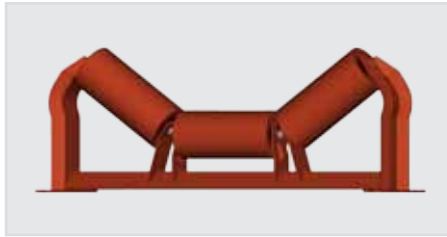


CEMA Rated Idlers

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.

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.



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

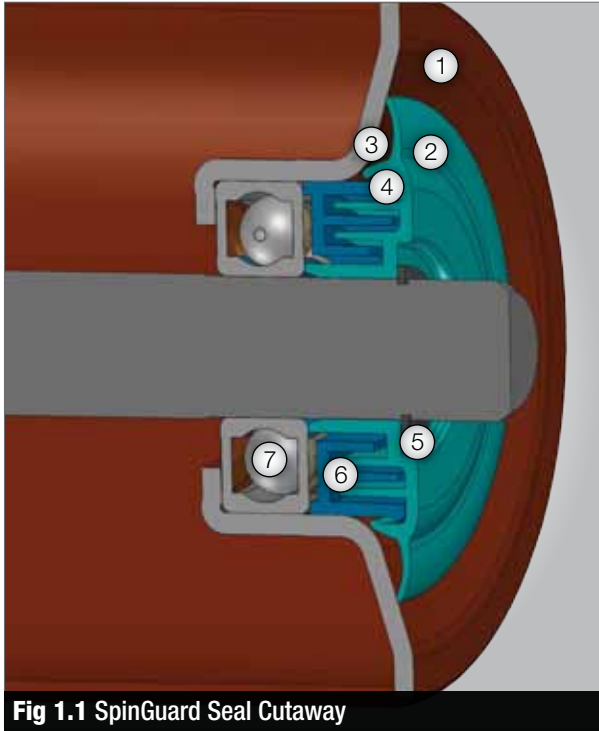
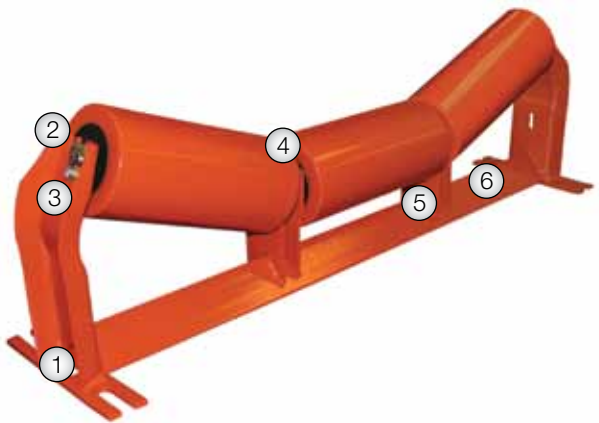


Fig 1.1 SpinGuard Seal Cutaway

- 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 durable 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

Fugitive Material

“ 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

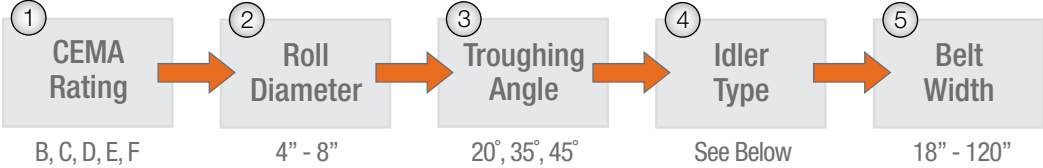
“ With other brands, the problems were directly related to bearing failure. Sand was getting through the seals and into the can. I read about Superior’s seal in magazines and now I’m witnessing it! ”

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

Example: C6-35E-36

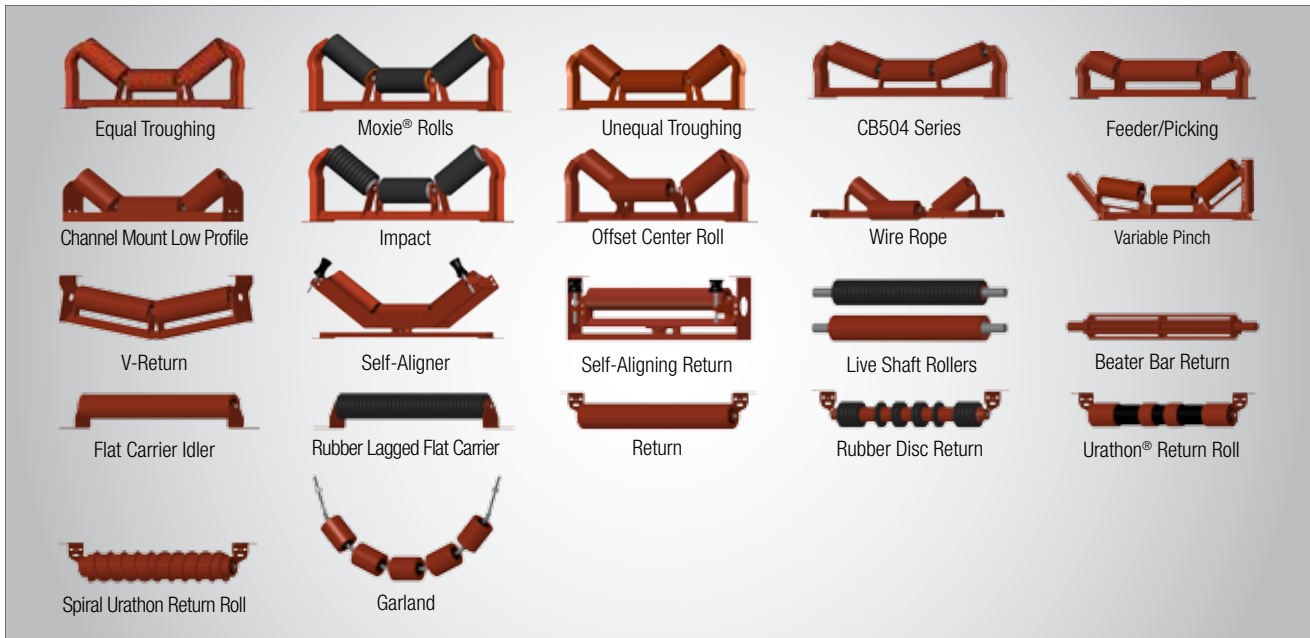


- ① **CEMA Rating or Series**
▶ Specify either CEMA B, C, D, E, or F
- ② **Roll Diameter**
▶ Specify either 4, 5, 6, 7 or 8 for the roll size diameter
- ③ **Troughing Angle**
▶ Specify either 20, 35, or 45 for the troughing angle
- ④ **Idler Type**
▶ Specify the idler identification letter for the particular 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	–
V-Return	–	X	X	X	–
Self-Aligner	X	X	X	X	X
Self-Aligning Return	X	X	X	X	–
Live Shaft Return	–	X	X	–	–
Beater Bar	–	X	X	–	–
Flat-Carrier	X	X	X	X	X
Rubber Lagged Flat Carrier	X	X	X	X	–
Steel Return	X	X	X	X	X
Rubber Lagged Return	–	X	X	–	–
Rubber Disc Return	X	X	X	X	–
Urathon® Return Roll	X	X	X	X	–
Spiral Urathon® Return Roll	–	X	X	X	–
Garland Return	–	X	–	–	–

1-800-321-1558

Find local distribution at superior-ind.com/distributor
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