2	27	71/2	53/4	85/8	10	1315/16	<b>7</b> 5/8	81/8	7	7	78	86
20	22%	317/16	30½	29	71/2	53/4	85/8	10	1315/16	75/8	81/8	7	9	80	88
24	25%	343/16	341/2	33	71/2	53/4	85/8	10	151/8	75/8	81/8	9	9	83	93
30	3015/16	401/16	401/2	39	71/2	53/4	85/8	10	161/4	75/8	81/8	11	11	105	115
36	363/16	457/16	461/2	45	71/2	53/4	85/8	10	173/8	<b>7</b> 5⁄8	81/8	13	13	113	124
42	411/2	511/16	521/2	51	71/2	53/4	10¾	141/2	1815/16	8	81/2	15	15	128	140
48	46¾	565/16	58½	57	71/2	53/4	103/4	141/2	201/16	8	81/2	17	17	140	156

 $<sup>\</sup>bigstar$ Approximate distance to the top of the center roll of other idlers.

<sup>☐</sup> Shaded sizes are most commonly used and are more readily available.

<sup>☐</sup> Shaded sizes are most commonly used and are more readily available.

# SERIES B and B+ RETURN IDLER

B+ Rolls can be furnished in polyethylene, ceramic coated or urethane coated.

REGREASABLE FACTORY SEALED

B+4040 RG B4040 FS

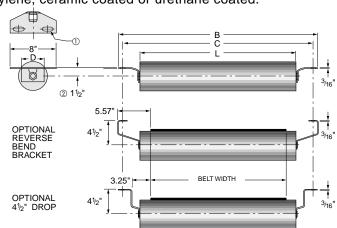
B+4040 FS

4-Inch Steel Roll

B+5040 RG B5040 FS B+5040 FS

D+3040

5-Inch Steel Roll



#### Dimensions in Inches — Average Weight in Pounds

Belt			D				Idler	Wgt.
Width	В	С	Recom.	Min.	Max.	L	4" Roll	5" Roll
18	28½	27	5	3¾	61/4	21	17	20
20	30½	29	5	3¾	61/4	23	18	21
24	341/2	33	5	3¾	61/4	27	20	24
30	401/2	39	5	33/4	61/4	33	24	29
36	461/2	45	5	33/4	61/4	39	29	33
<b>★</b> 42	52½	51	5	3¾	61/4	45	33	38
<b>★</b> 48	58½	57	5	33/4	61/4	51	39	44

① ½" or %" bolt dia.

# **FLAT IDLER**

B+ Rolls can be furnished in polyethylene, ceramic coated or urethane coated.

REGREASABLE FACTORY SEALED

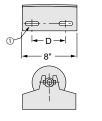
B+4020 RG B4020 FS

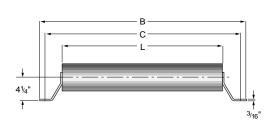
B+4020 FS

4-Inch Steel Roll

B+5020 B5020 FS B+5020 FS

5-Inch Steel Roll





#### Dimensions in Inches — Average Weight in Pounds

Belt			Rec	om.	Mini	mum	Maxi	imum		Idler	Wgt.
Width	В	C	D	D,	D	D,	D	D,	L	4" Roll	5" Roll
18	29	27	5	4	33/4	23/4	61/4	5	21	18	22
20	31	29	5	4	33/4	23/4	61/4	5	23	20	23
24	35	33	5	4	33/4	23/4	61/4	5	27	22	26
30	41	39	5	4	33/4	23/4	61/4	5	33	26	30
36	47	45	5	4	33/4	23/4	61/4	5	39	31	35
<b>★</b> 42	53	51	5	4	33/4	23/4	61/4	5	45	35	40
<del>★</del> 48	59	57	5	4	33/4	23/4	61/4	5	51	41	46

<sup>1)</sup> ½" or ¾" bolt.

<sup>2</sup> Also available with 11¾" and 16½" drop.

<sup>★</sup> These idlers are Series B+.

<sup>☐</sup> Shaded sizes are most commonly used and are more readily available.

<sup>★</sup> These idlers are Series B+.

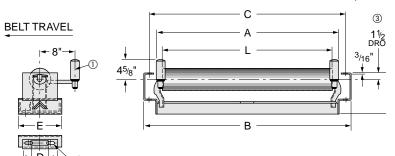
<sup>☐</sup> Shaded sizes are most commonly used and are more readily available.

#### **SERIES B+**

#### **RETURN TRAINING IDLER**

## Positive Arm<sup>①</sup> Type — Belt Travel One Direction Only

This trainer can be furnished with a rubber disc, ceramic disc, urethane disc or spiral roll.



REGREASABLE FACTORY SEALED

B+4052 RG B+4052 FS

4-Inch Steel Roll

B+5052 RG B+5052 FS

5-Inch Steel Roll

Dimensions in Inches — Average Weight in Pounds

Belt					D					Idler	Wgt.
Width	A	В	С	Recom.	Minimum	Maximum	E	F	L	4" Roll	5" Roll
18	23%	29½	27	5	3¾	61/4	10	91/2	21	83	90
20	25%	31½	29	5	33/4	61/4	10	91/2	23	94	102
24	29%	351/2	33	5	33/4	61/4	10	91/2	27	100	110
30	35%	411/2	39	5	33/4	61/4	10	91/2	33	117	126
36	41%	471/2	45	5	33/4	61/4	10	9½	39	137	148
42	47%	531/2	51	5	33/4	61/4	141/2	10	45	142	157
48	53%	591/2	57	5	33/4	61/4	141/2	10	51	153	167

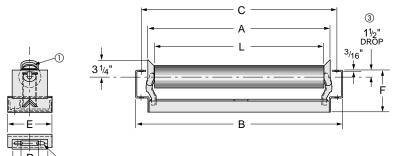
<sup>1)</sup> Positive Arm.

#### $\hfill \square$ Shaded sizes are most commonly used and are more readily available.

# **RETURN TRAINING IDLER**

## Actuating Shoe Type — Belt Travel Either Direction

This trainer can be furnished with a rubber disc, ceramic disc, urethane disc or spiral roll.



REGREASABLE FACTORY SEALED

B+4051 RG B+4051 FS

4-Inch Steel Roll

**B+5051 RG B+5051 FS** *5-Inch Steel Roll* 

# ${\bf Dimensions\ in\ Inches-Average\ Weight\ in\ Pounds}$

Belt					D					Idler	Wgt.
Width	A	В	С	Recom.	Minimum	Maximum	E	F	L	4" Roll	5" Roll
18	241/8	29½	27	5	33/4	61/4	10	91/2	21	81	88
20	261/8	31½	29	5	3¾	61/4	10	91/2	23	93	100
24	301/8	35½	33	5	3¾	61/4	10	91/2	27	96	112
30	361/8	411/2	39	5	3¾	61/4	10	91/2	33	115	125
36	421/8	471/2	45	5	3¾	61/4	10	91/2	39	135	146
42	481/8	53½	51	5	3¾	61/4	141/2	10	45	140	152
48	541/8	59½	57	5	3¾	61⁄4	14½	10	51	151	165

① Actuating Shoe.

☐ Shaded sizes are most commonly used and are more readily available.

② 1/2" or 5/8" bolt dia.

 $<sup>\</sup>ensuremath{\mathfrak{J}}$  Also available with  $41\!/\!_2$  and  $113\!/\!_4$  drop.

② 1/2" or 5/8" bolt dia.

<sup>3</sup> Also available with 41/2" and 113/4" drop.

#### **SERIES B+**

# **FLAT TRAINING IDLER**

# Positive Arm<sup>①</sup> Type — Belt Travel One Direction Only

This trainer can be furnished with a rubber disc, ceramic disc, urethane disc or spiral roll.

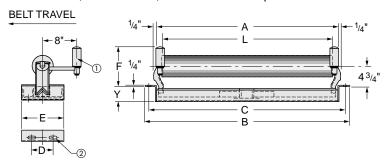
REGREASABLE FACTORY SEALED

B+4031 RG B+4031 FS

4-Inch Steel Roll

B+5031 RG B+5031 FS

5-Inch Steel Roll



#### Dimensions in Inches — Average Weight in Pounds

Belt					D						Idler	Wgt.
Width	A	В	С	Recom.	Min.	Max.	E	F	L	Y	4" Roll	5" Roll
18	235/8	28¾	27	5	33/4	61/4	10	9%	21	31/8	78	85
20	25%	30¾	29	5	3¾	61/4	10	9%	23	31/8	89	97
24	29%	34¾	33	5	33/4	61/4	10	9%	27	31/8	95	105
30	35%	40¾	39	5	33/4	61/4	10	9%	33	31/8	112	121
36	41%	46¾	45	5	33/4	61/4	10	9%	39	33/16	132	143
42	47%	52¾	51	5	33/4	61/4	141/2	9%	45	311/16	137	152
48	53%	58¾	57	5	33/4	61/4	141/2	9%	51	311/16	148	162

① For belt travel in both directions replace positive arms with actuating shoes.

#### **RETURN TRAINING IDLER**

# Inclined Pivot Type — Belt Travel One Direction Only

This trainer can be furnished with a rubber disc, ceramic disc, urethane disc or spiral roll.

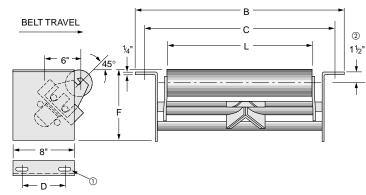
REGREASABLE FACTORY SEALED

B+4050 RG B+4050 FS

4-Inch Steel Roll

B+5050 RG B+5050 FS

5-Inch Steel Roll



Dimensions in Inches — Average Weight in Pounds

Belt				D			F		ldler	Wgt.
Width	В	С	Recom.	Minimum	Maximum	4" Roll	5" Roll	L	4" Roll	5" Roll
18	29	27	5	33/4	61/4	1111/16	123/16	21	74	81
20	31	29	5	33/4	61/4	1111/16	123/16	23	77	85
24	35	33	5	33/4	61/4	1111/16	123/16	27	85	94
30	41	39	5	33/4	61/4	1111/16	123/16	33	98	108
36	47	45	5	33/4	61/4	1111/16	123/16	39	108	119
42	53	51	5	33/4	61/4	1111/16	123/16	45	120	133
48	59	57	5	33/4	61/4	1111/16	123/16	51	132	146

① 1/2" or 5/8" bolt dia.

Note: Dimensions subject to change. Certified drawings are supplied with orders upon request.

<sup>☐</sup> Shaded sizes are most commonly used and are more readily available.

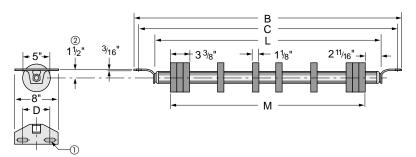
 $<sup>\</sup>textcircled{2}$  ½" or %" bolt dia.

 $<sup>\</sup>textcircled{2}$  Also available with a  $4\frac{1}{2}\text{"}$  or  $11\frac{3}{4}\text{"}$  drop.

<sup>☐</sup> Shaded sizes are most commonly used and are more readily available.

# SERIES B+ DISC RETURN IDLER

Rex Disc Return Idlers minimize belt misalignment which can cause damage to the belt, resulting from material build-up on the return idler rolls. Available with rubber, ceramic or urethane discs.



REGREASABLE FACTORY SEALED

B+5043 RG B+5043 FS

5-Inch Disc Roll

**Dimensions in Inches — Average Weight in Pounds** 

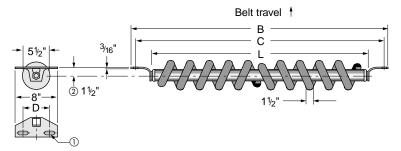
Belt	_	_		D		_		No. of	Idler
Width	В	С	Recom.	Minimum	Maximum	L	M	Discs	Wgt.
18	281/2	27	5	3¾	61/4	21	15¾	7	17
20	30½	29	5	3¾	61/4	23	17¾	7	19
24	341/2	33	5	33/4	61/4	27	21¾	8	21
30	401/2	39	5	33/4	61/4	33	273/4	9	24
36	461/2	45	5	33/4	61/4	39	33¾	10	27
42	521/2	51	5	33/4	61/4	45	39¾	11	31
48	581/2	57	5	33/4	61/4	51	45¾	12	36

<sup>(1) 1/2&</sup>quot; or 5%" bolt dia.

# SERIES C SPIRAL RETURN IDLER

#### **Belt Travel One Direction**

Rex Spiral Return Idlers minimize belt fleet and damage on the return belt which would otherwise result from material build-up. The correct direction of rotation is important and is clearly marked on each idler. The "V" formed by right-hand and left-hand spirals should point in the direction of rotation.



REGREASABLE FACTORY SEALED

C6042 RG C6042 FS

51/2-Inch Rubber Spiral Roll

Dimensions in Inches — Average Weight in Pounds

Belt	_	_		D		_	
Width	В	С	Recom.	Minimum	Maximum	L	ldler Wgt.
18	28½	27	5	33/4	61/4	21	19
20	30½	29	5	3¾	61/4	23	22
24	341/2	33	5	3¾	61/4	27	24
30	401/2	39	5	3¾	61/4	33	28
36	461/2	45	5	3¾	61/4	39	33
42	521/2	51	5	3¾	61/4	45	39
48	581/2	57	5	3¾	61/4	51	44

① 1/2" or 5/8" bolt dia.

☐ Shaded sizes are most commonly used and are more readily available.

<sup>(2)</sup> Also available with a 41/2", 113/4", 161/2" drop. For reverse bend brackets, see page 18.

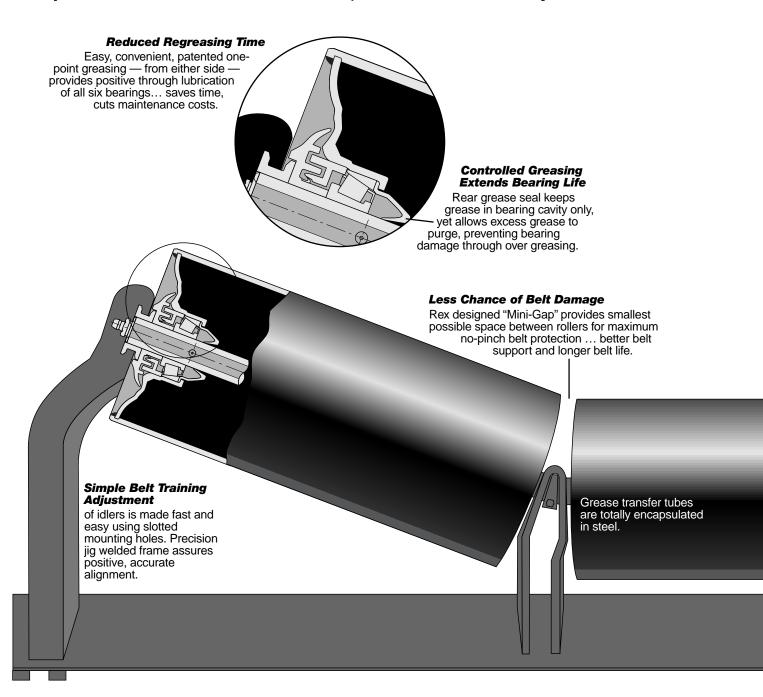
<sup>□</sup> Shaded sizes are most commonly used and are more readily available.

② Also available with a 4½", 11¾", 16½" drop. For reverse bend brackets, see page 18.

# Series C and D — CEMA C and D 20°, 35° and 45° Trough — 5" and 6" Roll Diameter

**Regreasable or Factory Sealed Bearings** 

The complete line of Rex CEMA Series C and D Idlers, with off-the-shelf availability . . .



#### Interchangeability

... built to fit existing conveyor frame without cutting or fitting. Conforms to CEMA standards.

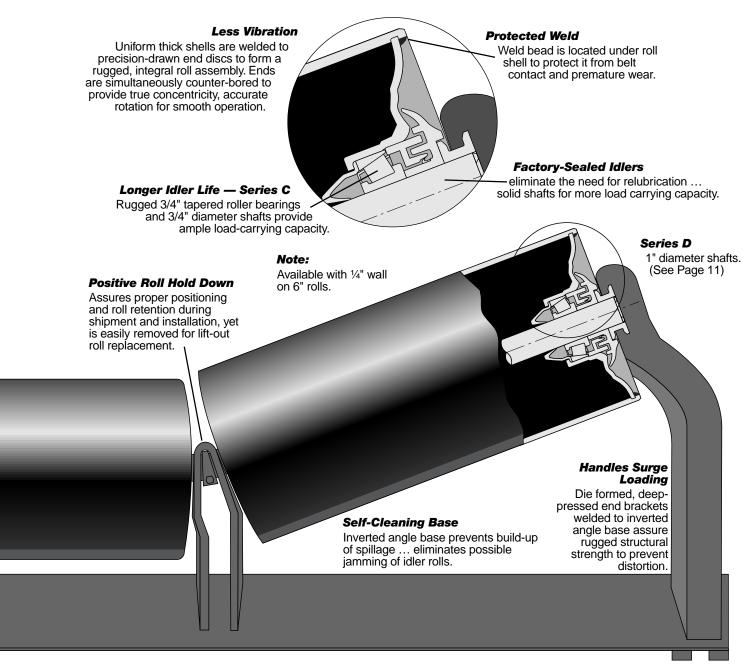
# **Regreasable Idlers**Better Protection Against Abrasives and Moisture

Rex offers a special combination labyrinth with wiping seal and protective outer shield for your operating environment. This seal has *five hard-to-get-through* passages filled with grease to block contaminants from the roller bearings. The outer and inner seals are close tolerance injection molded nonmetallic. The labyrinth/shield seal is particularly excellent for long overland horizontal conveyors, because of its low friction torque or for applications where water is present or when frequent washdowns are required.

# Series C and D — CEMA C and D 20°, 35° and 45° Trough — 5" and 6" Roll Diameter

Regreasable or Factory Sealed

offer low initial and maintenance costs, extra dependability for moderate to heavy duty applications.



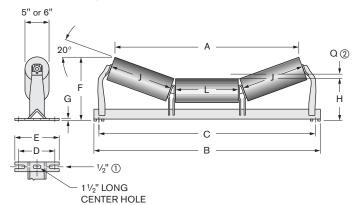
# Factory-Sealed Idlers

#### **Better Protection Against Abrasives**

Rex offers a special combination labyrinth with wiping seal and protective outer shield for your operating environment. This seal has five hard-to-get-through passages filled with grease to block contaminants from the roller bearings. The outer and inner seals are close tolerance injection molded nonmetallic. This product will provide excellent service in most environments and where minimum maintenance can be provided. Solid shafts are standard.

#### **SERIES C and D**

#### 20° TROUGHING IDLER — EQUAL LENGTH ROLLS



REGREASABLE FACTORY SEALED

C5200 RG C5200 FS D5200 RG D5200 FS

5-Inch Steel Rolls

C6200 RG C6200 FS D6200 RG D6200 FS

6-Inch Steel Rolls 3

#### Dimensions in Inches — Average Weight in Pounds

Belt	ı	4	_	_	D		_		F	_	H	1	_	_	_		Wgt.
Width	5" Roll	6" Roll	В	С	Recom.	Min.	E	5" Roll	6" Roll	G	5" Roll	6" Roll	J	L	Q	5"	es C) 6"
18	2013/16	201/2	29	27	71/2	5¾	91/4	11	11½	5/16	89/16	91/16	7	7	15/16	41	48
20	2213/16	221/2	31	29	71/2	53/4	91/4	11	111/2	5/16	89/16	91/16	7	9	15/16	45	53
24	261/2	263/16	35	33	71/2	53/4	91/4	1111/16	123/16	5/16	89/16	91/16	9	9	11/4	49	58
30	325/16	3115/16	41	39	71/2	53/4	91/4	12%	121/8	5/16	89/16	91/16	11	11	19/16	57	64
36	381/16	3711/16	47	45	71/2	5¾	91/4	131/8	13%	5/16	81/16	93/16	13	13	1 15/16	65	73
42	4313/16	437/16	53	51	71/2	53/4	91/4	141/8	149/16	5/16	9	9½	15	15	21/4	72	82
48	49%16	493/16	59	57	71/2	53/4	91/4	1413/16	151/4	5/16	9	91/2	17	17	25/8	83	92
54	555/16	55	651/2	63	9	6%	111/2	157/8	165/16	3/8	91/4	93/4	19	19	3	94	105
60	611/16	601/4	711/2	69	9	6%	111/2	16%16	17	3/8	91/4	93/4	21	21	31/4	104	116
72	72%	72%	831/2	81	9	73/4	111/2	185/16	18¾	3/8	911/16	103/16	25	25	37/8	127	141

① Use washers on ½-inch bolts.

2 Location of head pulley in relation to idler center roll.

3 Available in 1/4" roll wall thickness.

☐ Shaded sizes are most commonly used and are more readily available.

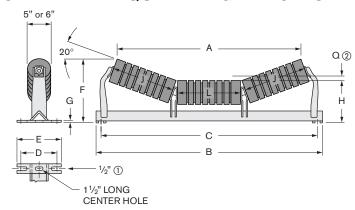
# 20° TROUGHING IMPACT IDLER — EQUAL LENGTH ROLLS

REGREASABLE FACTORY SEALED

5-Inch Rolls

C6202 RG C6202 FS D6202 RG D6202 FS

6-Inch Rolls



#### Dimensions in Inches — Average Weight in Pounds

Belt	1	A	_		D			ı	F	_	ŀ	1	_	_	_		Wgt.
Width	5" Roll	6" Roll	В	С	Recom.	Min.	E	5" Roll	6" Roll	G	5" Roll	6" Roll	J	L	Q	5"	es C) 6"
18	2013/16	201/2	29	27	71/2	5¾	91/4	11	11½	5/16	8%16	91/16	7	7	15/16	43	50
20	2213/16	221/2	31	29	71/2	53/4	91/4	11	111/2	5/16	8%16	91/16	7	9	15/16	46	54
24	261/2	263/16	35	33	71/2	53/4	91/4	1111/16	123/16	5/16	8%16	91/16	9	9	11/4	50	60
30	325/16	3115/16	41	39	71/2	53/4	91/4	12%	121/8	5/16	89/16	91/16	11	11	19/16	60	68
36	381/16	3711/16	47	45	71/2	53/4	91/4	131/8	13%	5/16	811/16	93/16	13	13	<b>1</b> 15/16	69	76
42	4313/16	437/16	53	51	71/2	53/4	91/4	141/8	149/16	5/16	9	9½	15	15	21/4	76	85
48	49%16	495/16	59	57	71/2	53/4	91/4	1413/16	151/4	5/16	9	9½	17	17	25/8	86	97
54	555/16	55	651/2	63	9	6%	111/2	157/8	165/16	3/8	91/4	93/4	19	19	3	98	109
60	611/16	601/4	711/2	69	9	6%	111/2	169/16	17	3/8	91/4	93/4	21	21	31/4	109	121
72	72%	725/16	831/2	81	9	73/4	11½	185/16	18¾	3/8	911/16	103/16	25	25	37/8	133	145

① Use washers on ½-inch bolts.

2 Location of head pulley in relation to idler center roll.

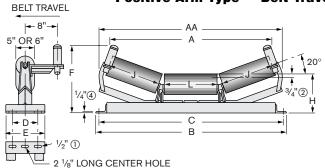
☐ Shaded sizes are most commonly used and are more readily available.

Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

#### SERIES C and D

#### 20° TROUGHING IDLER — EQUAL LENGTH ROLLS

### Positive Arm Type — Belt Travel One Direction Only



REGREASABLE FACTORY SEALED

C5212 RG C5212 FS D5212 RG D5212 FS

5-Inch Steel Rolls

C6212 RG C6212 FS D6212 RG D6212 FS

6-Inch Steel Rolls 3

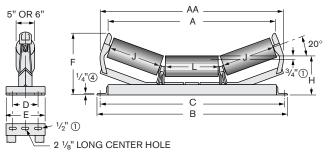
#### Dimensions in Inches — Average Weight in Pounds

Belt						D				ı	1				Wgt.
Width	A	AA	В	С	Recom.	Min.	Max	E	F	5" Roll	6" Roll	J	L	(Seri	es C) 6"
18 20	23 <sup>3</sup> / <sub>16</sub> 25 <sup>3</sup> / <sub>16</sub>	28% 30% 30%	29 31	27 29	7½ 7½	5 <sup>3</sup> / <sub>4</sub> 5 <sup>3</sup> / <sub>4</sub>	85/8 85/8	10 10	14 <sup>3</sup> / <sub>16</sub> 14 <sup>3</sup> / <sub>16</sub>	9½ 9¼	9 <sup>3</sup> / <sub>4</sub> 9 <sup>3</sup> / <sub>4</sub>	7 7	7 9	102 107	114 119
24 30	28 <sup>15</sup> / <sub>16</sub> 34 <sup>1</sup> / <sub>16</sub>	345/16 401/16	35 41	33 39	7½ 7½	5¾ 5¾	85% 85%	10 10	14 <sup>7</sup> / <sub>16</sub> 15 <sup>9</sup> / <sub>16</sub>	91/4 91/4	9¾ 9¾	9 11	9 11	118 132	130 145
36 42 48	40½ 46½ 52	45 <sup>7</sup> / <sub>16</sub> 51 <sup>13</sup> / <sub>16</sub> 57 <sup>9</sup> / <sub>16</sub>	47 53 59	45 51 57	7½ 7½ 7½ 7½	5 <sup>3</sup> / <sub>4</sub> 5 <sup>3</sup> / <sub>4</sub> 5 <sup>3</sup> / <sub>4</sub>	85/8 103/4 103/4	10 14½ 14½	165/16 17½ 183/16	95/16 913/16 913/16	9 <sup>13</sup> / <sub>16</sub> 10 <sup>5</sup> / <sub>16</sub> 10 <sup>5</sup> / <sub>16</sub>	13 15 17	13 15 17	146 163 178	159 175 191
54 60 72	57 <sup>1</sup> / <sub>4</sub> 63 <sup>1</sup> / <sub>2</sub> 75	63% 695/16 801/4	65 71 83	63 69 81	9 9	5 <sup>3</sup> / <sub>4</sub> 5 <sup>3</sup> / <sub>4</sub> 5 <sup>3</sup> / <sub>4</sub>	10 <sup>3</sup> / <sub>4</sub> 10 <sup>3</sup> / <sub>4</sub> 10 <sup>3</sup> / <sub>4</sub>	14½ 14½ 14½ 16½	19 <sup>1</sup> / <sub>4</sub> 19 <sup>1</sup> / <sub>5</sub> / <sub>16</sub> 21 <sup>5</sup> / <sub>16</sub>	10 <sup>3</sup> / <sub>16</sub> 10 <sup>3</sup> / <sub>16</sub> 10 <sup>3</sup> / <sub>16</sub>	10 <sup>11</sup> / <sub>16</sub> 10 <sup>11</sup> / <sub>16</sub> 10 <sup>11</sup> / <sub>16</sub>	19 21 25	19 21 25	192 208 236	206 221 253

<sup>Use washers on ½-inch bolts.
Approximate distance to the top of the center roll of other idlers.</sup> 

# 20° TROUGHING IMPACT IDLER — EQUAL LENGTH ROLLS

# Actuating Shoe Type — Belt Travel Either Direction



REGREASABLE FACTORY SEALED

C5210 RG C5210 FS D5210 RG D5210 FS

5-Inch Steel Rolls

C6210 RG C6210 FS D6210 RG D6210 FS

6-Inch Steel Rolls 3

#### Dimensions in Inches — Average Weight in Pounds

Belt	-	4					D			ı	F		1				Wgt.
Width	5" Dia.	6" Dia.	AA	В	С	Recom.	Min.	Max.	E	5" Dia.	6" Dia.	5" Dia.	6" Dia.	J	L	(Seri	es C) 6"
18 20	23¾ 25¾	231/8 251/8	28 <sup>9</sup> / <sub>16</sub> 30 <sup>9</sup> / <sub>16</sub>	29 31	27 29	7½ 7½	5¾ 5¾	85/8 85/8	10 10	13 <sup>3</sup> / <sub>16</sub> 13 <sup>3</sup> / <sub>16</sub>	141/4 141/4	9½ 9¼	9¾ 9¾	7	7 9	100 105	112 117
24 30	29½ 35¼	287/8 34 <sup>11</sup> / <sub>16</sub>	345/16 401/16	35 41	33 39	7½ 7½ 7½	5 <sup>3</sup> / <sub>4</sub> 5 <sup>3</sup> / <sub>4</sub>	85% 85%	10 10	137/8 149/16	14 <sup>15</sup> / <sub>16</sub> 15 <sup>1</sup> / <sub>8</sub>	9½ 9¼ 9¼	9 <sup>3</sup> / <sub>4</sub> 9 <sup>3</sup> / <sub>4</sub>	9 11	9 11	116 130	128 143
36 42	41 46¾	41 <sup>7</sup> / <sub>16</sub> 46 <sup>3</sup> / <sub>16</sub>	457/8 51 <sup>13</sup> / <sub>16</sub>	47 53	45 51	7½ 7½	5 <sup>3</sup> / <sub>4</sub> 5 <sup>3</sup> / <sub>4</sub>	85% 103/4	10 14½	151/4 161/2	163/8 179/16	95/16 913/16	9 <sup>13</sup> / <sub>16</sub> 10 <sup>5</sup> / <sub>16</sub>	13 15	13 15	144 160	156 172
48 54 60	521/4 581/4 64	51 <sup>15</sup> / <sub>16</sub> 57 <sup>11</sup> / <sub>16</sub> 63 <sup>7</sup> / <sub>16</sub>	57%16 63%16 695/16	59 65 71	57 63 69	7½ 9 9	5¾ 5¾ 5¾	10¾ 10¾ 10¾	14½ 14½ 14½	17¾16 18¾16 18⅙	17¾ 19⅓ 20	9 <sup>13</sup> / <sub>16</sub> 10 <sup>3</sup> / <sub>16</sub> 10 <sup>3</sup> / <sub>16</sub>	105/16 1011/16 1011/16	17 19 21	17 19 21	175 190 206	188 203 218
72	755/16	75	801/4	83	81	9	5¾	10¾	16½	201/4	215/16	103/16	1011/16	25	25	234	250

① Use washers on ½-inch bolts.

(2) Approximate distance to the top of the center roll of other idlers.

Shaded sizes are most commonly used and are more readily available.

<sup>3</sup> Available in ¼" roll wall thickness.

<sup>(4) .31&</sup>quot;-.72" belt width

<sup>☐</sup> Shaded sizes are most commonly used and are more readily available.

<sup>(3)</sup> Available in 1/4" roll wall thickness.

<sup>(4) .31&</sup>quot;-.72" belt width

#### SERIES C and D

# 20° TROUGHING IDLER — UNEQUAL LENGTH ROLLS

5" or 6" Q (2) В 1/2" ① 11/<sub>2</sub>" LONG

REGREASABLE **FACTORY SEALED** 

C5201 RG C5201 FS D5201 RG D5201 FS

5-Inch Steel Rolls

C6201 RG C6201 FS D6201 RG D6201 FS

6-Inch Steel Rolls 3

#### Dimensions in Inches — Average Weight in Pounds

**CENTER HOLE** 

Belt	£	١		_	D			ı	F	_		1	_	_	_		Wgt.
Width	6" Roll	6" Roll	В	С	Recom.	Min.	E	5" Roll	6" Roll	G	5" Roll	6" Roll	J	L	Q	5"	es C) 6"
24	2815/16	28½	35½	33	71/2	5¾	91/4	11	11½	5/16	89/16	91/16	7	15	13/16	49	58
30	3415/16	341/2	411/2	39	71/2	53/4	91/4	11	111/2	5/16	89/16	91/16	7	21	13/16	57	64
36	4015/16	401/2	471/2	45	71/2	53/4	91/4	111/16	119/16	5/16	811/16	93/16	7	27	13/16	65	73
42	4615/16	461/2	531/2	51	71/2	53/4	91/4	11%	111//8	5/16	9	91/2	7	33	13/16	72	82
48	52 <sup>15</sup> /16	521/2	591/2	57	71/2	53/4	91/4	11%	111//8	5/16	9	91/2	7	39	13/16	83	92
54	58 <sup>15</sup> / <sub>16</sub>	58½	651/2	63	9	6%	111/2	11¾	121/8	3/8	91/4	93/4	7	45	13/16	94	105
60	6415/16	641/2	711/2	69	9	6%	111/2	11¾	121/8	3/8	91/4	93/4	7	51	13/16	104	116
72	76 <sup>15</sup> / <sub>16</sub>	76½	831/2	81	9	73/4	11½	11¾	121/8	3/8	91/4	9¾	9	57	13/16	123	138

- 1) Use washers on 1/2-inch bolts.
- 2 Location of head pulley in relation to idler center roll.
- 3 Available in 1/4" roll wall thickness.

Contact Rexnord for load rating.

# 20° TROUGHING IMPACT IDLER — UNEQUAL LENGTH ROLLS

**REGREASABLE FACTORY SEALED** C5203 RG C5203 FS D5203 RG D5203 FS 5-Inch Rubber Rolls C6203 RG C6203 FS D6203 RG D6203 FS

6-Inch Rubber Rolls

5" or 6" Q 2 G Н С В 1/2" ① 11/2" LONG

CENTER HOLE

- Average Weight in Pounds **Dimensions in Inches** 

Belt	Į.	١			D				F	_	H	1	_	_	_		Wgt.
Width	5" Roll	6" Roll	В	С	Recom.	Min.	E	5" Roll	6" Roll	G	5" Roll	6" Roll	J	L	Q	(Seri	es C) 6"
24 30	28 <sup>15</sup> / <sub>16</sub> 34 <sup>15</sup> / <sub>16</sub>	28½ 34½	35½ 41½	33 39	7½ 7½	5¾ 5¾	9½ 9¼	11 11	11½ 11½	5/16 5/16	8%16 8%16	9½16 9½16	7 7	15 21	13/ <sub>16</sub>	50 60	60 68
36	4015/16	401/2	471/2	45	71/2	5¾	91/4	111/16	11%16	5/16	811/16	93/16	7	27	13/16	69	76
42	46 <sup>15</sup> / <sub>16</sub>	461/2	53½	51	71/2	5¾	91/4	11%	111//8	5/16	9	9½	7	33	13/16	76	85
48	52 <sup>15</sup> / <sub>16</sub>	52½	59½	57	71/2	53/4	91/4	11%	111//8	5/16	9	91/2	7	39	13/16	86	97
54	58 <sup>15</sup> / <sub>16</sub>	581/2	651/2	63	9	6%	111/2	113/4	121/8	3/8	91/4	93/4	7	45	13/16	98	109
60	6415/16	641/2	71½	69	9	6%	11½	11¾	121/8	3/8	91/4	9¾	7	51	13/16	109	121
72	76¹5⁄16	76½	831/2	81	9	73/4	11½	11¾	121/8	3/8	91/4	9¾	9	57	13/16	130	142

<sup>1)</sup> Use washers on 1/2-inch bolts.

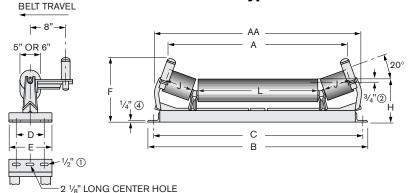
② Location of head pulley in relation to idler center roll.

Contact Rexnord for load rating.

#### SERIES C and D

#### 20° TROUGHING IDLER — UNEQUAL LENGTH ROLLS

## Positive Arm Type — Belt Travel One Direction Only



REGREASABLE FACTORY SEALED

C5213 RG C5213 FS D5213 RG D5213 FS

5-Inch Steel Rolls

C6213 RG C6213 FS D6213 RG D6213 FS

6-Inch Steel Rolls 3

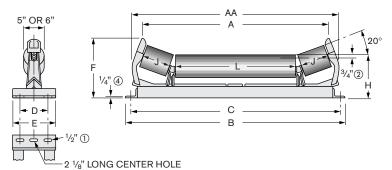
#### Dimensions in Inches — Average Weight in Pounds

Belt						D				ı	1				Wgt.
Width	A	AA	В	С	Recom.	Min.	Max	E	F	5" Dia.	6" Dia.	J	L	(Seri	es C) 6"
24	293/16	34%16	35	33	71/2	53/4	85/8	10	143/16	91/4	93/4	7	15	118	132
30	353/16	40%16	41	39	71/2	53/4	85/8	10	143/16	91/4	93/4	7	21	132	145
36	413/16	46%16	47	45	71/2	53/4	85/8	10	141/4	95/16	913/16	7	27	146	159
42	473/16	529/16	53	51	71/2	53/4	103/4	141/2	14¾	913/16	105/16	7	33	163	175
48	533/16	58%16	59	57	71/2	53/4	10¾	141/2	14¾	913/16	105/16	7	39	178	192
54	593/16	64%16	65	63	9	53/4	10¾	141/2	151/8	103/16	1011/16	7	45	192	206
60	653/16	70%16	71	69	9	53/4	10¾	141/2	151/8	103/16	1011/16	7	51	208	221
72	76 <sup>13</sup> / <sub>16</sub>	82%	84	81	91/2	53/4	10¾	16½	16%	10%16	111/16	9	57	227	239

- 1) Use washers on ½-inch bolts.
- ② Approximate distance to the top of the center roll of other idlers.
- 3 Available in 1/4" roll wall thickness.
- (4) .31"-.72" belt width

# 20° TROUGHING TRAINING IDLER — UNEQUAL LENGTH ROLLS

#### **Actuating Shoe Type — Belt Travel Either Direction**



REGREASABLE FACTORY SEALED

Contact Rexnord for load rating.

C5211 RG C5211 FS D5211 RG D5211 FS

5-Inch Steel Rolls

C6211 RG C6211 FS D6211 RG D6211 FS

6-Inch Steel Rolls 3

**Dimensions in Inches — Average Weight in Pounds** 

Belt		4					D				F	ı	1				Wgt.
Width	5" Dia.	6" Dia.	AA	В	С	Recom.	Min.	Max.	E	5" Dia.	6" Dia.	5" Dia.	6" Dia.	J	L	(Seri	es C) 6"
24	29¾	291/8	34%16	35	33	71/2	53/4	85/8	10	133/16	141/4	91/4	93/4	7	15	116	128
30	35¾	351/8	40%16	41	39	71/2	5¾	85%	10	133/16	141/4	91/4	9¾	7	21	130	143
36	41¾	411/8	46%16	47	45	71/2	5¾	85%	10	131/4	145/16	95/16	913/16	7	27	144	156
42	47¾	471/8	529/16	53	51	71/2	5¾	10¾	141/2	13¾	1413/16	913/16	105/16	7	33	160	172
48	53¾	531/8	58%16	59	57	71/2	5¾	10¾	141/2	13¾	1413/16	913/16	105/16	7	39	175	190
54	59¾	591/8	64%16	65	63	9	5¾	10¾	141/2	141/8	153/16	103/16	1011/16	7	45	190	203
60	65¾	651/8	70%16	71	69	9	5¾	10¾	141/2	141/8	153/16	103/16	1011/16	7	51	206	218
72	78¾	781/8	81%	84	81	91/2	5¾	10¾	16½	141/8	153/16	10%16	111/16	9	57	225	237

- ① Use washers on ½-inch bolts.
- ② Approximate distance to the top of the center roll of other idlers.
- 3 Available in ¼" roll wall thickness.
- (4) .31"-.72" belt width

Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

Contact Rexnord for load rating.

# **SERIES C and D**

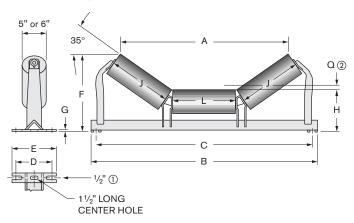
# 35° TROUGHING IDLER — EQUAL LENGTH ROLLS

REGREASABLE FACTORY SEALED

5-Inch Steel Rolls

C6300 RG C6300 FS D6300 RG D6300 FS

6-Inch Steel Rolls (3)



#### **Dimensions in Inches — Average Weight in Pounds**

Belt		1	_	_	D			ı	F	_	ı	1	_	_	_		Wgt.
Width	6" Roll	6" Roll	В	С	Recom.	Min.	E	5" Roll	6" Roll	G	5" Roll	6" Roll	J	L	Q	(Seri	es C) 6"
18	1815/16	18%	29	27	7½	53/4	91/4	1211/16	131/16	5/16	8%16	91/16	7	7	1½	42	49
20	2015/16	20%	31	29	71/2	53/4	91/4	1211/16	131/16	5/16	89/16	91/16	7	9	11/2	46	54
24	243/16	23%	35	33	7½	53/4	91/4	1313/16	143/16	5/16	89/16	91/16	9	9	21/8	50	59
30	297/16	287/8	41	39	71/2	53/4	91/4	1413/16	155/16	5/16	89/16	91/16	11	11	211/16	58	69
36	34¾	34¾16	47	45	7½	53/4	91/4	161/8	169/16	5/16	811/16	93/16	13	13	31/4	69	78
42	40	397/16	53	51	7½	53/4	91/4	175/8	18	5/16	9	9½	15	15	313/16	77	88
48	455/16	443/4	59	57	71/2	53/4	91/4	18¾	193/16	5/16	9	91/2	17	17	47/16	90	101
54	50%16	50	651/2	63	9	6%	111/2	201/4	2011/16	3/8	91/4	93/4	19	19	5	102	115
60	557/8	551/4	711/2	69	9	63/8	111/2	217/16	2113/16	3/8	91/4	93/4	21	21	59/16	114	130
72	661/4	657/8	831/2	81	9	61/4	111/2	24	241/2	3/8	911/16	103/16	25	25	611/16	148	157

- ① Use washers on 1/2-inch bolts.
- 2 Location of head pulley in relation to idler center roll.
- 3 Available in 1/4" roll wall thickness.

☐ Shaded sizes are most commonly used and are more readily available.

# 35° TROUGHING IMPACT IDLER — EQUAL LENGTH ROLLS

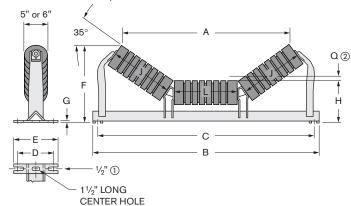
REGREASABLE FACTORY SEALED

C5302 RG C5302 FS D5302 RG D5302 FS

5-Inch Rubber Rolls

C6302 RG C6302 FS D6302 RG D6302 FS

6-Inch Rubber Rolls



#### Dimensions in Inches — Average Weight in Pounds

-					D						·					Idla	Wgt.
Belt			_	_			_			_				l _	_		
Width	5"	6"	В	С	Recom.	Min.	E	5"	6"	G	5"	6"	J	L	Q		es C)
	Roll	Roll			necom.	IVIIII.		Roll	Roll		Roll	Roll				5"	6"
18	1815/16	18%	29	27	71/2	53/4	91/4	1211/16	131/16	5/16	8%16	91/16	7	7	11/2	44	52
20	2015/16	20%	31	29	71/2	53/4	91/4	1211/16	131/16	5/16	89/16	91/16	7	9	11/2	48	57
24	243/16	235/8	35	33	71/2	53/4	91/4	1313/16	143/16	5/16	89/16	91/16	9	9	21/8	52	61
30	297/16	281/8	41	39	71/2	53/4	91/4	1415/16	155/16	5/16	89/16	91/16	11	11	211/16	61	72
36	34¾	343/16	47	45	71/2	5¾	91/4	161/8	169/16	3/16	811/16	93/16	13	13	31/4	73	82
42	40	397/16	53	51	71/2	53/4	91/4	175/8	18	5/16	9	9½	15	15	313/16	81	92
48	455/16	443/4	59	57	71/2	53/4	91/4	18¾	193/16	5/16	9	91/2	17	17	47/16	94	105
54	509/16	50	651/2	63	9	63/8	111/2	201/4	2011/16	3/8	91/4	93/4	19	19	5	105	120
60	557/8	551/4	711/2	69	9	6%	111/2	217/16	2113/16	3/8	91/4	93/4	21	21	59/16	119	135
72	661/4	657/8	831/2	81	9	61/4	111/2	24	241/2	3/8	911/16	103/16	25	25	611/16	145	161

① Use washers on ½-inch bolts.

<sup>2</sup> Location of head pulley in relation to idler center roll.

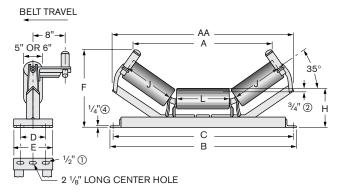
<sup>☐</sup> Shaded sizes are most commonly used and are more readily available.

Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

#### SERIES C and D

#### 35° TROUGHING TRAINING IDLER — EQUAL LENGTH ROLLS

Positive Arm Type — Belt Travel One Direction Only



REGREASABLE FACTORY SEALED

C5312 RG C5312 FS D5312 RG D5312 FS

5-Inch Steel Rolls

C6312 RG C6312 FS D6312 RG D6312 FS

6-Inch Steel Rolls (3)

**Dimensions in Inches — Average Weight in Pounds** 

Belt						D					н				Wgt.
Width	A	AA	В	С	Recom.	Min.	Max	E	F	5"	6"	J	L	•	es C)
					110001111		IVICA			Dia.	Dia.			5"	6"
18	20	3013/16	29	27	71/2	53/4	85/8	10	161/16	91/4	93/4	7	7	104	116
20	22	3213/16	31	29	71/2	53/4	85%	10	161/16	91/4	93/4	7	9	109	121
24	2313/16	361/8	35	33	71/2	53/4	85%	10	17	91/4	93/4	9	9	120	132
30	291/16	41%	41	39	71/2	53/4	85%	10	181/8	91/4	93/4	11	11	135	147
36	35¾	4611/16	47	45	71/2	53/4	85/8	10	195/16	95/16	913/16	13	13	149	162
42	411/16	52%	53	51	7½	53/4	10¾	141/4	211/4	913/16	105/16	15	15	166	178
48	465/16	5711/16	59	57	71/2	53/4	10¾	141/2	223/8	913/16	105/16	17	17	181	194
54	51%	65¾	65	63	9	53/4	10¾	141/2	237/8	103/16	1011/16	19	19	196	209
60	567/8	68%16	71	69	9	53/4	10¾	141/2	25	103/16	1011/16	21	21	212	225
72	677/16	79%16	83	81	9½	53/4	10¾	161/2	275/8	103/16	1011/16	25	25	231	244

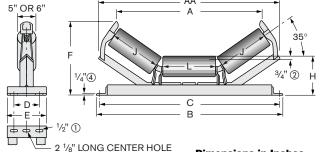
① Use washers on ½-inch bolts.

4) .31"-.72" belt width

# □ Shaded sizes are most commonly used and are more readily available.

# 35° TROUGHING TRAINING IDLER — EQUAL LENGTH ROLLS





REGREASABLE FACTORY SEALED

5-Inch Steel Rolls

C6310 RG C6310 FS D6310 RG D6310 FS

6-Inch Steel Rolls 3

Dimensions in Inches — Average Weight in Pounds

Belt		<b>\</b>					D			ı	F	ı	Н				Wgt.
Width	5" Roll	6" Roll	AA	В	С	Recom.	Min.	Max.	E	5" Dia.	6" Dia.	5" Dia.	6" Dia.	J	L	(Seri	es C) 6"
18	20%	191/16	3013/16	29	27	71/2	5 <sup>3</sup> / <sub>4</sub> 5 <sup>3</sup> / <sub>4</sub>	85/8 85/8	10	151/16	16	91/4	93/4	7	7	102	114
20 24	22% 25%	21½ 24ы 24ы	32 <sup>13</sup> / <sub>16</sub> 36 <sup>1</sup> / <sub>8</sub>	31 35	29 33	7½ 7½	53/4	8% 8%	10 10	15½ 16¼	16 171/8	9¼ 9¼	9¾ 9¾	9	9	107 118	119 130
30 36	30 <sup>15</sup> / <sub>16</sub> 36 <sup>3</sup> / <sub>16</sub>	29% 34%	41% 46 <sup>1</sup> / <sub>16</sub>	41 47	39 45	7½ 7½	5¾ 5¾	85/8 85/8	10 10	17% 18%	18¼ 19	91/4 95/16	9¾ 9⅓₁6	11 13	11 13	133 147	145 160
42	411/2	403/16	52%	53	51	7½	53/4	103/4	14½	201/4	211/8	913/16	105/16	15	15	163	176
48 54	46¾ 52	45 <sup>7</sup> / <sub>16</sub> 50 <sup>3</sup> / <sub>4</sub>	57 <sup>1</sup> / <sub>16</sub> 65 <sup>3</sup> / <sub>4</sub>	59 65	57 63	7½ 9	5¾ 5¾	10¾ 10¾	14½ 14½	21% 22 <sup>15</sup> / <sub>16</sub>	22 <sup>5</sup> / <sub>16</sub> 23 <sup>13</sup> / <sub>16</sub>	9 <sup>13</sup> / <sub>16</sub> 10 <sup>3</sup> / <sub>16</sub>	10 <sup>5</sup> / <sub>16</sub> 10 <sup>1</sup> / <sub>16</sub>	17 19	17 19	178 193	191 206
60 72	57 <sup>5</sup> / <sub>16</sub> 67 <sup>7</sup> / <sub>8</sub>	56 67¾	68% 79%	71 83	69 81	9 9½	5¾ 5¾	10¾ 10¾	14½ 16¾	24½ 26¾	24 <sup>15</sup> / <sub>16</sub> 27 <sup>1</sup> / <sub>4</sub>	10¾16 10¾16	10 <sup>11</sup> / <sub>16</sub> 10 <sup>11</sup> / <sub>16</sub>	21 25	21 25	209 227	222 240

Use washers on ½-inch bolts.
 Approximate distance to the top of the center roll of other idlers.

<sup>(2)</sup> Approximate distance to the top of the center roll of other idlers.

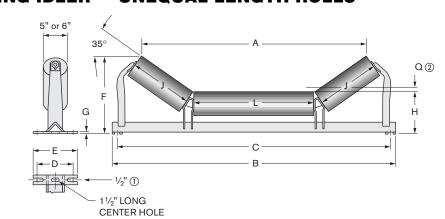
③ Available in ¼" roll wall thickness.

<sup>☐</sup> Shaded sizes are most commonly used and are more readily available.

<sup>3</sup> Available in ¼" roll wall thickness.

<sup>(4) .31&</sup>quot;-.72" belt width

# SERIES C and D 35° TROUGHING IDLER — UNEQUAL LENGTH ROLLS



REGREASABLE FACTORY SEALED

C5301 RG C5301 FS D5301 RG D5301 FS

5-Inch Steel Rolls

C6301 RG C6301 FS D6301 RG D6301 FS

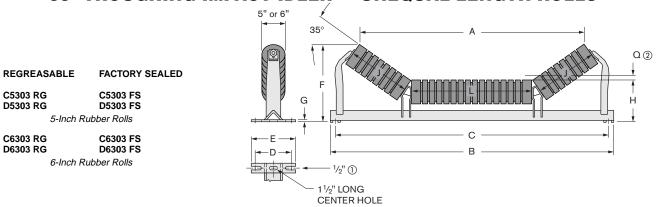
6-Inch Steel Rolls 3

#### Dimensions in Inches — Average Weight in Pounds

Belt	A _5",  _6",			D			I	F			н					Wgt.	
Width	_	0	В	С	Recom.	Min.	E	5"	6"	G	5"	6"	J	L	Q	(Seri	es C)
	Roll	Roll						Roll	Roll		Roll	Roll				5"	6"
30	303/16	295/87	41	39	71/2	53/4	91/4	1313/16	143/16	5/16	89/16	91/16	9	15	21/8	58	69
36	363/16	35%	47	45	71/2	53/4	91/4	137/8	141/4	5/16	811/16	93/16	9	21	21/8	69	78
42	42%	41%	53	51	71/2	53/4	91/5	143/16	149/16	5/16	9	91/2	9	27	21/8	77	88
48	483/16	47%	59	57	71/2	53/4	91/4	143/16	149/16	5/16	9	91/2	9	33	21/8	90	101
54	543/16	53%	651/2	63	9	6%	111/2	149/16	1415/16	3/8	91/4	93/4	9	39	21/8	102	115
60	603/16	59%	71½	69	9	6%	11½	149/16	1415/16	3/8	91/4	93/4	9	45	21/8	114	130
72	723/16	715/8	831/2	8-1	9	73/4	111/2	147/8	151/4	3/8	911/16	103/16	9	57	21/8	129	145

- ① Use washers on 1/2-inch bolts.
- ② Location of head pulley in relation to idler center roll.
- $\ensuremath{\mathfrak{J}}$  Available in  $\ensuremath{\mathfrak{I}}_4$  roll wall thickness.

# 35° TROUGHING IMPACT IDLER — UNEQUAL LENGTH ROLLS



#### Dimensions in Inches — Average Weight in Pounds

										-							
Belt		1	_	_	D			ı	F	_	ı	1	_	_	_		Wgt.
Width	5" Roll	6" Roll	В	С	Recom.	Min.	E	5" Roll	6" Roll	G	5" Roll	6" Roll	J	L	Q	(Seri	ies C) 6"
30	303/16	29%	41	39	71/2	53/4	91/4	1313/16	143/16	5/16	89/16	91/16	9	15	21/8	59	70
36	363/16	35%	47	45	71/2	53/4	91/4	137/8	141/4	5/16	811/16	93/16	9	21	21/8	70	79
42	42%	41%	53	51	71/2	53/4	91/4	143/16	14%16	5/16	9	91/2	9	27	21/8	79	90
48	483/16	47%	59	57	71/2	53/4	91/4	143/16	149/16	5/16	9	91/2	9	33	21/8	92	103
54	543/16	53%	651/2	63	9	63/8	111/2	149/16	1415/16	3/8	91/4	93/4	9	39	21/8	105	118
60	603/16	59%	711/2	69	9	6%	111/2	149/16	1415/16	3/8	91/4	93/4	9	45	21/8	117	133
72	723/16	71%	831/2	81	9	73/4	111/2	141/8	151/4	3/8	911/16	103/16	9	57	21/8	132	147

① Use washers on ½-inch bolts.

 $\ensuremath{\textcircled{2}}$  Location of head pulley in relation to idler center roll.

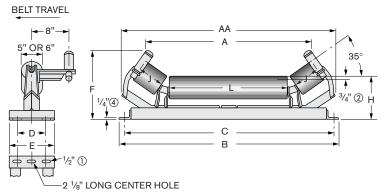
Contact Rexnord for load rating.

Contact Rexnord for load rating.

#### SERIES C and D

# 35° TROUGHING TRAINING IDLER — UNEQUAL LENGTH ROLLS

Positive Arm Type — Belt Travel One Direction Only



**REGREASABLE FACTORY SEALED** 

C5313 RG C5313 FS D5313 RG D5313 FS

5-Inch Steel Rolls

C6313 RG C6313 FS D6313 RG D6313 FS

6-Inch Steel Rolls 3

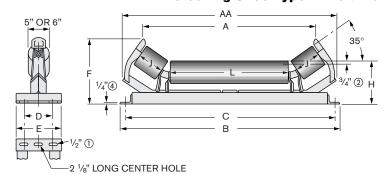
#### **Dimensions in Inches — Average Weight in Pounds**

Belt						D				ı	1			ldler	
Width	A	AA	В	С	Recom.	Min.	Max	E	F	5" Roll	6" Roll	J	L	(Seri	es C) 6"
30	311/4	421/8	41	39	7½	53/4	85%	10	175/16	91/4	93/4	9	15	135	147
36	371/4	481/8	47	45	71/2	53/4	85/8	10	17%	95/16	913/16	9	21	149	162
42	431/4	54%16	53	51	71/2	53/4	103/4	141/2	171/8	913/16	105/16	9	27	166	178
48	491/4	60%16	59	57	71/2	53/4	103/4	141/2	171/8	913/16	105/16	9	33	181	194
54	551/4	66%	65	63	9	53/4	10¾	141/2	181/4	103/16	1011/16	9	39	196	209
60	611/4	721/8	71	69	9	53/4	10¾	141/2	181/4	103/16	1011/16	9	45	212	225
72	721/4	851/4	83	81	91/2	53/4	10¾	161/2	181/4	103/16	1011/16	9	57	231	243

- (1) Use washers on ½-inch bolts.
- 2) Approximate distance to the top of the center roll of other idlers.
- 3 Available in 1/4" roll wall thickness.
- (4) .31"-.72" belt width

# 35° TROUGHING TRAINING IDLER — UNEQUAL LENGTH ROLLS

## **Actuating Shoe Type — Belt Travel Either Direction**



FACTORY SEALED REGREASABLE

Contact Rexnord for load rating.

C5311 RG C5311 FS D5311 RG D5311 FS

5-Inch Steel Rolls

C6311 RG C6311 FS D6311 RG D6311 FS

6-Inch Steel Rolls (3)

#### **Dimensions in Inches — Average Weight in Pounds**

									_	•							
Belt	-	A					D				F	ı	н				Wgt.
Width	5" Roll	6" Roll	AA	В	С	Recom.	Min.	Max.	E	5" Roll	6" Roll	5" Roll	6" Roll	J	L	(Seri	es C) 6"
30	31%	305/16	421/8	41	39	71/2	53/4	85/8	10	165/16	171/8	91/4	93/4	9	15	132	145
36	37%	365/16	481/8	47	45	71/2	53/4	85/8	10	16%	173/16	95/16	93/16	9	21	147	160
42	43%	465/16	541/8	53	51	71/2	53/4	10¾	141/2	16%	1711/16	913/16	105/16	9	27	163	176
48	49%	485/16	60%16	59	57	71/2	53/4	10¾	141/2	167/8	1711/16	913/16	105/16	9	33	178	191
54	55%	545/16	667/8	65	63	9	53/4	10¾	141/2	171/4	181/16	103/16	1011/16	9	39	193	206
60	61%	605/16	721/8	71	69	9	53/4	10¾	141/2	171/4	181/16	103/16	1011/16	9	45	209	222
72	73%	721/2	851/4	83	81	91/2	53/4	10¾	161/2	171/2	18%	103/16	1011/16	9	57	229	240

- 1) Use washers on ½-inch bolts.
- ② Approximate distance to the top of the center roll of other idlers.
- 3 Available in ¼" roll wall thickness.
- (4) .31"-.72" belt width

Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

Contact Rexnord for load rating.

# **SERIES C and D**

# 45° TROUGHING IDLER — EQUAL LENGTH ROLLS

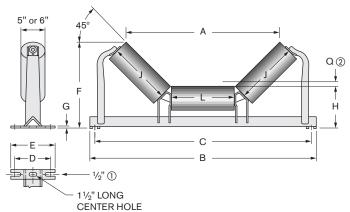
REGREASABLE FACTORY SEALED

C5400 RG C5400 FS D5400 RG D5400 FS

5-Inch Steel Rolls

C6400 RG C6400 FS D6400 RG D6400 FS

6-Inch Steel Rolls ③



Dimensions in Inches — Average Weight in Pounds

Belt	-	١.			D				F		·	1				Idler	Wgt.
Width	5" Roll	6" Roll	В	С	Recom.	Min.	E	5" Roll	6" Roll	G	5" Roll	6" Roll	J	L	Q	(Seri	es C) 6"
18	1711/16	17	29	27	71/2	53/4	91/4	13%	14	5/16	89/16	91/16	7	7	115/16	45	51
20	1911/16	19	31	29	71/2	53/4	91/4	13%	14	5/16	89/16	91/16	7	9	1 15/16	49	57
24	221/4	21%16	35	33	71/2	53/4	91/4	151/16	15%	5/16	89/16	91/16	9	9	21/2	53	62
30	271/16	26%	41	39	71/2	53/4	91/4	167/16	1613/16	5/16	89/16	91/16	11	11	37/8	61	72
36	3115/16	31¾16	47	45	71/2	5¾	91/4	1715/16	185/16	5/16	811/16	93/16	13	13	37/8	72	81
42	36¾	361/16	53	51	71/2	53/4	91/4	19%	20	5/16	9	9½	15	15	49/16	80	92
48	41%16	407/8	59	57	71/2	53/4	91/4	211/16	217/16	5/16	9	91/2	17	17	51/4	94	105
54	46%	4511/16	651/2	63	9	6%	111/2	227/8	233/16	3/8	91/4	93/4	19	19	5 <sup>15</sup> / <sub>16</sub>	106	119
60	511/4	501/2	711/2	69	9	6%	111/2	241/4	245/8	3/8	91/4	93/4	21	21	65/8	117	134
72	6015/16	601/4	831/2	81	9	73/4	111/2	271/2	2713/16	3/8	911/16	103/16	25	25	71/8	146	163

- 1) Use washers on 1/2-inch bolts.
- ② Location of head pulley in relation to idler center roll.
- $\ensuremath{\mathfrak{J}}$  Available in  $\ensuremath{\mathfrak{I}}_4$  roll wall thickness.

☐ Shaded sizes are most commonly used and are more readily available.

45° TROUGHING IMPACT IDLER — EQUAL LENGTH ROLLS

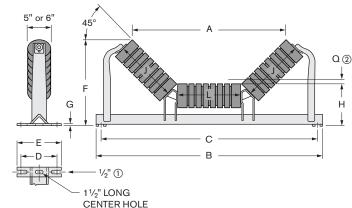
REGREASABLE FACTORY SEALED

C5402 RG C5402 FS D5402 RG D5402 FS

5-Inch Rubber Rolls

C6402 RG C6402 FS D6402 RG D6402 FS

6-Inch Rubber Rolls



## Dimensions in Inches — Average Weight in Pounds

Belt		4	_	_	D		_	ı	F		ŀ	1	_	_	_		Wgt.
Width	5" Roll	6" Roll	В	С	Recom.	Min.	E	5" Roll	6" Roll	G	5" Roll	6" Roll	J	L	Q	(Seri	es C) 6"
18	1711/16	17	29	27	7½	53/4	91/4	13%	14	5/16	8%16	91/16	7	7	115/16	47	54
20	1911/16	19	31	29	71/2	53/4	91/4	13%	14	5/16	89/16	91/16	7	9	1 15/16	51	60
24	221/4	21%16	35	33	71/2	53/4	91/4	151/16	15%	5/16	8%16	91/16	9	9	21/2	55	65
30	271/16	26%	41	39	71/2	53/4	91/4	167/16	16 <sup>13</sup> / <sub>16</sub>	5/16	8%16	91/16	11	11	33/16	64	75
36	3115/16	313/16	47	45	71/2	5¾	91/4	1715/16	18%	5/16	811/16	93/16	13	13	37/8	75	84
42	36¾	361/16	53	51	71/2	53/4	91/4	19%	20	5/16	9	91/2	15	15	49/16	84	96
48	41%16	407/8	59	57	71/2	53/4	91/4	211/16	217/16	5/16	9	91/2	17	17	51/4	98	109
54	46%	4511/16	651/2	63	9	63/8	111/2	221/8	233/16	3/8	91/4	93/4	19	19	5 <sup>15</sup> / <sub>16</sub>	110	123
60	511/4	501/2	711/2	69	9	6%	111/2	241/4	245/8	3/8	91/4	93/4	21	21	65/8	121	139
72	6015/16	601/4	831/2	81	9	73/4	111/2	271/2	2713/16	3/8	911/16	103/16	25	25	71/8	148	167

① Use washers on ½-inch bolts.

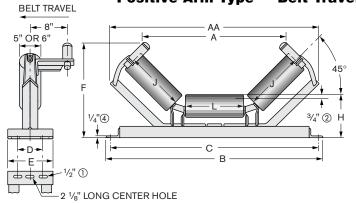
☐ Shaded sizes are most commonly used and are more readily available.

② Location of head pulley in relation to idler center roll.

#### SERIES C and D

## 45° TROUGHING TRAINING IDLER — EQUAL LENGTH ROLLS

#### Positive Arm Type — Belt Travel One Direction Only



REGREASABLE **FACTORY SEALED** 

C5412 RG C5412 FS D5412 RG

D5412 FS

5-Inch Steel Rolls

C6412 RG C6412 FS D6412 FS D6412 RG

6-Inch Steel Rolls (3)

#### **Dimensions in Inches — Average Weight in Pounds**

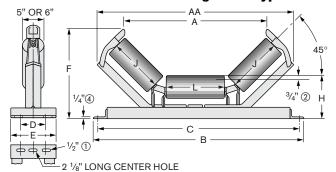
Belt						D				ı	1				Wgt.
Width	A	AA	В	С	Recom.	Min.	Max	E	F	5" Roll	6" Roll	J	L	(Seri	es C) 6"
18	17¾	31%	29	27	7½	53/4	85/8	10	171/16	91/4	93/4	7	7	106	118
20	19¾	337/8	31	29	71/2	53/4	85/8	10	171/16	91/4	93/4	7	9	111	123
24	22%16	36%16	35	33	71/2	53/4	85/8	10	181/2	91/4	93/4	9	9	122	134
30	27%	41%	41	39	71/2	53/4	85/8	10	20	91/4	93/4	11	11	137	149
36	323/16	461/4	47	45	71/2	53/4	85/8	10	21%	95/16	913/16	13	13	149	164
42	37	51%	53	51	7½	53/4	10¾	141/2	223/16	913/16	105/16	15	15	169	181
48	411/8	56%	59	57	71/2	53/4	103/4	141/2	243/4	913/16	105/16	17	17	183	196
54	4611/16	61%	65	63	9	53/4	10¾	141/2	261/2	103/16	1011/16	19	19	198	212
60	51½	667/16	71	69	9	53/4	10¾	141/2	2715/16	103/16	1011/16	21	21	215	227
72	601/4	76%	83	81	91/2	53/4	10¾	161/2	30½	103/16	1011/16	25	25	254	263

① Use washers on 1/2-inch bolts.

☐ Shaded sizes are most commonly used and are more readily available.

# 45° TROUGHING TRAINING IDLER — EQUAL LENGTH ROLLS

#### Actuating Shoe Type — Belt Travel Either Direction



REGREASABLE **FACTORY SEALED** 

C5410 RG C5410 FS D6410 RG C5410 FS

5-Inch Steel Rolls

C6410 RG C6410 FS D6410 RG D5410 FS

6-Inch Steel Rolls 3

Dimensions in Inches — Average Weight in Pounds

Belt		4					D				F	ı	Н				Wgt.
Width	5" Roll	6" Roll	AA	В	С	Recom.	Min.	Max.	E	5" Roll	6" Roll	5" Roll	6" Roll	J	L	(Seri	es C) 6"
18	181/4	16%	31%	29	27	71/2	53/4	85/8	10	163/16	1615/16	91/4	93/4	7	7	104	116
20	201/4	18%	33%	31	29	71/2	53/4	85/8	10	163/16	16 <sup>15</sup> / <sub>16</sub>	91/4	93/4	7	9	109	121
24	22%16	21½	35%16	35	33	71/2	53/4	85/8	10	179/16	185/16	91/4	93/4	9	9	120	132
30	2715/16	265/16	41%	41	39	71/2	53/4	85/8	10	191/16	193/4	91/4	93/4	11	11	135	147
36	32¾	311/8	461/4	47	45	71/2	53/4	85/8	10	207/16	211/4	95/16	913/16	13	13	147	162
42	37%16	3515/16	51%16	53	51	71/2	53/4	10¾	141/2	22%	231/8	913/16	105/16	15	15	165	178
48	42%	4013/16	56%	59	57	71/2	53/4	10¾	141/2	23¾	249/16	913/16	105/16	17	17	180	193
54	471/4	45%	61%	65	63	9	53/4	103/4	141/2	25%16	265/16	103/16	1011/16	19	19	195	208
60	521/16	507/16	667/16	71	69	9	53/4	103/4	141/2	27	273/4	103/16	1011/16	21	21	211	224
72	623/16	603/4	765/8	83	81	91/2	53/4	103/4	161/2	2913/16	30%16	103/16	1011/16	25	25	249	260

<sup>1)</sup> Use washers on 1/2-inch bolts.

☐ Shaded sizes are most commonly used and are more readily available.

<sup>2</sup> Approximate distance to the top of the center roll of other idlers. 3 Available in 1/4" roll wall thickness.

<sup>(4) .31&</sup>quot;-.72" belt width

<sup>2)</sup> Approximate distance to the top of the center roll of other idlers. 3 Available in 1/4" roll wall thickness.

<sup>4) .31&</sup>quot;-.72" belt width

# SERIES C and D

# 45° TROUGHING IDLER — UNEQUAL LENGTH ROLLS

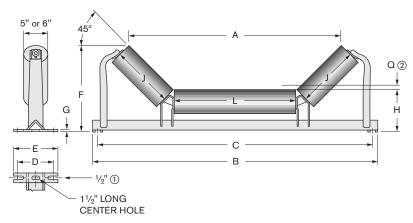
REGREASABLE FACTORY SEALED

C5401 RG C5401 FS D5401 RG D5401 FS

5-Inch Steel Rolls

C6401 RG C6401 FS D6401 RG D6401 FS

6-Inch Steel Rolls ③



#### **Dimensions in Inches — Average Weight in Pounds**

Belt				D				F		ı	н					Wgt.	
Width	5" Roll	6" Roll	В	С	Recom.	Min.	E	5" Roll	6" Roll	G	5" Roll	6" Roll	J	L	Q	E !!	es C) 6"
																э	
30	281/4	27%16	41	39	71/2	53/4	91/4	151/16	15%	5/16	89/16	91/16	9	15	21/2	59	70
36	341/4	33%16	47	45	71/2	53/4	91/4	151/8	157/16	5/16	811/16	93/16	9	21	21/2	75	79
42	401/4	39%16	53	51	71/2	53/4	91/4	157/16	15¾	5/16	9	91/2	9	27	21/2	82	91
48	461/4	45%16	59	57	71/2	53/4	91/4	157/16	15¾	5/16	9	91/2	9	33	21/2	91	101
54	521/4	51%16	651/2	63	9	6%	111/2	15 <sup>13</sup> / <sub>16</sub>	161/8	3/8	91/4	93/4	9	39	21/2	102	115
60	581/4	57%16	711/2	69	9	6%	111/2	15 <sup>13</sup> / <sub>16</sub>	161/8	3/8	91/4	93/4	9	45	21/2	114	130
72	701/4	69%16	831/2	81	9	73/4	111/2	15 <sup>13</sup> / <sub>16</sub>	161/8	3/8	911/16	103/16	9	57	21/2	141	157

- 1) Use washers on 1/2-inch bolts.
- 2 Location of head pulley in relation to idler center roll.
- ③ Available in ¼" roll wall thickness.

Contact Rexnord for load rating.

# 45° TROUGHING IMPACT IDLER — UNEQUAL LENGTH ROLLS

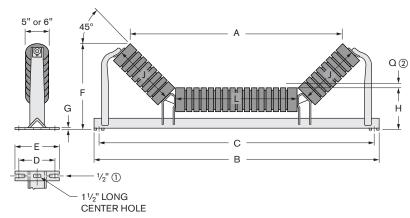
REGREASABLE FACTORY SEALED

C5403 RG C5403 FS D5403 RG D5403 FS

5-Inch Rubber Rolls

C6403 RG C6403 FS D6403 RG D6403 FS

6-Inch Rubber Rolls



## Dimensions in Inches — Average Weight in Pounds

Belt		4			D				<b>-</b>		ŀ	1					Wgt.
Width	5" Roll	6" Roll	В	С	Recom.	Min.	E	5" Roll	6" Roll	G	5" Roll	6" Roll	J	L	Q	(Seri	es C) 6"
30	281/4	27%16	41	39	71/2	53/4	91/4	151/16	15%	5/16	8%16	91/16	9	15	21/2	62	73
36	341/4	33%16	47	45	71/2	53/4	91/4	151/8	157/16	5/16	811/16	93/16	9	21	21/2	73	82
42	401/4	391/16	53	51	71/2	53/4	91/4	157/16	15¾	5/16	9	91/2	9	27	21/2	81	93
48	461/4	45%16	53	57	71/2	53/4	91/4	157/16	15¾	5/16	9	91/2	9	33	21/2	95	106
54	521/4	51%16	651/2	63	9	63/4	111/2	1513/16	161/8	3/8	91/4	93/4	9	39	21/2	106	119
60	581/4	57%16	71½	69	9	6%	111/2	1513/16	161//8	3/8	91/4	93/4	9	45	21/2	117	135
72	701/4	69%16	831/2	81	9	73/4	111/2	1513/16	161/8	3/8	911/16	103/16	9	57	21/2	143	161

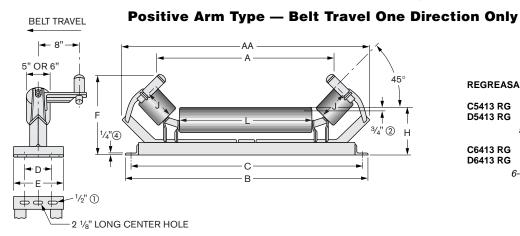
① Use washers on  $\frac{1}{2}$ -inch bolts.

 $\ensuremath{\textcircled{2}}$  Location of head pulley in relation to idler center roll.

Contact Rexnord for load rating.

#### SERIES C and D

# 45° TROUGHING TRAINING IDLER — UNEQUAL LENGTH ROLLS



REGREASABLE FACTORY SEALED

C5413 RG C5413 FS D5413 RG D5413 FS

5-Inch Steel Rolls

C6413 RG C6413 FS D6413 RG D6413 FS

6-Inch Steel Rolls (3)

Contact Rexnord for load rating.

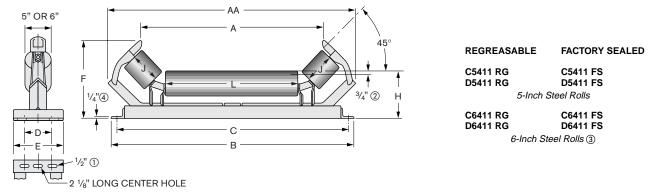
**Dimensions in Inches — Average Weight in Pounds** 

Belt	_		_	_		D		_		H	1	_	_		Wgt.
Width	A	AA	В	С	Recom.	Min.	Max	E	F	5" Roll	6" Roll	J	L	(Seri	es C) 6"
30	28%16	42%16	41	39	7½	53/4	85/8	10	181/2	91/4	93/4	9	15	135	147
36	34%16	48%	47	45	7½	53/4	85/8	10	189/16	95/16	913/16	9	21	147	162
42	40%16	551/16	53	51	71/2	53/4	10¾	141/2	191/16	913/16	105/16	9	27	166	180
48	46%16	611/16	59	57	71/2	53/4	10¾	141/2	191/16	913/16	105/16	9	33	180	193
54	529/16	671/2	65	63	9	53/4	10¾	141/2	197/16	103/16	1011/16	9	39	194	208
60	58%16	731/2	71	69	9	53/4	10¾	141/2	197/16	103/16	1011/16	9	45	211	223
72	69%	86	83	81	91/2	53/4	10¾	161/2	197/16	103/16	1011/16	9	57	248	259

- ① Use washers on 1/2-inch bolts.
- Approximate distance to the top of the center roll of other idlers.
- ③ Available in ¼" roll wall thickness.
- (4) .31"-.72" belt width

# 45° TROUGHING TRAINING IDLER — UNEQUAL LENGTH ROLLS

# **Actuating Shoe Type — Belt Travel Either Direction**



**Dimensions in Inches — Average Weight in Pounds** 

Belt		1					D			ı	F		1				Wgt.
Width	5" Roll	6" Roll	AA	В	С	Recom.	Min.	Max.	E	5" Roll	6" Roll	5" Roll	6" Roll	J	L	(Seri	es C) 6"
30	291/16	271/2	429/16	41	39	71/2	53/4	85/8	10	17%	185/16	91/4	9¾	9	15	133	145
36	351/16	33½	48%	47	45	71/2	53/4	85/8	10	17%	18%	95/16	913/16	9	21	145	160
42	411/16	39½	551/16	53	51	71/2	53/4	10¾	141/2	181/4	187/8	913/16	105/16	9	27	162	177
48	471/16	451/2	611/16	59	57	71/2	53/4	10¾	141/2	181/4	187/8	913/16	105/16	9	33	177	190
54	531/16	51½	671/2	65	63	9	53/4	10¾	141/2	18%	191/4	103/16	1011/16	9	39	191	204
60	591/16	57½	731/2	71	69	9	53/4	10¾	141/2	18%	191/4	103/16	1011/16	9	45	207	220
72	711/16	69½	805/16	83	81	91/2	53/4	10¾	161/2	18%	191/4	103/16	1011/16	9	57	241	255

- 1) Use washers on 1/2-inch bolts.
- ② Approximate distance to the top of the center roll of other idlers.
- ③ Available in 1/4" roll wall thickness.
- 4 .31"-.72" belt width

Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

Contact Rexnord for load rating.

# SERIES C and D RETURN STEEL OR RUBBER IDLER

**REGREASABLE FACTORY SEALED REGREASABLE FACTORY SEALED** 41/5" C5040 RG C5040 FS C5049 RG C5049 FS 1 D5040 RG D5040 FS D5049 RG D5049 FS 5" OR 6' 5-Inch Steel Roll 5-Inch Rubber Roll C В 3.25 C6040 RG C6040 FS C6049 RG C6049 FS D6040 RG D6040 FS D6049 RG D6049 FS 6-Inch Steel Roll ③ 6-Inch Rubber Roll 41/2" OPTIONAL REVERSE BEND BRACKET

#### Dimensions in Inches — Average Weight in Pounds

Belt Width		С	D				Idler Wgt. and Thickness (Series C)				
	В		Recom.	Min.	Max.	† L	5"		6"		
							Steel R	Rubber	Steel	Steel	Rubber
							.149"	1.47"	.165"	.250"	1.97"
18	29	27	5	3¾	61/4	21	22	32	33	41	39
20	31	29	5	33/4	61/4	23	24	32	35	44	39
24	35	33	5	3¾	61/4	27	26	38	38	49	47
30	41	39	5	33/4	61/4	33	32	49	44	58	57
36	47	45	5	33/4	61/2	39	37	57	50	56	66
42	53	51	5	33/4	61/4	45	42	64	56	75	75
48	59	57	5	33/4	61/4	51	47	73	62	83	84
<b>★</b> 54	65	63	5	33/4	61/4	57	58	85	70	95	92
<b>★</b> 60	71	69	5	33/4	61/4	63	63	90	79	107	100
<b>★</b> 72	83	81	5	33/4	61/4	75	74	106	93	126	116

<sup>1)</sup> Use washers on ½-inch bolts.

# **FLAT STEEL OR RUBBER IDLER**

REGREASABLE	FACTORY SEALED	REGREASABLE	FACTORY SEALED	41/4"		
C5020 RG D5020 RG	C5020 FS D5020 FS	C5025 RG D5025 RG	C5025 FS D5025 FS	3/16	6"	
5-Inch	Steel Roll	5-Inch	Rubber Roll	5" OR 6"		l il
C6020 RG D6020 RG	C6020 FS D6020 FS	C6025 RG D6025 RG	C6025 FS D6025 FS			
6-Inch Steel Roll ③		6-Inch	Rubber Roll	41/4	<u>"                                     </u>	
				8" - 3/ <sub>16</sub> "	- C - B -	
				1/2" ①		

## Dimensions in Inches — Average Weight in Pounds

Belt Width		c	D				Idler Wgt. and Thickness (Series C)				
	В		Recom.	Min.	Max.	t L	5"		6"		
							Steel	Rubber	Steel	Steel	Rubber
							.149"	1.47"	.165"	.250"	1.97"
18	29	27	5	33/4	61/4	21	22	32	33	41	39
20	31	29	5	33/4	61/4	23	24	32	35	44	39
24	35	33	5	33/4	61/4	27	26	38	38	49	47
30	41	39	5	33/4	61/4	33	32	49	44	58	57
36	47	45	5	33/4	61/2	39	37	57	50	56	66
42	53	51	5	33/4	61/4	45	42	64	56	75	75
48	59	57	5	33/4	61/4	51	47	73	62	83	84
<b>★</b> 54	65	63	5	33/4	61/4	57	58	85	70	95	92
<b>★</b> 60	71	69	5	33/4	61/4	63	63	90	79	107	100
<b>★</b> 72	83	81	5	33/4	61/4	75	74	106	93	126	116

① Use washers on 1/2-inch bolts.

<sup>2</sup> Available with 1½, 11¾ or 16½ inch drop.

<sup>3</sup> Available in 1/4" roll wall thickness.

<sup>☐</sup> Shaded sizes are most commonly used and are more readily available.

<sup>★</sup> These idlers are Series D only.

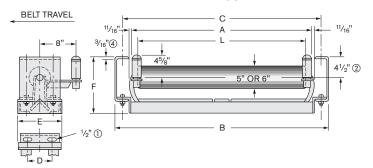
<sup>☐</sup> Shaded sizes are most commonly used and are more readily available.

<sup>★</sup> These idlers are Series D only.

#### SERIES C and D

#### **RETURN TRAINING IDLER**

#### Positive Arm Type — Belt Travel One Direction Only



REGREASABLE FACTORY SEALED

C5052 RG C5052 FS D5052 RG D5052 FS

5-Inch Steel Roll

C6052 RG C6052 FS D6052 RG D6052 RG

6-Inch Steel Roll ③

#### Dimensions in Inches — Average Weight in Pounds

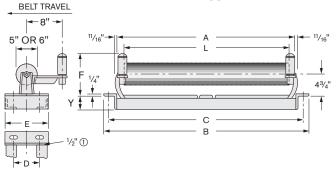
Relt	Belt	R	R			D	I				Idler W	gt. and Th (Series C	
Width	A	В	С	Recom.	Min.	Max.	E	F	L	5"	6"	6"	
					•••••	III CAI				.149"	.165"	.250"	
18 20 24 30 36	235% 255% 295% 355% 415%	29½ 31½ 35½ 41½ 47½	27 29 33 39 45	5 5 5 5 5	3 <sup>3</sup> / <sub>4</sub> 3 <sup>3</sup> / <sub>4</sub> 3 <sup>3</sup> / <sub>4</sub> 3 <sup>3</sup> / <sub>4</sub>	6 <sup>1</sup> / <sub>4</sub> 6 <sup>1</sup> / <sub>4</sub> 6 <sup>1</sup> / <sub>4</sub> 6 <sup>1</sup> / <sub>4</sub>	10 10 10 10 10	12½ 12½ 12½ 12½ 12½ 12½	21 23 27 33 39	90 102 110 126 148	105 117 129 141 153	114 127 140 155 169	
42 48 ★54 ★60 ★72	475/8 535/8 595/8 655/8 775/8	53½ 59½ 65½ 71½ 83½	51 57 63 69 81	5 5 5 5	3 <sup>3</sup> / <sub>4</sub> 3 <sup>3</sup> / <sub>4</sub> 3 <sup>3</sup> / <sub>4</sub> 3 <sup>3</sup> / <sub>4</sub>	6½ 6½ 6½ 6½ 6½ 6½	14½ 14½ 14½ 14½ 16½	13 13 13 13 13 <sup>15</sup> ⁄16	45 51 57 63 75	157 167 178 188 208	165 182 192 200 214	184 204 216 227 238	

- 1) Use washers on 1/2-inch bolts.
- ② Available with 1½ or 11¾ inch drop.
- 3 Available in 1/4" roll wall thickness.
- 4 1/4"-.72" belt width

- □ Shaded sizes are most commonly used and are more readily available.
- $\star$  These idlers are Series D only.

## **FLAT TRAINING IDLER**

### Positive Arm Type — Belt Travel One Direction Only



REGREASABLE FACTORY SEALED

5-Inch Steel Rol

C6031 RG C6031 FS D6031 RG D6031 FS

6-Inch Steel Roll (2)

Dimensions in Inches — Average Weight in Pounds

Belt					D						Idler Wo	gt. and Th (Series C	
Width	A	В	С	Recom.	Min.	Max.	E	F	L	Y	5"	6"	6"
				necom.	WIIII.	wax.					.149"	.165"	.250"
18	23%	28¾	27	5	33/4	61/4	10	9%	21	31/8	85	100	109
20	25%	30¾	29	5	33/4	61/4	10	9%	23	31/8	97	112	122
24	29%	34¾	33	5	33/4	61/4	10	9%	27	31/8	105	124	135
30	35%	40¾	39	5	33/4	61/4	10	9%	33	31/8	121	136	150
36	41%	46¾	45	5	33/4	61/4	10	9%	39	33/16	143	148	165
42	47%	52¾	51	5	33/4	61/4	141/2	9%	45	311/16	152	160	179
48	53%	58¾	57	5	33/4	61/4	141/2	93/8	51	311/16	162	177	199
<b>★</b> 54	59%	643/4	63	5	33/4	61/4	141/2	9%	57	39/16	173	187	211
<b>★</b> 60	65%	703/4	69	5	33/4	61/4	141/2	93/8	63	39/16	183	198	225
<b>★</b> 72	775/8	823/4	81	5	33/4	61/4	161/2	93/4	75	39/16	202	208	234

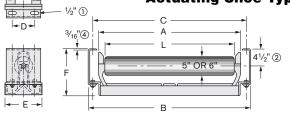
- ① Use washers on ½-inch bolts.

- $\hfill \square$  Shaded sizes are most commonly used and are more readily available.
- ★ These idlers are Series D only.

#### SERIES C and D

#### RETURN TRAINING IDLER

#### Actuating Shoe Type — Belt Travel Either Direction



**REGREASABLE** 

**FACTORY SEALED** 

C5051 RG D5051 RG C5051 FS D5051 FS

5-Inch Steel Roll

C6051 RG D6051 RG C6051 FS D6051 FS

6-Inch Steel Roll 3

#### Dimensions in Inches — Average Weight in Pounds

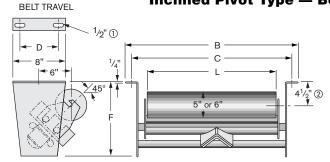
Belt											er wg: a. (Ser	t. & ies C)
Width	A	В	C	Recom.	Min.	Max.	E	F	L	5"	6"	6"
										.149"	.165"	.250"
18	241/8	291/2	27	5	33/4	61/4	10	121/2	21	88	102	111
20	261/8	31½	29	5	33/4	61/4	10	121/2	23	100	115	125
24	301/8	351/2	33	5 5	3¾	61/4	10	121/2	27	112	127	139
30	361/8	411/2	39	5	3¾	61/4	10	12½	33	125	139	153
36	421/8	471/2	45	5	3¾	61/4	10	12½	39	146	151	167
42	481/8	531/2	51	5	33/4	61/4	141/2	13	45	152	163	182
48	541/8	59½	57	5	33/4	61/4	141/2	13	51	165	180	201
<b>★</b> 54	601/8	651/2	63	5 5	3¾	61/4	141/2	13	57	176	190	214
<b>★</b> 60	661/8	711/2	69		3¾	61/4	141/2	13	63	186	201	227
<b>★</b> 72	781/8	83½	81	5	3¾	61/4	16½	1315/16	75	205	219	251

- Use washers on ½-inch bolts.
- ② Available with 1½ or 11¾ inch drop.
- 3 Available in 1/4" roll wall thickness.
- 4 1/4"-.72" belt width

- These idlers are Series D only.
- Shaded sizes are most commonly used and are more readily available.

#### RETURN TRAINING IDLER

#### Inclined Pivot Type — Belt Travel One Direction Only



#### REGREASABLE

**FACTORY SEALED** 

C5050 RG D5050 RG C5050 FS D5050 FS

5-Inch Steel Roll

C6050 RG

C6050 FS D6050 RG D6050 FS

6-Inch Steel Roll 3

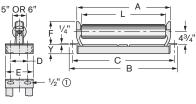
## **Dimensions in Inches — Average Weight in Pounds**

Polt	Belt Vidth B		D					Idler Wgt. & Thick. (Series C)			
Width	В	С	Recom.	Min.	Max.	F	L	5"	6"	6"	
			necoiii.	141111.	wax.			.149"	.165"	.250"	
18	29	27	5	33/4	61/4	143/16	21	81	74	83	
20	31	29	5	33/4	61/4	143/16	23	85	90	100	
24	35	33	5	33/4	61/4	143/16	27	94	106	118	
30	41	39	5	33/4	61/4	143/16	33	108	122	136	
36	47	45	5	3¾	61/4	143/16	39	119	136	152	
42	53	51	5	33/4	61/4	143/16	45	133	152	171	
48	59	57	5	33/4	61/4	143/16	51	146	167	188	
<b>★</b> 54	65	63	5	33/4	61/4	143/16	57	185	199	223	
<b>★</b> 60	71	69	5	33/4	61/4	143/16	63	200	215	281	
<b>★</b> 72	83	81	5	33/4	61/4	143/16	75	231	247	279	

- Use washers on ½-inch bolts.
- ② Available with 1½ or 11¾ inch drop.
- (3) Available in 1/4" roll wall thickness.
- ★ These idlers are Series D only.
- ☐ Shaded sizes are most commonly used and are more readily

## FLAT TRAINING IDLER

## **Actuating Shoe Type — Belt Travel Either Direction**



**REGREASABLE FACTORY SEALED** 

6-Inch Steel Roll 2

C5030 RG C5030 FS D5030 RG D5030 FS 5-Inch Steel Roll

C6030 RG C6030 FS D6030 RG D6030 FS

Idler Wgt. and D Thick. (Series C) Belt В C E L 5" 6" 6" Width Min. Max Recom .149 .165 .250 107 18 241/8 283/ 61/4 98 23 20 33/4 261/8 120 303/4 61/4 10 91/8 31/8 95 24 301/8 343/4 33/4 61/4 10 91/8 27 31/8 134 33 39 120 141 30 361/9 403/4 39 33/4 61/4 10 8 91/8 31/8 148 36 10 8 33/16 162 421/8 463/4 45 33/4 61/4 91/8 146 42 481/8 523/4 33/4 61/4 141/2 91/8 45 311/16 177 51 5 8 147 158 3<sup>1</sup>/<sub>16</sub> 3<sup>9</sup>/<sub>16</sub> 91/8 196 48 583/4 61/4 141/2 51 160 175 **★**54 601/8 643/4 63 5 33/4 61/4 141/2 8 91/8 57 171 185 209 703/4 33/4 39/16 222 **★**60 661/8 69 61/4 141/2 91/8 63 181 196 These idlers are Series D only.

Dimensions in Inches — Average Weight in Pounds

1) Use washers on 1/2-inch bolts. 2 Available in 1/4" roll wall thickness

- - Shaded sizes are most commonly used and are more readily available.

#### SERIES C and D

#### SPIRAL RETURN IDLER

#### **Belt Travel One Direction Only**

Rex Spiral Return Idlers minimize belt fleet and damage on the return belt which would otherwise result from material build-up. The correct direction of rotation is important and is clearly marked on each idler. The "V" formed by right-hand and left-hand spirals should point in the direction of rotation.

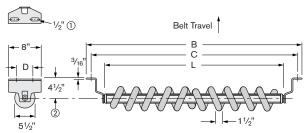
Dimensions in Inches — Average Weight in Pounds

Belt	_	_		D		_	ldler Wgt.
Width	В	С	Recom.	Min.	Max.	L	(Series C)
18 20 24 30 36	29 31 35 41 47	27 29 33 39 45	5 5 5 5 5	3 <sup>3</sup> / <sub>4</sub> 3 <sup>3</sup> / <sub>4</sub> 3 <sup>3</sup> / <sub>4</sub> 3 <sup>3</sup> / <sub>4</sub>	6½ 6½ 6¼ 6¼ 6¼ 6¼	21 23 27 33 39	20 23 25 29 34
42 48 ★54 ★60 ★72	53 59 65 71 83	51 57 63 69 81	5 5 5 5 5	3 <sup>3</sup> / <sub>4</sub> 3 <sup>3</sup> / <sub>4</sub> 3 <sup>3</sup> / <sub>4</sub> 3 <sup>3</sup> / <sub>4</sub>	6½ 6½ 6½ 6¼ 6¼ 6¼	45 51 57 63 75	40 45 58 67 85

- 1) Use washers on 1/2-inch bolts.
- ② Available with 1½, 11¾ or 16½ inch drop.

(3) 1/4"-.72" belt width

- ★ These idlers are Series D only.
- Shaded sizes are most commonly used and are more readily available



REGREASABLE

**FACTORY SEALED** 

C6042 RG D6042 RG C6042 FS D6042 FS

51/2-Inch Rubber Spiral Roll

51/2-Inch Rubber Spiral Roll

#### SPIRAL RETURN TRAINING IDLER

### Positive Arm Type — Belt Travel One Direction Only

#### Dimensions in Inches — Average Weight in Pounds

Belt					D					Idler		41.0
Width	A	В	С	Recom.	Min.	Max.	E	F	L	Wgt. (Series C)	<u> </u>	½" ①
18 20 24 30 36 42 48 *54 *60 *72	255/8 295/8 355/8 415/8 475/8 535/8 595/8 655/8	29½ 31½ 35½ 41½ 47½ 53½ 59½ 65½ 71½ 83½	27 29 33 39 45 51 57 63 69 81	5555555555	3 <sup>3</sup> / <sub>4</sub> 3 <sup>3</sup> / <sub>4</sub>	6½ 6½ 6½ 6½ 6½ 6½ 6¼ 6¼ 6¼ 6¼ 6¼ 6¼	10 10 10 10 10 14½ 14½ 14½ 14½ 16½	13 13	21 23 27 33 39 45 51 57 63 75	88 98 110 123 135 143 159 169 179 197	5½" 8"  BELT TRAVEL	3/16"3
① Use ② Avail inch	able v drop.	vith 13	₂ or 1			□ Shad	ed size		nost	D only. commonly dily	<del></del>	REGREASABLE         FACTORY SEALED           C6057 RG         C6057 FS           D6057 RG         D6057 FS

### **SPIRAL RETURN TRAINING IDLER**

#### Inclined Pivot Type — Belt Travel One Direction Only

**Dimensions in Inches — Average Weight in Pounds** 

Belt	_	_		D		_	_	Idler
Width	В	С	Recom.	Min.	Max.	F	L	Wgt. (Series C)
18 20 24 30 36	29 31 35 41 47	27 29 33 39 45	5 5 5 5 5	3 <sup>3</sup> / <sub>4</sub> 3 <sup>3</sup> / <sub>4</sub> 3 <sup>3</sup> / <sub>4</sub> 3 <sup>3</sup> / <sub>4</sub>	6½ 6½ 6¼ 6¼ 6¼ 6¼	14 <sup>3</sup> / <sub>16</sub> 14 <sup>3</sup> / <sub>16</sub> 14 <sup>3</sup> / <sub>16</sub> 13 <sup>3</sup> / <sub>16</sub> 14 <sup>3</sup> / <sub>16</sub>	21 23 27 33 39	76 81 90 104 115
42 48 ★54 ★60 ★72	53 59 65 71 83	51 57 63 69 81	5 5 5 5 5	3 <sup>3</sup> / <sub>4</sub> 3 <sup>3</sup> / <sub>4</sub> 3 <sup>3</sup> / <sub>4</sub> 3 <sup>3</sup> / <sub>4</sub>	6½ 6½ 6¼ 6¼ 6¼ 6¼	14 <sup>3</sup> / <sub>16</sub> 14 <sup>3</sup> / <sub>16</sub> 14 <sup>3</sup> / <sub>16</sub> 14 <sup>3</sup> / <sub>16</sub>	45 51 57 63 75	130 144 173 188 215

- 1) Use washers on 1/2-inch bolts.
- (2) Available with 11/2 or 113/4 inch drop.

В - D **-**-6" BELT TRAVEL

REGREASABLE

FACTORY SEALED

C6053 RG D6053 RG

C6053 FS D6053 FS

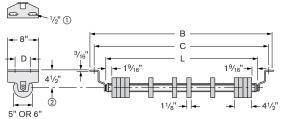
51/2-Inch Rubber Spiral Roll

Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.

★ These idlers are Series D only.

## SERIES C and D DISC RETURN IDLER

Rex Disc Return Idlers minimize belt misalignment which can cause damage to the belt, resulting from material build-up on the return idler rolls. Available with rubber, ceramic or urethane discs.



Four discs on each end is standard

REGREASABLE	FACTORY	SEALED
REGREASABLE	: FACIURI	SEALED

C5043 RG C5043 FS D6043 RG D5043 FS 5-Inch Disc Roll

C6043 RG C6043 FS D6043 RG D6043 FS 6-Inch Disc Roll

#### Dimensions in Inches — Average Weight in Pounds

Belt	В	С		D			No. of	ldler (Seri	
Width		•	Recom.	Min.	Max.	_	Discs	5"	6"
18	29	27	5	3¾	61/4	21	9	20	26
20	31	29	5	33/4	61/4	23	9	22	28
24	35	33	5 5	33/4	61/4	27	10	24	30
30	41	39		3¾	61/4	33	11	27	34
36	47	45	5	3¾	61/4	39	12	31	37
42	53	51	5	33/4	61/4	45	13	35	42
48	59	57	5	3¾	61/4	51	14	41	48
<b>★</b> 54	65	63	5 5	3¾	61/4	57	15	49	56
<b>★</b> 60	71	69	5	33/4	61/4	63	16	54	62
<b>★</b> 72	83	81	5	3¾	61/4	75	18	65	73

- ① Use washers on 1/2-inch bolts.
- 2 Available with 11/2, 113/4 or 161/2 inch drop.
- ★ These idlers are Series D only.
- ☐ Shaded sizes are most commonly used and are more readily available.

Dimensions in Inches — Average Weight in Pounds

61/4 10

61/4

61/4 10

61/4 10

61/4

61/4

61/4

61/4

E

10

10

141/2

141/2 13

141/2

141/2

161/2

121/2

21/2

121/2

121/2

13

13 13

D

Recom.

5

5

5 5

Min. Max

33/

33/4

33/4

33/4

33/4

33/4

33/4

33/4

ldler Wat.

(Series C)

6"

97

109

134

146

159

5"

94

106

118

131

143

156

167

183 195

23

33

39

45

51

57

63

No.

of Discs

10

12

13

14

15

16

## DISC RETURN TRAINING IDLER

## Positive Arm Type — Belt Travel One Direction Only

255/8

295/8

355/8

415%

475/8

53%

59%

655/8

Belt

Width

18 235/8

20

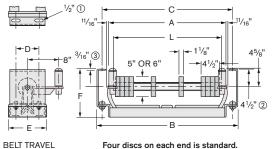
30

36

42

48

**★**60



REGREASABLE

C5056 RG C5056 FS D5056 RG D5056 FS

5-Inch Disc Roll

6-Inch Disc Roll

C6056 RG C6056 FS D6056 RG D6056 FS

**FACTORY SEALED** 

1) Use washers on 1/2-inch bolts. 2 Available with 1½ or 11¾ inch drop.

В

291/2 27

311/2

411/2 39

471/2

53½ 51

591/2 57

651/2 63

711/2

C

29

45

69

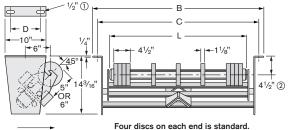
(3) 1/4"-.72" belt width

★ These idlers are Series D only.

☐ Shaded sizes are most commonly used and are more readily available.

### **DISC RETURN TRAINING IDLER**

#### Inclined Pivot Type — Belt Travel One Direction Only



**FACTORY SEALED** 

BELT TRAVEL

C5054 FS C5054 RG D5054 RG D5054 FS 5-Inch Disc Roll

**REGREASABLE** 

C6054 RG C6054 FS D6054 RG D6054 FS 6-Inch Disc Roll

## Dimensions in Inches — Average Weight in Pounds

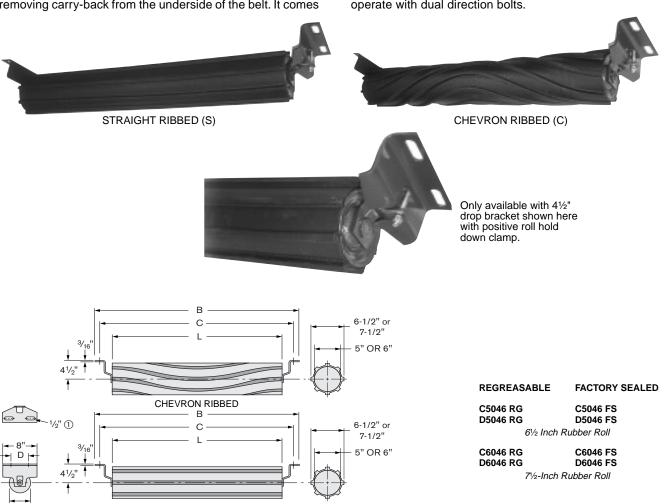
Belt	В	С		D		L	No. of	Idler Wgt. (Series C)		
Width	-		Recom.	Min.	Max.	-	Discs	5"	6"	
18	29	27	5	3 <sup>3</sup> / <sub>4</sub>	6½	21	9	67	69	
20	31	29	5	3 <sup>3</sup> / <sub>4</sub>	6¼	23		69	71	
24 30	35 41	33 39	5 5 5	3 <sup>3</sup> / <sub>4</sub> 3 <sup>3</sup> / <sub>4</sub>	6½ 6¼	27 33	10 11	73 80	76 83	
36	47	45	5	3¾	61/4	39	12	106	109	
42	53	51	5	3¾	61/4	45	13	116	120	
48	59	57	5	3 <sup>3</sup> / <sub>4</sub>	6½	51	14	127	131	
★54	65	63	5	3 <sup>3</sup> / <sub>4</sub>	6¼	57	15	161	165	
★60	71	69	5	3¾	61/4	63	16	174	178	
★72	83	81	5	3¾	61/4	75	18	197	202	

- 1) Use washers on 1/2-inch bolts.
- 2) Available with 11/2 or 113/4 inch drop.
- ★ These idlers are Series D only.
- ☐ Shaded sizes are most commonly used and are more readily available.

## SERIES C and D RIBBED COVERED RETURN IDLER

The REX RIBBED COVERED RETURN IDLERS are standard Rex return idlers covered with a tough extruded, one piece, ribbed rubber sleeve. The sleeve is offered in either a **straight-ribbed** or **chevron** pattern. The **straight-ribbed** idler acts as an effective belt beater removing carry-back from the underside of the belt. It comes

complete with special hangers for longer life. The **chevron ribbed** cover also removes material but runs smoothly without idler build-up making an effective return idler for severe operating conditions. Both styles offer "rubber on rubber" belt protection, prevent idler build-up, remove carry back and operate with dual direction bolts.



#### Dimensions in Inches — Average Weight in Pounds

Belt				D			Idler Wgt. (Series C)   6½"   7½"   Roll   33   39   42   39   47   48   56		
Width	В	С	Recom.	Min.	Max.	L			
18 20 24 30 36	29 31 35 41 47	27 29 33 39 45	55555	3 <sup>3</sup> / <sub>4</sub> 3 <sup>3</sup> / <sub>4</sub> 3 <sup>3</sup> / <sub>4</sub> 3 <sup>3</sup> / <sub>4</sub>	6½ 6½ 6½ 6½ 6½ 6½	21 23 27 33 39	35 39	42	
42 48 ★54 ★60 ★72	53 59 65 71 83	51 57 63 69 81	5 5 5 5	3 <sup>3</sup> / <sub>4</sub> 3 <sup>3</sup> / <sub>4</sub> 3 <sup>3</sup> / <sub>4</sub> 3 <sup>3</sup> / <sub>4</sub>	6½ 6½ 6½ 6½ 6½	45 51 57 63 75	63 70 84 92 98	74 83 92 100	

① Use washers on ½-inch bolts.

5" OR 6'

Add suffix "C" for chevron and "S" for straight, i.e. 48-C6046RG-S.

STRAIGHT RIBBED

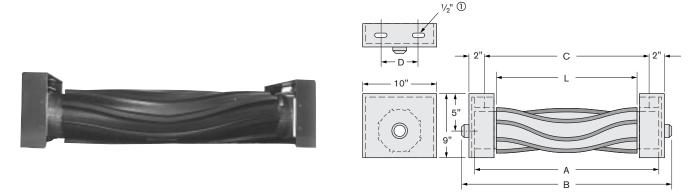
- $\hfill\square$  Shaded sizes are most commonly used and are more readily available.
- ★ These idlers are Series D.

#### **SERIES D**

#### REX RIBBED® TRAINING IDLER

The REX RIBBED TRAINING IDLER functions by sensing misalignment and immediately reacting to it. A Rex cartridge self-aligning roller bearing centered inside the rubber covered steel roll provides a rugged pivot. The cartridge bearing is well protected with "M" seals and by its location inside the roll. The tough ribbed rubber cover helps eliminate material build-up. The REX RIBBEDTRAINING IDLER is especially effective on reversing conveyors.

Model D6058 7<sup>1</sup>/<sub>2</sub>-Inch Rubber Roll



The REX RIBBED TRAINING IDLER utilizes a steel six inch diameter hollow tube. This tube is placed into a fluted rubber sleeve which is 7½" diameter. The rubber sleeve has a chevron pattern for superior training.

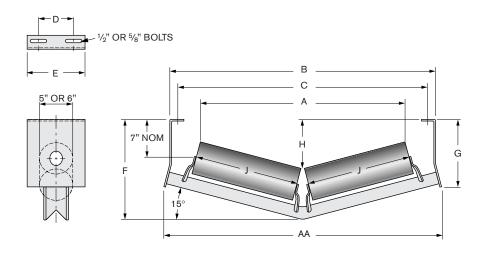
#### Dimensions in Inches — Average Weight in Pounds

Belt	A B	В	В	В	_		D			Idler
Width	A	В	С	Recom.	Min.	Max.	L	Wgt.		
24	36	38½	33	4	35/16	811/16	291/2	93		
30	42	441/2	39	4	35/16	811/16	351/2	103		
36	48	50½	45	4	35/16	811/16	411/2	115		
42	54	56½	51	4	35/16	811/16	471/2	127		
48	60	62½	57	4	35/16	811/16	531/2	138		
54	66	681/2	63	4	35/16	811/16	591/2	154		
60	72	74½	69	4	35/16	811/16	651/2	165		
72	84	861/2	81	4	35/16	811/16	771/2	183		

① Use washers on ½" bolts.

<sup>☐</sup> Shaded sizes are most commonly used and are more readily available.

# SERIES C and D V – RETURN IDLER – 15° Factory Sealed



C5140V15 FS

D5140V15 FS

5-Inch Disc Roll

C6140V15 FS

D6140V15 FS

6-Inch Disc Roll

#### Dimensions in Inches — Average Weight in Pounds

Belt		A					A					H	ı		ldler	
Width	5" Roll	6" Roll	AA	В	С	Recom. Min. Max	E	F	G	5" Roll	6" Roll	J	(Serie	es C) 6"		
18	21½	211/4	321/4	30	27	61/4	33/4	81/2	10	161/4	12½	71/2	7	11	59	62
20	21½	211/4	341/4	32	29	61/4	33/4	81/2	10	161/4	121/2	71/2	7	11	60	63
24	25%	251/8	381/4	36	33	61/4	33/4	81/2	10	163/4	121/2	8	71/2	13	66	70
30	331/8	327/8	441/4	42	39	61/4	33/4	81/2	10	173/4	121/2	9	81/2	17	76	81
36	37	36¾	501/4	48	45	61/4	3¾	81/2	10	18½	12½	9%	91/8	19	83	88
42	443/4	441/2	561/4	54	51	61/4	33/4	81/2	10	191/4	12½	10½	10	23	93	100
48	481/2	481/4	621/4	60	57	61/4	33/4	81/2	10	20	121/2	111/4	10¾	25	99	107
54	561/4	56	681/4	66	63	61/4	33/4	81/2	10	21	121/2	121/8	11%	29	110	119
60	64	63¾	741/4	72	69	61/4	3¾	81/2	10	21¾	121/2	127/8	12%	33	120	130
72	75%	75%	861/4	84	81	61/4	33/4	81/2	10	221/2	121/2	13¾	131/4	39	137	149

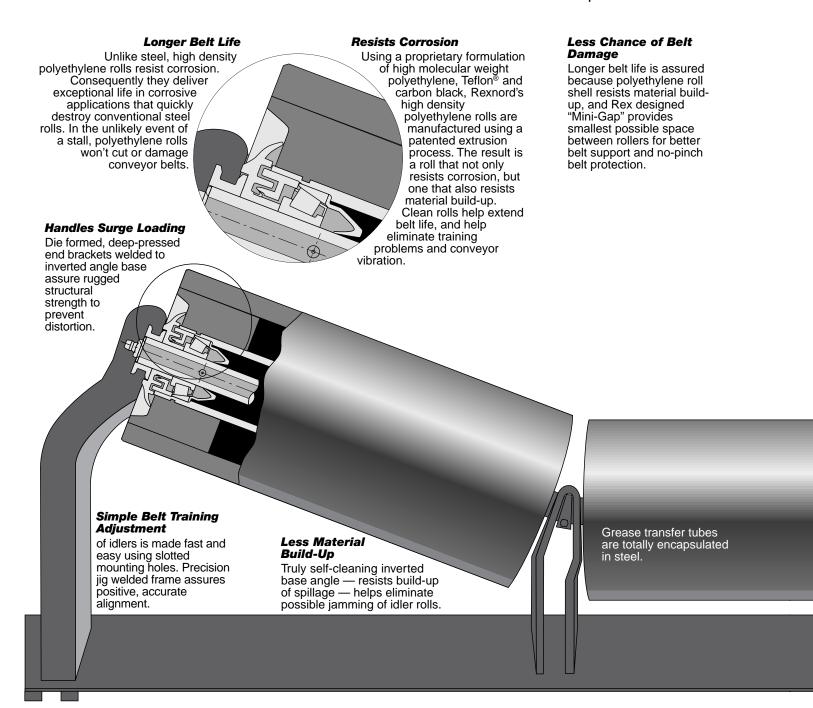
Available in: Rubber Disk, Rubber Roll, Steel ¼" wall in 6" diameter, Rex Ribbed Covered Roll, Polyethylene Roll and Urethane, Ceramic or Rubber Coated Roll. Part number example: 36 C6140V15 FS

## Series B+, C and D

(5" Roll diameter only for B+)

## POLYETHYLENE ROLL IDLERS Regreasable or Factory Sealed

A durable roll shell that resists corrosion and material build-up.



## Regreasable Idlers

#### **Better Protection Against Abrasives and Moisture**

Rex offers a special combination labyrinth with wiping seal and protective outer shield for your operating environment. This seal has five hard-to-get-through passages filled with grease to block contaminants from the roller bearings. The outer and inner seals are close tolerance injection molded nonmetallic. The labyrinth/shield seal is particularly excellent for long overland horizontal conveyors, because of its low friction torque or for applications where water is present or when frequent washdowns are required.

## Series B+, C and D

(5" Roll diameter only for B+)

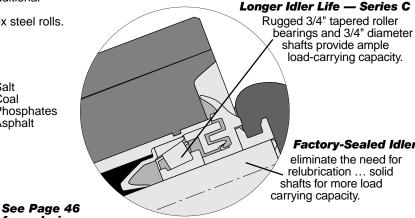
## **POLYETHYLENE ROLL IDLERS** Regreasable or Factory Sealed

#### Other Features Include:

- A wide variety of available sizes in 5 and 6-inch diameters and 18- to 72-inch widths.
- Galvanized frames with plated hardware for additional corrosion protection (optional).
- Polyethylene rolls are interchangeable with Rex steel rolls.

#### **Typical Applications:**

- Chemicals
- Chemical compounds
- Acid
- Coke
- Oil
- Tar sands
- Pulp & paper
- Wood Chips
- Salt
- Coal Phosphates
- Asphalt



**Factory-Sealed Idlers** eliminate the need for

Series D

1" diameter shafts.

(See Page 11)

relubrication ... solid shafts for more load carrying capacity.

for ordering information. Refer to pages 22 thru 42 for

dimensional data.

#### **Positive Roll Hold Down**

Assures proper positioning and roll retention during shipment and installation, yet is easily removed for lift-out roll replacement.

## Interchangeability

No need to cut base pads. Designed with slotted holes for easy adjustment — built to fit existing conveyor frame without cutting and fitting – conforms to CEMA standards.

## **Factory-Sealed Idlers**

#### **Better Protection Against Abrasives**

Rex offers a special combination labyrinth with wiping seal and protective outer shield for your operating environment. This seal has five hard-to-get-through passages filled with grease to block contaminants from the roller bearings. The outer and inner seals are close tolerance injection molded nonmetallic. This product will provide excellent service in most environments and where minimum maintenance can be provided. Solid shafts are standard.

## POLYETHYLENE ROLL IDLERS ORDERING INFORMATION — ORDER BY MODEL NUMBER

DECORIDEION	MODEL N	UMBER ◆
DESCRIPTION	5" Roll (B+, C and D)	6" Roll (C and D)
Flat	X5027 FS	X6027 FS
Flat -Training - Actuating Shoe	X5035 FS	X6035 FS
Flat - Training- Positive Arm	X5036 FS	X6036 FS
Return	X5047 FS	X6047 FS
Return - Training - Positive Arm	X5059 FS	X6059 FS
Return - Training - Actuating Shoe	X5070 FS	X6070 FS
20° Troughing	X5206 FS	X6206 FS
20° Troughing - Training - Actuating Shoe	X5218 FS	X6218 FS
20° Troughing - Training - Positive Arm	X5264 FS	X6264 FS
35° Troughing	X5306 FS	X6306 FS
35° Troughing -Training - Actuating Shoe	X5318 FS	X6318 FS
35° Troughing- Training - Positive Arm	X5364 FS	X6364 FS
45° Troughing- Training - Positive Arm	X5406 FS	X6406 FS
45° Troughing- Training - Actuating Shoe	X5418 FS	X6418 FS
45°Troughing - Training - Positive Arm	X5464 FS	X6464 FS

If galvanized frame required; specify "galvanized frame" Insert CEMA Classification for "X".

◆ FS is factory sealed; specify RG for regreasable.

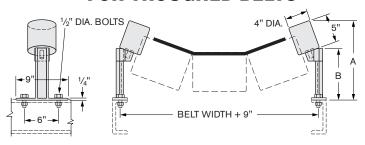
## **SIDE GUIDE IDLERS**

The use of side guide idlers is not normally recommended. There are some applications where conditions may require their use. On a new installation, side guide idlers are sometimes installed during the belt training period and then removed before the conveyor is placed in actual operation.

Side guide idlers tend to cause belt-edge wear. Training idlers are much preferred to assure proper belt alignment since they do not damage the belt.

Factory sealed ball bearings insure free roll rotation to keep belt edge wear to a minimum.

## FOR TROUGHED BELTS



Dimensions in Inches — Average Weight in Pounds

	2	20° Idler	s					35° I	dlers			
	Id	ller Seri	es					Idler	Series			
Side Guide Part No.	B, B+	C,	D	A	В	ldler Wgt. Lbs.	Side Guide Part No.	B, B+	C, D	A	В	ldler Wgt.
	B, B+	5	6			3		D, D+	, D			
	Belt Widths						Belt V	Vidths				
611-20444	18-20	_	_	131/8	725/32	9.2	611-20445	18-20	_	15½	107/16	10.3
601-3327	24-36	18-20	18-20	1411/32	9%2	9.4	611-20446	24-30	18-20	173/32	123/32	10.6
601-3328	42	24-36	24-30	15¾	1011/16	10.0	601-3333	36	24-30	181/4	137/16	10.9
601-3329	48	42-48	36-48	17¹5⁄₁6	127/8	10.4	601-3334	42	36	205/32	1511/32	11.2
601-3330	_	54-60	54-60	1911/16	14%	10.8	601-3335	48	42-48	223/16	17%	11.9
							601-3336	_	54-60	24¾	19¹5⁄₁6	13.1

 $<sup>45^{\</sup>circ}$  Side Guide Idlers also available upon request.

## SIDE GUIDE IDLERS

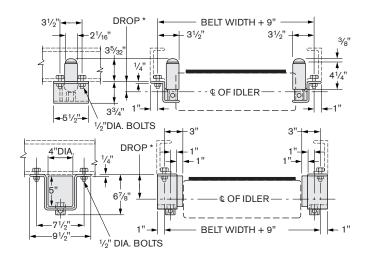
## **FOR RETURN BELTS**

Side Guide	Idler Series	ldler
Part No.	All Belt Sizes	Wgt.
601-3518	B, B+ C, D	6.0

<sup>\*</sup> For use with 11/2" drop brackets

Side Guide	Idler Series	ldler
Part No.	All Belt Sizes	Wgt.
601-3519	C, D	10.0

<sup>\*</sup> For use with 41/2" drop brackets

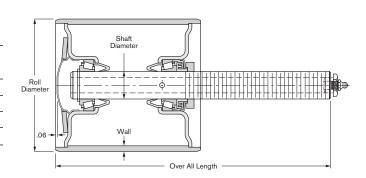


## FOR FLEX WALL RETURN BELTS

Regreasable or factory sealed.

Side Guide	Diame	eter ①	Longth	Over	Wall	Weight
Part No.	Shaft	Roll	Length	All Length	Thickness	weight
611-21651	0.75	5	5.25	10	0.149	8
611-21963	0.75	4	5	10	0.149	6.7
611-22131	0.75	6	5.75	10	0.165	10
611-22132	0.75	6	5.75	10	0.25	11.1

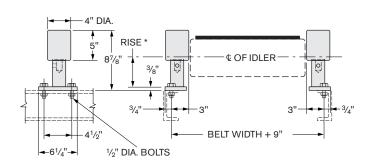
<sup>1)</sup> Thread is 16 UNF.



## **FOR FLAT BELTS**

Side Guide	Idler Series	ldler
Part No.	All Belt Sizes	Wgt.
601-3520	B C, D	17.0

<sup>\*</sup> For use with 41/4" rise brackets



All items are normally available from stock

## Series E — CEMA E 20°, 35° and 45° Trough — 6" and 7" Roll Diameter Regreasable or Factory Sealed

#### Increased Idler Capacity with Tapered Roller Bearings

Precision tapered roller bearings and 11/4" diameter shafts assure freer-turning rolls and less belt wear.

#### **Maintainance Cost Reduced**

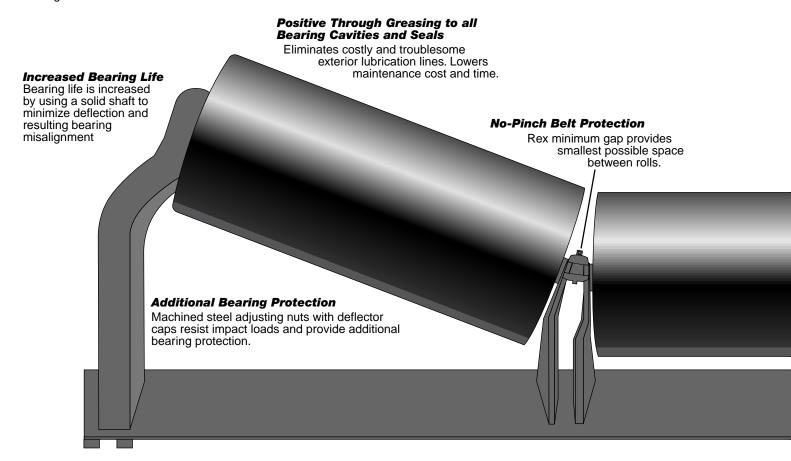
Single point grease through lubrication with relief fitting and center tube minimizes maintenance cost.

#### Better Protection Against Abrasives and Moisture

Triple-labyrinth cartridge type grease seal protects bearings.

#### **Roll Shaft Locks**

Heavy end retainer provides locking of roll shaft.



#### No Need to Cut or Fit Base Pads

Pads are designed to fit existing conveyor frames without recutting and fitting. Meet all CEMA standards.

#### **Handles Surge Loading**

Die-pressed, deep formed end brackets of rugged cross section give solid support and idler roll alignment.

## Series E — CEMA E 20°, 35° and 45° Trough — 6" and 7" Roll Diameter Regreasable or Factory Sealed

#### Longer Roll Life

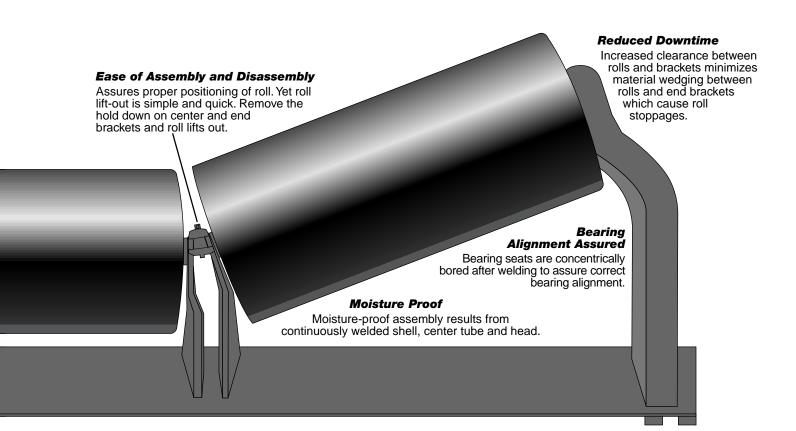
Superior sealing protection and true concentricity of rolls assure longer roll life under severest operating conditions.

#### **Moisture Proof Assembly**

Rigid construction and moisture-proof assembly result from continuously welded center tube joint.

#### **No Lubrication Required**

Factory lubricated and sealed idlers can be furnished as an optional feature, replacing the standard fittings with pipe plugs.



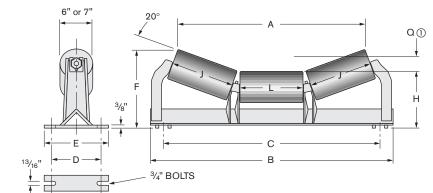
#### Reduces Roll Damage

Inverted angle base prevents build-up of spillage ... eliminates possible jamming of idler rolls.

#### Ease of Maintainance

Jig welded frame assures positive, accurate roll alignment. Slotted mounting holes in base pad simplify adjustments.

## SERIES E 20° TROUGHING IDLER — EQUAL LENGTH ROLLS



REGREASABLE FACTORY SEALED

E6200 RG E6200 FS 6-Inch Steel Rolls

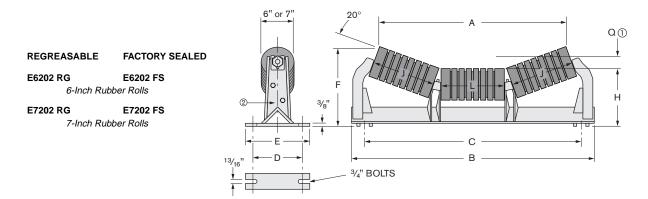
E7200 RG E7200 FS 7-Inch Steel Rolls

Dimensions in Inches — Average Weight in Pounds

Belt		A			D		F	•		1				Idler	Wgt.
Width	6" Roll	7" Roll	В	С	Min.	E	6" Roll	7" Roll	6" Roll	7" Roll	J	L	Q(1)	6" Roll	7" Roll
36	41	40%	501/2	45	9	12	15%	15¾	10½	11	139/16	13%16	17/8	140	168
42	46¾	46%	56	51	9	12	16	161/2	10½	11	15%16	15%16	21/4	154	187
48	521/2	521/8	62	57	9	12	16¾	171/8	10½	11	179/16	179/16	21/2	167	203
54	58%	58	68	63	9	12	17%	171/8	10½	11	19%	19%	3	180	220
60	631/2	631/8	74	69	9	12	18	181/2	10½	11	21%	21%	31/4	192	236
72	74%	741/4	86	81	9	12	201/8	201/2	111/4	113/4	251/4	251/4	31/2	233	285
84	861/8	85¾	98	93	111/2	141/2	221/4	225/8	12	121/2	291/4	291/4	45/8	304	363
96	97%	971/4	110	105	111/2	141/2	23%	24	12	121/2	331/4	331/4	51/4	337	406

① Location of head pulley in relation to idler center roll.

## 20° TROUGHING IMPACT IDLER — EQUAL LENGTH ROLLS



 $\ \ \, \textbf{Dimensions in Inches} - \textbf{Average Weight in Pounds} \\$ 

Belt	1	4			D		F		Н	ı				Idler	Wgt.
Width	6" Roll	7" Roll	В	С	Min.	E	6" Roll	7" Roll	6" Roll	7" Roll	J	L	Q(1)	6" Roll	7" Roll
36	4011/16	40%	501/2	45	9	12	151/4	1511/16	107/16	1015/16	131/16	131/16	17/8	145	161
42	467/16	461/8	56	51	9	12	15 <sup>15</sup> /16	16%	101/16	1015/16	151/16	151/16	21/4	165	183
48	521/4	51%	62	57	9	12	16%	171/16	101/16	1015/16	171/16	171/16	21/2	182	202
54	581/8	5713/16	68	63	9	12	175/16	173/4	101/16	1015/16	191/8	191/8	3	199	222
60	633/16	627/8	74	69	9	12	171/8	18%	101/16	1015/16	20%	20%	31/4	214	239
72	74%	74	86	81	9	12	1915/16	207/16	113/16	1111/16	24¾	24¾	3½	265	294
84	85%	85%16	98	93	11½	141/2	221/16	221/2	1115/16	127/16	28¾	28¾	45/8	364	397
96	973/8	971/16	110	105	111/2	141/2	237/16	237/8	1115/16	127/16	32¾	323/4	51/4	407	444

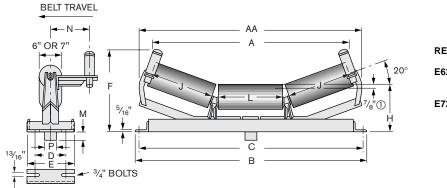
 $<sup>\</sup>ensuremath{\textcircled{\scriptsize 1}}$  Location of head pulley in relation to idler center roll.

② Demountable end brackets.

#### **SERIES E**

## 20° TROUGHING TRAINING IDLER — EQUAL LENGTH ROLLS

Positive Arm Type — Belt Travel One Direction Only



REGREASABLE FACTORY SEALED

E6212 RG E6212 FS

6-Inch Steel Rolls

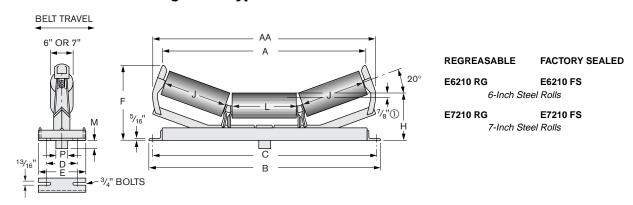
7-Inch Steel Rolls

Dimensions in Inches — Average Weight in Pounds

Belt					D			ŀ	1						Idle	r Wgt.
Width	A	AA	В	С	Min.	E	F	6" Dia.	7" Dia.	J	L	М	N	P	6" Dia.	7" Dia.
36	42¾	51%	47	45	9	12	18¾	11%	111//8	139/16	139/16	311/16	10	3½	237	265
42	481/2	571/8	53	51	9	12	19%	11%	111//8	159/16	15%16	311/16	10	31/2	258	290
48	541/4	627/8	59	57	9	12	201/8	11%	111//8	179/16	179/16	311/16	10	31/2	278	315
54	601/8	687/8	65	63	9	12	203/4	11%	111//8	19%	19%	311/16	15	31/2	300	339
60	651/4	74	71	69	9	12	21%	11%	111//8	21%	21%	311/16	15	31/2	318	362
72	76%	85%	83	81	9	12	23½	121/8	12%	251/4	251/4	43/4	15	51/4	434	485

① Approximate distance to the top of the center roll of other idlers.

## 20° TROUGHING TRAINING IDLER — EQUAL LENGTH ROLLS Actuating Shoe Type — Belt Travel Either Direction

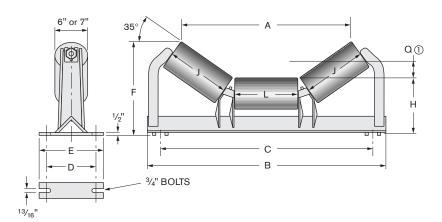


**Dimensions in Inches — Average Weight in Pounds** 

Belt					D			ŀ	1						Idle	r Wgt.
Width	A	AA	В	С	Min.	E	F	6" Dia.	7" Dia.	J	L	М	N	P	6" Dia.	7" Dia.
36	44%	44	51%	47	45	9	12	173/4	11%	11%	13%16	311/16	13%16	31/2	224	252
42	501/8	49¾	571/8	53	51	9	12	18%	11%	11%	15%16	311/16	159/16	31/2	245	277
48	557/8	551/2	627/8	59	57	9	12	191/8	11%	11%	179/16	311/16	179/16	31/2	265	301
54	61¾	61%	687/8	65	63	9	12	19¾	11%	111//8	19%	311/16	19%	31/2	286	326
60	667/8	661/2	74	71	69	9	12	20%	11%	111//8	21%	311/16	21%	31/2	305	348
72	78	77%	85%	83	81	9	12	221/2	121/8	12%	251/4	43/4	251/4	51/4	421	472

① Approximate distance to the top of the center roll of other idlers.

## SERIES E 35° TROUGHING IDLER — EQUAL LENGTH ROLLS



REGREASABLE FACTORY SEALED

E6300 RG E6300 FS

6-Inch Steel Rolls

E7300 RG E7300 FS

7-Inch Sreel Rolls

#### Dimensions in Inches — Average Weight in Pounds

Belt		4			D			F		1				Idler	Wgt.
Width	6" Roll	7" Roll	В	С	Min.	E	6" Roll	7" Roll	6" Roll	7" Roll	J	L	Q①	6" Roll	7" Roll
36	371/16	367/8	501/2	45	9	12	187/16	19	107/16	11	139/16	13%16	31/8	149	175
42	42%	421/8	56	51	9	12	199/16	201/8	107/16	11	15%16	15%16	3¾	168	193
48	47%	47%	611/4	57	9	12	20¾	211/4	107/16	11	179/16	179/16	41/4	181	212
54	531/16	527/8	67	63	9	12	2115/16	221/2	107/16	11	19%	19%	47/8	199	230
60	573/4	571/2	713/4	69	9	12	2215/16	231/2	107/16	11	21%	21%	51/2	213	246
72	6715/16	67¾	831/2	81	9	12	2513/16	26%	111/8	113/4	251/4	251/4	65/8	260	296
84	787/16	781/4	951/2	93	111/2	141/2	28%	291/2	111//8	121/2	291/4	291/4	71/4	337	377
96	89	89¾	1071/2	105	11½	141/2	31¾16	31¾	111//8	121/2	331/4	331/4	87/8	378	423

① Location of head pulley in relation to idler center roll.

## 35° TROUGHING IMPACT IDLER — EQUAL LENGTH ROLLS

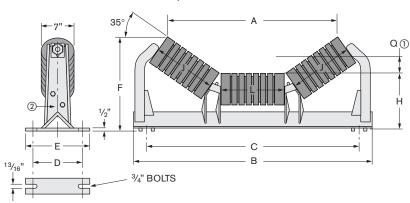
REGREASABLE FACTORY SEALED

E6302 RG E6302 FS

6-Inch Rubber Rolls

E7302 RG E7302 FS

7-Inch Rubber Rolls



**Dimensions in Inches — Average Weight in Pounds** 

Belt	-	4			D			F	ŀ	1				Idler	Wgt.
Width	6" Roll	7" Roll	В	С	Min.	E	6" Roll	7" Roll	6" Roll	7" Roll	J	L	Q(1)	6" Roll	7" Roll
36	37	367/16	501/2	45	9	12	187/16	18 <sup>13</sup> / <sub>16</sub>	107/16	1015/16	131/16	131/16	31/8	160	176
42	425/16	4111/16	56	51	9	12	199/16	20	107/16	1015/16	151/16	151/16	33/4	181	199
48	47%16	47	611/4	57	9	12	20¾	211/8	101/16	1015/16	171/16	171/16	41/4	199	219
54	53	527/16	67	63	9	12	21%	225/16	107/16	1015/16	191/8	191/8	47/8	217	240
60	575/8	571/16	713/4	69	9	12	221/8	235/16	107/16	1015/16	201/8	20%	5½	233	258
72	671/8	675/16	831/2	81	9	12	2513/16	261/4	113/16	1111/16	24¾	24¾	65/8	285	314
84	787/16	7713/16	951/2	93	111/2	141/2	281/8	295/16	11 <sup>15</sup> / <sub>16</sub>	121/16	28¾	28¾	71/4	376	409
96	8815/16	88%	107½	105	11½	141/2	313/16	31%16	11 <sup>15</sup> ⁄16	127/16	32¾	32¾	87/8	421	458

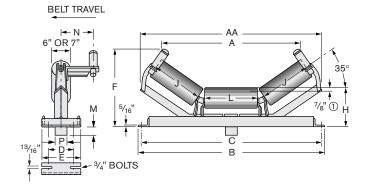
 $<sup>\</sup>ensuremath{\textcircled{1}}\xspace$  Location of head pulley in relation to idler center roll.

② Demountable end brackets.

#### **SERIES E**

## 35° TROUGHING TRAINING IDLER — EQUAL LENGTH ROLLS

Positive Arm Type — Belt Travel One Direction Only



REGREASABLE **FACTORY SEALED** 

E6312 RG

E6312 FS 6-Inch Steel Rolls

E7312 RG E7312 FS

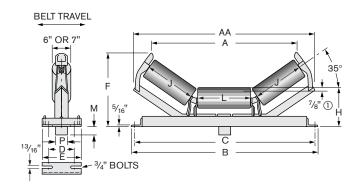
7-Inch Steel Rolls

Dimensions in Inches — Average Weight in Pounds

Belt					D			ŀ	1						Idle	r Wgt.
Width	A	AA	В	С	Min.	E	F	6" Dia.	7" Dia.	J	L	М	N	P	6" Dia.	7" Dia.
36	381/8	53%	47	45	9	12	22%	11%	11%	13%16	131/16	311/16	10	3½	242	270
42	431/2	58%	53	51	9	12	231/2	11%	11%	15%16	15%16	311/16	10	31/2	263	295
48	48¾	63%	59	57	9	12	24%	11%	11%	179/16	179/16	311/16	10	31/2	283	320
54	541/8	691/4	65	63	9	12	25¾	11%	11%	19%	19%	311/16	15	31/2	304	344
60	58¾	731/8	71	69	9	12	26¾	11%	11%	21%	21%	311/16	15	31/2	319	362
72	69	85%	83	81	9	12	29¾	121/8	12%	251/4	251/4	43/4	15	51/4	434	486

<sup>1)</sup> Location of head pulley in relation to idler center roll.

## 35° TROUGHING TRAINING IDLER — EQUAL LENGTH ROLLS Actuating Shoe Type — Belt Travel Either Direction



REGREASABLE **FACTORY SEALED** 

E6310 RG E6310 FS 6-Inch Steel Rolls

E7310 FS E7310 RG

7-Inch Steel Rolls

Dimensions in Inches — Average Weight in Pounds

Belt		A				D			•	Н	n					Idle	r Wgt.
Width	6" Dia.	7" Dia.	AA	В	С	Min.	E	6" Dia.	7" Dia.	6" Dia.	7" Dia.	J	L	М	P	6" Dia.	7" Dia.
36	39%	39%	53%	47	45	9	12	215/16	2111/16	11%	111//8	139/16	13%16	311/16	31/2	229	257
42	451/4	44%	58%	53	51	9	12	225/16	2213/16	11%	111//8	15%16	15%16	311/16	31/2	250	282
48	501/2	497/8	63%	59	57	9	12	23%16	2315/16	11%	111//8	179/16	179/16	311/16	31/2	270	306
54	557/8	55%	691/4	65	63	9	12	2411/16	253/16	11%	111//8	19%	19%	311/16	31/2	291	331
60	601/2	60	737/8	71	69	9	12	2511/16	263/16	11%	111//8	21%	21%	311/16	31/2	306	349
72	70¾	701/4	85%	83	81	9	12	2811/16	291/16	121/8	12%	251/4	251/4	43/4	51/4	421	473

<sup>1</sup> Location of head pulley in relation to idler center roll.

## SERIES E 45° TROUGHING IDLER — EQUAL LENGTH ROLLS

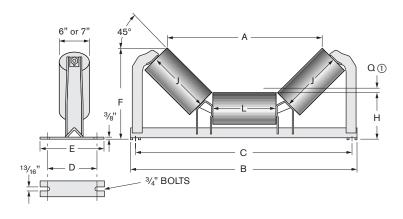
REGREASABLE FACTORY SEALED

E6400 RG E6400 FS

6-Inch Steel Rolls

E7400 RG E7400 FS

7-Inch Steel Rolls



#### Dimensions in Inches — Average Weight in Pounds

Belt		4			D		F	:	ŀ					Idler	Wgt.
Width	6" Roll	7" Roll	В	O	Min.	E	6" Roll	7" Roll	6" Roll	7" Roll	J	L	Q(1)	6" Roll	7" Roll
36	337/8	331/4	54	45	9	12	20%	20¾	101/2	11	131/16	13%16	4	151	179
42	38¾	38	59½	51	9	12	2113/16	223/16	10½	11	15%16	15%16	45/8	167	198
48	43%	427/8	651/2	57	9	12	233/16	231/16	10½	11	179/16	17%16	5%	180	217
54	481/2	477/8	711/2	63	9	12	2411/16	25	10½	11	19%	19%	61/8	196	236
60	523/4	521/8	74	69	9	12	257/8	261/4	10½	11	21%	21%	63/4	209	253
72	621/8	61½	87	81	9	12	29%	29¾	111/4	113/4	251/4	251/4	77/8	253	304

① Location of head pulley in relation to idler center roll.

## 45° TROUGHING IMPACT IDLER — EQUAL LENGTH ROLLS

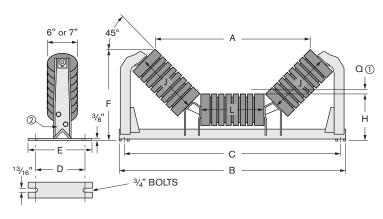
REGREASABLE FACTORY SEALED

E6402 RG E6402 FS

6-Inch Rubber Rolls

E7402 RG E7402 FS

7-Inch Rubber Rolls



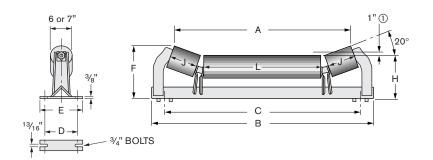
#### Dimensions in Inches — Average Weight in Pounds

Belt		4			D		F		H	•				Idler	Wgt.
Width	6" Roll	7" Roll	В	C	Min.	E	6" Roll	7" Roll	6" Roll	7" Roll	J	L	<b>Q</b> (1)	6" Roll	7" Roll
36	337/8	331/8	54	45	9	12	201/4	20%	107/16	1015/16	131/16	131/16	4	164	180
42	3811/16	3715/16	59½	51	9	12	2111/16	221/16	107/16	1015/16	151/16	151/16	45/8	185	204
48	431/2	4213/16	651/2	57	9	12	231/8	237/16	107/16	1015/16	171/16	171/16	53/8	204	224
54	481/2	47¾	711/2	63	9	12	249/16	241/8	107/16	1015/16	191/8	191/8	61/8	223	246
60	5211/16	52	74	69	9	12	2513/16	261/8	107/16	1015/16	211/8	211/8	63/4	240	265
72	621/16	61%	87	81	9	12	291/4	29%16	113/16	1111/16	24¾	24¾	77/8	293	322

① Location of head pulley in relation to idler center roll.

② Demountable end brackets.

## SERIES E 20° TROUGHING TRAINING IDLER — UNEQUAL LENGTH ROLLS



REGREASABLE FACTORY SEALED

E6201 RG E6201 FS

6-Inch Steel Rolls

E7201 RG E7201 FS

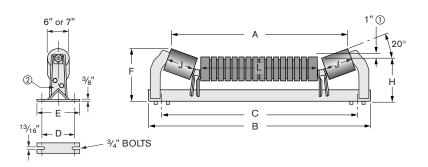
7-Inch Steel Rolls

Dimensions in Inches — Average Weight in Pounds

Belt	A	ı			D			F		Н			Idler	Wgt.
Width	6" Dia.	7" Dia.	В	O	Min.	E	6" Dia.	7" Dia.	6" Dia.	7" Dia.	J	L	6" Dia.	7" Dia.
36	41	40¾	501/2	45	9	12	131/8	139/16	107/16	1015/16	7%	251/4	138	167
42	467/8	46%	56	51	9	12	131/8	13%16	107/16	1015/16	7%	311/8	146	179
48	527/8	525/8	62	57	9	12	131/8	139/16	107/16	1015/16	7%	371/8	158	195
54	587/8	585/8	68	63	9	12	131/8	139/16	107/16	1015/16	7%	431/8	177	218
60	647/8	64%	74	69	9	12	131/8	13%16	107/16	1015/16	7%	491/8	190	233
72	76%	76%	86	81	9	12	137/8	14%	111/8	11%	73/8	611/8	229	280

<sup>1</sup> Location of head pulley in relation to idler center roll.

## 20° TROUGHING TRAINING IDLER — UNEQUAL LENGTH ROLLS



REGREASABLE FACTORY SEALED

E6203 RG E6203 FS

6-Inch Steel & Rubber Rolls

E7203 RG E7203 FS

7-Inch Steel & Rubber Rolls

Dimensions in Inches — Average Weight in Pounds

Belt	A				D		ı	F		Н			Idler	Wgt.
Width	6" Dia.	7" Dia.	В	С	Min.	E	6" Dia.	7" Dia.	6" Dia.	7" Dia.	J	L	6" Dia.	7" Dia.
36	4013/16	401/2	50½	45	9	12	131/8	139/16	107/16	1015/16	7%	24¾	137	158
42	4611/16	46%	56	51	9	12	131/8	13%16	107/16	1015/16	7%	30%	153	176
48	5211/16	52%	62	57	9	12	131/8	139/16	107/16	1015/16	7%	36%	169	194
54	5811/16	58%	68	63	9	12	131/8	13%16	107/16	1015/16	73/8	42%	185	213
60	6411/16	64%	74	69	9	12	131/8	13%16	107/16	1015/16	7%	48%	201	231
72	7611/16	76%	86	81	9	12	1313/16	14%	111/8	11%	7%	60%	250	285

① Location of head pulley in relation to idler center roll.

② Demountable end bracket.

## SERIES E RETURN IDLER

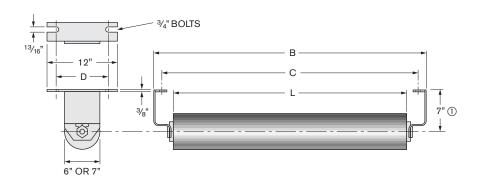
REGREASABLE FACTORY SEALED

E6040 RG E6040 FS

6-Inch Steel Roll

E7040 RG E7040 FS

7-Inch Steel Roll



#### Dimensions in Inches — Average Weight in Pounds

	_	_	D	_	ldler	Weight
Belt Width	В	С	Minimum	L	6" Roll	7" Roll
36	481/4	45	9	397/8	82	109
42	541/4	51	9	457/8	90	121
48	601/4	57	9	51%	99	133
54	661/4	63	9	57%	107	145
60	721/4	69	9	63%	115	156
72	841/4	81	9	75%	131	181

① Also available with 4½" drop.

## **DISC RETURN IDLER**

## Belt Travel Either Direction Available with rubber or urethane discs.

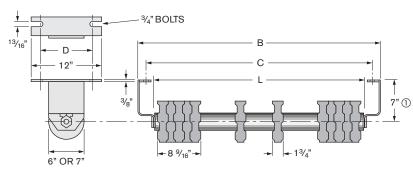
REGREASABLE FACTORY SEALED

E6043 RG E6043 FS

6-Inch Rubber Disc Roll

E7043 RG E7043 FS

7-Inch Rubber Disc Roll



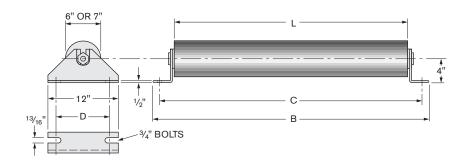
Five discs on each end is standard.

#### Dimensions in Inches — Average Weight in Pounds

	1 _	_	D		Idler \	Weight	Number of
Belt Width	В	C	Minimum	L	6" Roll	7" Roll	Discs
36	481/4	45	9	3911/16	88	92	13
42	541/4	51	9	4511/16	96	100	14
48	601/4	57	9	51 <sup>11</sup> / <sub>16</sub>	104	108	15
54	661/4	63	9	5711/16	112	118	16
60	721/4	69	9	6311/16	121	127	17
72	841/4	81	9	7511/16	137	143	19

Also available with 4½" drop.

## SERIES E FLAT STEEL IDLER



REGREASABLE FACTORY SEALED

E6020 RG E6020 FS

6-Inch Steel Roll

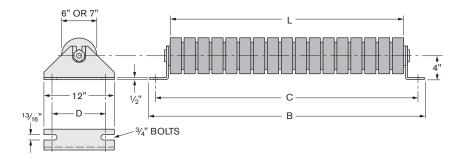
E7020 RG E7020 FS

7-Inch Steel Roll

#### **Dimensions in Inches — Average Weight in Pounds**

	_	_	D	_	ldler W	/eight
Belt Width	В	С	Minimum	L	6" Roll	7" Roll
36	477/16	45	9	397/8	81	108
42	537/16	51	9	457/8	89	120
48	597/16	57	9	51%	98	132
54	657/16	63	9	57%	106	144
60	717/16	69	9	63%	114	155
72	837/16	81	9	75%	130	180

## **FLAT RUBBER IDLER**



REGREASABLE FACTORY SEALED

E6025 RG E6025 FS

6-Inch Rubber Roll

E7025 RG E7025 FS 7-Inch Rubber Roll

Dimensions in Inches — Average Weight in Pounds

	_	_	D	_	ldler W	leight
Belt Width	В	С	Minimum	L	6" Roll	7" Roll
36	477/16	45	9	38	126	139
42	537/16	51	9	447/8	140	156
48	597/16	57	9	50%	155	173
54	657/16	63	9	56%	170	190
60	<b>71</b> ½16	69	9	627/8	185	207
72	837/16	81	9	747/8	214	241

#### **SERIES E**

## **RETURN TRAINING IDLER**

## Positive Arm Type - Belt Travel One Direction Only

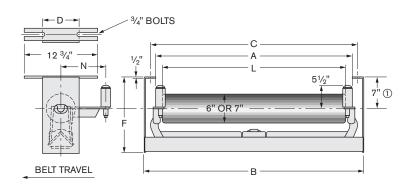
**REGREASABLE FACTORY SEALED** 

E6052 RG E6052 FS

6-Inch Steel Roll

E7052 FS E7052 RG

7-Inch Steel Roll



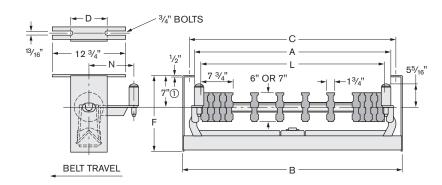
#### Dimensions in Inches — Average Weight in Pounds

Belt		В	•	D	_		N	Idler V	/eight
Width	A	В	С	Minimum		L	N	6" Roll	7" Roll
36	44%	481/2	45	9	189/16	397/8	10	254	281
42	50%	541/2	51	9	189/16	457/8	10	310	341
48	56%	601/2	57	9	189/16	51%	10	331	366
54	62%	661/2	63	9	189/16	577/8	15	348	386
60	68%	72½	69	9	189/16	637/8	15	374	414
72	80%	841/2	81	9	1911/16	757/8	15	520	570

<sup>(1) 1 3/4&</sup>quot; or 4 1/4" can be furnished for wide base idlers.

## **DISC RETURN TRAINING IDLER**

#### Positive Arm Type — Belt Travel One Direction Only



REGREASABLE **FACTORY SEALED** 

E6056 RG E6056 FS 6-Inch Rubber Disc Roll

E7056 RG E7056 FS

7-Inch Rubber Disc Roll

Five discs on each end is standard.

#### Dimensions in Inches — Average Weight in Pounds

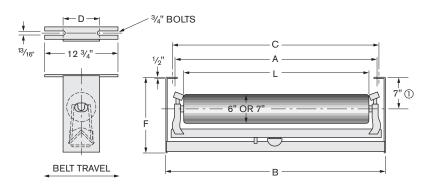
Belt Width				D				Number	Idler \	Weight	
	A	В	С	Minimum	F	F L N	N	of Discs	6" Roll	7" Roll	
36	44%	481/2	45	9	189/16	3911/16	10	13	260	264	
42	50%	54½	51	9	189/16	4511/16	10	14	316	320	
48	56%	601/2	57	9	189/16	5111/16	10	15	337	341	
54	62%	661/2	63	9	189/16	5711/16	15	16	353	359	
60	68%	721/2	69	9	189/16	6311/16	15	17	379	385	
72	80%	841/2	81	9	1911/16	7511/16	15	19	525	531	

<sup>1 3/4&</sup>quot; or 4 1/4" can be furnished for wide base idlers.

## **SERIES E**

## **RETURN TRAINING IDLER**

## **Actuating Shoe Type - Belt Travel Either Direction**



REGREASABLE FACTORY SEALED

E6051 RG E6051 FS

6-Inch Steel Roll

E7051 RG E7051 FS

7-Inch Steel Roll

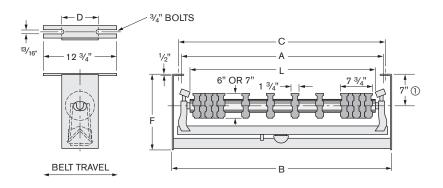
**Dimensions in Inches — Average Weight in Pounds** 

Belt Width		_		D	_		Idler V	<b>V</b> eight	
Deit Width	A	В	C	Minimum	F	-	6" Roll	7" Roll	
36	443/4	481/2	45	9	18%	397/8	241	268	
42	503/4	541/2	51	9	189/16	457/8	297	328	
48	56¾	601/2	57	9	189/16	51%	318	353	
54	62¾	661/2	63	9	189/16	57 <sup>7</sup> /8	335	373	
60	68¾	721/2	69	9	189/16	637/8	361	401	
72	803/4	841/2	81	9	1911/16	757/8	499	549	

 $<sup>\</sup>textcircled{\scriptsize 1}$   $\mbox{\scriptsize 1}$   $\mbox{\scriptsize 34"}$  or 4  $\mbox{\scriptsize 14"}$  can be furnished for wide base idlers.

## DISC RETURN TRAINING IDLER

## **Actuating Shoe Type — Belt Travel Either Direction**



REGREASABLE FACTORY SEALED

**E6055 RG E6055 FS** 6-Inch Rubber Disc Roll

E7055 RG E7055 FS

7-Inch Rubber Disc Roll

Dimensions in Inches — Average Weight in Pounds

Belt	Belt _			D		Number		Idler \	Idler Weight		
Width	A	В	С	Minimum	F	L	of Discs	6" Roll	7" Roll		
36	443/4	481/2	45	9	189/16	3911/16	13	247	251		
42	503/4	54½	51	9	189/16	4511/16	14	303	307		
48	56¾	60½	57	9	189/16	5111/16	15	324	328		
54	62¾	661/2	63	9	189/16	5711/16	16	340	346		
60	68¾	72½	69	9	189/16	6311/16	17	366	372		
72	80¾	84½	81	9	1911/16	7511/16	19	512	518		

① 1 ¾" or 4 ¼" can be furnished for wide base idlers.

## SERIES E FLAT TRAINING IDLER

## Positive Arm Type - Belt Travel One Direction Only

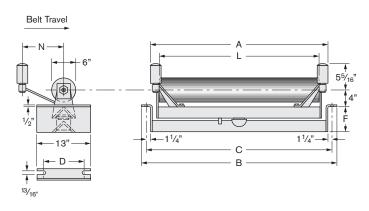
REGREASABLE FACTORY SEALED

E6031 RG E6031 FS

6-Inch Steel Roll

E7031 RG E7031 FS

7-Inch Steel Roll



#### Dimensions in Inches — Average Weight in Pounds

Belt	Belt			D		_   .		Idler Weight		
Width	A	В	С	Minimum	F	L	N	6" Roll	7" Roll	
36	42%	471/2	45	9	77/16	371/8	10	201	228	
42	48%	53½	51	9	77/16	437/8	10	227	258	
48	54%	59½	57	9	77/16	497/8	10	253	287	
54	60%	651/2	63	9	77/16	557/8	15	283	310	
60	66%	71½	69	9	77/16	61%	15	292	332	
72	78%	831/2	81	9	9%	73%	15	404	454	

<sup>1 34&</sup>quot; or 4 14" can be furnished for wide base idlers.

## **RETURN BEATER IDLER**

REGREASABLE FACTORY SEALED

E7046 RG E7046 FS 7-Inch Steel Rod Roll

Dimensions in Inches — Average Weight in Pounds

		-	-	
В	С	D Minimum	L	Idler Weight 7" Roll
481/4	45	9	397/8	109
541/4	51	9	457/8	121
601/4	57	9	517/8	133
661/4	63	9	577/8	146
721/4	69	9	637/8	158
841/4	81	9	757/8	183
	48½ 54¼ 60¼ 66¼ 72¼	48¼ 45 54¼ 51 60¼ 57 66¼ 63 72¼ 69	B         C         Minimum           48½         45         9           54½         51         9           60½         57         9           66½         63         9           72½         69         9	B         C         Minimum         L           48½         45         9         39%           54½         51         9         45%           60½         57         9         51%           66½         63         9         57%           72½         69         9         63%

<sup>1 34&</sup>quot; or 4 14" can be furnished for wide base idlers.

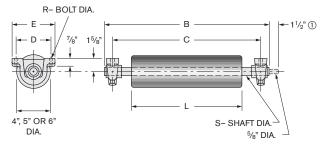
## LIVE SHAFT IDLERS

#### **SERIES F**

#### LIVE SHAFT RETURN OR FLAT IDLER

Dimensions in Inches — Average Weight in Pounds

	D D				ldler Wgt.							
Belt Width	В	С	Recom.	Min.	Max.	E	EL	R	S	4" Roll	5" Roll	6" Roll
18	29	27	45/8	41/4	5	6	21	1/2	13/16	24	27	32
20	31	29	45/8	41/4	5	6	23	1/2	13/16	27	31	38
24	35	33	45/8	41/4	5	6	27	1/2	13/16	31	37	44
30	41	39	45/8	41/4	5	6	33	1/2	13/16	36	42	51
36	47	45	45/8	41/4	5	6	39	1/2	13/16	41	48	57
42	53	51	45/8	41/4	5	6	45	1/2	13/16	47	54	65
48	59	57	45/8	41/4	5	6	51	1/2	13/16	53	60	72
54	65	63	45/8	41/4	5	6	57	1/2	13/16			79
60	71	69	45/8	41/4	5	6	63	1/2	13/16			85



- ① Idlers with stub shaft extension are available on request.
- ② Also available in ¼" roll wall thickness.

Note: Return Idler shown. Rotate pillow blocks 180° for Flat Idler. F4041 4-Inch Steel Roll

F5041

5-Inch Steel Roll

F6041

6-Inch Steel Roll (2)

## **SERIES F - HEAVY DUTY**

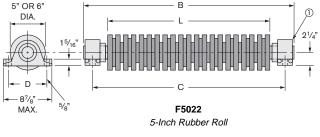
(Photograph on Page 6)

#### LIVE SHAFT FLAT IMPACT IDLER

#### Dimensions in Inches — Average Weight in Pounds

D - 14				D			Idler	Wgt.
Belt Width	В	C	Recom.	Min.	Max.	L	5" Roll	6" Roll
18	297/8	27	61/4	6	71/4	21	45	51
20	311/8	29	61/4	6	71/4	23	55	61
24	357/8	33	61/4	6	71/4	27	63	71
30	411/8	39	61/4	6	71/4	33	72	81
36	471/8	45	61/4	6	71/4	39	80	91
42	537/8	51	61/4	6	71/4	45	89	101
48	597/8	57	61/4	6	71/4	51	97	111
54	657/8	63	61/4	6	71/4	57	106	122
60	71%	69	61/4	6	71/4	63	115	132

- (1) Shaft is 21/16" and has 115/16" roller bearing pillow blocks.
- ☐ Shaded sizes are most commonly used and are more readily available.

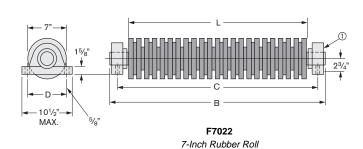


F6022 6-Inch Rubber Roll

## SERIES F - SUPER DUTY LIVE SHAFT FLAT IMPACT IDLER

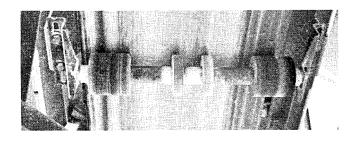
#### **Dimensions in Inches — Average Weight in Pounds**

Belt	_			D			Disc. (a)	Idler
Width	В	С	Recom.	Min.	Max.	L	Rise ②	Wgt.
30	43¾	39	71/8	67/8	83/4	34	213/16	130
36	49¾	45	71/8	67/8	83/4	40	215/16	150
42	553/4	51	71/8	67/8	83/4	46	31/4	170
48	61¾	57	71/8	67/8	83/4	52	31/4	190
54	67¾	63	71/8	67/8	83/4	58	3½	210
60	73¾	69	71/8	6%	83/4	64	3½	230
72	85¾	81	71/8	67/8	83/4	76	315/16	270
84	97¾	93	71/8	67/8	83/4	88	l —	310
96	109¾	105	71/8	67/8	83/4	100	_	350



- ① Has  $2^{21}/_{32}$ " shaft and  $2^{7}/_{16}$ " roller bearing pillow blocks.
- ② Required rise when interspersed with Series C 6" impact idlers.
- $\hfill\Box$  Shaded sizes are most commonly used and are more readily available.

## **REX IDLER PROBLEM SOLVERS**



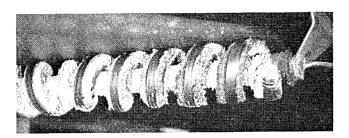
#### **Disc Idlers**

**RUBBER** disc idlers are designed to allow material to fall off the belt, keeping the belt clean. Used in abrasive applications where temperatures do not exceed 200°F.

**URETHANE** disc idlers provide longer life due to higher wear resistance. Temperatures not to exceed 200°F.

**CERAMIC** disc idlers are recommended for extremely abrasive applications. Temperatures not to exceed 200°F.

NOTE: Ceramic is brittle and must be handled with care.

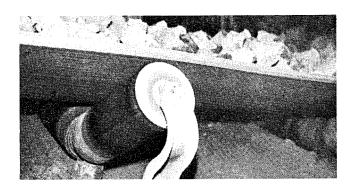


#### **Spiral Idlers**

The unique **SPIRAL** return idler has an ever changing point of contact, providing a scrubbing action to resist material build-up. In most applications, four or five spiral idlers after the head pulley will adequately clean the belt. Temperatures not to exceed 200°F.

NOTE: Should not be used on reversing conveyors.

## **ABRASION**



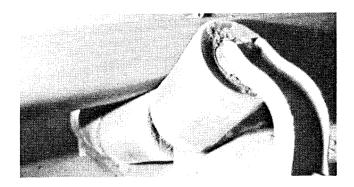
#### **Coated Rolls**

Steel rolls can be coated to provide extended roll life:

**RUBBER** for corrosion and material build-up. Temperature not to exceed 200°F.

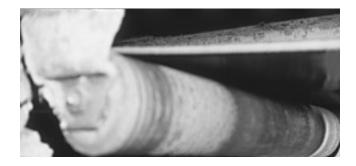
**URETHANE** for corrosion and abrasion.  $\frac{1}{4}$ " and  $\frac{1}{6}$ " coating is available ( $\frac{1}{6}$ " available up to 40" only.) Temperature not to exceed 200°F.

**CERAMIC** for corrosion and extreme abrasion. Standard thickness is .010". Temperatures not to exceed 200°F.



#### **Polyethylene Roll Idlers**

Polyethylene roll idlers resist corrosion and material build-up. Temperatures not to exceed 160°F. Refer to pages 44 -46.



#### **Return Idler**

Six inch steel return idlers are available in  $\frac{1}{4}$ " wall at a nominal premium for abrasive and corrosive applications. Available in B+, C, D and E.

TO ORDER COMPLETE ROLL ASSEMBLIES, SPECIFY:

#### **Steel Roll Assembly**

Idler Model Number Regreasable or Factory Sealed

(If Model Number is not known, specify idler series, belt width, roll diameter and length)

#### **Impact Roll Assembly**

Idler Model Number Regreasable or Factory Sealed

(If Model Number is not known, specify idler series, belt width, roll diameter and length)

#### **Spiral Roll Assembly**

Idler Model Number Regreasable or Factory Sealed

(If Model Number is not known, specify idler series, belt width and roll diameter)

#### **Spiral Clincher Strip Only**

Idler Series (Available in 50-foot coils only)

## **Disc Roll Assembly**

Idler Model Number Regreasable or Factory Sealed

(If Model Number is not known, specify idler series, belt width and roll diameter)

#### **Discs Only**

Idler Series and Roll Diameter Rubber, Urethane or Ceramic

## **Urethane Covered Roll Assembly**

Idler Model Number Regreasable or Factory Sealed

(If Model Number is not known, specify idler series, belt width, roll diameter and length)

#### **Ceramic Coated Roll Assembly**

Idler Model Number Regreasable or Factory Sealed

(If Model Number is not known, specify idler series, belt width, roll diameter and length)

#### **Polyethylene Roll Assembly**

Idler Model Number Regreasable or Factory Sealed

(If Model Number is not known, specify idler series, belt width, roll diameter and length)



Steel Roll



Impact Roll



Spiral Return Roll



Disc Roll



Urethane Covered Roll



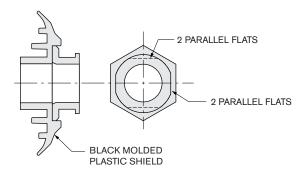
Ceramic Coated Roll



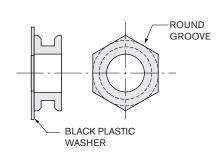
Polyethylene Roll

## SERIES B (Old Pre 97) IDLER IDENTIFICATION BRACKETS

## PRE 97 (OLD) CEMA B NUT



#### **NEW CEMA B NUT**



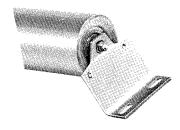
## (OLD STYLE) DROP BRACKETS SERIES B



Standard 1½" Drop (shown)
Part No. 111-20130-01
Optional 3" Drop
Part No. 111-20083-01

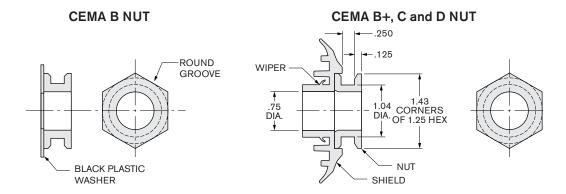


Optional 11¾" Drop (shown)
Part No. 111-20132-01
Optional 4¼" Drop
Part No. 111-20131-01



Standard 41/4" Rise/Drop Combination
Part No. 111-20084-01
Optional 11/2" Rise #111-20082-01
Optional 3" Rise #111-20083-01

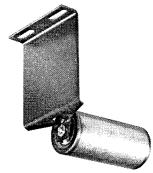
## SERIES B, B+, C and D IDLER IDENTIFICATION, BRACKETS AND SEAL KITS



#### DROP BRACKETS SERIES B, B+, C & D



**Standard 4½" Drop** (shown) Part No. 101-60672-1



Optional 113/4" Drop (shown) Part No. 101-60672-2

RISE BRACKETS SERIES B, B+, C & D

**Standard 41/4" Rise** Part No. 101-60676-1

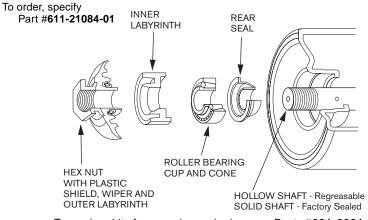
Optional 16½" Drop Part No. 101-60672-9

## REVERSE DROP BRACKET SERIES B, B+, C & D



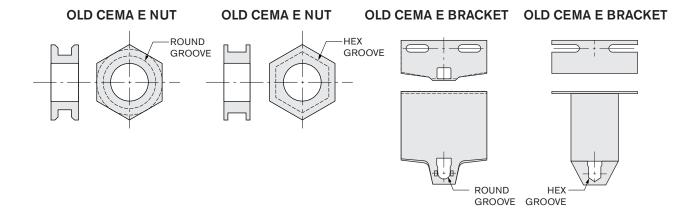
4½" Drop Only
These brackets are used to allow more belt fleet.
Part No. 101-60673-5

## Series B+, C and D (Excluding spiral and disc designs – contact factory) .750" Bearing Bore



To order kit for previous design — Part #601-2901-1 (Hex nut without plastic shield)

## SERIES B, B+, C and D IDLER IDENTIFICATION, BRACKETS AND SEAL KITS



DROP BRACKETS SERIES E



**Standard 7" Drop (shown)**Part No. 111-20026-01
Optional 4½" Drop
Part No. 111-20026-04

#### RISE BRACKETS SERIES E



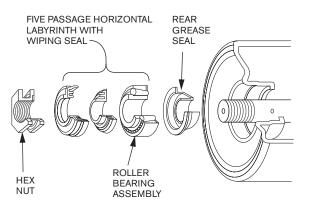
**Standard 4" Rise** Part No. 111-20024-01

## Series "E" Labyrinth Seal with Wiper 1.250" Bearing Bore

To order either the roller bearing or the labyrinth seal, the entire kit must be ordered.

Specify series E part number 601-3901-1.

Seal Kit contains Bearings and Seals for one complete roll.



## **REX BELT IDLERS INTERCHANGEABILITY**

To convert any standard CEMA B, B+, C and D troughing idler to belt width plus 14", 15", or 16".

Order proper idler clip.







#### **To Convert Troughing Idlers to Impact Idlers**





Remove the steel rolls and replace with impact rolls. NOTE: Both 5" and 6" diameter rolls are interchangeable.

#### TRAINING IDLERS

#### To Convert Return Training Idlers to Flat Training Idlers Remove the Hanger Brackets



Convert positive type return trainer to flat training idler by removing the hanger brackets.



Convert actuating type return trainer to flat training idler by removing the hanger brackets.

#### **Conversion of Positive Type to Actuating Shoe Type Training Idler**

Convert any "positive" type training idler to "actuating shoe" type training idler by removing the positive arms and adding actuating shoes to the end brackets.



Actuating shoes vary with roll diameter

**Roll Dia.**4"-5"
6"

Part No. 411-20009-01 411-20010-01

**NOTE:** Bolt holes are provided on all positive trainers for conversion to actuating shoe.

Use 5/16 x 1 Hex Hd. Cap Screw and Nut



## **REX CATENARY IDLERS**

The Rex Catenary Idler is designed to handle wet, sticky or hot materials in such applications as glass plants, fertilizer plants, quarries and food processing operations. Rubber rolls and steel cable in the roll element resist material buildup through continuous flexing action. Overall flexibility of the roll assembly provides smooth han-

dling of lumpy materials. End bearings are double-sealed and factory lubricated for minimum maintenance. The roll is suspended from a mounting hook and swivel assembly which offers additional flexibility and exceptional ease in installation.



#### ROLL BENEFITS

#### **Bearings and Seals**

Assure longer life due to double contact seal.

Last longer due to downward position which ejects troublesome dirt. Run cooler away from the hot belt.

Improves belt life by preventing belt contamination by leaking grease. Reduce maintenance — only two bearings per idler.

#### Ralle

Resist buildup because of flexing action.

More versatile — can rotate either direction.

Reduce belt damage — rubber roll surface cannot cut belt covers.

Give longer life since they are corrosion resistant.

Provide smooth flowing ride when handling lumpy material.

#### **BASE BENEFITS**

#### **Mounting Hook and Swivel**

Permits roll to adapt to varying load conditions by allowing greater roll articulation.

Assures easy roll installation.

#### **Base Pipe**

Rectangular pipe provides structural strength.

#### **End Stands**

Absorb maximum loads since the rectangular shape gives added strength in the direction of maximum loads.

#### INSTALLATION

It is essential that the brackets be installed in a straight line and square with the center line of the conveyor. Upon installation, if the idler does not contact the troughed belt completely across its width, it will be necessary to increase the spacing between the idlers to drop the belt or shim up the brackets; in some cases, both of the procedures may be necessary.

When installing an idler next to a conventional steel idler roll, the backing dimension (height at the center of the idler) should be ½- to 1-inch higher than the center of the steel idler, as measured from the deck on the top of the roller.

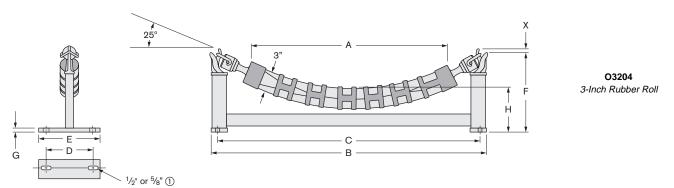
Height of the drive and tail pulleys also is important in relation to the top of the center of the idler. The top of the center should be  $\frac{1}{2}$ - to 1-inch higher than the top of the pulley.

Rex Catenary Idlers should be applied using the 20-degree troughing idler capacity charts on page 74. Use the chart below to determine proper idler spacing.

Material Weight in Lbs./Cu. Ft.	Maximum Lump Size — Inches	Troughing Idler Spacing — Feet	Return Idler Spacing — Feet
20-50	5	6	10
55-70	4	6	10
75-125	3	5	10

## **REX CATENARY IDLERS**

## **CATENARY TROUGHING IDLER**

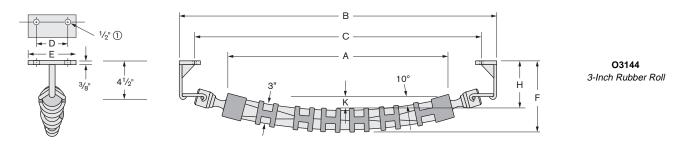


**Dimensions in Inches — Average Weight in Pounds** 

Belt		В	С		D		_	-	F G H X We	G		Weight
Width	A	_		Recom.	Min.	Max.	_	•			^	Weight
18	19½	29¾	27	41/2	4	5	67/8	10¾	3/8	81/4	1%	30
20	21½	31¾	29	41/2	4	5	67/8	107/8	3/8	81/4	15/8	31
24	25½	35¾	33	41/2	4	5	67/8	111/8	3/8	81/4	15/8	34
30	311/4	41	39	71/2	7	8	97/8	12%	3/8	9	15/8	43
36	371/4	47	45	71/2	7	8	97/8	13	3/8	9	15/8	46

① Use washers on ½ -inch bolts.

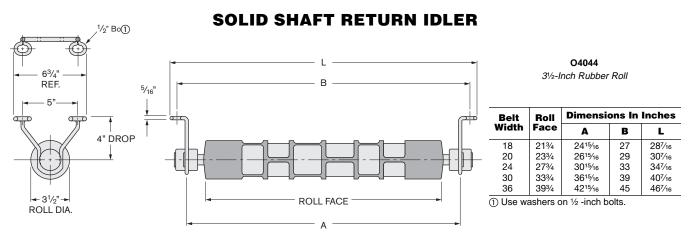
## **CATENARY RETURN IDLER**



Dimensions in Inches — Average Weight in Pounds

Belt Width	A	В	С	D	E	F	н	K	Weight
18	201//8	31	27	5	6	67/8	37/8	7/8	15
20	221/16	33	29	5	6	71/16	41/16	11/16	15
24	261/16	37	33	5	6	73/16	43/16	13/16	16
30	31%	421/4	39	5	6	73/16	43/16	1%	18
36	38	481/4	45	5	6	73/16	45/16	11/2	20

① Use washers on ½ -inch bolts.



## **WEIGHT OF ROTATING PARTS FOR STEEL ROLLS**

The weights of rotating parts of the idler rolls are used in determining the additional forces required to overcome roller friction. For convenience, the following tabulation of average weights of rotating parts may be used in these calculations. The weights listed include only the rotating parts of the carrying and return rolls.

Series No.	Roll Diameter	Belt Width Inches	Troughing Idlers Lbs.	Flat or Return Idlers Lbs.
В	4 inch	18 20 24 30 36 42 48	13.42 14.43 16.46 19.50 22.55 25.59 28.64	11.58 12.59 14.62 17.66 20.71 23.75 26.80
В	5 Inch	18 20 24 30 36 42 48	16.18 17.46 20.02 23.85 27.69 31.52 35.36	14.70 15.98 18.54 22.37 26.21 30.04 33.88
B+, C and D	5 Inch	18 20 24 30 36 42 48 54 60	18.61 19.90 22.47 26.33 30.19 34.05 37.91 41.77 45.63	15.21 16.50 19.07 22.93 26.79 30.65 34.51 38.37 42.23
C and D	6 Inch	18 20 24 30 36 42 48 54 60	23.10 24.81 28.24 33.38 38.52 43.66 48.81 53.95 59.09	20.26 21.97 25.40 30.54 35.68 40.82 45.97 51.11 56.25
E	6 Inch	36 42 48 54 60 72 84 96	62.6 70.3 78.0 85.7 93.4 108.7 124.0 139.4	54.8 62.5 70.1 77.8 85.5 100.8 116.2 131.5
E	7 Inch	36 42 48 54 60 72 84 96	60.8 69.8 78.9 87.9 96.9 114.9 132.9 150.9	60.1 69.1 78.1 87.1 96.1 114.2 132.2 150.2

## **SELECTION OF BELT CONVEYOR IDLERS**

#### **Determination of Belt Width and Speed**

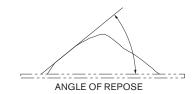
Belt width and belt speed can be determined by using the material characteristics and required conveyor capacity.

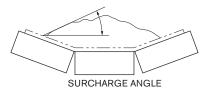
#### **Basis for Selection**

**Required Conveyor Capacity** — Amount of material to be handled, (tons per hour). This figure should reflect peak or surge volume rather than average volume.

**Material Characteristics** — A precise description of the material to be handled. The description should include the following:

- A. Material Weight In pounds per cubic foot. (Table 1, pages 72-73)
- B. Maximum Lump Size (largest measurement) and percentage of lumps and fines.
- C. Flowability of the Material Free-flowing, average or sluggish.
- D. Abrasiveness of Material Non-abrasive, mildly abrasive or very abrasive. (Table 1, pages 72-73).
- E. Corrosiveness of Material Non-corrosive, mildly corrosive or very corrosive. (Table 1, pages 72-73).
- F. Surcharge Angle This is the angle from the horizontal assumed by the conveyed material as it is carried on a belt passing over idlers. The surcharge angle is normally 5° to 15° less than the angle of repose.
- G. Angle of Repose This is the angle from the horizontal assumed by the material in a freely formed pile on a horizontal surface.





#### **Selection Procedure**

- From Tables 2, 3, or 4 (pages 74-76) Determine the minimum belt width based on lump size, surcharge angle and percentage of lumps and fines. (The minimum belt width is the same for any troughing angle.) Read down the appropriate right hand column until the required lump size is reached then read across to the left hand column for minimum belt width.
- From Tables 2, 3 or, 4 (pages 74-76) Refer to the footnotes and select the symbol which most closely represents the material to be conveyed based on flowability and abrasiveness.

Next, determine the design capacity. The capacities shown in the tables are based on material weight of 100 pounds per cubic foot. For other materials, use the following formula to convert required capacity to design capacity:

100 x Required Capacity (TPH) Actual Material Wgt. (Lbs/Cu.Ft.) = Design Capacity (TPH) To find **maximum belt speed**, enter the table at the belt width from paragraph 1 and read to the right until the selected symbol is reached. Then read down - following the selected symbol across columns if necessary - to the required design capacity at the proper surcharge angle. Normal belt speed is usually 100-200 fpm less than the maximum.

To determine optimum belt width and speed - deduct at least 100 fpm and increase belt width as required.

**NOTES:** Do not select any belt width narrower than minimum belt width determined in Step 1.

Do not select any belt speed faster than maximum belt speed determined in Step 2.

A minimum belt speed of 300 fpm is recommended for proper discharge from  $35^{\circ}$  and  $45^{\circ}$  troughed belts.

## **TABLE 1A - CEMA MATERIAL CLASS DESCRIPTION**

#### **Weights and Conveying** Characteristics of **Materials**

Table (1A) lists CEMA material class descriptions and corresponding codes referred to in Table (1). Table (1) lists typical values. Some materials, particularly ores, vary widely. Weight and angle of repose depend largely on the size distribution in a given material. Degree of aeration may be important factor in density of very fine material. Angle of repose may increase with the percentage of fines as well as the angularity of the particles. Fines carry most of the moisture content, which is often the controlling factor. For these reasons, the values given can only be approximate.

	Material Characteristics	Code
SIZE	Very fine – 100 mesh and under Fine – 1/8 inch and under Granular – under 1/2 inch Lumpy – containing over 1/2 inch Irregular – stringy, interlocking, mats together	A B C D E
FLOWABILITY ANGLE OF REPOSE	Very free flowing – angle of repose than 20°.  Free flowing – angle of repose 20° to 30°  Average flowing – angle of repose 30° to 45°  Sluggish – angle of repose 45° and over	1 2 3 4
ABRASIVENESS	Non-abrasive Abrasive Very abrasive Very sharp – cuts or gouges belt covers	5 6 7 8
MISCELLANEOUS CHARACTERISTICS (Sometimes more than one of these characteristics may apply.)	Very dusty	LMNPQRSTUVWXYz

#### Table 1 **Conveying Properties of Materials** (For Additional Information See CEMA Handbook)

Material	Lbs. per Cu. Ft.	Angle of Repose	Recom'd Max. Inclin.	Code	Material	Lbs. per Cu. Ft.	Angle of Repose	Recom'd Max. Inclin.	Code
Alfalfa meal	17	45°		B46Y	Carborundum, 3" and under	100	20-29°		D27
Alum, fine	45-50	30-44°		B35	Casein	36	30-44°		B35
Alum, lumpy	50-60	30-44°		D35	Cast iron chips	90-120	45°		C46
Alumina	50-65	22°	10-12°	B27M	Cement, Portland	72-99	30-44°	20-23°	A36M
*Aluminum chips	7-15	45°		E46Y	Cement, Portland, aerated	60-75			A16M
Aluminum hydrate	18	34°	20-24°	C35	Cement, rock (see limestone)	100-110			D36
Aluminum oxide	70-120	29°		A27M	Cement clinker	75-95	30-40°	18-20°	D37
Aluminum silicate	49	30-44°		B35S	Chalk, lumpy	75-85	45°		D46
Aluminum sulphate	54	32°	17°	D35	*Charcoal	18-25	35°	20-25°	D36Q
Ammonium chloride, crystalline	45-52	30-44°		B36S	Chrome ore (chromite)	125-140	30-44°		D37
Ammonium nitrate	45	30-44°		*C36NUS	Cinders, blast furnace	57	35°	18-20°	*D37T
Ammonium sulphate, granular	45-58	44°		*C35TU	Cinders, coal	40	35°	20°	*D37T
Asbestos, ore or rock	81	30-44°		D37R	Clay, calcined	80-100			B37
Asbestos, shred	20-25	45°		E46XY	Clay, dry, fines	100-120	35°	20-22°	C37
Ashes, coal, dry, 3" and under	35-40	45°		D46T	Clay, dry, lumpy	60-75	35°	18-20°	D36
Ashes, coal, wet, 3" and under	45-50	45°		D46T	Coal, anthracite, sized	55-60	27°	16°	C26
Ashes, fly	40-45	42°	20-25°	A37	Coal, bituminous, mined 50 mesh and less	50-54	45°	24°	B45T
Ashes, gas-producer, wet	78			D47T	Coal, bituminous, mined and sized	45-55	35°	16°	D35T
Asphalt, binder for paving	80-85			C45	Coal, bituminous, mined, run of mine	45-55	38°	18°	D35T
Asphalt, crushed, ½" and under	45	30-44°		C35	Coal, bituminous, stripping, not cleaned	50-60			D36T
riophait, ordonod, 72 and andor	10	00 11			Coal, lignite	40-45	38°	22°	D36T
Bagasse	7-10	45°		E45Y	Coke, loose	23-35	30-44°	18°	B37QVT
Bakelite and similar plastics, powdered	35-45	45°		B45	Coke, petroleum calcined	35-45	30-44°	20°	D36Y
Barite	180	30-44°		B36	Coke breeze, 1/4" and under	25-35	30-44°	20-22°	C37Y
Barium carbonate	72	45°		A45	Compost	30-50			E45ST
Barium oxide	150-200			A46	Concrete, cinder	90-100		12-30°	D46
*Bark, wood, refuse	10-20	45°	27°	E45VY	Copper ore	120-150	30-44°	20°	*D37
Basalt	80-103	20-28°		B26	Copper sulfate	75-85	31°	17°	D36
Bauxite, ground, dry	68	20-29°	20°	B26	Cork, granulated	12-15	"	l	C45
Bauxite, mine run	80-90	31°	17°	E37	Corn. shelled	45	21°	10°	C25NW
Bauxite, crushed, 3" and under	75-85	30-44°	20°	D37	Cottonseed cake, crushed	40-45	30-44°		B35
*Bentonite, crude	35-40	42-44°		D36X	Cottonseed cake, lumpy	40-45	30-44°		D35W
Bentonite, 100 mesh and under	50-60	42°	20°	A36XY	Cottonseed meal	35-40	35°	22°	B35W
Boneblack, 100 mesh and under	20-25	20-29°		A25Y	Cottonseed meats	40	30-44°		B35W
Bonechar	27-40	30-44°		B36	Cryolite, dust	75-90	30-44°		A36
Bonemeal	50-60	30-44°		B36	Cryolite, lumpy	90-100	30-44°		D36
Borate of lime	60	30-44°		A35	Cullet	80-120	30-44°	20°	D37Z
Borax, ½" screenings	55-60	30-44°		C36	Odnot	00 120	30 44	20	5012
Borax, 3" and under	60-70	30-44°		D35	Diatomaceous earth	11-14	30-44°		A36MY
Boric acid, fine	55	20-29°		B26T	Dicalcium phosphate	40-50	45°		A45
Brewer's grain, spent, dry	25-30	45°		C45	Disodium phosphate	25-31	30-44°		B36QT
Brewer's grain, spent, wet	55-60	45°		C45T	Dolomite, lumpy	80-100	30-44°	22°	D36
				0.0.	,,	30 .00			200
Calcium carbide, crushed	70-80	30-44°		D36N	Earth, as excavated — dry	70-80	35°	20°	B36
Carbon, activated, dry, fine	8-20	20-29°		B26Y	Earth, wet, containing clay	100-110	45°	23°	B46
Carbon black, pelletized	20-25	25°		B25Q	Ebonite, crushed 1/2" and under	65-70	30-44°		C35
Carbon black, powder	4-7	30-44°		*A35Y	Emery	230	20-29°		A27
* May vary considerbly -	concult :	a CEMA n	nember	•	Epson salts	40-50	30-44°		B35

# Table 1 — Cont'd. Conveying Properties of Materials (For Additional Information See CEMA Handbook)

Material	Lbs. per Cu. Ft.	Angle of Repose	Recom'd Max. Inclin.	Code	Material	Lbs. per Cu. Ft.	Angle of Repose	Recom'd Max. Inclin.	Code
Feldspar, ½" screenings	70-85	38°	18°	B36	Potassium sulfate	42-48	45°		B36X
Feldspar, 1½" to 3" lumps	90-110	34°	17°	D36	Pumice, 1/8" and under	40-45	45°		B47
Ferrous sulfate	50-75	•••		C36	Pyrites, iron, 2" to 3" lumps	135-145	20-29°		D26T
Filter press mud, sugar factory	70			A15	Pyrites, pellets	120-130	30-44°		C36T
Flue dust, boiler house, dry	35-40	20° 45°	•••	A17MTY C46	Overty 1/" coreonings	80-90	20-29°		C27Z
Fluorspar, ½" screenings Fluorspar, 1½" to 3" lumps	85-105 110-120	45°	•••	D46	Quartz, ½" screenings Quartz, 1½" to 3" lumps	85-95	20-29°		D27Z
oundry refuse, old sand cores, etc	70-120	30-44°	•••	D37Z	Quartz, 172 to 3 lumps	65-95	20-29		DZIZ
Fuller's earth, dry	30-35	23°		B26	Rock, crushed	125-145	20-29°		D26
Fuller's earth, oily	60-65	20-29°		B26	Rock, soft, excavated with shovel	100-110	30-44°	22°	D36
Fuller's earth, oil filter, burned	40	20-29		B26	Rubber, pelletized	50-55	35°	22°	D35
Fuller's earth, oil filter, raw	35-40	35°	20°	*B26	Rubber, reclaim	25-30	32°	18°	D35
Glass batch, wool and container	80-100	30-44°	20-22°	D38Z	Salicylic acid	29			B25U
Glue, pearl	40	25°	11°	C25	Salt, common dry, coarse	40-55		18-22°	C36TU
Grain, distillery, spent, dry	30	30-44°		E35WY	Salt, common dry, fine	70-80	25°	11°	D26TU\
Grain, distillery, spent, wet	40-60	45°		C45V	Salt cake, dry, coarse	85	36°	21°	B36TV
Granite, ½" screenings	80-90	20-29°		C27	Salt cake, dry, pulverized	60-85	20-29°		B26NT
Granite, 1½" to 2" lumps	85-90	20-29°		D27	Sand, bank, damp	105-130	45°	20-22°	B47
Granite, broken	95-100	30-44°		D37	Sand, bank, dry	90-110	35°	16-18°	B37
Graphite, flake	40	30-44°	20°	C35	Sand, core	65	41°	26° 24°	B35X
Gravel, bank run	90-100 70-80	38° 40°	20°	C36	Sand, foundry, prepared	80-90 90-100	30-44° 39°	24° 22°	B37 D37
Gypsum, ½" screenings	70-80 70-80	30°	15°	D36	Sand, foundry, shakeout Sand, silica, dry	90-100	20-29°	10-15°	B27
Guano, dry	70-80	20-29°		B26	Sandstone, broken	85-90	20-29 30-44°		D37
, ar j	7.0		l	520	Sawdust	10-13	36°	22°	*B35
Hops, spent, wet	50-55	45°		E45T	Sewage sludge, moist	55	30-44°		B36
	00 00	.0			Shale, broken	90-100	20-29°		D26Q2
ce, crushed	35-45	19°		D16	Shale, crushed	85-90	39°	22°	C36
menite ore	140-160	30-44°		B37	Shellac	80	45°		C45
ron ore	100-200	35°	18-20°	*D36	Shellac, powdered or granulated	31			B35PY
ron ore pellets	116-130	30-44°	13-15°	D37Q	Sinter	100-135	35°		*D37
ron sulfide	120-135	30-44°		D36	Slag, blast furnace, crushed	80-90	25°	10°	A27
					Slag, furnace, granular, dry	60-65	25°	13-16°	C27
Kaolin clay, 3" and under	63	35°	19°	D36	Slag, furnace, granular, wet	90-100	45°	20-22°	B47
	00	00.440		4.0EDV	Slate, crushed, ½" and under	80-90	28°	15°	C36
_actose	32	30-44°	•••	A35PX	Slate, 1½" to 3" lumps	85-95	 30-44°		D26 C35Q
_ead arsenate _ead ores	72 200-270	45° 30°	15°	B45R *B36RT	Soap beads or granules Soda ash, briquettes	15-25 50	22°	7°	C26
_ead oxides	60-150	45°		B45	Soda ash, heavy	55-65	32°	19°	B36
_ead oxides, pulverized	200-250	30-44°		A36	Soda ash, light	20-35	37°	22°	A36Y
_ead sulfide	240-260	30-44°		A36	Sodium aluminate, ground	72	30-44°		B36
ignite, air-dried	45-55	30-44°		*D35	Sodium aluminum sulfate	75	30-44°		A36
_ime, ground, 1/8" and under	60-65	43°	23°	B35X	Sodium antimonate, crushed	49	31°		C36
Lime, hydrated, 1/8" and under	40	40°	21°	B35MX	Sodium nitrate	70-80	24°	11°	*D25
Lime, hydrated, pulverized	32-40	42°	22°	A35MXY	Sodium phosphate	50-65	37°		B36
ime, pebble	53-56	30°	17°	D35	Soybeans, whole	45-50	21-28°	12-16°	C27NW
imestone, agricultural, 1/8" and less	68	30-44°	20°	B36	Starch	25-50	24°	12°	*B25
imestone, crushed	85-90	38°	18°	C36X	Steel chips, crushed	100-150	30-44°		D37W2
An ann an iomra albination	20	400		0.45	Steel trimmings	75-150	35°	18°	E37V
Magnesium chloride	33 40-50	40° 30-44°	•••	C45	Sugar, raw, cane	55-65 50-55	45° 30-44°		B46TX B35PU
Magnesium sulfate	27-30	20-29°	•••	C25N	Sugar, refined, granulated, dry	55-65	30-44°		C35X
Malt, dry, whole	60-65	45°		C45	Sugar, refined, granulated, wet Sugar, beet pulp, dry	12-15	20-29°		C26
Manganese dioxide	80			*	Sugar, beet pulp, wet	25-45	20-29°		C26X
Manganese ore	125-140	39°	20°	*D37	Sugar cane, knifed	15-18	45°		E45V
Manganese sulfate	70	30-44°		C37	Sulfate, crushed, ½" and under	50-60	30-44°	20°	C35NS
Marble, crushed ½" and under	80-95	30-44°		D37	Sulfate, 3" and under	80-85	30-44°	18°	D35NS
Marl	80	30-44°		C37					
/lica, flakes	17-22	19°		B16MY	Taconite, pellets	116-130	30-44°	13-15°	D37Q
/lica, ground	13-15	34°	23°	*B36	Talc, 1/2" screenings	80-90	20-29°		C25
filk, malted	30-35	45°		A45PX	Talc, 11/2" to 3" lumps	85-95	20-29°		D25
Molybdenite, powdered	107	40°	25°	B35	Titanium dioxide	140	30-44°		B36
Molybdenum ore	107	40°		B36	Titanium sponge	60-70	45°		E47
					Tobacco scraps	15-25	45°		D45Y
Nickel-cobalt, sulfate ore	80-150	30-44°		*D37T	Tobacco stems	15	45°		E45Y
Oil eaks	40.50	450	1	DACIM	Traprock, ½" screenings	90-100	30-44°		C37
Oil cake	48-50	45° 30-44°	•••	D45W	Traprock, 2" to 3" lumps	100-110	30-44° 30-44°	110	D37 B35
Oxalic acid crystals Oyster shells, ground, under ½"	60 50-60	30-44° 30-44°		B35SU C36T	Trisodium phosphate, granular Trisodium phosphate, pulverized	60 50	30-44° 40°	11° 25°	B35
Dyster shells, whole	80	30-44°		D36TV	moodidin phoophiate, pulvelized	30	40	23	ادوم
				. <b></b>	Vermiculite, expanded	16	45°	22.	C45Y
Paper pulp stock	40-60	19°		*E15MV	Vermiculite ore	70-80		20°	D36Y
Peanuts, in shells	15-24	30-44°		D35Q	Melant aballa	05.45	00.440	1	D0-
Peanuts, shelled	35-45	30-44°		C35Q	Walnut shells, crushed	35-45	30-44°		B37
Phosphate, acid, fertilizer	60	26°	13°	B25T	Wood chips	10-30	45°	27°	E45W
Phosphate, triple super, ground fertilizer	50-55	45°	30°	B45T	Wood chips, hogged, fuel	15-25	45°		D45
Phosphate rock, broken, dry	75-85	25-29°	12-15°	D26	Zine concentrates	75 00			Poe
Phosphate rock, pulverized	60 35	40°	25°	B36	Zinc concentrates	75-80		220	B26
Polystyrene pellets	35	23°	•••	B25PQ	Zinc ore, crushed	160	38°	22°	Cac
Potash salts, sylvite, etc	80 51	20-29° 20-29°	•••	B25T B26	Zinc ore, roasted	110 30-35	38° 45-55°		C36
Potassium carbonate Potassium chloride, pellets	51 120-130	20-29° 30-44°	•••	C36T	Zinc oxide, heavy	30-35 10-15	45-55° 45°		A45X A45XY
olassialli olilollas, pellels	76-80	20-29°		C26T	Zinc oxide, light*  * May vary considerbly -			1	1 40V

# Table 2 — Belt Capacity — $20^{\circ}$ Troughing Idlers — Equal Length Rolls

		Cross				n Cap	acity	— Sh	ort Ton	s (2000	Leng Lbs.) P Materia	Per Hou			Large	Max. Lu st Dimen		
Belt Width Inches	Sur- charge _Angle	Sectional Area Square	В	elt Sp	eed –								Footnot	es)	10%	Lumps Fines	All L	umps Fines
iliches	Degrees	Feet	50	100	150	200	250	300	350	400	500	600	700	800	Surc 20°	harge 30°	Surc 20°	harge 30°
18	0 5 10 20 25 30	.090 .109 .128 .168 .188 .209	14 16 19 25 28 31	27 33 38 50 56 63	41 49 58 76 85 94	54 65 77 101 113 125	68 82 96 126 141 157	81 98 115 151 169 188	95■ 114■ 134■ 176■ 197■ 219■	108   131   154   202   226   251	135• 164• 192• 252• 282• 314•	162 196 230 302 338 376	189 229 269 353 395 439	216 262 307 403 451 502	6	3	4	2
20	0 5 10 20 25 30	.115 .139 .163 .213 .239 .266	17 21 24 32 36 40	35 42 49 64 72 80	52 63 73 96 108 120	69 83 98 128 143 160	86 104 122 160 179 200	104 125 147 192 215 239	121■ 146■ 171■ 224■ 251■ 279■	138♦ 167♦ 196♦ 256♦ 287♦ 319♦	173• 209• 245• 320• 359• 399•	207 250 293 383 430 479	242 292 342 447 502 559	276 334 391 511 574 638	6	3½	4	2
24	0 5 10 20 25 30	.174 .209 .246 .321 .360 .399	26 31 37 48 54 60	52 63 74 96 108 120	78 94 111 144 162 180	104 125 148 193 216 240	131 157 185 241 270 299	157 188 221 289 324 359	183 219 258 337 378 419	209 251 295 385 432 479	261■ 314■ 369■ 482■ 540■ 599■	313   376   443   578   648   718	365• 439• 517• 674• 756• 838•	418 502 590 770 864 958	8	4	5	2½
30	0 5 10 20 25 30	.285 .342 .402 .523 .586 .649	43 51 60 78 88 97	86 103 121 157 176 195	128 154 181 235 264 292	171 205 241 314 352 389	214 257 302 392 440 487	257 308 361 471 527 584	299 359 422 549 615 681	342 410 482 628 703 779	428■ 513■ 603■ 785■ 879■ 974■	513   616   724   941   1055   1168	599• 718• 844• 1098• 1231• 1363•	684 821 965 1125 1406 1558	10	5	6	3
36	0 5 10 20 25 30	.423 .508 .596 .774 .867 .961	63 76 89 116 130 144	127 152 179 232 260 288	190 229 268 348 390 432	254 305 358 464 520 577	317 381 447 581 650 721	381 457 536 697 780 865	444 533 626 813 910 1009	508 610 715 929 1040 1153	635 762 894 1161 1301 1442	761   914   1073   1393   1561   1730	888• 1067• 1252• 1625• 1821• 2018•	1015 1219 1430 1858 2081 2306	12	6	7	3½
42	0 5 10 20 25 30	.589 .708 .829 1.074 1.201 1.333	88 106 124 161 180 200	177 212 249 322 361 400	265 318 373 483 540 600	353 425 497 644 721 800	442 531 622 806 901 1000	530 638 746 967 1082 1200	618 744 870 1128 1262 1400	707 850 995 1289 1442 1600	884 1062 1244 1611 1802 2000	1060 = 1275 = 1492 = 1933 = 2163 = 2399 =	1237   1487   1741   2255   2523   2799	1414• 1700• 1990• 2578• 2884• 3199•	14	7	8	4
48	0 5 10 20 25 30	.782 .939 1.099 1.424 1.592 1.765	117 140 165 214 238 265	235 282 330 427 476 530	352 422 495 641 714 794	469 564 659 854 952 1059	587 705 824 1068 1190 1324	704 845 989 1282 1428 1589	821 987 1154 1495 1666 1853	938 1128 1319 1709 1904 2118	1173 1409 1649 2136 2380 2648	1408■ 1681■ 1978■ 2563■ 2857■ 3177■	1642   1973   2308   2990   3332   3707	1877• 2255• 2638• 3418• 3808• 4236•	16	8	10	5
54	0 5 10 20 25 30	1.002 1.204 1.407 1.823 2.037 2.259	150 180 211 273 306 339	301 360 422 547 612 678	451 542 633 820 916 1017	601 722 844 1094 1222 1355	752 903 1055 1367 1528 1694	902 1084 1266 1641 1833 2033	1052 1264 1477 1914 2139 2372	1202 1445 1688 2188 2444 2711	1503 1806 2111 2735 3056 3389	1804■ 2167■ 2533■ 3281■ 3667■ 4066■	2104 2529 2955 3828 4278 4744	2405• 2890• 3377• 4375• 4889• 5422•	18	9	11	5½
60	0 5 10 20 25 30	1.250 1.151 1.753 2.270 2.537 2.813	188 225 263 341 380 422	375 450 526 681 761 844	563 675 789 1022 1142 1266	750 900 1052 1362 1522 1688	1315 1703 1903	1125 1350 1578 2043 2283 2532	1313 1576 1841 2384 2664 2954	1500 1801 2104 2724 3045 3376	1875 2251 2630 3405 3806 4220	2250 2702 3155 4086 4567 5063	2625 3152 3681 4767 5328 5907	3000• 3602• 4207• 5448• 6090• 6751•	20	10	12	6
72	0 5 10 20 25 30	1.826 2.192 2.560 3.313 3.702 4.103	274 328 384 497 555 615	548 658 768 994 1110 1231	822 986 1152 1491 1665 1846	1096 1315 1536 1988 2221 2462	1920 2485 2776	1643 1973 2304 2982 3332 3693	1917 2302 2688 3479 3887 4308	2191 2631 3072 3976 4442 4924	2739 3289 3840 4970 5552 6155	3287 3941 4608 5963 6663 7385	3835 4604 5376 6957 7773 8616	4382• 5262• 6144• 7951• 8884• 9847•	24	12	14	7
84	0 5 10 20 25 30	2.513 3.014 3.519 4.551 5.085 5.685	377 452 528 683 763 845	754 904 1056 1365 1525 1690	1131 1356 1584 2048 2288 2536	1508 1808 2111 2731 3051 3381	1885 2260 2639 3413 3814 4226	2262 2713 3167 4096 4576 5071	2639 3165 3695 4779 5339 5917	3016 3617 4223 5461 6102 6762	3770 4521 5278 6827 7627 8452	4523	5277   6329   7390   9557   10678   11833	6031• 7234• 8446• 10922• 12204• 13524•	26	13	15	<b>7</b> ½
96	0 5 10 20 25 30	3.308 3.967 4.631 5.986 6.687 7.411	496 595 695 898 1003 1112	992 1190 1389 1796 2006 2223	1489 1785 2084 2694 3009 3335	2380 2779 3692 4012	2975 3473 4490	2977 3570 4168 5387 6018 6670	3473 4165 4863 6285 7021 7782	3970 4760 5557 7183 8024 8893	4962 5950 6946 8979 10030 11117	12037■	6947 8331 9725 12571 14043 15563	14366• 16049•	28	14	16	8

Suggested Belt Speeds for Other Conditions:
Fine, Dry, Dusty or Fluffy Material 100-200 FPM Maximum.
Fragile Materials where degradation is harmful 150-250 FPM Maximum.
Wet Materials or materials which tend to cling to belt 300FPM Min.

Material Flowability and Abrasiveness.

Grain or other Free Flowing, Non Abrasive Materials.

Coal, Damp Clay, Soft Ores, Overburden and Earth, Fine Crushed Stone.

Heavy, Hard, Sharp Edged Ore, Coarse Crushed Stone.

Note: A Minimum Speed of 300 FPM is recommended for proper discharge.

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# Table 3 — Belt Capacity — 35° Troughing Idlers — Equal Length Rolls

	e,	Cross			Desig					s (2000 c Foot			r —			Max. Lu		
Belt Width Inches	Sur- charge Angle	Sectional Area Square	В	elt Sp	eed –	- Feet	Per I	Minute	(Sugg	ested S	peeds ·	— See	Footnot	es)		Lumps Fines		umps Fines
inches	Degrees	Feet	50	100	150	200	250	300	350	400	500	600	700	800	Surc 20°	harge 30°	Surc 20°	harge 30°
18	0 5 10 20 25 30	.144 .161 .178 .212 .231 .249	22 24 27 32 35 37	43 48 53 64 69 75	65 72 80 95 104 112	86 97 107 127 139 149	108 121 134 159 173 187	130 145 160 191 208 224	151∎ 169∎ 187∎ 223∎ 243∎ 261∎	173♦ 193♦ 214♦ 254♦ 277♦ 299♦	216• 242• 267• 318• 347• 374•	259 290 320 382 416 448	302 338 374 445 485 523	346 386 427 509 554 598	6	3	4	2
20	0 5 10 20 25 30	.184 .205 .226 .270 .293 .316	28 31 34 41 44 47	55 62 68 81 88 95	83 92 102 122 132 142	110 123 136 162 176 190	138 154 170 203 220 237	166 185 203 242 264 284	193■ 215■ 237■ 284■ 308■ 332■	221 ◆ 246 ◆ 271 ◆ 324 ◆ 352 ◆ 379 ◆	276• 308• 339• 405• 440• 474•	331 369 407 486 527 569	386 431 475 567 615 664	442 492 542 648 703 758	6	3½	4	2
24	0 5 10 20 25 30	.278 .309 .341 .406 .441 .475	42 46 51 61 66 71	83 93 102 122 132 143	125 139 153 183 198 214	167 185 205 244 265 285	209 232 256 305 331 356	250 278 307 365 397 428	292 324 358 426 463 499	334 371 409 487 529 570	417■ 464■ 512■ 609■ 662■ 713■	500♦ 556♦ 614♦ 731♦ 794♦ 855♦	584• 649• 716• 853• 926• 998•	667 742 818 974 1058 1140	8	4	5	2½
30	0 5 10 20 25 30	.456 .506 .558 .663 .718 .773	68 76 84 99 108 116	137 152 167 199 215 232	205 228 251 298 323 348	274 304 335 398 431 464	342 380 419 497 539 580	410 455 502 597 646 696	479 531 586 696 754 812	547 607 670 796 862 928	684■ 759■ 837■ 995■ 1077■ 1160■	821	958• 1063• 1172• 1392• 1508• 1623•	1094 1214 1339 1591 1723 1855	10	5	6	3
36	0 5 10 20 25 30	.676 .750 .827 .981 1.062 1.143	101 113 124 147 159 171	203 225 248 294 319 343	304 338 372 441 478 514	406 450 496 589 637 686	507 563 620 736 797 857	608 675 744 883 956 1029	710 788 868 1030 1115 1200	811 900 992 1177 1274 1372	1014■ 1125■ 1241■ 1472■ 1593■ 1715■	1217   1350   1489   1766   1912   2057	1420 • 1575 • 1737 • 2060 • 2230 • 2400 •	1622 1800 1985 2354 2549 2743	12	6	7	3½
42	0 5 10 20 25 30	.940 1.043 1.148 1.361 1.473 1.585	141 156 172 204 221 238	282 313 344 408 442 476	423 469 517 612 663 713	564 626 689 817 884 951	705 782 861 1021 1105 1189	846 939 1033 1225 1325 1427	987 1095 1205 1429 1547 1664	1128 1252 1378 1633 1768 1902	1410 1565 1722 2042 2210 2378	1692■ 1877■ 2066■ 2450■ 2651■ 2853■	1974   2190   2411   2858   3093   3329	2256• 2503• 2755• 3266• 3535• 3804•	14	7	8	4
48	0 5 10 20 25 30	1.249 1.383 1.523 1.804 1.949 2.100	187 207 228 271 292 315	375 415 457 541 585 630	562 622 685 812 877 945	749 830 914 1082 1170 1260	937 1037 1142 1353 1462 1575	1124 1245 1371 1624 1755 1890	1311 1452 1599 1894 2047 2205	1499 1660 1828 2165 2340 2520	1874 2075 2285 2706 2925 3150	2248■ 2489■ 2741■ 3247■ 3509■ 3780■	2623   2904   3198   3788   4094   4410	2998• 3319• 3655• 4330• 4680• 5040•	16	8	10	5
54	0 5 10 20 25 30	1.600 1.774 1.950 2.309 2.494 2.686	240 266 293 346 375 403	480 532 585 693 748 806	720 798 878 1039 1122 1209	960 1065 1170 1385 1497 1612	1200 1330 1463 1732 1871 2015	1440 1597 1755 2078 2245 2417	1680 1863 2048 2424 2620 2820	1920 2129 2340 2771 2994 3223	2400 2661 2925 3464 3742 4029	2880 ■ 3194 ■ 3510 ■ 4165 ■ 4490 ■ 4835 ■	3360 3726 4095 4849 5239 5641	3840• 4258• 4680• 5542• 5988• 6446•	18	9	11	5½
60	0 5 10 20 25 30	1.992 2.211 2.430 2.876 3.107 3.345	299 331 365 431 466 502	598 662 729 863 932 1004	896 995 1094 1294 1498 1505	1195 1327 1458 1726 1864 2007	1658 1823 2157 2330	1793 1990 2187 2588 2896 3011	2092 2322 2552 3020 3262 3512	2390 2654 2916 3451 3728 4014	2988 3317 3645 4314 4660 5018	3586■ 3980■ 4374■ 5177■ 5592■ 6021■	4183   4644   5103   6040   6525   7025	4781 • 5308 • 5832 • 6902 • 7456 • 8028 •	20	10	12	6
72	0 5 10 20 25 30	2.913 3.220 3.547 4.197 4.532 4.879	437 484 532 630 680 732	874 968 1064 1259 1360 1464	1311 1453 1596 1889 2040 2196	1937 2128	2422 2660 3148	2622 2907 3192 3777 4080 4391	3060 3391 3724 4407 4758 5123	3496 3875 4256 5036 5439 5855	4380 4845 5321 6296 6800 7319	5245 ■ 5813 ■ 6385 ■ 7555 ■ 8158 ■ 8782 ■	6119 6782 7449 8814 9518 10246	10878●	24	12	14	7
84	0 5 10 20 25 30	4.007 4.440 4.876 5.776 6.226 6.701	601 666 731 865 934 1005	1202 1332 1463 1730 1868 2010	1803 1998 2194 2595 2802 3015	2404 2664 2926 3460 3736 4020	3330	3606 3996 4388 5189 5603 6031	4207 4662 5120 6054 6537 7036	4808 5328 5851 6919 7471 8041	6010 6660 7314 8649 9339 10052	11207∎		13838• 14942•	26	13	15	7½
96	0 5 10 20 25 30	5.274 5.842 6.415 7.584 8.189 8.812	791 876 962 1138 1228 1322	1582 1753 1925 2275 2457 2644	2373 2629 2887 3413 3685 3965	3164 3505 3849 4550 4913 5287	4382 4811 5688 6142	4747 5258 5774 6825 7370 7930	5538 6134 6736 7963 8598 9253	10574		10515∎ 11547∎ 13651∎ 14740∎ 15862∎	11075 12268 13471 15926 17197 18505 Ods for O	14020• 15396• 18202• 19654• 21149•	28	14	16	8

Material Flowability and Abrasiveness.

■ Grain or other Free Flowing, Non Abrasive Materials.

■ Coal, Damp Clay, Soft Ores, Overburden and Earth, Fine Crushed Stone.

■ Heavy, Hard, Sharp Edged Ore, Coarse Crushed Stone.

Note: A Minimum Speed of 300 FPM is recommended for proper discharge.

Suggested Belt Speeds for Other Conditions:
Fine, Dry, Dusty or Fluffy Material 100-200 FPM Maximum.
Fragile Materials where degradation is harmful 150-250 FPM Maximum.
Wet Materials or materials which tend to cling to belt 300FPM Min.

# Table 4 — Belt Capacity — 45° Troughing Idlers — Equal Length Rolls

	Sur-	Cross			Desig					s (2000 ic Foot			ır —			Max. Lump Size Largest Dimension — Inches			
Belt Width Inches	charge Angle	Sectional Area Square	В	elt Sp	eed –	- Feet	Per I	Minute	(Sugg	ested S	peeds	— See	Footnot	tes)		Lumps Fines		umps Fines	
mones	Degrees	Feet	50	100	150	200	250	300	350	400	500	600	700	800	Surc 20°	harge 30°	Surc 20°	harge 30°	
18	0 5 10 20 25 30	.170 .185 .200 .230 .246 .262	26 28 30 35 37 39	51 56 60 69 74 79	77 83 90 104 111 118	102 111 120 138 148 157	128 139 150 173 185 197	153 167 180 207 221 236	179■ 194■ 210■ 242■ 258■ 275■	204 222 240 276 295 314	300∙ 345∙	306 333 360 414 443 472	357 389 420 483 517 550	408 444 480 552 590 629	6	3	4	2	
20	0 5 10 20 25 30	.217 .236 .254 .293 .313 .333	33 35 38 44 47 50	65 71 76 88 94 100	98 106 114 132 141 150	130 142 152 176 188 200	163 177 191 220 235 250	195 212 229 264 282 300	228■ 246■ 267■ 308■ 329■ 350■	260♦ 283♦ 305♦ 352♦ 376♦ 400♦	354∙ 381∙	391 425 457 527 563 599	456 496 533 615 657 699	521 566 610 703 751 799	6	3½	4	2	
24	0 5 10 20 25 30	.327 .355 .383 .440 .470 .499	49 53 57 66 71 75	98 107 115 132 141 150	147 160 172 198 212 225	196 213 230 264 282 299	245 266 287 330 353 374	294 320 345 396 423 449	343 373 402 462 494 524	392 426 460 528 564 599	491■ 533■ 575■ 660■ 705■ 749■	589   639   689   792   846   898	687• 746• 804• 924• 987• 1048•	785 852 919 1056 1128 1198	8	4	5	2½	
30	0 5 10 20 25 30	.536 .580 .625 .716 .764 .812	80 87 94 107 115 122	161 174 188 215 229 244	241 261 281 322 344 365	322 348 375 430 458 487	402 435 469 537 573 609	482 522 563 644 688 731	563 609 656 752 802 853	643 696 750 859 917 974	804■ 870■ 938■ 1074■ 1146■ 1218■	965 1044 1125 1289 1375 1462	1126• 1218• 1313• 1504• 1604• 1705•	1286 1392 1500 1718 1834 1949	10	5	6	3	
36	0 5 10 20 25 30	.795 .860 .926 1.060 1.131 1.201	119 129 139 159 170 180	239 258 278 318 339 360	358 387 417 477 509 540	477 516 556 636 679 721	596 645 695 795 848 901	716 774 833 954 1018 1081	835 903 972 1113 1188 1261	954 1032 1111 1272 1357 1441	1193 1290 1389 1590 1697 1802	1431   1548   1667   1908   2036   2162	1670 • 1806 • 1945 • 2226 • 2375 • 2522 •	1908 2064 2222 2544 2714 2882	12	6	7	3½	
42	0 5 10 20 25 30	1.106 1.194 1.286 1.471 1.568 1.665	166 179 193 221 235 250	332 358 386 441 470 500	498 537 579 662 706 749	664 716 772 883 941 999	830 896 965 1103 1176 1249	995 1075 1157 1324 1411 1499	1161 1254 1350 1545 1646 1748	1327 1433 1543 1765 1882 1998	1659 1791 1929 2207 2352 2498	1991 = 2149 = 2315 = 2648 = 2822 = 2997 =	2323   2507   2701   3089   3293   3497	2654• 2866• 3086• 3530• 3763• 3996•	14	7	8	4	
48	0 5 10 20 25 30	1.467 1.584 1.705 1.948 2.076 2.204	220 238 256 292 311 331	440 475 512 585 623 661	660 713 767 877 934 992	880 950 1023 1169 1246 1322	1100 1188 1279 1461 1557 1653	1320 1426 1535 1753 1868 1984	1540 1663 1790 2045 2180 2314	1760 1901 2046 2338 2491 2465	2201 2376 2558 2922 3114 3306	2641 = 2851 = 3069 = 3507 = 3737 = 3967 =	3081 3326 3581 4091 4360 4628	3521• 3802• 4092• 4676• 4982• 5290•	16	8	10	5	
54	0 5 10 20 25 30	1.879 2.030 2.182 2.493 2.656 2.819	282 304 327 374 398 423	563 609 655 748 796 846	845 914 982 1122 1194 1269	1128 1218 1309 1496 1592 1691	1523 1637	1691 1827 1964 2244 2388 2537	1973 2132 2291 2618 2786 2960	2255 2436 2618 2992 3184 3383	2819 3046 3273 3740 3980 4229	3383 3655 3928 4487 4776 5074	3947   4264   4582   5235   5572   5920	4510• 4873• 5237• 5983• 6368• 6766•	18	9	11	5½	
60	0 5 10 20 25 30	2.342 2.529 2.718 3.104 3.303 3.510	351 379 408 466 496 527	702 758 815 931 991 1053	1054 1138 1223 1397 1487 1580	1405 1518 1631 1862 1982 2106	2478	2108 2277 2446 2794 2973 3159	2459 2656 2854 3259 3469 3686	2810 3036 3262 3725 3965 4212	3513 3796 4077 4656 4956 5265	4215 4554 4892 5587 5947 6318	4919 5313 5708 6518 6938 7371	5621• 6072• 6523• 7450• 7929• 8424•	20	10	12	6	
72	0 5 10 20 25 30	3.420 3.693 3.967 4.528 4.818 5.118	513 554 595 679 722 768	1026 1108 1190 1358 1445 1535	1539 1662 1785 2038 2168 2303	2052 2216 2380 2717 2891 3071	2565 2770 2975 3396 3614 3839	3078 3324 3570 4075 4336 4606	3591 3878 4165 4754 5059 5374	4104 4432 4760 5434 5782 6142	5130 5540 5951 6792 7228 7677	6156 6648 7141 8150 8673 9212	7182 7756 8331 9509 10118 10748		24	12	14	7	
84	0 5 10 20 25 30	4.702 5.076 5.452 6.220 6.617 7.027	705 761 818 933 992 1054	1411 1523 1635 1866 1985 2108	2978	2821 3045 3271 3732 3970 4216	4089 4665	4232 4568 4907 5598 5955 6324	4937 5330 5275 6531 6948 7378	5642 6091 6542 7464 7940 8432	7053 7614 8178 9330 9925 10540	9813 <b>■</b> 11196 <b>■</b> 11910 <b>■</b>	9874 10660 11449 13062 13896 14757	13085• 14928• 15880•	26	13	15	7½	
96	0 5 10 20 25 30	6.188 6.678 7.172 8.180 8.701 9.239	928 1002 1076 1227 1305 1386	1856 2003 2152 2454 2610 2772			5008 5379 6135 6525	5569 6010 6455 7362 7831 8315	6497 7012 7530 8589 9136 9701	9816 10441	9282 10017 10758 12270 13051 13858	12020■ 12910■ 14724■ 15662■	12995 14024 15061 17178 18272 19402	16027• 17213• 19632• 20882•	28	14	16	8	

Material Flowability and Abrasiveness.

Grain or other Free Flowing, Non Abrasive Materials.

Coal, Damp Clay, Soft Ores, Overburden and Earth, Fine Crushed Stone.

Heavy, Hard, Sharp Edged Ore, Coarse Crushed Stone.

Note: A Minimum Speed of 300 FPM is recommended for proper discharge.

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Suggested Belt Speeds for Other Conditions:
Fine, Dry, Dusty or Fluffy Material 100-200 FPM Maximum.
Fragile Materials where degradation is harmful 150-250 FPM Maximum.
Wet Materials or materials which tend to cling to belt 300 FPM Min.

#### SELECTION PROCEDURE — from CEMA Standard 502-1998

Rexnord is a member of CEMA — Conveyor Equipment Manufacturers Association. The following procedure is part of the CEMA standard for belt conveyor idlers. For more information, contact Rexnord.

Selection of the Rex idler series is based on the following factors: belt speed, belt weight, belt width, idler capacity, idler spacing, material lump size, type of service, and environmental conditions.

# Initial Selection: Steps 1 and 2

Select idler class by comparing calculated idler load (CIL and CILr) with idler load ratings from table 14 (page 80). Refer to page 10 for idler styles and catalog page numbers.

NOTE: When material to be conveyed is of an unusually abrasive, corrosive, or sticky nature, refer to table 15 (page 81) for idler roll recommendations.

# Bearing $L_{10}$ Life Correction: Steps 3, 4, and 5

Factors K2 (figure 8) and K3A (figure 9) are multiplying factors used to adjust basic  $L_{10}$  life rating of idler class selected. Factor K2 is based on percent of idler load and K3A is a factor for actual roll speed (rpm). Step 5, factor K3B, is an optional step showing the advantage of using larger diameter rolls. It can be used as a multiplier to save repeating step 4 if a larger diameter roll is used.

#### **Determine Potential Idler Life: Step 6**

Factors K4A (figure 11), K4B (figure 12), and K4 $\mathring{\mathbb{C}}$  (figure 13) show conditions which will affect idler life, but are independent of bearing  $L_{10}$  life, idler load, and idler class. Use these figures to evaluate the potential expected idler life. Contact Rexnord for recommendations.

#### **Step 1. Troughing Idler Series Selection**

CIL = ((Wb + (Wm x K1)) x SI) + IML

Where.

CIL = calculated idler load, in pounds

Wb = belt weight, in pounds per foot

(table 5)

Wm = weight of material, in pounds per foot

= TPH x 33.3 ÷ FPM

K1 = lump adjustment factor (see table 6, page 78)

(see table 6, page 78

SI = idler spacing, in feet (see table 7, page 78)

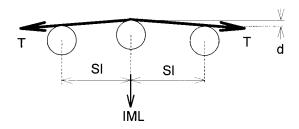
TPH = capacity, in short tons per hour

FPM = belt speed, in feet per minute

(selected from paragraph 3, page 71)

IML = idler misalignment load, in pounds — caused by deviation in idler height and belt tension

(see the following diagram and formula)



 $IML = (d \times T) \div (6 \times SI)$ 

d = idler misalignment, in inches

T = belt tension, in pounds

SI = idler spacing, in feet

When an idler is higher than adjacent idlers, a component of belt tension will add load to that idler. The amount of height deviation can vary with the installation and type of idler. CEMA publications on conveyor installation standards list recommendations on structure misalignment.

# Use CIL and select proper series of idlers from table 14. CIL value should be equal to or less than the idler load rating.

This troughing idler selection procedure for calculated idler load does not include the following:

- 1. Impact force on idler at conveyor loading points.
- 2. Effect of belt transitions (head and tail pulley) on idler load.

Table 5 Wb — Estimated Average Belt Weights (Lb/Ft) Multiple Ply & Reduced Ply Belts

Width	Material Carried Lb/Cu. Ft.							
Inches	30-74	75-129	130-200					
18	3.5	4	4.5					
20	4	4.5	5					
24	4.5	5.5	6					
30	6	7	8					
36	9	10	12					
42	11	12	14					
48	14	15	17					
54	16	17	19					
60	18	20	22					
72	21	24	26					
84	25	30	33					
96	30	35	38					

Note: 1. Steel Cable Belts — Increase above values by 50%.

Actual belt weights vary widely with different constructions, manufacturers, cover gauges, etc. Use the above values for estimating only and obtain actual values from the belt manufacturer whenever possible.

# **SELECTION PROCEDURE from CEMA Standard 502-1998**

Table 6 K1 — Lump Adjustment Factor †

Maximum Lump Size	Material Weight In Pounds Per Cubic Foot								
(Inches)	50	75	100	125	150	175	200		
4	1.00	1.00	1.00	1.00	1.10	1.10	1.10		
6	1.00	1.00	1.00	1.10	1.10	1.10	1.10		
8	1.00	1.00	1.10	1.10	1.10	1.20	1.20		
10	1.00	1.10	1.10	1.10	1.20	1.20	1.20		
12	1.00	1.10	1.10	1.20	1.20	1.20	1.30		
14	1.10	1.10	1.10	1.20	1.20	1.30	1.30		
16	1.10	1.10	1.20	1.20	1.30	1.30	1.40		
18	1.10	1.10	1.20	1.20	1.30	1.30	1.40		

<sup>†</sup> These factors are for average conditions. If lump percent, speed, and/or sag are high consult Rexnord.

Table 7 SI — Recommended Average Spacing of Idlers (in feet)

			Carryi	ng Idler	s				
Belt Width		Weight of Material Conveyed Pounds Per Cubic Feet							
	30	50	75	100	150	200			
18	5½	5	5	5	41/2	41/2	10		
20	51/2	5	41/2	41/2	4	4	10		
24	5	41/2	41/2	4	4	4	10		
30	5	41/2	41/2	4	4	4	10		
36	5	41/2	4	4	31/2	31/2	10		
42	41/2	41/2	4	31/2	3	3	10		
48	41/2	4	4	31/2	3	3	10		
54	41/2	4	31/2	31/2	3	3	10		
60	4	4	31/2	3	3	3	10		
72	4	31/2	31/2	3	21/2	21/2	8		
84	31/2	31/2	3	21/2	21/2	2	8		
96	31/2	3½	3	21/2	2	2	8		

Note: 1. Loading Point (Impact Idlers) — Normally, one half the carrying idler spacing is recommended. To insure maximum belt protection for optimum life and to reduce skirtboard leakage the impact idlers should be at least six inch diameter and spaced at one foot intervals.

Convex Vertical Curves — One-half of normal spacing unless radius is small, then space closer.

#### Step 2. Return Idler Series Selection

 $C\overline{I}Lr = (SI \times Wb) + IML$ 

Where:

CILr = calculated idler load for the return idlers, in pounds

= idler spacing, in feet (see table 7)

Wb

= belt weight, in pounds per foot (table 5, page 77)

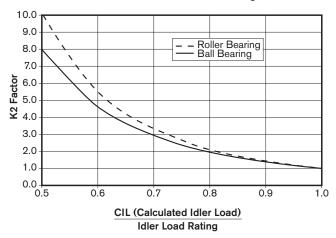
idler misalignment load, in pounds — caused by IML deviation in idler height and belt tension. (calculate using the IML formula in step 1)

Use CILr and select the proper series from table 14. CILr should be equal to or less than the return idler load rating.

#### Step 3. K2 = Effect of load on predicted bearing life

When calculated idler load (CIL) is less than the load rating of the idler selected, the bearing  $L_{10}$  life will increase.

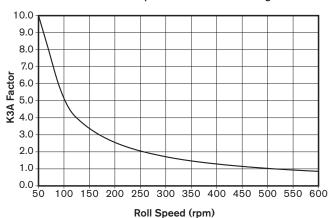
Figure 8 K2 = Effect of Load on Predicted Bearing L10 Life



#### Step 4. 3A = Effect of belt speed on predicted bearing life

CEMA L<sub>10</sub> life ratings are based on 500 rpm. Slower speeds increase life and faster speeds decrease life. Figure 9 shows this relationship.

Figure 9 K3A = Effect of Belt Speed on Predicted Bearing L10 Life



 $RPM = \frac{Belt Speed (fpm) \times 12}{}$ Roll Dia. (in.) x  $\pi$ 

# **SELECTION PROCEDURE** —from CEMA Standard 502-1998

#### Step 5. K3B = Effect of roll diameter on predicted bearing life

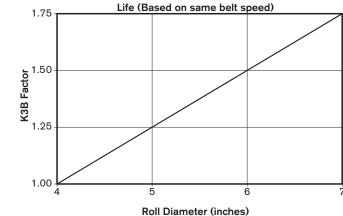
For a given belt speed, using larger diameter rolls will increase idler  $L_{10}$  life. Figure 10 depicts  $L_{10}$  life adjustment for various roll diameters using a 4" diameter as a value of 1.0. Percent life increase can be calculated for each roll diameter increase.

Example:  $\frac{1.5 \text{ for } 6^{\circ} \text{ dia.}}{1.25 \text{ for } 5^{\circ} \text{ dia.}} = 1.20 \text{ for } 20\% \text{ increase in L}_{10} \text{ life.}$ 

Figure 10

K3B = Effect of Roll Diameter on Predicted Bearing L<sub>10</sub>

Life (Based on same belt speed)



# Step 6. K4 = Environmental, maintenance, and other conditions

Figure 11 K4A - Effect of maintenance on potential idler life

Figure 12 K4B - Effect of environment on potential idler life

Figure 13 K4C - Effect of operating temperature on potential idler life

Based on collective application experience by CEMA idler manufacturers, these conditions are very important in determining potential idler life. However, exact mathematical basis is very subjective, so contact Rexnord for assistance, or for any unusual conditions not listed.

Figure 11
K4A = Effect of Maintenance on Potential Idler Life

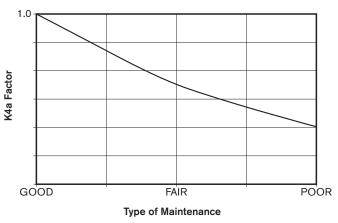


Figure 12
K4B = Effect of Environmental Conditions on
Potential Idler Life

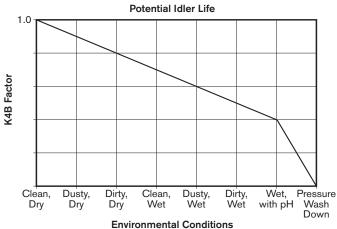
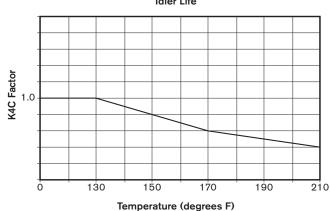


Figure 13
K4C = Effect of Operating Temperature on Potential
Idler Life



# **SELECTION PROCEDURE** —from CEMA Standard 502-1998

Table 14 **Idler Load Ratings (in pounds)** 

Width         20°         35°         45°         Return           18         410         410         410         220           20         410         410         410         210           24         410         410         410         190           30         410         410         410         165           36         410         410         396         155           42         390         363         351         150 ②           48         380         353         342         125 ②    Series C	N/A N/A
18         410         410         410         220           20         410         410         410         210           24         410         410         410         190           30         410         410         410         165           36         410         410         396         155           42         390         363         351         150 ②           48         380         353         342         125 ②    Series C	N/A
20     410     410     410     210       24     410     410     410     190       30     410     410     410     165       36     410     410     396     155       42     390     363     351     150 ②       48     380     353     342     125 ②    Series C	N/A
24     410     410     410     190       30     410     410     410     165       36     410     410     396     155       42     390     363     351     150 ②       48     380     353     342     125 ②   Series C	
30     410     410     410     165       36     410     410     396     155       42     390     363     351     150 ②       48     380     353     342     125 ②   Series C	N I / A
36     410     410     396     155       42     390     363     351     150 ②       48     380     353     342     125 ②   Series C	N/A
42 390 363 351 150 ② 48 380 353 342 125 ② Series C	N/A
48 380 353 342 125 ② Series C	N/A
Series C	N/A
	N/A
10 000 000 175	
18 900 900 900 475	500
20 900 900 900 400	500
24 900 900 900 325	500
30 900 900 900 250	500
36 900 837 810 200	500
42 850 791 765 150	500
48 800 744 720 125	500
54 750 698 675 375 ③	500
60	500
Series D	
24 1200 1200 1200 600	850
30   1200   1200   1200   600	850
36   1200   1200   1200   600	850
42   1200   1200   1200   500	850
48   1200   1200   1200   425	850
54 1200 1116 1080 375	850
60 1150 1070 1035 280	850
72 1050 977 945 155	850
Series E	
36   1800   1800   1800   1000	N/A
42 1800 1800 1800 1000	N/A
48 1800 1800 1800 1000	N/A
54 1800 1800 1800 920	N/A
60 1800 1800 1800 850	N/A
72   1800   1800   1800   700	N/A
84 1800 1674 1620 550	N/A
96 1750 1628 1575 400	N/A

NOTES: Troughing idler load ratings are based on equal length roll idlers, and are based on 70% of the load on the center roll.

CEMA Standard 502 specifies that the load ratings for B and C Series idlers shall be based on a minimum  $\rm L_{10}$  life of 30,000 hours; and the load ratings for D and E Series idlers shall be based on a minimum  $\rm L_{10}$  life of 60,000 hours. For all idlers, the  $\rm L_{10}$  life calculations are to be done at 500 rpm. B+ is a Rexnord exclusive, not a CEMA standard.

- ① Recommended maximum belt speed: 4" diam. roll 500 fpm 5" diam. roll 600 fpm
- ② These return idlers are series C.③ These return idlers are series D.

# **SELECTION PROCEDURE** —Cont'd

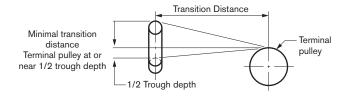
# Table 15 Idler Roll Recommendations

Material Characteristics	Idler R	oll Recommendations
material Characteristics	Troughing or Flat	Return
NA —Non Abrasive MA — Mildly Abrasive NC — Non Corrosive MC —Mildly Corrosive	Standard — Steel	Standard — Steel
VA — Very Abrasive	Larger roll diameter Thicker roll shell — steel Coated roll (Ceramic) Rubber cover or Urethane cover	Rubber, Urethane, Ceramic Disc or Rubber Spiral Thicker roll shell — steel Larger roll diameter Coated roll (Ceramic) Rubber cover or Urethane cover
VC — Very Corrosive	Thicker roll shell — steel Coated roll (Ceramic) Rubber cover or Urethane cover Polyethylene	Thicker roll shell — steel Coated roll (Ceramic) Rubber cover or Urethane cover Rubber, Urethane, Ceramic Disc or Rubber Spiral Polyethylene
Materials which adhere to belt and idlers.	Rubber Disc or Urethane disc Catenary Rubber cover or Urethene cover Polyethylene	Rubber or Urethane Disc or Rubber Spiral Catenary Polyethylene

Table 16
Terminals — Distance between nearest standard carrying idler and pulley.

	Carrying Idler Spacing at Ter	minals
Troughing Angle	Distance in Inches Pulley to closest standard idler	Transition Idlers — If distance to the closest standard idler is greater than the recommended spacing in table 17 below, the use of the following transition idlers are recommended.
20°	1.0 x belt width	
35°	1.5 x belt width	20° idler
45°	2.0 x belt width	20° idler and 35° idler

Table 17
Recommended Minimum Transition Distance



Minimal transition distance Terminal pulley at full trough depth	Transition Distance  Terripull  Full trough depth	minal ey
---	---	-------------

Idler Angle	% Rated Tension	Fabric Belts	Steel Cable Belts
20°	Over 90	.9 <i>b</i>	2.0 <i>b</i>
	60 to 90	.8 <i>b</i>	1.6 <i>b</i>
	Less than 60	.6 <i>b</i>	1.0 <i>b</i>
35°	Over 90	1.6 <i>b</i>	3.4 <i>b</i>
	60 to 90	1.3 <i>b</i>	2.6 <i>b</i>
	Less than 60	1.0 <i>b</i>	1.8 <i>b</i>
45°	Over 90	2.0 <i>b</i>	4.0 <i>b</i>
	60 to 90	1.6 <i>b</i>	3.2 <i>b</i>
	Less than 60	1.3 <i>b</i>	2.3 <i>b</i>

Idler Angle	% Rated Tension	Fabric Belts	Steel Cable Belts
20°	Over 90	1.8 <i>b</i>	4.0 <i>b</i>
	60 to 90	1.6 <i>b</i>	3.2 <i>b</i>
	Less than 60	1.2 <i>b</i>	2.8 <i>b</i>
35°	Over 90	3.2 <i>b</i>	6.8 <i>b</i>
	60 to 90	2.4 <i>b</i>	5.2 <i>b</i>
	Less than 60	1.8 <i>b</i>	3.6 <i>b</i>
45°	45° Over 90 60 to 90 Less than 60		8.0 <i>b</i> 6.4 <i>b</i> 4.4 <i>b</i>

b = Belt width

# **REX IDLER SPECIFICATIONS**

#### REGREASABLE IDLERS

Regreasable idlers are designed to provide positive thru-lubrication to all bearings from a single fitting and are recommended for those installations where a regular re-lubrication program is scheduled.

#### Series B+

Idlers are Rexnord Light Duty type conforming to the dimension requirements for CEMA B. The idlers exceed CEMA B Load Ratings by utilizing a CEMA C roll.

4" and 5" diameter rolls are manufactured from #9 gauge (.149") welded steel tubing, counterbored for deep drawn steel end discs which are welded in place assuring concentricity and balance. Total indicated runout to be .030" or less. Rolls shall have ¾" hollow shafts to permit thru greasing and ¾" tapered roller bearings designed to operate at 100% of the CEMA C rated idler load. Seals shall be of the five passage horizontal labyrinth with wiper type. The combination outer seal and shield and inner seal are close tolerance injection molded non-metallic components.

The idler frame shall consist of an inverted angle, formed end and center brackets with slotted mounting pads. Frame strength shall be equal or greater than the CEMA B idler load ratings.

Gap between the center and end roll shall not exceed the following:

Roll Diameter	Trough Angle			
Inches	<b>20</b> °	<b>35</b> °		
4	1/2"	17/32"		
5	9/32"	5/16"		

Positive roll retention locks are provided for end and center rolls. Roll locks are easily removeable for roll replacement. Both ends of the idler are equipped with a ball check type grease fitting to allow lubrication from either side of the idler.

#### Series C & D Troughing Idler

Idlers are Rexnord Medium Duty type conforming to the requirements for CEMA C in dimension. Rex Idlers meet or exceed CEMA load rating requirements. Available with 5" and 6" diameter rolls with single point thru-greasing.

Rolls shall be manufactured from welded steel tubing. The 5 inch diameter roll shall have a wall thickness of #9 gauge (.149") and the 6 inch diameter roll shall have a wall thickness of #8 gauge (.165"). The roll shell shall be counterbored for deep drawn steel end discs which will be welded in place assuring concentricity and balance. T.I.R. to be .030" or less. Rolls shall have ¾" diameter hollow shafts (1" diameter for Series D); to permit thru-greasing and ¾" tapered roller bearings designed to operate at 100% of the rated idler load. Seals shall be of the five passage horizontal labyrinth with wiper type. The combination outer seal and shield and inner seal are close tolerance injection molded non-metallic components.

The idler frame shall consist of an inverted steel angle, end and center brackets and slotted mounting pads. Frame strength shall be equal to or greater than the CEMA D idler load ratings.

Gap between the center and end roll shall not exceed the following:

Roll Diameter	Trough Angle				
Inches	20°	<b>35</b> °	45°		
5	5/16"	9/32"	5/16"		
6	3/8"	7/32"	3/16"		

Positive retention heavy duty roll locks are to be provided for end and center rolls and are to be easily removable for roll replacement. Center roll locks are to provide support and protection for the thrugrease connector tube.

Both ends of the idler are equipped with a ball check type grease fitting to allow lubrication from either side of the idler.

#### Series E Troughing Idler

Idlers are Heavy Duty type conforming to the requirements for CEMA E in dimensions and load rating and are available with 6" and 7" diameter rolls with single point thru-greasing.

Rolls are manufactured from 1/4" welded steel tubing, counterbored for deep drawn steel end discs which will be welded in place assuring concentricity and balance. T.I.R. to be .040". Rolls shall have 1/4"diameter shafts and 1/4" tapered roller bearings designed to operate at 100% of the rated idler loads. Seals shall be of the triple labyrinth cartridge type with deflector caps.

The idler frame shall consist of an inverted steel angle, end and center brackets and slotted mounting pads. Frame strength shall be equal to or greater than the idler load ratings.

Roll gap between the center and end roll shall not exceed the following:

Roll Diameter	Trough A	gh Angle 35°
Inches	<b>20</b> °	35°
6	29/32"	3/4"
7	3/4"	7/16"

Positive retention heavy duty roll locks are to be provided for end and center rolls and are to be easily removable for roll replacement. Center roll locks are to provide protection for the thru-grease connector tube.

Each idler shall have a standard grease fitting on one end and a pressure relief fitting on the opposite end.

# **REX IDLER SPECIFICATIONS**

#### **FACTORY SEALED IDLERS**

Factory sealed idlers are designed to provide longer roll life for those installations where a regular re-lubrication program will not be maintained.

#### Series B Troughing Idler

Idlers are Rexnord Light Duty type conforming to the dimensional requirements for CEMA B. These idlers exceed CEMA B load ratings. Available in 4" and 5" diameter rolls.

Rolls are manufactured from #9 gauge (.149") welded steel tubing, counterbored for steel end discs. The end discs are pressed into the roll shell at which time the roll ends are formed to lock the disc securely assuring concentricity and balance. The 17mm solid shaft with ball bearings has dual shields and seals. An outer shield protects the bearing from larger contaminants.

The idler frame shall consist of an inverted steel angle, formed end and center brackets and slotted mounting pads. Frame strength shall be equal to or greater than the idler load ratings.

Gap between the center and end roll shall not exceed the following:

Roll Diameter	Trough	Angle
Inches	20°	<b>35</b> °
4	1/2"	17/32"
5	9/32"	5/16"

Positive roll retention is to be provided for end and center rolls, to be easily removable for roll replacement.

### Series C & D Troughing Idler

Idlers are Rexnord Medium Duty type conforming to the requirements for CEMA Series C in dimension. Available with 5" and 6" diameter rolls. Rex idlers meet or exceed CEMA load rating requirements.

Rolls shall be manufactured from welded steel tubing. The 5 inch diameter roll shall have a wall thickness of #9 Gauge (.149") and the 6 inch diameter roll shall have a wall thickness of #8 Gauge (.165"). The roll shell shall be counterbored for deep drawn steel end discs which will be welded in place assuring concentricity and balance. T.I.R. to be .030" or less. Rolls shall have ¾" diameter solid shafts (1" diameter for Series D); and ¾" tapered roller bearings designed to operate at 100% of the rated idler load. Seals shall be of the five passage horizontal labyrinth with wiper type. The combination outer seal and shield and inner seal are close tolerance injection molded non-metallic components.

The idler frame shall consist of an inverted steel angle, end and center brackets and slotted mounting pads. Frame strength shall be equal to or greater than the CEMA D idler load ratings.

Gap between the center and end roll shall not exceed the following:

Roll Diameter	Trough Angle					
Inches	<b>20</b> °	35°	<b>45</b> °			
5 6	5/16" 3/8"	9/ <sub>32</sub> " 7/ <sub>32</sub> "	5/16" 3/16"			

Positive retention heavy duty roll locks are to be provided for end and center rolls and are to be easily removable for roll replacement.

#### **SPECIFIC FUNCTION IDLERS**

**Return and Flat Idlers** — Return and Flat idlers are to have the same specifications for roll construction as the troughing idlers. Hanger or support brackets shall have a strength equal to or greater than the idler load rating.

**Impact Idlers** — **Troughing** — To be used where the impact force exceeds 40 foot pounds. Impact idler rolls shall be of molded rubber specifically selected for shock absorbing characteristics, with alternate deep and shallow grooving for impact absorption, and press fit onto a steel inner tube.

**Impact Idlers** — **Flat** — Flat impact idler rolls are to have the same specifications as the troughing impact rolls, except they are to be mounted on a solid steel shaft with outboard roller bearing pillow blocks.

**Spiral Return Idlers** — Spiral return idlers shall consist of an extruded rubber, formed to fit over a heavy steel spiral which is welded to a steel inner tube. These idlers are to be used on unidirectional conveyors only.

**Rubber Disc Return Idlers** — Rubber disc return idlers shall have square corner, abrasion resistant rubber discs with an encapsulated steel ring to maintain a compression fit between the disc and inner tube.

**Urethane Disc Return/Idlers** — Urethane disc return idlers shall have square corner, abrasion resistant urethane discs with an encapsulated steel ring to maintain a compression fit between the disc and inner tube.

**Ceramic Disc Return/Idlers** — Ceramic disc return idlers shall have extremely abrasion resistant ceramic discs with a urethane bushing to maintain a compression fit between the disc and inner tube.

**Training Idlers (Positive Type)** — Training idlers shall be provided with ball bearing activating rollers mounted on both ends of the idler frame. The idler frame shall be free to swivel within controlled limits about a pivot housing on tapered roller bearings. Belt travel one direction only.

**Training Idlers (Actuating Shoe)** — Training idlers shall be provided with actuating shoes mounted on both ends of the idler frame. The idler shall be free to swivel within controlled limits about a pivot housing on tapered roller bearings. Belt travel either direction.

**Training Idlers (Inclined Pivot)** — Training idlers shall be constructed to allow the weight of the belt to direct the roll to a belt centering position. Belt travel one direction only.

**Ceramic Covered Rolls** — Rolls shall be standard steel idler rolls with a ceramic covering for increased roll shell wear life. Ceramic material is not to chip off roll face until backup metal is deformed. Rolls are to be interchangeable with standard roll assemblies of the same series.

**Urethane Covered Rolls** — Rolls shall be standard steel idler rolls with a  $\frac{1}{8}$ " or  $\frac{1}{4}$ " thick bonded urethane covering for increased roll shell wear life. Rolls are interchangeable with standard roll assemblies of the same series.

**Polyethylene Roll Idlers** — Polyethylene rolls are made of a proprietary formulation of high molecular weight polyethylene, Teflon® and carbon black to provide a roll that resists corrosion and material build-up.

# **INSTALLATION, CARE AND MAINTENANCE**

A belt conveyor is one of the most economical means of transporting bulk material. It can operate in almost any weather condition, and it can traverse terrain which would severely limit other means of transport. A belt conveyor system represents a substantial capital investment . . . and it must be kept running to obtain full value.

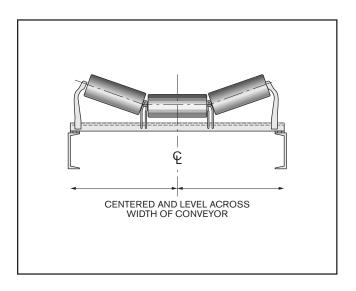
In a system, the belt can easily represent half the total conveyor cost. . . and is the most fragile part of the conveyor. The structure and various mechanical components of a system serve primarily to drive, guide, and protect the belt.

**IMPORTANT** — Safety Instructions

Compliance with safety standards, including OSHA and other Federal, State, local codes or regulations is the responsibility of the user of the conveyor installation. Placement of guards and other safety equipment in accordance with safety standards is dependent upon the area and use to which the system is put. A safety study should be made of the conveyor application and guards should be installed wherever appropriate. "Safety Standards For Conveyors And Related Equipment" ANSI B20.1 is a guide for safe construction, installation, operation and maintenance of conveyors and related equipment.

#### **GENERAL RECOMMENDATIONS**

 Alignment of the structure is critical if the belt is to train properly on the idlers. Idler and pulley supports must be equidistant from the conveyor centerline and level across the conveyor width.



- Pulley shaft assemblies must be square to centerline of conveyor, level and in line.
- 3. Belt must be properly spliced so it runs straight and true.

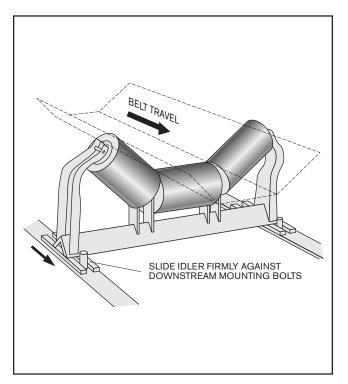
#### STORAGE AND PREPARATION

Belt conveyor idlers are usually shipped to the job site mounted on skids and shrink wrapped. As idlers often arrive well in advance of their installation, they should be stored under cover to protect them from exposure to the weather and other adverse conditions.

Prior to installation, check all idlers for evidence of damage to the rolls or frame due to mishandling. Check all rolls to make sure that they turn freely.

#### **INSTALLATION**

Place idlers in position by sliding them downstream, firmly against the mounting bolts and lightly tighten. Final alignment requires that the centerline of all idlers is in a straight line, perpendicular to the line of belt travel, properly spaced and level. When alignment is complete, bolt idlers securely in place.



## **IDLER ALIGNMENT**

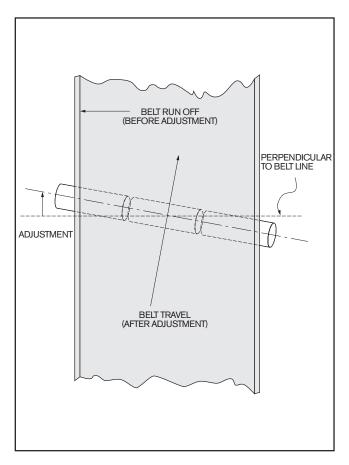
When the idlers and belt have been installed, the system should be started while empty and checked for alignment. A properly aligned conveyor has the belt running evenly in the center of the idlers and, therefore, prevents damage to the belt edges from contact with supporting structures or other objects. If a misalignment problem exists, it is not advisable to attempt to correct it by readjusting the head or tail pulley, as this will cause undue strains on the pulley bearings, belt, belt splice or joint, and on the conveyor frames. Pulleys should be carefully aligned when installed and should not be moved for purposes of belt training. (Continued)

# **INSTALLATION, CARE AND MAINTENANCE**

#### **IDLER ALIGNMENT** — Cont'd

If one section of a belt runs true and another section runs out of line, either the belt is bowed from improper storage or handling or the belt is not properly spliced. If the belt runs out of line consistently at one point in the conveyor, the condition can be attributed to misaligned idlers. Usually the idlers that require adjustment will be located upstream of the point at which the belt runs out of line.

Proper alignment is achieved by loosening the mounting bolts on several idlers on the upstream side and skewing them slightly. When one side of an idler is shifted ahead of the other, the belt shifts to the side which is behind. Retighten the mounting bolts before restarting the conveyor.



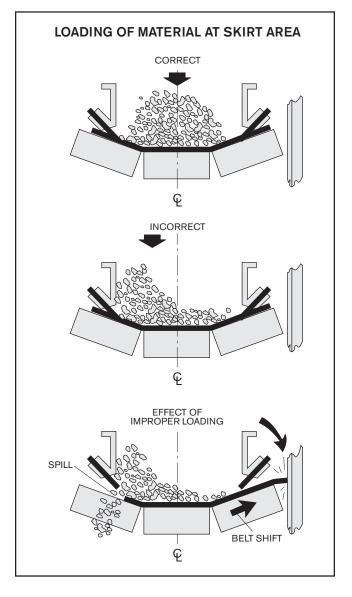
Do not shift idlers on a reversing belt as this will detrain the belt when it travels in the opposite direction.

Once constant central alignment has been achieved on the return and carrying run with an empty belt, the conveyor should be checked while carrying a full load.

#### **LOADING**

Start with a light load and gradually work up to the load that the conveyor was designed to handle. Check chutes to see that the material is being directed onto the center of the belt. Off-center loading is harmful to belt, idlers, and shafting. An off-center load will affect belt alignment in that the belt will run off center. An on-center load will maintain belt alignment.

To insure maximum **belt protection** for optimum life and to reduce skirtboard leakage the **impact idlers** should be at least **six inch diameter** and spaced at **one foot intervals**.



The loading area of a belt conveyor is the critical point. Here the conveyor receives its major abrasion and practically all of its impact. The ideal condition is to have the material pass from chute to belt at the same speed and direction of travel as the belt, with a minimum amount of impact, and to load the belt on center.

The skirts must be adjusted to prevent side spillage of material and to keep the load central on the belt. The maximum distance between skirtboards customarily is two thirds the width of a troughed belt. It is desirable, when possible, to reduce this spacing to one half the width of the troughed belt especially for free flowing materials.

The skirt lengths are designed to stop side spillage. The material should also be at rest on the belt before it reaches the end of the skirt. If the material is still tumbling as it passes the skirt end, the skirts should be lengthened.

#### TRAINING IDLERS

A properly aligned and centrally loaded belt will track in the center of the idlers without using training idlers. Training idlers are used to compensate for occasional irregular loading, the effects of wind, and other varying conditions.

# INSTALLATION, CARE AND MAINTENANCE

#### TROUGHING TRAINING IDLERS

Troughing training idlers are installed along the conveyor length, as required, but not closer than fifty feet from a pulley. Positive arm types are used on belts traveling in one direction only. Actuating shoe types are used on reversing belts and on belts with traveling trippers or stackers.

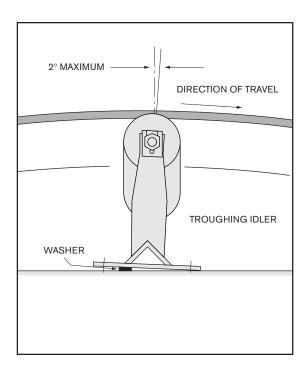
#### **RETURN TRAINING IDLERS**

Return training idlers are installed along the conveyor length, as required, but not closer than fifty feet from a pulley. Positive arm and inclined pivot types are used on belts traveling in one direction only; actuating shoe types are used on reversing belts.

#### **TILTING IDLERS**

Tilting the troughing idlers forward (not over 2 degrees) in the direction of belt travel produces an aligning effect. This may be accomplished by placing a tilting block or steel washer under the rear of the idler stand. If the angle of tilt exceeds 2 degrees, excessive wear may occur on the belt and on the idler rolls, since the rolls are rotating on an axis which is not at right angles to the path of belt travel. This method has the advantage over shifting idlers in that it will correct movement on the belt before and after the idler, hence, it is useful for training erratic belts.

Both shifting and tilting idlers are unidirectional adjustments. They are obviously not effective for a reversing belt.

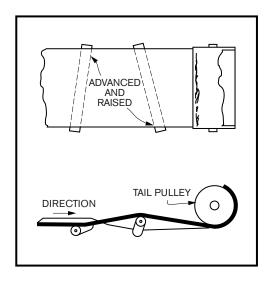


Return idlers cannot be tilted, however, by shifting their axis, they can be used to provide a corrective effect.

This can be done by slightly advancing and raising the alternate ends of the return rolls nearest the tail pulley. This can be done for expediency on a *temporary basis*. If this area is a training problem, a self-aligning return idler should be installed about the 2nd or 3rd idler from the tail pulley.

#### NOTE

Shifting or tilting of idlers for belt training can only be used for belts traveling in **one direction only**. This remedy cannot be used for **reversing belt** conveyors.



#### SIDE GUIDE IDLERS

Side guide idlers do not train a belt. They are sometimes used to prevent a belt from running off the pulleys and to prevent the belt from damage caused by contacting the conveyor structure and other objects.

They should be installed so that they do not touch the belt edge when it is running normally. If the belt runs against a side guide idler continually, even though the rolls are free to rotate, belt edge wear can occur.

# **INSTALLATION, CARE AND MAINTENANCE**

#### **LUBRICATION**

All Rex idlers are prelubricated at the factory and are ready for operation. All external lubrication lines (if added by the customer) should be filled with grease when installed to insure that the idlers will get grease when the lubrication cycle is started.

Under normal conditions, relubrication should be every 4000 to 6000 hours until a clean bead of grease appears around the final opening of each seal.

The lubrication cycle can be lengthened in applications where operating conditions are clean, dry, of moderate temperature and slow speed. The cycle should be shortened in applications where severe dirt, high humidity, elevated temperatures, high speeds, free water, prolonged shutdown, or other extreme conditions are encountered. Periodic inspection during the first few years of operation will provide the best determination of required relubrication frequency.

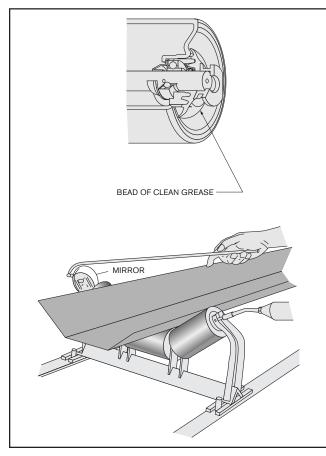
Rex idlers are greased at the factory with Lithium EP grease with a NLGI #2 consistency having the following characteristics:

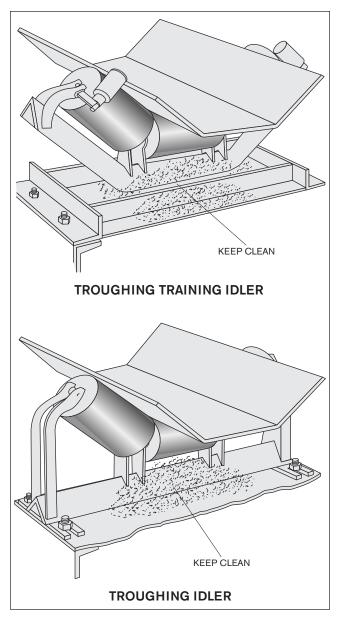
- 1. Lithium soap base
- 2. Mineral oil
- 3. Worked penetration 265-295" 77°F
- 4. Operating range of +225°F to-10°F
- 5. Bleed rate 3% maximum

It is recommended that an equivalent grease be used. When using any other type of grease, it is imperative that it be compatible with the original grease.

When lubricating idlers, the use of high pressure equipment is not only unnecessary but is actually undesirable unless used with great care. High pressure may cause damage to bearings and seals. It is recommended that a VOLUME TYPE GREASE GUN BE USED: one that delivers an ounce of grease per seven to ten strokes of the lever.

All fittings should be wiped clean before lubricating so as not to introduce dirt into the system.





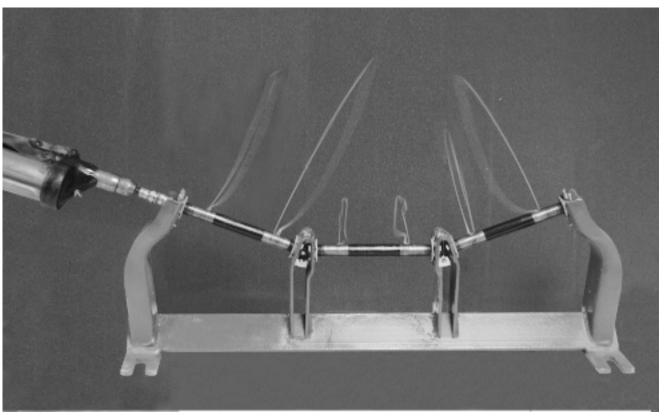
#### **INSPECTION AND MAINTENANCE**

A scheduled maintenance program, followed faithfully by trained people, can usually help avoid costly interruptions in production and repairs to equipment. Many operators make a cursory check at least once a day to find obvious problems. A more comprehensive inspection is made at periodic intervals.

Inspection should entail the following:

- Inspect belt for breaks and cuts or for indications that the belt edge is rubbing.
- 2. The belt should be centered on the idlers.
- 3. Check loading areas material should be loaded evenly, and on the center of the belt.
- Rubber skirts on chutes and skirt plates are adjusted to prevent spillage.
- 5. Belt cleaners are properly adjusted and working.
- Rex Idlers are designed to be self cleaning. Accumulation of material must not be allowed to prevent idler rolls from rotating or training idlers from pivoting.
- 7. All idler rolls should be rotating. A stalled roll will cause excessive roll shell and belt wear and should be replaced.

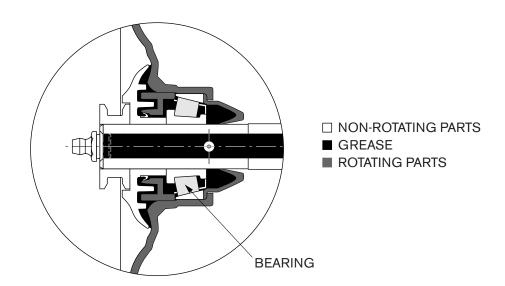
# INSTALLATION, CARE AND MAINTENANCE Effective Through-Greasing System



#### **EFFECTIVE THROUGH-GREASING SYSTEM**

Rex® patented metered greasing system make use of an engineered grease restrictor in the shafts at each bearing. This develops equalized pressures throughout all roll shafts to provide grease to each bearing cavity without depending on the seals to pressurize the system.

This pressurized system within the shafts allows grease to flow to all bearings without high pressure buildup in the bearing cavities. This system allows the grease to flow outward through the bearings and seals, purging them of detrimental contaminants that could stop bearing rotation.



## BELT CONVEYOR TROUBLE-SHOOTING

Any belt conveyor installation can be subject to a wide variety of problems which may become costly in terms of replacement and plant downtime unless quickly diagnosed and corrected. This guide is intended to point out the majority of belt conveyor problems and to set forth their probable causes and solutions.

Locate the specific problem in the "problem" column below and note the numbers to the right. They represent the most likely causes for the problem, in order of probable occurrence, and how to correct them. The list at the bottom of the page details the causes and solutions by number.

#### **COMMON BELT CONVEYOR PROBLEMS**

		•	OIVI	WIOI	DE	LIC
PROBLEM		AUSI				N ence
Belt runs off at tail pulley.	7	15	14	17	21	_
Entire belt runs off at all points of the conveyor.	26	17	15	21	4	16
One belt section runs off at all points of the conveyor.	2	11	1	_	_	_
Belt runs off at head pulley.	15	22	21	16	_	_
Belt runs to one side throughout entire length at specified idlers.	15	16	21	_	_	_
Belt slip.	19	7	21	14	22	_
Belt slip on start-up.	19	7	22	10	_	_
Excessive belt stretch.	13	10	21	6	9	8
Belt breaks at or behind fasteners; fasteners tear loose.	2	23	13	22	20	10
Vulcanized splice separation.	13	23	10	20	2	9

PROBLEM		CAUS der o				
Excessive wear, including rips, gouges, ruptures and tears.	12	25	17	21	8	5
Excessive bottom cover wear.	21	14	5	19	20	22
Excessive edge wear, broken edges.	26	4	17	8	1	21
Cover swells in spots or streaks.	8	_	_	_	_	_
Belt hardens or cracks.	8	23	22	18	_	
Covers become checked or brittle.	8	18	_	_	_	_
Longitudinal grooving or cracking of top cover.	27	14	21	12	_	_
Longitudinal grooving or cracking of bottom cover.	14	21	22	_	_	_
Fabric decay, carcass cracks, ruptures, gouges (soft spots inbelt).	12	20	5	10	8	24
Ply separation.	13	23	11	8	3	_

### PROBABLE CAUSES AND SOLUTIONS

- Belt bowed Avoid telescoping belt rolls or storing them in damp locations. A new belt should straighten out when "broken in" or it must be replaced.
- Belt improperly spliced or wrong fasteners Use correct fasteners. Retighten after running for a short while. If improperly spliced, remove belt splice and make new splice. Set up regular inspection schedule
- 3. Belt speed too fast Reduce belt speed.
- 4. Belt strained on one side Allow time for new belt to "break in." If belt does not break in properly or is not new, remove strained section and splice in a new piece.
- Breaker strip missing or inadequate When service is lost, install belt with proper breaker strip.
- Counterweight too heavy Recalculate weight and adjust counterweight accordingly. (If using screw takeups, reduce takeup tension to point of slip, then tighten slightly.)
- Counterweight too light Recalculate weight required and adjust counterweight accordingly. (If using screw takeups, increase tension.)
- 8. Damage by abrasives, acid, chemicals, heat, mildew, oil Use belt designed for specific condition. For abrasive materials working into cuts and between plies, make spot repairs with cold patch or with Permanent Repair Patch. Seal metal fasteners or replace with vulcanized step splice. Enclose conveyor for protection against rain, snow and sun. Don't over-lubricate idlers.
- Differential speed wrong on dual pulleys Make necessary adjustment.
- 10. Drive underbelted Recalculate maximum belt tensions and select correct belt. If conveyor is over-extended, consider using two-flight system with transfer point. If carcass is not rigid enough for load, install belt with proper flexibility when service is lost.
- Edge worn or broken Repair belt edge. Remove badly worn or out-of-square section and splice in a new piece.
- 12. Excessive impact of material on belt or fasteners Use correctly designed chutes and baffles. Make vulcanized splices. Install impact idlers. Where possible, load fines first. Where material is trapped

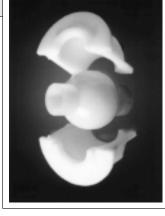
- under skirts, adjust skirtboards to minimum clearance.
- **13. Excessive tension** Recalculate and adjust tension. Use vulcanized splice within recommended limits.
- Idler rolls not turning Correct or replace stalled rolls. Lubricate. Improve maintenance. (Don't over-lubricate.)
- 15. Idlers or pulleys out-of-square with center line of conveyor Realign. Install limit switches for greater safety.
- **16. Idlers improperly placed** Relocate idlers or insert additional idlers spaced to support belt.
- Improper loading, spillage Feed should be in direction of belt travel and at belt speed, centered on the belt. Control flow with feeders, chutes and skirtboards.
- **18. Improper storage or handling** Refer to your belt supplier for storage and handling tips.
- 19. Insufficient traction between belt and pulley Increase wrap with snub pulleys. Lag drive pulley. In wet conditions, use grooved lagging. Install correct cleaning devices on belt. Install centrifugal switch for safety.
- Material between belt and pulley Use skirtboards properly. Remove accumulation. Improve maintenance.
- Material build-up Remove accumulation. Install cleaning devices, scrapers, and inverted "V" decking. Improve housekeeping.
- 22. Pulley lagging worn Replace worn pulley lagging. Use grooved lagging for wet conditions.
- Pulleys too small Use larger-diameter pulleys.
- 24. Radius of convex vertical curve too small Increase radius by vertical realignment of idlers to prevent excessive edge tension.
- **25. Relative loading velocity too high or too low** Adjust chutes or correct belt speed. Consider use of impact idlers.
- **26. Side loading** Load in direction of belt travel, in center of conveyor.
- 27. Skirts improperly placed Install skirtboards so that they do not rub against belt.

# Rex Whisperol® Idlers Take a closer look.





Saves Time and Money. Spring loaded hex shafting makes quick work of Whisperol installation and removal. Whisperol roller lengths come in increments of 1/4" ensuring that any current roller length you have can be matched with a replacement Whisperol.



Unique in the roller industry, Whisperol spherical bearings allow for a large amount of misalignment without affecting rolling friction. Low friction, engineering grade polymeric materials give exceptional wear life and create very little sound. This patented bearing makes

Whisperol polymeric rollers the most feature filled product for the price.

Note: The 250 Series Whisperol rollers use a unique sleeve bearing to provide greater support in heavy duty applications. The same

#### Options.

- Nickel plated shafting corrosion resistance for frequent washdown applications.
- Stainless steel shafting excellent corrosion resistance against acid and chemical washdowns used in the food and beverage industry.
- Dual drive grooves for a line shaft conveying applications. Not available on the 250 Series with a 7/16" shaft.
- Steel internal sleeves can be inserted inside the polymeric roll shell for greater impact resistance and rigidity. Allows wider "BF" dimensions.



**Self-Aligning Bearings.** Patented spherical bearing handles misalignment up to 5° and still operates at peak efficiency.



Long Lasting. Durable engineered polymeric materials give excellent performance and a long uninterrupted life. Self-lubricated and self-aligning, Whisperol operates for years without an ounce of attention. You'll forget they're there!



**FDA Approved.** Whisperol polymeric rollers are made of FDA approved materials. They may be used for packaged product handling in inspected food plants.



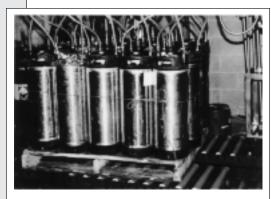
**Protects Your Products.** Whisperol's polymeric roll shell resists build-up of glues, starches and other common packaging contaminants. The smooth, slippery surfaces of the polymeric roll shell don't give contaminants a place to hang on. Plus, they're antistatic, further reducing the chances for build-up to collect on the roll shell.



**Lower Maintenance Costs.** No lubrication or maintenance is required. What this means to you is Whisperol quietly goes about its business with no attention from your maintenance staff.



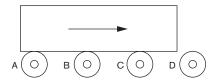
Whisperol® rollers will quietly handle any type of packaged product: beverage cases, packaged foods and general unit handling. The polymeric roll shell resists static charges, thereby reducing the attraction of dirt and debris.



Whisperol® rollers can handle a variety of product configurations and loading ranges. As this photo demonstrates, even heavily loaded wooden pallets may be conveyed. If you need to roll it, Whisperol polymeric rollers can do the job quietly and cleanly.

#### How to determine load per roller.

Typical roller design will assure that 3 rollers will come in contact with the package at all times. In the figure below, the package leaves roller "A" at the same time it comes in contact with roller "D".



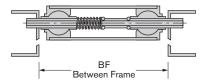
# How to calculate roller loading.

- Verify that the existing roller spacing actually maintains 3 rollers under the package at all times.
- Divide the package length by 4 to get the proper roller spacing that will assure roller contact at all times.
- 3. Now divide the package weight by 3 to get the actual load per

roller spacing and load per roller.

In many instances, more than 3 rollers are supporting the package. In these cases, use that quantity of rollers divided into the package weight to determine the load per roller quantity found in Step 3.

# REX WHISPEROL® IDLERS



Normal-duty roller conveyors. (1.9" dia. <sup>7</sup>/<sub>16</sub>" hex shaft)

The 190 Series was designed to deliver superior service, quiet running and low maintenance for a variety of conveyor applications. With a full ranger of options available, the 190 Series can be adapted to virtually any application.

#### 190 SERIES

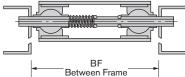
**Size Ranges •** Available in increments of 1/4" from 6" BF to 33" BF **Load Capacity •** 40 lbs.

Requires internal steel sleeve for BF>38"

Whisperol® conveyor roller application data-1.9" dia. roller on 7/16" hex shaft

		Dynami	c Frictio	n for Powe	tions-%		
Belt Speed FPM	Belt Speed FPM	1		Roller - in mbient ter	Operating Conditions		
		10#	15#	20#	30#	40#	
100	200	4.0%	4.0%	4.0%	4.0%	3.5%	Continuous Service
150	300	4.0%	4.0%	4.0%	4.0%	4.0%	Power or Gravity Conveyor
200	400	4.0%	4.0%	4.0%	4.0%	4.0%	Intermittent Service at stated.
225	450	4.0%	4.0%	4.0%	4.0%	4.0%	Load and Speed up to 60% of
250	500	4.0%	4.0%	4.0%	4.0%	4.0%	the time. Powered Conveyor.
275	550	4.5%	4.0%	4.0%	4.0%	4.0%	
300	600	4.5%	4.0%	4.0%	4.0%	4.0%	

\*At 90°F to 100°F Ambient Temperatures, operate these rollers at only 50% of continous service at a maximum speed of 125 RPM. Note: Spring loaded shafts available as standard.



For wider conveyor applications. (2.25" dia. 7/16" hex shaft)

With its thicker shell, the 225 Series delivers wider load carrying capabilities - up to 54". The spring-loaded shaft simplifies installation.

### 225 SERIES

Size Ranges • Available in increments of 1/4" from 6" BF to 54" BF Load Capacity • 40 lbs.

Requires internal steel sleeve for BF>40"

Whisperol® conveyor roller application data-2.25" dia. roller on 7/16" hex shaft

		Dynami	c Friction	n for Powe			
Belt Speed FPM	Belt Speed FPM			Roller - in mbient ter	Operating Conditions		
		10#	15#	20#	30#	40#	1
100	200	4.0%	4.0%	4.0%	4.0%	3.5%	Continuous Service
150	300	4.0%	4.0%	4.0%	4.0%	4.0%	Power or Gravity Conveyor
200	400	4.0%	4.0%	4.0%	4.0%	4.0%	Intermittent Service at stated.
225	450	4.0%	4.0%	4.0%	4.0%	4.0%	Load and Speed up to 60% of
250	500	4.0%	4.0%	4.0%	4.0%	4.0%	the time. Powered Conveyor.
275	550	4.5%	4.0%	4.0%	4.0%	4.0%	
300	600	4.5%	4.0%	4.0%	4.0%	4.0%	

\*At 90°F to 100°F Ambient Temperatures, operate these rollers at only 50% of continous service at a maximum speed of 125 RPM. Note: Spring loaded shafts available as standard.



BF

Between Frame

For heavy-duty handling conveyors. (2.50" dia. <sup>7</sup>/<sub>16</sub>" or <sup>11</sup>/<sub>16</sub>" hex shaft)

With <sup>11</sup>/<sub>16</sub>" hex shaft and cylindrical bearings, the heavyduty 250 Series is built to handle loads smoothly and quietly.

#### 250 SERIES

Size Ranges • Available in increments of 1/4" from 10" BF to 63" BF (54" BF with 7/16" hex shaft).

Load Capacity • 250 lbs. with 11/16" hex shaft (optional spring-loaded shaft).

• 40 lbs. with 7/16" hex shaft (spring-loaded shaft standard).

Whisperol® conveyor roller application data-2.50" dia. roller on 11/16" hex shaft

		Dynamic	Friction for	Power Calcul		
Belt Speed FPM	Belt Speed FPM	Ai		r - in Pounds nt temperatu	Operating Conditions	
		100#	150#	200#	250#	
50	77	4.0%	4.0%	4.0%	4.0%	Continuous Service
75	115	4.0%	4.0%	4.0%	4.0%	Power or Gravity Conveyor
100	155	4.0%	4.0%	4.0%	4.0%	Intermittent Service at stated.
150	230	4.0%	4.0%	4.0%	4.0%	Load and Speed up to 60% of
200	310	4.0%	4.0%	3.5%	3.5%	the time. Powered Conveyor.

\*At 90°F to 100°F Ambient Temperatures, operate these rollers at only 50% of continous service at a maximum speed of 125 RPM. Note: Standard roller shafts are spring loaded shafts construction. Cottered shafts available as option.

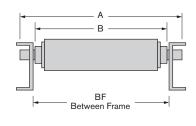
Center support barings are furnished as standard on rollers above 31" BF.

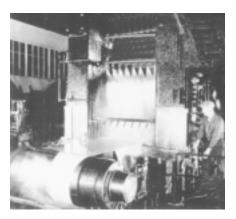
#### How to order Whisperol®

- 1. Measure between frame (BF) dimension (in inches).
- 2. Select roll diameter: 1.9", 2.25" or 2.5"
- 3. Specify options:
  - · special shaft materials
  - drive grooves
  - internal steel sleeve.
- Determine quantity (10 pc. Minimum) of rollers needed.

#### Important dimensions

	Models					
Dimension	190, 225 and 250 (7/16" shaft)	250 (11/ <sub>16</sub> " shaft)				
A-Shaft Length	BF + 11/2"	BF + 2"				
B-Bearing to Bearing Length	BF - 1/4"	BF - 1/4"				





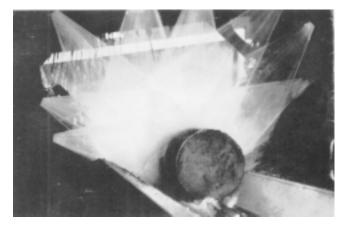
**STEEL:** Steel sheets are cooled with blades of water from Rex Flat Spray Nozzles.

# FOR PRECISION:

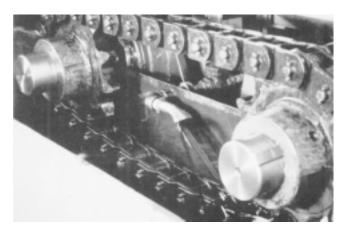
- COOLING
- WASHING
- CLEANING
- DESCALING



**Rock:** Efficient use of Rex Flat Spray Nozzles cleans rock with a minimum of water and power.



**LUMBER:** Rex Flat Spray Nozzles remove all saw-destroying grit and dirt from logs.



**LUBRICATION:** High Speed chain is lubricated and cooled with a Rex Flat Spray Nozzle.

#### **Precise Spray Pattern**

The wide range of deflectors and venturis offers a choice of liquid patterns from high velocity micro-thin to delicate low velocity at the correct pressure, quantity and angle of impact.

#### Precision-Controlled Pattern

Guide vanes, designed for a specific application, produce a sharp-edged blade of liquid for uniform cutting or cooling. There is no loss of liquid in side splatter. Can cut liquid usage as much as 80%.

#### **Precision-Controlled Impact**

The perfectly flat, polished deflector makes sure that every drop of liquid works hard — that every drop is kept in line to form an efficient micro-thin water blade. The venturi throat is uniformly tapered to eliminate turbulence and guide every drop of liquid onto the deflector with maximum force.

**Performance Inspected** — Each Rex Flat Spray Nozzle is hand-finished. They are not released for delivery until final inspection — under actual operating conditions — shows the blade pattern to be perfect. This is your guarantee of performance.



#### **Dependable Performance**

The circular orifice and tapered throat keep the Rex Flat Spray Nozzles working under conditions that would quickly plug ordinary slotted openings. The Rexnord design provides a maximum-size opening to allow particles used for cleaning to pass through easily, to assure long clog-free operation.

#### **Long Operating Life**

Rex Flat Spray Nozzles are designed for various applications and pressures. Suitable blade construction materials and proper proportioning of the shank and deflector give rugged durability under the working pressures for which each was designed. There is a Rex Flat Spray Nozzle for any working pressure from 20 to 1500 p.s.i.

# Simple, Quick, Permanent Installation

One-piece construction, with standard pipe threads and standard hex for wrenches, means simple, easy installation. No adjustments are required at any time during or after installation.

## SELECTION PROCEDURE

#### THE AVAILABLE WATER PRESSURE (PSI) MUST BE KNOWN.

- 1. From the typical application tables (pages 95 96), select an application similar to the one under consideration.
- 2. Estimate the distance from the Spray Nozzle to the line of impingement and enter selected application table.
- 3. Select orifice size based on available pressure. Use smallest orifice for minimum water usage. Use largest orifice for highest impact force and greatest water discharge.
- 4. After determining the orifice size, read down to the bottom of the chart and find the patterns available and the pipe thread size.
- 5. Using Table 1, select the proper Material Code that is compatible with the washing solution being used.
- 6. Check Table 2 to determine which of the patterns from Step 4 are available in the material selection from Step 5.
- 7. Having determined the pattern, turn to Table 13, page 97, to determine spray width.
- To determine quantity required, divide the total coverage needed by the spray width.
- 9. To order, list quantity, pattern number, material code, and orifice

NOTE: To determine discharge rate in gallons per minute (GPM) for any orifice size and pressure, see page 98.

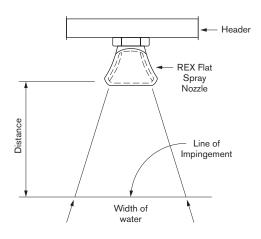


Table 1
Nozzle Material Selection Code

	Liquid Solution	Pressure Range in Pounds per Square Inch (p.s.i.)													
	Elquid Solution	0- 50	51- 100	101- 200	201- 300	301- 600	601- 1000	1001- 1500							
	►1. Clear Water	B or MB	B or MB	ВН	ВН	АН	АН	AAH							
_ere_	2. Water with some Silt	B or MB	ВН	АН	АН	ААН	AAH	ААН							
0	3. Water with some Sand	вн	AH	АН	AH	AAH	AAH								
Kead step	4. Water with Detergent	S or Z	S or Z	SH or ZH	AAH	AAH									
¥	5. Mildly Acid Solution	B or MB	B or MB	AAH	AAH										
	6. Harsh Acid Solution	SS	SS	AAH											

#### **Example**

Cooling Steel in Mill (see page 95, Table 8)

300 PSI 16.4 GPM 12 Orifice

NOTE: Use smallest orifice size as impact force not required for this application.

70488A or 70488B or 70873A.

3/8" Pipe Thread

Clear Water

Code BH.

Aluminum Bronze is available for patterns 70488A & 70488B. Use70488B (See footnote ★)

148" = 13

12

13 pcs. 70488B - BH-12

#### Table 2 **Pattern Selection**

				Pipe Thread Size						
	Mat'l.		3/8"	3/	4"	1"				
	Code	Material Description	Or	ifice Nu	mber Ra	nge				
	•		6-16	16-20	22-28	32-36				
			ı	Pattern	Number	*				
	Α	416 Stainless Steel	70488B		70608A 74493A	On Appl.				
here	АН	416 Stainless Steel - Heat Treated	70488B		70608A	On Appl.				
ep 6	AAH	440C Stainless Steel - Heat Treated	70488A	70608B						
Read step 6 here	В	Aluminum Bronze	70488A 70488B	70608B	70608A 70229A 73889A					
Ц	ВН	Aluminum Bronze - Heat Treated	70488A 70488B	70608B	70608A					
	MB	Manganese Bronze	70873A	70608B	70608A	70494A				
	MBP	Mn. Br Polished	70873A	70608B	70608A					
	S	8617 Steel	70488B							
	SH	8617 St Heat Treated	70488B							
	SS	303 Stainless Steel	70488A 70488B							
	SSP	303 S. S Polished	70488B							
	Z	Z Cast Iron		70608B	70608A 74493A	70494A				
	ZH	Cast Iron - Heat Treated		70608B	70608A 74493A	70494A				

- Suffix letter "P"indicates material with polished finish only.
- Suffix letter "P"indicates material with polished finish only.

  Suffix letter "H"indicates hardened material with polished finish.

  If more than one pattern is shown, consider the following: The pattern with the lesser angle of discharge will give the greater impact. The pattern with the wider defector blade will produce a wider spray pattern but less impact. (See page 97).

# **TYPICAL APPLICATION TABLES**

Table 3 Log Washing Gallons Per Minute

Guii	0113	C. 141	iiiuic						
Distance	PSI		Orifice						
Inches	P31	28	32	36					
16	40 50 60 70 80 100 125 150	36.4 39.9 44.0 46.1 51.5 57.6 63.1	42.5 47.6 52.1 56.1 60.2 67.7 75.2	53.9 60.2 66.0 71.1 76.2 85.1					
24	70 80 90 100 125 150			71.1 76.2 80.7 85.1 95.2 104.3					
Pattern	702 7060 738 744	8A&B 89A	70494A						
PipeThread	3,	<b>4</b> "	1"						

Table 4 Washing Hard Vegetables Gallons Per Minute

Distance	PSI	Orifice													
Inches	<b>P3</b> 1	6	7	8	9	10	11	12							
16	40	1.5													
24	30 40 50	1.3 1.5 1.7	1.8 2.0												
36	20 30 40 50		1.9	2.4 2.3 2.7 3.0	2.9 2.9 3.4	3.6 4.2									
48	20 30 40 50 60					2.9 3.6 4.2 4.6 5.1	3.6 4.4 5.0 5.6	4.2 5.2 6.0 6.7							
Pattern	7	70488A— 70488B — 70873A													
Pipe Thread															

Table 5 Can and Bottle Washing Gallons Per Minute

Distance	201		Ori	fice				
Inches	PSI	6	7	8	9			
12	60 70 80 90	1.8 1.9 2.1 2.3						
16	40 50 60 70 80			3.0 3.3 3.5 3.8	3.4 3.8 4.1 4.4			
Pattern	70	488A—	70488	B — 70	873A			
Pipe Thread	3/8"							

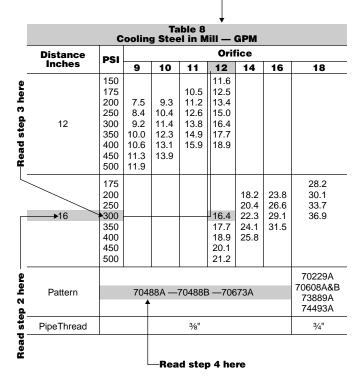
Table 6
Descaling Steel
Gallons Per Minute

G.C.		io i oi iiiiiiato											
Distance	PSI	Orifice											
Inches	P31	6	7	8	9								
12	400 450 500 600 700 800 900 1000 1200	6.7 7.1 7.5 8.2	7.9 8.5 9.1 9.7 10.2	9.4 10.3 11.1 11.9 12.6	10.6 11.3 11.9 13.0 14.1 15.1								
Pattern	704	88A —	- 70488	B —70	873A								
Pipe Thread			3/8 "										

Table 7
Washing Felts and Paper —GPM

		wasi	r —u	г — цри								
Distance	PSI					Orif	fice					
Inches	- 31	6	7	8	9	10	11	12	14	16	18	
8	40 50	1.5 1.7										
12	30 40 50 60 70 80	1.8 2.0 2.1	2.3 2.5	2.7 3.0	2.9 3.4							
16	30 40 50 60 70		2.5 2.7	3.0 3.3	3.4 3.8	4.2 4.6	4.4 5.0					
24	30 40 50 60 70				3.8 4.1 4.5	4.6 5.1	5.0 5.6	6.0 6.7	7.1 8.1			
36	30 40 50 60							6.7 7.3	8.1 9.1	9.2 10.6	11.7	
Pattern		70488	A— 70	)488B	— 708	373A		70229A —70608A&B 73889A — 74493A				
PipeThread				3/8 "				3,	⁄ <sub>4</sub> "			





# **TYPICAL APPLICATION TABLES**

Table 9 Washing Soft Vegetables — GPM

Distance	PSI				Orifice	•		
Inches	PSI	6	7	8	9	10	11	12
16	40 50	1.5 1.7						
24	30 40 50	1.5 1.7	1.8 2.0					
36	20 30 40 50			1.9 2.3 2.7 3.0	2.4 2.9 3.4 3.8	2.9 3.6 4.2 4.6		
48	20 30 40 50 60						3.6 4.4 5.0 5.6 6.2	4.2 5.2 6.0 6.7
Pattern		•	70488/	A— 704	88B — 7	70873A		•
Pipe Thread				3,	⁄8"			

Table 11 Meat Cleaning — GPM

	meat Cleaning — GPM												
Distance	PSI				Orif	ice							
Inches	FJI	6	7	8	9	10	11	12	14				
12	110 125 150 175	2.9 3.1	3.3 3.6										
16	100 125 150			4.2 4.7 5.1	5.3 5.9								
24	100 125					6.6 7.3	7.9						
36	80 100								11.5 12.9				
Pattern		70488A — 70873A											
Pipe Thread					3/	<b>8</b> "							

Table 10 Washing Ore & Gravel — GPM

		wasn	sning Ore & Gravei — GPM												
Distance	PSI				C	Prific	е								
Inches	F 31	14	16	18	20	22	24	28	32	36					
	30 40		10.6	11.7 13.5	14.4 16.6										
12	50 60 70 80 90 100	9.1 10.0 10.7 11.5 12.2 12.9	11.9 13.0 14.0 15.0 15.9	15.5 16.5 18.2 19.0	18.6 20.4 21.9										
16	30 40 50 60 70 80 90			13.5 15.1 16.5 18.2 19.0 20.4	16.6 18.6 20.4 21.9 23.5	-	23.9 26.8								
24	30 40 50 60 70 80					22.5 24.6 27.5 28.4	23.9 26.8 29.3 31.6	28.2 32.6 36.4 39.9	36.8 42.5 47.6						
36	30 40 50 60 70 80								42.5 47.6 52.1 56.1 60.2						
Pattern	-	88A& 8889A			229A 73889				704	94A					
Pipe Thread		3/8"				3/4"			1	"					

Table 12 Washing Vehicles & Scum Removal — GPM

		wa	SIIIII	y ve	HIC	e5 0	k JU	um	nell	iova	. — ,	GPIVI			
Distance	DGI					0	rific	е							
Inches	F 31	6	7	8	9	10	11	12	14	16	18	20	22	24	28
8	40 50 60 70 80 90		2.7 2.9 3.1	3.3 3.5 3.8	3.8 4.1 4.5	4.2 4.6 5.1									
12	50 60 70 80 90 100				4.5 4.8 5.1 5.3	5.1 5.5 5.9 6.3	5.6 6.2 6.7 7.1	6.7 7.3 7.9							
16	40 50 60 70 80 90							7.9 8.5 9.0	10.0 10.7	11.9 13.0					
24	40 50 60 70 80								10.0 10.7 11.5	13.0		16.6 18.6			
36	30 40 50 60 70 80										16.5 17.8 19.0	21.9	22.5 24.6	23.9 26.8	28.2 32.6
Pattern			7048	38A –	- 704	88B -	— 708	373A					9A — 7 9A — 7		
Pipe Thread		%"											3/4"		

# **SPRAY PATTERN WIDTHS (Table 13)**

Width of Water Spray (Inches) at Line of Impingement at 60 P.S.I.★

_			D.::	N				, -					\.	70.40	OD -				. N			
			Pattern prox. Sh		Wt.:					A		ttern x. Shi	ppin		8B .: 4 oz				tern No. . Shippi			
here	3/8" Pipe Thread	***************************************	11"	//8"		5	3/4" HEX SIZE		17/8" X3H 15/16" X3H 1								11/8" UN NO					³⁄₄" HEX SIZE
7	Distance from Point of	Orifi	ce Siz	es in	64th	h Inc	hes		•	Orifi	ce :	Size	s in	64t	h Inc	hes	Or	rifice	Sizes	in 64t	h Inch	es
step	Discharge to Point of Impingement	6 7	8 9	10	11	12	14	16	6	7	8	9	10	11	12	14 16	9	10	11	12	14	16
Read s	4 8 12 →16	3 3 4 4 6 6 8 8	3 3 4 4 7 8 9 10	5 8	3 5 9	4 6 9	-	4 7 11	3 5 6 8	3 5 7 9	3 5 7 9	3 6 8 10	4 6 8 10	4 6 8 11	4 6 9	4 4 7 7 10 11 13 14	5 8 12 16	5 9 13	6 10 14 18	6 10 15	6 11 16 21	7 12 18 23
	20 24	9 10 11 12	11 12 13 14	13	14 16	14 16	16	17 20	10 11	10 12	11 13	12 14	12 15	13 16	14 17	15   17 18   20	20 24	21 25	22 27	23 28	26 31	28 34
	32	14 16	17 19		21	21		26	14	16	16	18	19	20	22	24 26	30	32	35	36	40	45
	40 48	18   19   21   23	21 24 25 28		26 31	26 32		32 39	18 21	19 23	20 24	22 27	22 28	26 30	27 32	29 32 35 38	38 45	40 48	44 52	45 54	50 60	56 65
-		A	Pattern No. 70229A Approx. Shipping Wt.: 7 oz.												7060 8.5 o				o. 7388 Shippin			
	3/4" Pipe Thread	3"		311/16"		/16"-	1 <sup>4</sup> / <sub>4</sub> " HEX SIZE			2 <sup>7</sup> /8"		42	5/8"		7/8"	1 <sup>1</sup> / <sub>4</sub> " HEX SIZE	2 <sup>31</sup> / <sub>32</sub> " 3 <sup>5</sup> / <sub>8</sub> " × 3H = <sup>4</sup> / <sub>5</sub> .					HEX SIZE
	Distance from Point of	Orifi	ce Siz	es in	64th	n Inc	hes		Orifice Sizes in 64t						64th Inches			Orifice Sizes in 64th Inches				
	Discharge to Point of Impingement			22					16	060	8B 20		22		608/ 24	28			-	2		
_	4			5					4	-	4	_	5		<b>24</b> 5	6				7		
	8 12			8 12					8		8 11		9 13		9 13	10 14				1 5		
	16			15					10		14		16		17	18 22				9		
	20 24			18 22					12 15		17 21		20 24		21 25	26				!4 !8		
	32 40 48		28 35 42							1	27 33 39		31 38 44		32 40 46	34 43 51			4	66  4  3		
		30° 27/8'							-					Pat	tern	No. 70	49A	Appro	ox. Sh	ipping	Wt.: 2	24 oz.
	<b>4</b> II				7	<b>†</b> *									cha	e from l ge to F pingem	oint o		Orific	e Size Inch 36		ith
	1" Pipe			///		3/16"	//	//	/							4 8				8		
	Thread						1	$+\parallel$	217	2121						12				18		
	311/16"						311/16" X							16 20				23 28				
							_4			9/-						24 32				33 43		
1"						40 52																
									- 1			70	62									

<sup>★</sup> Spray width will vary slightly at other pressures. However, use widths listed for all pressures. For other liquids, consult Rexnord.

# **HOW TO ORDER**

1. Number of units. 2. List Pattern No. — Material Code — Orifice Size

#### **Pattern Numbers and Orifice Sizes**

	Pattern Number †	Orifice Size No.															Orifice Size No.			
Pipe Thread		6	7	8	9	10	11	12	13	14	15	16	18	20	Pipe	Pattern Number	22	24	28	36
		Orifice Diam. In.												Thread †		Orifice Diam. In.				
		3/32	7/64	1/8	9/64	5/32	11/64	3/16	13/64	7/32	15/64	1/4	9/32	5/16			11/32	3/8	7/16	9/16
3/8 3/8 3/8 3/8 3/8	70488A-AAH 70488A-B 70488A-BH 70488A-SS									□ ■ □					3/ <sub>4</sub> 3/ <sub>4</sub> 3/ <sub>4</sub>	70229A-B 70608A-A 70608A-AH				
3/8 3/8 3/8 3/8 3/8 3/8	70488B-A 70488B-AH 70488B-B 70488B-BH 70488B-S 70488B-SH														3/4 3/4 3/4 3/4 3/4 3/4	70608A-B 70608A-BH 70608A-MB 70608A-MBP 70608A-Z 70608A-ZH				
3/8 3/8	70488B-SS 70488B-SSP		<b>■</b>	■ □				<b>■</b>							3/ <sub>4</sub> 3/ <sub>4</sub>	73889A-B 73889A-BH				
3/8 3/8	70873A-MB 70873A-MBP				<b>■</b>			<b>•</b>				□			3/4 3/4 3/4 3/4	74493A-A 74493A-AH 74493A-Z 74493A-ZH				
3/4 3/4 3/4 3/4 3/4 3/4 3/4	70608B-AAH 70608B-B 70608B-BH 70608B-MB 70608B-MBP 70608B-Z 70608B-ZH														1 1 1	70494A-AH 70494A-MB 70494A-Z 70494A-ZH				

- † See Table 2 for Material Code (Page 94).
- Stock Size.
- □ Order Size Ten Piece Minimum Quantity.

#### Discharge Rates in GPM (By Orifice Number)

PSI	6	7	8	9	10	11	12	14	16	18	20	22	24	28	32	36
15	.9	1.2	1.6	2.1	2.5	3.1	3.7	5.0	6.5	8.2	10.2	12.3	14.7	19.9	26.1	33.0
20	1.1	1.4	1.9	2.4	2.9	3.6	4.2	5.8	7.5	9.5	11.8	14.2	16.9	23.0	30.1	38.1
30	1.3	1.8	2.3	2.9	3.6	4.4	5.2	7.1	9.2	11.7	14.4	17.4	20.7	28.2	36.8	46.6
40	1.5	2.0	2.7	3.4	4.2	5.0	6.0	8.1	10.6	13.5	16.6	20.1	23.9	32.6	42.5	53.9
50	1.7	2.3	3.0	3.8	4.6	5.6	6.7	9.1	11.9	15.1	18.6	22.5	26.8	36.4	47.6	60.2
60	1.8	2.5	3.3	4.1	5.1	6.2	7.3	10.0	13.0	16.5	20.4	24.6	29.3	39.9	52.1	66.0
80	2.1	2.9	3.8	4.8	5.9	7.1	8.5	11.5	15.0	19.0	23.5	28.4	33.8	46.1	60.2	76.2
100	2.4	3.2	4.2	5.3	6.6	7.9	9.5	12.9	16.8	21.3	26.3	31.8	37.8	51.5	67.3	85.1
125	2.6	3.6	4.7	5.9	7.3	8.9	10.6	14.4	18.8	23.8	29.4	35.6	42.3	57.6	75.2	95.2
150	2.9	3.9	5.1	6.5	8.0	9.7	11.6	15.8	20.6	26.1	32.2	38.9	46.3	63.1	82.4	104.3
175	3.1	4.3	5.6	7.0	8.7	10.5	12.5	17.0	22.2	28.2	34.8	42.1	50.1	68.1	89.0	112.6
200	3.3	4.6	5.9	7.5	9.3	11.2	13.4	18.2	23.8	30.1	37.2	45.0	53.5	72.8	95.1	120.4
250	3.7	5.1	6.6	8.4	10.4	12.6	15.0	20.4	26.6	33.7	41.6	50.3	59.8	81.4	106.4	134.6
300	4.1	5.6	7.3	9.2	11.4	13.8	16.4	22.3	29.1	36.9	45.5	55.1	65.5	89.2	116.5	147.5
350	4.4	6.0	7.9	10.0	12.3	14.9	17.7	24.1	31.5	39.8	49.2	59.5	70.8	96.4	125.9	159.3
400	4.7	6.4	8.4	10.6	13.1	15.9	18.9	25.8	33.6	42.6	52.6	63.6	75.7	103.0	134.6	170.3
450	5.0	6.8	8.9	11.3	13.9	16.9	20.1	27.3	35.7	45.2	55.7	67.5	80.3	109.3	142.7	180.6
500	5.3	7.2	9.4	11.9	14.7	17.8	21.2	28.8	37.6	47.6	58.8	71.1	84.6	115.2	150.4	190.4
550	5.5	7.5	9.9	12.5	15.4	18.6	22.2	30.2	39.4	49.9	61.6					
600	5.8	7.9	10.3	13.0	16.1	19.5	23.2	31.5	41.2	52.1	64.4					
650	6.0	8.2	10.7	13.6	16.7	20.3	24.1	32.8	42.9	54.3	67.0					
700	6.3	8.5	11.1	14.1	17.4	21.0	25.0	34.1	44.5	56.3	69.6					
750	6.5	8.8	11.5	14.6	18.0	21.8	25.9	35.3	46.1	58.3	72.0					
800	6.7	9.1	11.9	15.1	18.6	22.5	26.8	36.4	47.6	60.2	74.3					
850	6.9	9.4	12.3	15.5	19.2	23.2	27.6	37.5	49.0	62.1	76.6					
900	7.1	9.7	12.6	16.0	19.7	23.8	28.4	38.6	50.5	63.9	78.8					
950	7.3	9.9	13.0	16.4	20.2	24.5	29.2	39.7	51.8	65.6	81.0					
1000	7.5	10.2	13.3	16.8	20.8	25.1	29.9	40.7	53.2	67.3	83.1					
1100	7.8	10.7	13.9	17.6	21.8	26.4	31.4								1	
1200	8.2	11.2	14.6	18.4	22.8	27.5	32.8								1	1
1300	8.5	11.6	15.2	19.2	23.7	28.7	34.1								1	
1400	8.8	12.0	15.7	19.9	24.6	29.7	35.4								1	1
1500	9.2	12.5	16.3	20.6	25.4	30.8	36.6								1	

Note: Dimensions subject to change. Certified dimensions of ordered material furnished on request.