

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
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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

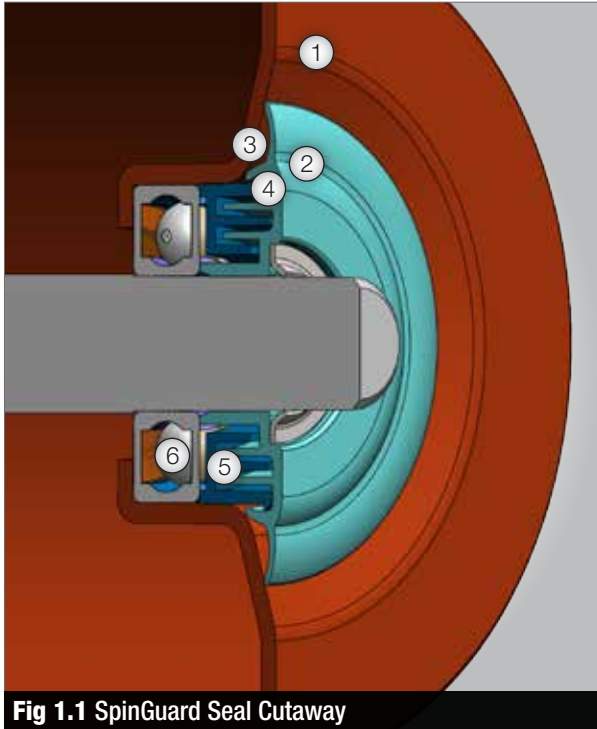


Fig 1.1 SpinGuard Seal Cutaway

- 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 **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
- ⑥ **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

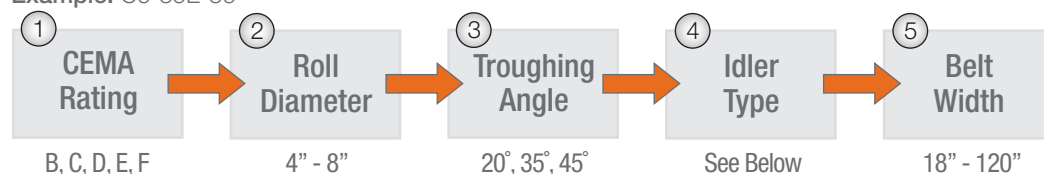
"With other brands, the problems were directly related to bearing failure. Sand was getting through the seals and into the can. I read about Superior's seal in magazines and now I'm witnessing it!"

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

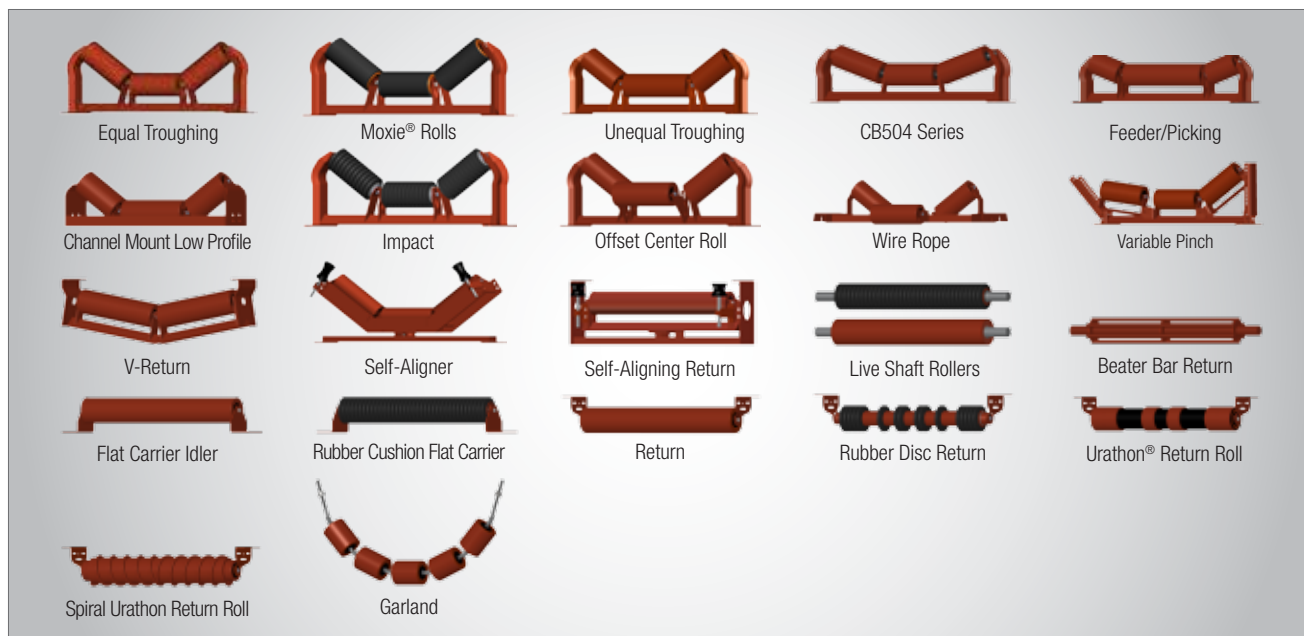
⑤ Belt Width

- ▶ 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 Cushion 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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