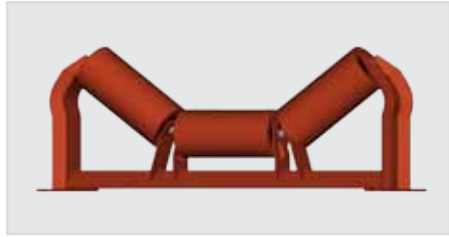


# CEMA Rated Idlers

The Broadest Range of Conveyor Idlers on the Market



## Quick Specs

- ▶ **Classes:** CEMA B, C, D, E, and F
- ▶ **Roll Diameter:** 4" - 8"
- ▶ **Belt Widths:** 18" - 120"

## Frequently Asked Questions

### Which CEMA class do I need?

- ▶ According to CEMA, the main influences in selection are belt weight, material weight, load rating, belt sag, idler life, belt rating and belt tension. It's a confusing combination of data that we've tried to simplify with our Idler Selector Calculator. Find it in the "Quick Links" section at [superior-ind.com](http://superior-ind.com).

### Which roll diameter do I need?

- ▶ The rule of thumb considers belt speed. At 400 FPM consider a 4" idler, 500 FPM is 5", 600 FPM is 6" and so on. It's also a fact that larger diameter rolls have longer lives due to fewer revolutions and thicker shells.

### Where can I buy Superior Idlers?

- ▶ We have distribution partners with inventory throughout North America and Central America. For local service and fast deliveries, see our partners at [superior-ind.com/distributor](http://superior-ind.com/distributor).



## Digital Literature

Forward to Colleague



CEMA Rated Idlers

## Features and Benefits

### SpinGuard® Seal Technology: (Fig 1.1)

- ▶ Contact seal prevents foreign material from entering seal cavity
- ▶ Grease-filled triple labyrinth seal shuts out contaminants
- ▶ Stationary external seal prevents material pinch points

### Quick Reaction

- ▶ Distributors stocked with standard products
- ▶ One to two day turnarounds on custom designs

### High Quality Construction

- ▶ Thick or thicker steel construction compared to other brands
- ▶ Two year complete components warranty
- ▶ Largest, broadest range of all CEMA categories on the market

### Economical Retrofit Rolls

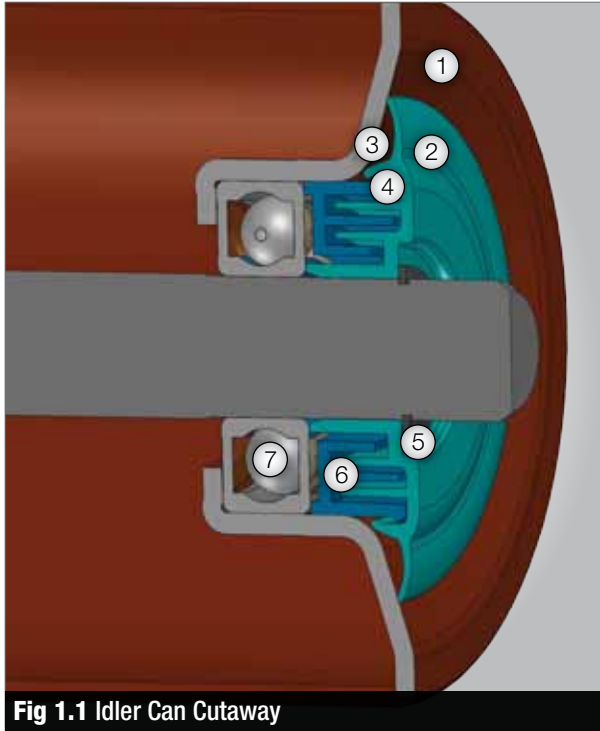
- ▶ Slotted shafts fit most competitor frames
- ▶ Hex nut adapter available for hex nut style brackets

### No Maintenance Base Frame

- ▶ Angled base sheds material
- ▶ Flared, non-clogging center stands
- ▶ No material pinch points between roll and frame

Idler Specifications				
Specs	Bearing Size	Diameter	Thickness	Belt Width
CEMA B	17 mm	4", 5"	11, 9 Ga	18"- 48"
CEMA C	20 mm	4", 5", 6"	11, 9, 7 Ga	18"- 60"
CEMA D	25 mm	5", 6"	9, 7 Ga	24"- 72"
CEMA E	40 mm	6", 7"	1/4"	36"- 96"
CEMA F	50 mm	7", 8"	1/2" or 3/4"	42"- 120"

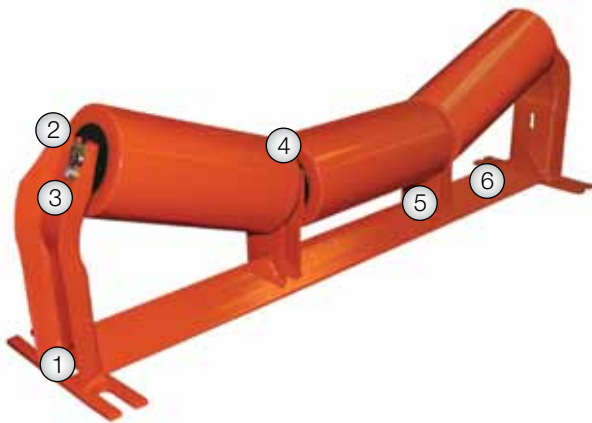
# SpinGuard Seal Technology



**Fig 1.1** Idler Can Cutaway

- ① **Flat Surface**  
Material will not build up across the flat end disc surface
- ② **Stationary External Seal**  
Stationary external seal helps prevent material pinch points between the frame and the end of the roller
- ③ **Centrifugal Force Chamber**  
Centrifugal force creates a self-cleaning flinger effect, keeping water and dirt out
- ④ **Contact Seal**  
First defense against contaminants is the contact seal, which creates less drag than a rubber seal
- ⑤ **Snap Ring**  
Creates positive locking for seals and bearings on shaft
- ⑥ **Triple Labyrinth Seal**  
Second defense is the triple labyrinth seal which makes contaminants travel a longer distance
  - ▶ The labyrinth is also grease filled to keep contaminants away from the ball bearing
  - ▶ The seal material is more durable and is less susceptible to corrosion
- ⑦ **Ball Bearing**  
Factory sealed metric ball bearing on all CEMA rated idlers

## Idler Features



- ① **Base Plate**  
Open end stand design gives better access for single or double bolt hole mounting
- ② **No Pinch Points**  
No pinch points between roll and frame means no fugitive material jamming
- ③ **Locking Mechanism**  
Integrated locking tab or retainer clip holds roll tight to the frame and offers easy roll change out
- ④ **Narrow Roll Gap**  
No pinch point that leads to belt damage
- ⑤ **Center Stands**  
Non-clogging
- ⑥ **Base Angle**  
Sheds material, preventing build-up



# Producer Perspective



Plant Superintendent at Eastern Colorado Aggregates, La Junta, CO

## Wet and Wild

“ In the beginning, our plant was stocked by another brand and some of them were lasting just three months! We run a lot of wet sand and they weren't making the cut. ”

## Seal Power

“ With other brands, the problems were directly related to bearing failure. Sand was getting through the seals and into the can. I read about Superior's seal in magazines and now I'm witnessing it! ”

## Competitive Comparison

“ Comparing brand to brand, we get three – sometimes four – times the life with Superior Idlers. They definitely fit the bill! ”

## Part Number Guide



### ① CEMA Rating or Series

- ▶ Specify either CEMA B, C, D, E, or F

### ② Roll Diameter

- ▶ Specify either 4, 5, 6, 7, or 8 for the roll size diameter

### ③ Troughing Angle

- ▶ Specify either 20, 35, or 45 for the troughing angle

### ④ Idler Type

- ▶ Specify the idler identification letter for the particular idler, you may need from the chart to the right

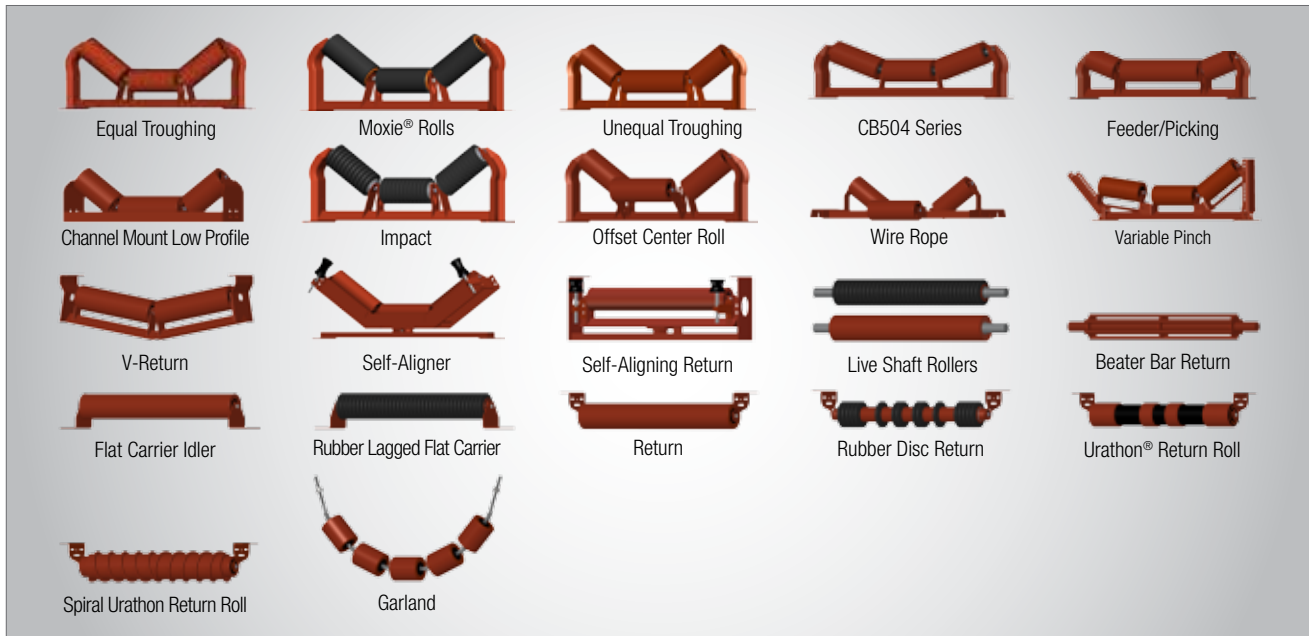
### ⑤ Belt Width

- ▶ Specify the belt width

## Idler Type

- E** Troughing Idler Equal Length Rolls
- EI** Rubber Cushion Troughing Idler
- EA** Self-Aligner
- BA** Bi-Directional Aligning Idler
- RET** Return Idler
- FLT** Flat Carrier Idler
- FLTI** Flat Carrier Rubber Cushion Idler
- RETI** Return Rubber Cushion Idler
- RETU** Urathon® Return
- RETUSP** Spiral Urathon® Return Roll
- RETA** Return Self-Aligning Idler Roll
- RETAI** Return Self-Aligning Rubber Cushion Idler
- RETV** V-Return Idler
- P** Picking Idler Length Rolls
- U** Troughing Idler Unequal Length Rolls
- CM** Low-Profile Channel Mount Idler
- CMI** Channel Mount Impact Low Profile Idler
- SM** Low-Profile Standard Mount Idler
- SMI** Standard Mount Impact Low Profile Idler
- GO** Offset Troughing Idler
- EW** Wire Rope Idler
- VPE** Variable Pitch Idler
- MOX** Moxie® Roll
- CB** CB504 Series
- LS** Live Shaft
- LSB** Live Shaft Beater

# Idler Styles



## Idler Styles

Products Available in CEMA Rated Idlers					
Idler Style	CEMA B	CEMA C	CEMA D	CEMA E	CEMA F
Equal Troughing	X	X	X	X	X
Moxie® Rolls	–	X	X	–	–
Unequal Troughing	–	X	X	X	X
Feeder/Picking	–	X	X	X	X
Channel Mount Low Profile	X	X	X	–	–
Impact	X	X	X	X	X
Offset Center Roll	X	X	–	–	–
Wire Rope	–	X	X	–	–
Variable Pitch	–	X	X	X	–
Self-Aligner	X	X	X	X	X
Flat-Carrier	X	X	X	X	X
Rubber Lagged Flat Carrier	X	X	X	X	–
Steel Return	X	X	X	X	X
Self-Aligning Return	X	X	X	X	–
Urathon® Return Roll	X	X	X	X	–
Spiral Urathon® Return Roll	–	X	X	X	–
Rubber Disc Return	X	X	X	X	–
Rubber Lagged Return	–	X	X	–	–
Beater Bar	–	X	X	–	–
V-Return	–	X	X	X	–
Live Shaft Return	–	X	X	–	–
Garland Return	–	X	–	–	–