

# series F5000 “sealed for life” idler



With load ratings up to 80 percent higher than standard E4000 Series idlers, series F5000 idler assemblies are recommended where loads exceed CEMA E ratings. The heavy duty design which incorporates 1.75-inch diameter precision tapered roller bearings offers significantly higher load ratings and impact capabilities than competitive belt idlers. F5000 idlers are available in belt widths from 48- to 120-inches and with rolls of 7- or 8-inches diameter.

The F5000 idlers are sealed for life with a grease filled, triple horizontal labyrinth seal that repels contaminants, extends bearing life and eliminates the need for relubrication. The primary seal is a nitrile rubber triple lip contact member and the rear seal is a non-contact metallic seal. To resist water, the lubricant used is a water resistant, grade 2, lithium-based grease.

The F5000 idler features a solid shaft that is 1.75-inches diameter at the bearings. Optional stepped shafts with diameters of 2- and 2.44-inches are available.

A polymeric powder coating (Corvel Gray) protects the F5000 rollers and frames from corrosion. The coating is applied following a three-stage phosphate cleaning operation and is then baked on at high temperatures to provide resistance to abrasive elements. Assembly hardware is electro-zinc plated to ensure extended service.

The inverted angle frame base of the F5000 idler is constructed of ASTM A-36 steel and is designed to shed material build-up. Slotted footstraps ensure quick, easy mounting and alignment. The heavy duty, die-formed, steel end brackets have a contoured profile and generous clearances to prevent spilled materials becoming jammed and impeding the rotation of the rollers. All idler frames and rolls are welded in accordance with AWS D1.1 specifications for structural welds.

## F5000 Series Features

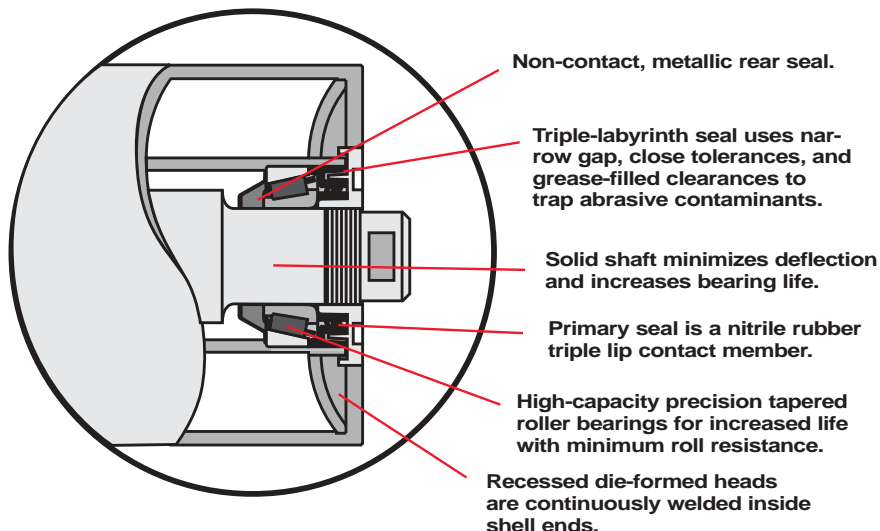
- Exceeds CEMA F load ratings
- Sealed for life design for maintenance free applications
- Inline roll configuration designed for minimum roll gap (35° and 45° within RMA 10 mm specification)
- 0.022-inch TIR, average, 0.030-inch TIR, maximum
- Shell: 0.25-inch hot rolled electric welded mechanical tubing
- Center tube: Hot rolled electric welded mechanical tubing and line bored bearing and seal seats after welding

## Bearing Features

- 1.75-inch diameter precision tapered roller bearings
- 18823 lbf AFBMA dynamic load rating

F5000 IDLER LOAD RATINGS				
Belt Width (in.)	Trough		Return	
	CEMA (lbs)	F5000 (lbs)	CEMA (lbs)	F5000 (lbs)
48	-	3800	-	2400
54	-	3800	-	2300
60	3000	3800	1500	2200
72	3000	3800	1200	2000
84	3000	3800	900	2100
96	2800	3800	600	1900
108	-	3800	-	1700
120	-	3800	-	1600

		Idler Load Rating (lbs)							
		500	1000	1500	2000	2500	3000	3500	4000
CEMA SERIES	B	600							
	C		950						
	D			1360					
	E				2100				
	F							3800	



## idlers of every type to meet your specific needs

### series F5000

### CEMA F

	belt width, inches	roll dia., inches
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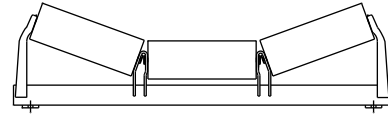
#### troughed belt idlers

steel rolls 20°-35°-45°	48-120	7-8
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#### return idlers

steel rolls	48-120	7-8
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### carrying idler types



**Troughed belt idlers** for general carrying service are available with trough angles of 20°, 35°, and 45°.

**models:** F5701, F5801, F5702, F5802, F5728, F5828

### CEMA classification

series no.	roll dia., in.	basic idler nomenclature	CEMA class	
			old	new
F5000	7	F5700	none	F7
F5000	8	F5800	none	F8

### return idler types



**Return belt idlers** carry the empty belt on the return run.

**models:** F5717, F5817



**CAUTION:** Link-Belt Conveyor idlers must be installed, operated and maintained in accordance with accompanying FMC Technologies Service Instructions. Failure to follow these instructions can result in serious personal injury, property damage or both.

FMC Technologies Service Instructions accompany the shipment of equipment. If additional copies of Service Instructions are required, they are available free of charge from FMC Technologies, Material Handling Solutions Division, P.O. Box 1370, Tupelo, MS 38802.

troughed belt idlers equal length rolls

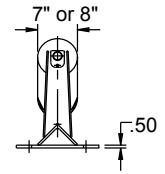
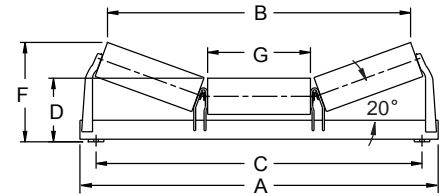
# 20°

## CEMA F

### 7 //rolls

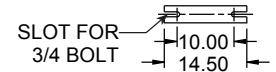
Belt width, inches	Idler number	Idler weight, pounds	A	B	C	D	F	G
			Inches					
48	F5701-48	279	63.00	52.44	57.00	12.31	18.50	17.75
54	F5701-54	306	69.25	58.56	63.00	12.31	19.19	19.88
60	F5701-60	332	76.00	64.69	69.00	12.31	19.94	22.00
66	F5701-66	384	82.00	70.81	75.00	12.31	20.69	24.12
72	F5701-72	412	88.00	76.94	81.00	12.31	21.44	26.25
78	F5701-78	440	94.00	83.06	87.00	12.31	22.19	28.38
84	F5701-84	457	100.00	89.19	93.00	13.00	23.56	30.50
96	F5701-96	512	112.50	101.44	105.00	13.00	25.00	34.75
108	F5701-108	616	125.00	113.69	117.00	13.06	26.50	39.00
120	F5701-120	676	137.50	125.88	129.00	13.06	27.94	43.25

### steel rolls



### 8 //rolls

Belt width, inches	Idler number	Idler weight, pounds	A	B	C	D	F	G
			Inches					
48	F5801-48	293	63.00	51.81	57.00	12.81	18.88	17.44
54	F5801-54	321	69.25	57.94	63.00	12.81	19.62	19.56
60	F5801-60	349	76.00	64.06	69.00	12.81	20.38	21.69
66	F5801-66	403	82.00	70.19	75.00	12.81	21.12	23.81
72	F5801-72	432	88.00	76.31	81.00	12.81	21.88	25.94
78	F5801-78	461	94.00	82.44	87.00	12.81	22.56	28.06
84	F5801-84	479	100.00	88.56	93.00	13.50	23.94	30.19
96	F5801-96	537	112.50	100.81	105.00	13.50	25.44	34.44
108	F5801-108	644	125.00	113.00	117.00	13.56	26.94	38.69
120	F5801-120	707	137.50	125.25	129.00	13.56	28.38	42.94



troughed belt idlers equal length rolls

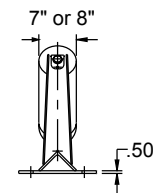
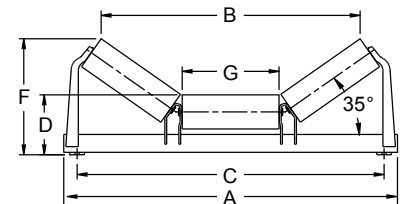
# 35°

## CEMA F

### 7 //rolls

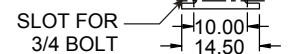
Belt width, inches	Idler number	Idler weight, pounds	A	B	C	D	F	G
			Inches					
48	F5728-48	287	63.00	47.56	57.00	12.31	22.62	17.75
54	F5728-54	313	68.50	53.12	63.00	12.31	23.81	19.88
60	F5728-60	339	74.25	58.75	69.00	12.31	25.00	22.00
66	F5728-66	392	80.25	64.38	75.00	12.31	26.31	24.12
72	F5728-72	420	86.00	70.00	81.00	12.31	27.50	26.25
78	F5728-78	449	92.00	75.56	87.00	12.31	28.75	28.38
84	F5728-84	466	97.50	81.19	93.00	13.00	30.62	30.50
96	F5728-96	523	109.50	92.38	105.00	13.00	33.06	34.75
108	F5728-108	626	121.00	103.62	117.00	13.06	35.56	39.00
120	F5728-120	686	132.00	114.81	129.00	13.06	37.94	43.25

### steel rolls



### 8 //rolls

Belt width, inches	Idler number	Idler weight, pounds	A	B	C	D	F	G
			Inches					
48	F5828-48	301	63.00	46.69	57.00	12.81	22.94	17.44
54	F5828-54	328	68.50	52.31	63.00	12.81	24.12	19.56
60	F5828-60	356	74.25	57.94	69.00	12.81	25.38	21.69
66	F5828-66	410	80.25	63.56	75.00	12.81	26.62	23.81
72	F5828-72	440	86.00	69.12	81.00	12.81	27.81	25.94
78	F5828-78	470	92.00	74.75	87.00	12.81	29.06	28.06
84	F5828-84	489	97.50	80.38	93.00	13.50	30.94	30.19
96	F5828-96	548	109.50	91.56	105.00	13.50	33.38	34.44
108	F5828-108	654	121.00	102.81	117.00	13.56	35.88	38.69
120	F5828-120	717	132.00	114.00	129.00	13.56	38.31	42.94

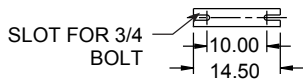
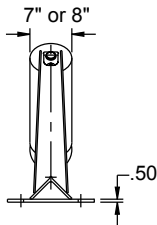
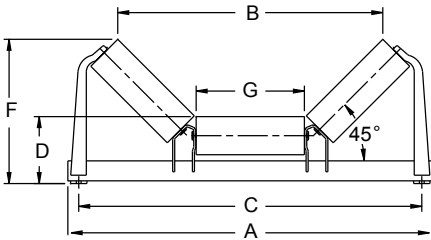


# 45°

troughed belt idlers equal length rolls

## CEMA F

### steel rolls



### 7 //rolls

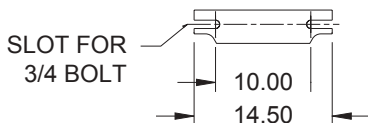
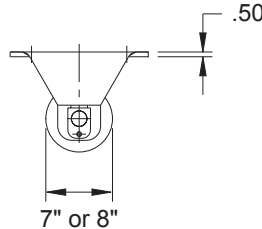
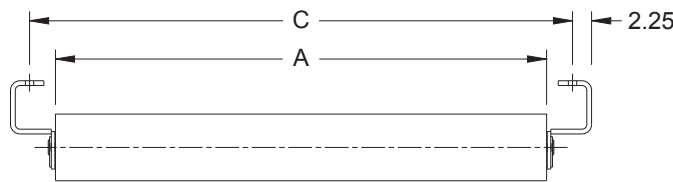
Belt width, inches	Idler number	Idler weight, pounds	Inches					
			A	B	C	D	F	G
48	F5702-48	290	61.00	43.56	57.00	12.31	25.00	17.75
54	F5702-54	317	67.00	48.69	63.00	12.31	26.50	19.88
60	F5702-60	344	72.00	53.81	69.00	12.31	28.00	22.00
66	F5702-66	396	78.00	58.94	75.00	12.31	29.56	24.12
72	F5702-72	426	84.00	64.06	81.00	12.31	31.06	26.25
78	F5702-78	455	90.00	69.19	87.00	12.31	32.56	28.38
84	F5702-84	474	96.00	74.31	93.00	13.00	34.69	30.50
96	F5702-96	532	108.00	84.62	105.00	13.00	37.69	34.75
108	F5702-108	637	120.00	94.88	117.00	13.06	40.75	39.00
120	F5702-120	700	132.00	105.12	129.00	13.06	43.75	43.25

### 8 //rolls

Belt width, inches	Idler number	Idler weight, pounds	Inches					
			A	B	C	D	F	G
48	F5802-48	304	61.00	42.62	57.00	12.81	25.25	17.44
54	F5802-54	333	67.00	47.75	63.00	12.81	26.75	19.56
60	F5802-60	360	72.00	52.88	69.00	12.81	28.25	21.69
66	F5802-66	414	78.00	58.00	75.00	12.81	29.81	23.81
72	F5802-72	445	84.00	63.12	81.00	12.81	31.31	25.94
78	F5802-78	476	90.00	68.25	87.00	12.81	32.81	28.06
84	F5802-84	496	96.00	73.38	93.00	13.50	34.94	30.19
96	F5802-96	557	108.00	83.69	105.00	13.50	37.94	34.44
108	F5802-108	665	120.00	93.94	117.00	13.56	41.00	38.69
120	F5802-120	731	132.00	104.19	129.00	13.56	44.00	42.94

### return belt idlers

### steel rolls



## CEMA F

### 7 //rolls

Belt width, inches	Idler number	Idler weight, pounds	Inches	
			A	C
48	F5717-48	189	51.56	57.00
54	F5717-54	206	57.56	63.00
60	F5717-60	224	63.56	69.00
66	F5717-66	241	69.56	75.00
72	F5717-72	259	75.56	81.00
78	F5717-78	277	81.56	87.00
84	F5717-84	294	87.56	93.00
96	F5717-96	329	99.56	105.00
108	F5717-108	365	111.56	117.00
120	F5717-120	400	123.56	129.00

### 8 //rolls

Belt width, inches	Idler number	Idler weight, pounds	Inches	
			A	C
48	F5817-48	201	51.25	57.00
54	F5817-54	220	57.25	63.00
60	F5817-60	239	63.25	69.00
66	F5817-66	258	69.25	75.00
72	F5817-72	276	75.25	81.00
78	F5817-78	295	81.25	87.00
84	F5817-84	314	87.25	93.00
96	F5817-96	352	99.25	105.00
108	F5817-108	390	111.25	117.00
120	F5817-120	428	123.25	129.00