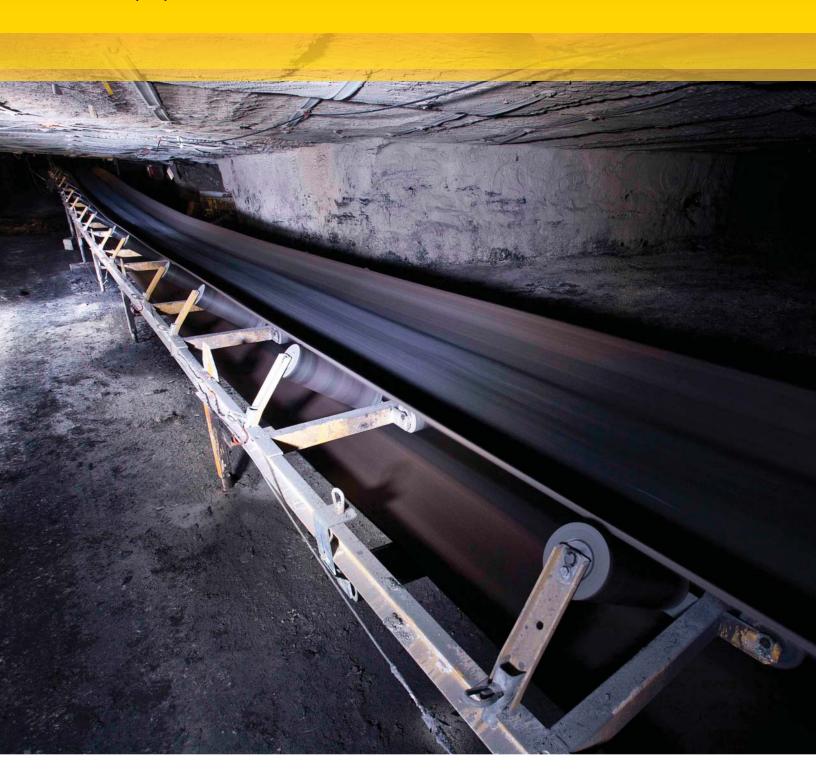
# **Underground Conveyor Structure**

CEMA C, D, and E Series

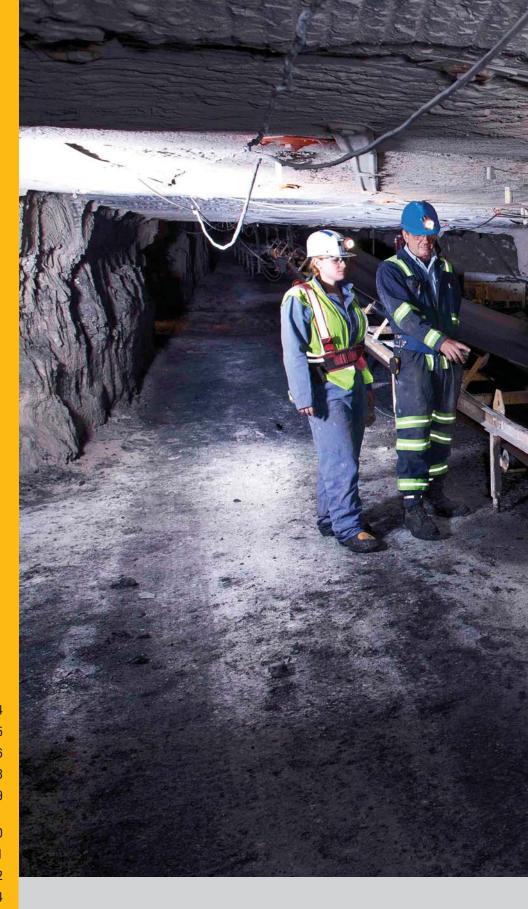




# Custom Designed Solutions for Your Mining Applications

#### **Contents**

Belt Structure Configurations	4
Carrying Assemblies	5
Offset Carrying Assemblies	6
Carrying Assemblies	8
EZEE-LOC™ Configurations	9
EZEE-LOC Configurations and Return Roll Assemblies	10
Replacement Return Rolls	11
Additional Configurations	12
Drop Brackets	14
EXALON® Rolls	15
ldler PAL™	18
Steel Rolls	19
Electronic Quality Tracking	20
Notes	21





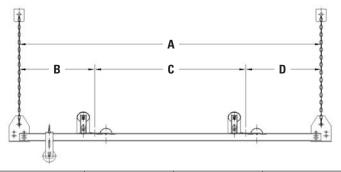
Custom-designed for your bulk material handling applications, Caterpillar has a full range of rugged and reliable conveyor systems and conveyor products unsurpassed in performance and service life. Transport your mined materials reliably and efficiently with our Conveyor Systems solutions both on the surface and underground.

# **Belt Structure Configurations**

## Quick and easy installation

#### **Roof-hung Structure**

This typical 3 m (10 ft) section of roof-hung structure features the Cat® EZEE-LOC rail connections for quick installation. No special tools are required to set up.

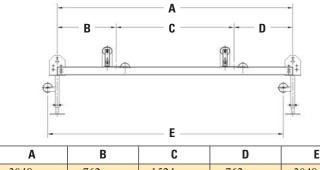


Α	В	C	D
3048 mm	762 mm	1524 mm	762 mm
(10 ft 0 in)	(2 ft 6 in)	(5 ft 0 in)	(2 ft 6 in)



#### **Floor-mounted Structure**

The example of floor-mounted EZEE-LOC structure shows the return rolls mounted in floor stands. Return rolls can also be furnished mounted in drop brackets attached to channel rails.

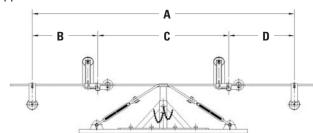


Α	В	C	D	E
3048 mm	762 mm	1524 mm	762 mm	3048 mm
(10 ft 0 in)	(2 ft 6 in)	(5 ft 0 in)	(2 ft 6 in)	(10 ft 0 in)



#### **Wire-rope Structure**

The Cat wire-rope structure features carrying idlers with mounting feet that cradle the wire rope until securely fastened with the supplied hardware. The tie-off stands can be floor-mounted or roof-hung.



Α	В	C	D
3048 mm	762 mm (2 ft 6 in)	1524 mm (5 ft 0 in)	762 mm (2 ft 6 in)
(10 ft 0 in)	(2 It 0 III)	(5110111)	(2 It 0 III)

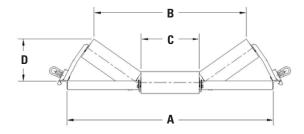


# **Carrying Assemblies**

Handle full capacity loading

#### **Cat Carrying Assemblies**

Cat carrying idlers have a single mechanical tube cross member, sized to handle full capacity loading through 1500 mm (60 in) belt widths. Box frame carrying idlers are also available.



#### **Carrying Idler Assemblies for Channel Mount\***

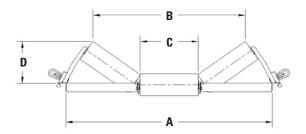
, ,									
101 mm (4 in) 35° – 7 Ga. – CEMA C or D Carrying Assembly*									
	Part No.								
Belt Width	CEMA C	CEMA D	A	В	C	D			
914 mm (36 in)	343371	_	1193 mm (47 in)	863 mm (34 in)	336 mm (13 <sup>1</sup> / <sub>4</sub> in)	222 mm (8 <sup>3</sup> / <sub>4</sub> in)			
1066 mm (42 in)	343343	_	1346 mm (53 in)	1006 mm (395/8 in)	381 mm (15½ in)	250 mm (9 <sup>7</sup> / <sub>8</sub> in)			
1219 mm (48 in)	343389	-	1498 mm (59 in)	1139 mm (44 <sup>7</sup> / <sub>8</sub> in)	431 mm (17 <sup>1</sup> / <sub>4</sub> in)	280 mm (11 <sup>1</sup> / <sub>16</sub> in)			

127 mm (5 in) 0 – 35° – 7 Ga. – CEMA C or D Carrying Assembly*									
	Part No.								
Belt Width	CEMA C	CEMA D	A	В	С	D			
914 mm (36 in)	343386	_	1193 mm (47 in)	863 mm (34 in)	336 mm (13 <sup>1</sup> / <sub>4</sub> in)	233 mm (9 <sup>3</sup> / <sub>16</sub> in)			
1066 mm (42 in)	342621	375912	1346 mm (53 in)	989 mm (38 <sup>15</sup> / <sub>16</sub> in)	381 mm (15½ in)	260 mm (10 <sup>1</sup> / <sub>4</sub> in)			
1219 mm (48 in)	343390	366593	1498 mm (59 in)	1374 mm (45½ in)	431 mm (17 <sup>1</sup> / <sub>4</sub> in)	300 mm (11 <sup>13</sup> / <sub>16</sub> in)			
1371 mm (54 in)	343305	375915	1651 mm (65 in)	1281 mm (50 <sup>7</sup> / <sub>16</sub> in)	488 mm (19 <sup>1</sup> / <sub>4</sub> in)	330 mm (13 in)			

152 mm (6 in) 0 – 35° – 7 Ga. – CEMA C or D Carrying Assembly*									
	Part No.								
Belt Width	CEMA C	CEMA D	A	В	C	D			
914 mm (36 in)	375613	-	1193 mm (47 in)	869 mm (34 <sup>1</sup> / <sub>4</sub> in)	336 mm (13 <sup>1</sup> / <sub>4</sub> in)	252 mm (9 <sup>15</sup> / <sub>16</sub> in)			
1066 mm (42 in)	375624	375914	1349 mm (53 in)	1003 mm (39½ in)	381 mm (15 <sup>1</sup> / <sub>4</sub> in)	280 mm (11 <sup>1</sup> / <sub>16</sub> in)			
1219 mm (48 in)	375631	357916	1498 mm (59 in)	1138 mm (44 <sup>13</sup> / <sub>16</sub> in)	431 mm (17 <sup>1</sup> / <sub>4</sub> in)	309 mm (12 <sup>3</sup> / <sub>16</sub> in)			
1371 mm (54 in)	375756	326985	1651 mm (65 in)	1271 mm (50½/16 in)	488 mm (19 <sup>1</sup> / <sub>4</sub> in)	339 mm (13 <sup>3</sup> / <sub>8</sub> in)			
1524 mm (60 in)	375917	375918	1803 mm (71 in)	1404 mm (55 <sup>5</sup> / <sub>16</sub> in)	539 mm (21 <sup>1</sup> / <sub>4</sub> in)	368 mm (14 <sup>1</sup> / <sub>2</sub> in)			

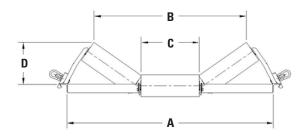
<sup>\*</sup>Available with 6 mm ( $\frac{1}{4}$  in) wall rolls upon request.

# Offset Carrying Assemblies Offset Carrying Idler Assembly



Carry Idler Assemblies for Channel Mount										
152 mm (6 in) 35° $-$ 6 mm ( $^{1}\!/_{\!\!4}$ in) $-$ CEMA E Steel Roll Channel Mount										
Belt Width	Part No.	Α	В	C	D					
914 mm (36 in)	602678	1196 mm (47½ in)	849 mm (33 <sup>7</sup> / <sub>16</sub> in)	346 mm (13 <sup>5</sup> / <sub>8</sub> in)	244 mm (9 <sup>5</sup> / <sub>8</sub> in)					
1066 mm (42 in)	602679	1349 mm (53½ in)	976 mm (38 <sup>7</sup> /16 in)	396 mm (155/8 in)	271 mm (10 <sup>11</sup> / <sub>16</sub> in)					
1219 mm (48 in)	376370	1501 mm (59½ in)	1131 mm (44 <sup>9</sup> / <sub>16</sub> in)	447 mm (17 <sup>5</sup> / <sub>8</sub> in)	284 mm (11 <sup>13</sup> / <sub>16</sub> in)					
1371 mm (54 in)	376402	1654 mm (65½ in)	1271 mm (50½ in)	498 mm (19 <sup>5</sup> / <sub>8</sub> in)	339 mm (13 <sup>3</sup> / <sub>8</sub> in)					
1524 mm (60 in)	324853	1806 mm (71½ in)	1398 mm (55 <sup>5</sup> / <sub>16</sub> in)	549 mm (21 <sup>5</sup> / <sub>8</sub> in)	368 mm (14 <sup>1</sup> / <sub>2</sub> in)					
1828 mm (72 in)	602683	1958 mm (77½ in)	1651 mm (65 <sup>7</sup> / <sub>8</sub> in)	650 mm (25 <sup>5</sup> / <sub>8</sub> in)	427 mm (16 <sup>13</sup> / <sub>16</sub> in)					

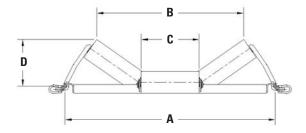
# Offset Carrying Assemblies Channel Mount Steel Rolls



Carry Idler Assemblies for Channel Mount										
177 mm (7 in) 35° – 6 mm (¼ in) – CEMA E Steel Roll Channel Mount										
Belt Width	Part Number	Α	В	C	D					
914 mm (36 in)	602684	1196 mm (47 <sup>1</sup> / <sub>8</sub> in)	852 mm (33 <sup>9</sup> / <sub>16</sub> in)	346 mm (13 <sup>5</sup> / <sub>8</sub> in)	265 mm (10 <sup>7</sup> / <sub>16</sub> in)					
1066 mm (42 in)	602685	1349 mm (53½ in)	985 mm (38 <sup>13</sup> / <sub>16</sub> in)	396 mm (15 <sup>5</sup> / <sub>8</sub> in)	293 mm (11% in)					
1219 mm (48 in)	376369	1501 mm (59 <sup>1</sup> / <sub>8</sub> in)	1120 mm (44 <sup>1</sup> / <sub>8</sub> in)	447 mm (17 <sup>5</sup> / <sub>8</sub> in)	322 mm (12 <sup>11</sup> / <sub>16</sub> in)					
1371 mm (54 in)	376401	1654 mm (65½ in)	1254 mm (49 <sup>3</sup> / <sub>8</sub> in)	498 mm (19 <sup>5</sup> / <sub>8</sub> in)	352 mm (13 <sup>7</sup> / <sub>8</sub> in)					
1524 mm (60 in)	376403	1806 mm (71½ in)	1389 mm (54 <sup>11</sup> / <sub>16</sub> in)	549 mm (21 <sup>5</sup> / <sub>8</sub> in)	381 mm (15 in)					
1828 mm (72 in)	602689	1958 mm (77½ in)	1657 mm (65 <sup>1</sup> / <sub>4</sub> in)	650 mm (25 <sup>5</sup> / <sub>8</sub> in)	439 mm (17 <sup>5</sup> / <sub>16</sub> in)					

# **Carrying Assemblies**

# Multiple configurations ensure the right fit



#### Carrying Idler Assemblies for Channel Mount\*

101 mm (4 in) ø – 35° – 7 Ga. – CEMA C or D Carrying Assembly									
	Part No.								
Belt Width	CEMA C	CEMA D	A	В	C	D			
914 mm (36 in)	329226	_	1219 mm (48 in)	869 mm (34 <sup>1</sup> / <sub>8</sub> in)	336 mm (13 <sup>1</sup> / <sub>4</sub> in)	260 mm (10 <sup>1</sup> / <sub>4</sub> in)			
1066 mm (42 in)	329253	_	1371 mm (54 in)	976 mm (38 <sup>7</sup> / <sub>16</sub> in)	381 mm (15½ in)	263 mm (10 <sup>3</sup> / <sub>8</sub> in)			
1219 mm (48 in)	329264	_	1524 mm (60 in)	1146 mm (45½ in)	437 mm (17 <sup>1</sup> / <sub>4</sub> in)	304 mm (12 in)			

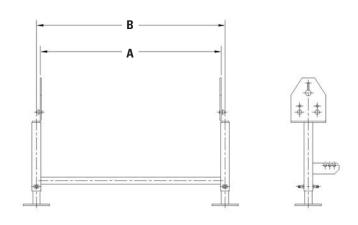
127 mm (5 in) $ m  ext{\it g} - 35^{\circ} - 7$ Ga. $-$ CEMA C or D Carrying Assembly									
	Part No.								
Belt Width	CEMA C	CEMA D	A	В	C	D			
914 mm (36 in)	340206	-	1219 mm (48 in)	852 mm (33 <sup>9</sup> / <sub>16</sub> in)	336 mm (13 <sup>1</sup> / <sub>4</sub> in)	269 mm (10 <sup>5</sup> / <sub>8</sub> in)			
1066 mm (42 in)	327175	375964	1371 mm (54 in)	962 mm (37 <sup>7</sup> / <sub>8</sub> in)	381 mm (15 <sup>1</sup> / <sub>4</sub> in)	273 mm (10 <sup>3</sup> / <sub>4</sub> in)			
1219 mm (48 in)	299987	328811	1524 mm (60 in)	1131 mm (44 <sup>9</sup> / <sub>16</sub> in)	437 mm (17 <sup>1</sup> / <sub>4</sub> in)	314 mm (12 <sup>3</sup> / <sub>8</sub> in)			
1371 mm (54 in)	375932	376000	1676 mm (66 in)	1285 mm (50 <sup>5</sup> / <sub>8</sub> in)	488 mm (19 <sup>1</sup> / <sub>4</sub> in)	338 mm (13 <sup>5</sup> / <sub>16</sub> in)			

152 mm (6 in) ø – 35° – 7 Ga. – CEMA C or D Carrying Assembly									
	Part No.								
Belt Width	CEMA C	CEMA D	Α	В	C	D			
914 mm (36 in)	355926	-	1219 mm (48 in)	835 mm (32 <sup>7</sup> / <sub>8</sub> in)	336 mm (13 <sup>1</sup> / <sub>4</sub> in)	280 mm (11 <sup>1</sup> / <sub>16</sub> in)			
1066 mm (42 in)	375923	375995	1371 mm (54 in)	947 mm (37 <sup>5</sup> / <sub>16</sub> in)	381 mm (15 <sup>1</sup> / <sub>4</sub> in)	288 mm (11 <sup>3</sup> / <sub>8</sub> in)			
1219 mm (48 in)	375929	375998	1524 mm (60 in)	1116 mm (43 <sup>15</sup> / <sub>16</sub> in)	437 mm (17 <sup>1</sup> / <sub>4</sub> in)	325 mm (12 <sup>13</sup> / <sub>16</sub> in)			
1371 mm (54 in)	375933	376001	1676 mm (66 in)	1271 mm (50 <sup>1</sup> / <sub>16</sub> in)	488 mm (19 <sup>1</sup> / <sub>4</sub> in)	349 mm (13 <sup>3</sup> / <sub>4</sub> in)			
1524 mm (60 in)	375935	376003	1828 mm (72 in)	1404 mm (55 <sup>5</sup> / <sub>16</sub> in)	539 mm (21 <sup>1</sup> / <sub>4</sub> in)	377 mm (14 <sup>7</sup> / <sub>8</sub> in)			

<sup>\*</sup>Available with 6 mm (1/4 in) wall rolls upon request.

# **EZEE-LOC Configurations**

#### **EZEE-LOC Adjustable Floor Stand Assemblies**

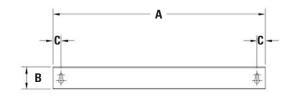


76 mm (3 in) Channel Floor Stand					
Belt Width Part No. A B					
914 mm (36 in)	337433	1200 mm (47 <sup>1</sup> / <sub>4</sub> in)	1244 mm (49 in)		
1066 mm (42 in)	337435	1352 mm (53 <sup>1</sup> / <sub>4</sub> in)	1397 mm (55 in)		
1219 mm (48 in)	337437	1504 mm (59 <sup>1</sup> / <sub>4</sub> in)	1549 mm (61 in)		

106 mm (4 in) Channel Floor Stand				
Belt Width	В			
914 mm (36 in)	336873	1200 mm (47 <sup>1</sup> / <sub>4</sub> in)	1244 mm (49 in)	
1066 mm (42 in)	336874	1352 mm (53 <sup>1</sup> / <sub>4</sub> in)	1397 mm (55 in)	
1219 mm (48 in)	336875	1504 mm (59 <sup>1</sup> / <sub>4</sub> in)	1549 mm (61 in)	
1371 mm (54 in)	336876	1657 mm (65 <sup>1</sup> / <sub>4</sub> in)	1701 mm (67 in)	

127 mm (5 in) Channel Floor Stand					
Belt Width	Part No.	Α	В		
1219 mm (48 in)	347495	1504 mm (591/4 in)	1549 mm (61 in)		
1371 mm (54 in)	347496	1657 mm (65 <sup>1</sup> / <sub>4</sub> in)	1701 mm (67 in)		
1500 mm (60 in)	347497	1809 mm (71 <sup>1</sup> / <sub>4</sub> in)	1854 mm (73 in)		

#### **EZEE-LOC Side Channel Rails**



76 mm (3 in) Channel Floor Rail						
Part No.	A	В	C			
300808	177 mm-298 mm	76 mm	47 mm			
	(7 in-11 <sup>3</sup> / <sub>4</sub> in)	(3 in)	(1 <sup>7</sup> / <sub>8</sub> in)			
302123	228 mm-298 mm	76 mm	47 mm			
	(9 in-11 <sup>3</sup> / <sub>4</sub> in)	(3 in)	(1 <sup>7</sup> / <sub>8</sub> in)			
302121	279 mm-298 mm	76 mm	47 mm			
	(11 in-11 <sup>3</sup> / <sub>4</sub> in)	(3 in)	(1 <sup>7</sup> / <sub>8</sub> in)			

	106 mm (4 in) Channel Floor Rail					
Part No.	Α	В	C			
334711	177 mm-298 mm	106 mm	47 mm			
	(7 in-11 <sup>3</sup> / <sub>4</sub> in)	(4 in)	(1 <sup>7</sup> / <sub>8</sub> in)			
260050	228 mm-298 mm	106 mm	47 mm			
	(9 in-11 <sup>3</sup> / <sub>4</sub> in)	(4 in)	(1 <sup>7</sup> / <sub>8</sub> in)			
272337	279 mm-298 mm	106 mm	47 mm			
	(11 in-11 <sup>3</sup> / <sub>4</sub> in)	(4 in)	(1 <sup>7</sup> / <sub>8</sub> in)			

	127 mm (5 in) Channel Floor Rail					
Part No.	Α	В	С			
334811	177 mm-298 mm	127 mm	47 mm			
	(7 in-11 <sup>3</sup> / <sub>4</sub> in)	(5 in)	(1 <sup>7</sup> / <sub>8</sub> in)			
310943	228 mm-298 mm	127 mm	47 mm			
	(9 in-11 <sup>3</sup> / <sub>4</sub> in)	(5 in)	(1 <sup>7</sup> / <sub>8</sub> in)			
334812	279 mm-298 mm	127 mm	47 mm			
	(11 in-11 <sup>3</sup> / <sub>4</sub> in)	(5 in)	(1 <sup>7</sup> / <sub>8</sub> in)			

# **EZEE-LOC Configurations and Return Roll Assemblies**

#### **EZEE-LOC Roof-hung Spreader Assemblies**



76 mm (3 in) Channel Spreader					
Belt Width Part No. A					
914 mm (36 in)	327372	1200 mm (47 <sup>1</sup> / <sub>4</sub> in)			
1066 mm (42 in)	327373	1352 mm (53 <sup>1</sup> / <sub>4</sub> in)			
1219 mm (48 in)	310971	1504 mm (59 <sup>1</sup> / <sub>4</sub> in)			

101 mm (4 in) Channel Spreader					
Belt Width	Part No.	Α			
914 mm (36 in)	327378	1200 mm (47 <sup>1</sup> / <sub>4</sub> in)			
1066 mm (42 in)	327379	1352 mm (53 <sup>1</sup> / <sub>4</sub> in)			
1219 mm (48 in)	327380	1504 mm (59 <sup>1</sup> / <sub>4</sub> in)			
1371 mm (54 in)	327381	1657 mm (65 <sup>1</sup> / <sub>4</sub> in)			

127 mm (5 in) Channel Spreader					
Belt Width Part No. A					
1219 mm (48 in)	327388	1504 mm (59 <sup>1</sup> / <sub>4</sub> in)			
1371 mm (54 in)	327389	1657 mm (65 <sup>1</sup> / <sub>4</sub> in)			
1524 mm (60 in)	310945	1809 mm (71 <sup>1</sup> / <sub>4</sub> in)			

#### **Return Roll Assemblies**



101 mm (4 in) ø – 7 Ga. – Return Roll*					
	Part No.				
Belt Width	CEMA C	CEMA D	Α		
914 mm (36 in)	324721	-	-	1193 mm (47 in)	
1066 mm (42 in)	324727	_	-	1346 mm (53 in)	
1219 mm (48 in)	324730	_	_	1498 mm (59 in)	

127 mm (5 in) ø – Return Roll*					
	Part No.				
Belt Width	CEMA C	CEMA D	Α		
914 mm (36 in)	325356	-	-	1193 mm (47 in)	
1066 mm (42 in)	325357	325786	-	1346 mm (53 in)	
1219 mm (48 in)	325358	325787	-	1498 mm (59 in)	
1371 mm (54 in)	325359	325788	_	1651 mm (65 in)	

152 mm (6 in) ø 7 Ga. – Return Roll*					
	Part	No.			
Belt Width	CEMA C	CEMA D	A		
914 mm (36 in)	325485	_	1193 mm (47 in)		
1066 mm (42 in)	325488	325818	1346 mm (53 in)		
1219 mm (48 in)	325493	325819	1498 mm (59 in)		
1371 mm (54 in)	325498	325820	1651 mm (65 in)		
1524 mm (60 in)	325501	325822	1803 mm (71 in)		

152 mm (6 in) 6 mm (¼ in) – Return Roll				
Belt Width	CEMA E	A		
914 mm (36 in)	358962	1187 mm (46 <sup>3</sup> / <sub>4</sub> in)		
1066 mm (42 in)	342575	1340 mm (52 <sup>3</sup> / <sub>4</sub> in)		
1219 mm (48 in)	376433	1492 mm (58 <sup>3</sup> / <sub>4</sub> in)		
1371 mm (54 in)	376434	1645 mm (64 <sup>3</sup> / <sub>4</sub> in)		
1524 mm (60 in)	325435	1797 mm (70 <sup>3</sup> / <sub>4</sub> in)		

<sup>\*</sup>Available with 6 mm (1/4 in) wall rolls upon request.

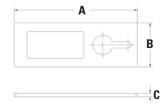
# Replacement Return Rolls CEMA E



177 mm (7 in) Diameter Steel Rolls				
Belt Width	Belt Width Part Number			
914 mm (36 in)	376441	1187 mm (46 <sup>3</sup> / <sub>4</sub> in)		
1066 mm (42 in)	376458	1340 mm (52 <sup>3</sup> / <sub>4</sub> in)		
1219 mm (48 in)	376459	1492 mm (58 <sup>3</sup> / <sub>4</sub> in)		
1371 mm (54 in)	376460	1645 mm (64 <sup>3</sup> / <sub>4</sub> in)		
1524 mm (60 in)	376462	1797 mm (70 <sup>3</sup> / <sub>4</sub> in)		
1828 mm (72 in)	376465	2101mm (82 <sup>3</sup> / <sub>4</sub> in)		

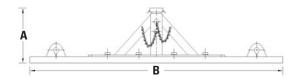
# **Additional Configurations**

#### **Channel Slider/Hanger Brackets**



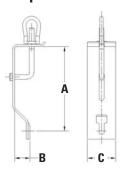
Slider/Hanger Brackets				
Part No.	Channel Size	Α	В	C
347481	76 mm (3 in)	254 mm	88.9 mm	6.35 mm
	@ 3.5#	(10 in)	(3.5 in)	(0.25 in)
347482	101 mm (4 in)	254 mm	88.9 mm	6.35 mm
	@ 5.4#	(10 in)	(3.5 in)	(0.25 in)
347483	127 mm (5 in)	254 mm	88.9 mm	6.35 mm
	@ 6.7#	(10 in)	(3.5 in)	(0.25 in)

#### Wire Rope Adjustable Tie-off Stands



Tie-off Stands					
Part No. A Min. A Max. B					
276956	609 mm (24 in)	914 mm (36 in)	1956 mm (77 in)		
271136 812 mm (32 in) 1219 mm (48 in) 1956 mm (77					

#### **Channel Mounted Drop Brackets**



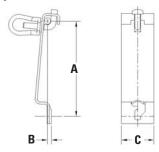
76 mm (3 in) Brackets					
Part No. A B C					
338431	228 mm (9 in)	85.7 mm (3 <sup>3</sup> / <sub>8</sub> in)	76.2 mm (3 in)		
338433	304 mm (12 in)	85.7 mm (3 <sup>3</sup> / <sub>8</sub> in)	76.2 mm (3 in)		
338435	381 mm (15 in)	85.7 mm (3 <sup>3</sup> / <sub>8</sub> in)	76.2 mm (3 in)		

101 mm (4 in) Brackets						
Part No.	Part No. A B C					
338426	228 mm (9 in)	85.7 mm (3 <sup>3</sup> / <sub>8</sub> in)	76.2 mm (3 in)			
338428	304 mm (12 in)	85.7 mm (3 <sup>3</sup> / <sub>8</sub> in)	76.2 mm (3 in)			
338430	381 mm (15 in)	85.7 mm (3 <sup>3</sup> / <sub>8</sub> in)	76.2 mm (3 in)			

127 mm (5 in) Brackets					
Part No. A B C					
338437	228 mm (9 in)	85.7 mm (3 <sup>3</sup> / <sub>8</sub> in)	76.2 mm (3 in)		
338439	304 mm (12 in)	85.7 mm (3 <sup>3</sup> / <sub>8</sub> in)	76.2 mm (3 in)		
288558	381 mm (15 in)	85.7 mm (3 <sup>3</sup> / <sub>8</sub> in)	76.2 mm (3 in)		

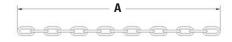
# **Additional Configurations**

#### **Wire Rope Drop Brackets**



Drop Brackets				
Part No.	C			
391355	146 mm (5 <sup>3</sup> / <sub>4</sub> in)	9.5 mm ( <sup>3</sup> / <sub>8</sub> in)	76.2 mm (3 in)	
391356	184 mm (7 <sup>1</sup> / <sub>4</sub> in)	9.5 mm ( <sup>3</sup> / <sub>8</sub> in)	76.2 mm (3 in)	
391357	228 mm (9 in)	9.5 mm ( <sup>3</sup> / <sub>8</sub> in)	76.2 mm (3 in)	
391358	298 mm (11 <sup>3</sup> / <sub>4</sub> in)	9.5 mm ( <sup>3</sup> / <sub>8</sub> in)	76.2 mm (3 in)	

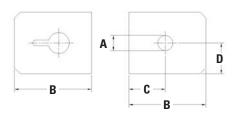
#### **Cat Standard Chain**



mm (¼ in) Proof Coil Chain with Hook		
Part No. A		
208650	1.2 m (4 ft)	
244458	1.5 m (5 ft)	
231598	1.8 m (6 ft)	

mm (5/16 in) Proof Coil Chain Without Hook			
Part No. A			
222516	1.5 m (5 ft)		
216997	1.8 m (6 ft)		

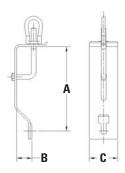
#### **Roof Mounting Plates for Chain Hung Structure**



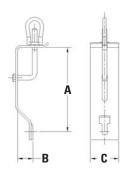
	Roof Plates				
Part No.	Α	В	C	D	
223140	19 mm	127 mm	60.3 mm	50.8 mm	
	( <sup>3</sup> / <sub>4</sub> in)	(5 in)	(2 <sup>3</sup> / <sub>8</sub> in)	(2 in)	
246787	25 mm	127 mm	60.3 mm	50.8 mm	
	(1 in)	(5 in)	(2 <sup>3</sup> / <sub>8</sub> in)	(2 in)	
213551	31 mm	127 mm	60.3 mm	50.8 mm	
	(1 <sup>1</sup> / <sub>4</sub> in)	(5 in)	(2 <sup>3</sup> / <sub>8</sub> in)	(2 in)	
242648	38 mm	127 mm	60.3 mm	50.8 mm	
	(1½ in)	(5 in)	(2 <sup>3</sup> / <sub>8</sub> in)	(2 in)	

**Drop Brackets**127 mm (5 in) and 152 mm (6 in) Channel

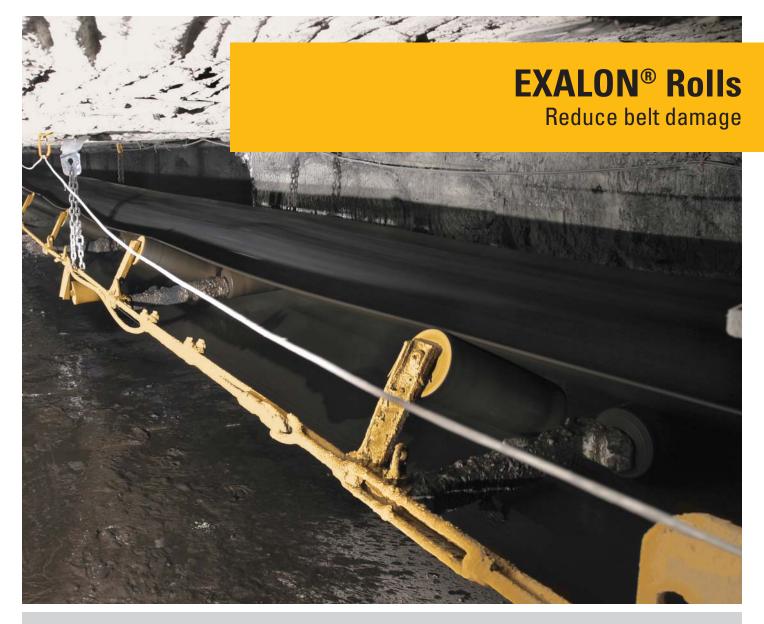
#### **CEMA E**



127 mm (5 in) Channel Drop Brackets					
Part No. A B C					
338447	304 mm (12 in)	85.7 mm (3 <sup>3</sup> / <sub>8</sub> in)	76.2 mm (3 in)		
338448	330 mm (13 in)	85.7 mm (3 <sup>3</sup> / <sub>8</sub> in)	76.2 mm (3 in)		
314661 355 mm (14 in) 85.7 mm (3 <sup>3</sup> / <sub>8</sub> in) 76.2 mm (3 in)					



152 mm (6 in) Channel Drop Brackets			
Part No.	Α	В	С
338442	304 mm (12 in)	85.7 mm (3 <sup>3</sup> / <sub>8</sub> in)	76.2 mm (3 in)
338443	330 mm (13 in)	85.7 mm (3 <sup>3</sup> / <sub>8</sub> in)	76.2 mm (3 in)
338444	355 mm (14 in)	85.7 mm (3 <sup>3</sup> / <sub>8</sub> in)	76.2 mm (3 in)



#### **Another Perfect Choice for Your Highly Corrosive and Abrasive Mining Operations**

In addition to its world-class steel rolls, Caterpillar also offers a highly successful range of CEMA C-, D- and E-class rolls made of a proprietary high molecular weight polyethylene (HMWPE) called EXALON.

While steel rolls are effective in most bulk-material handling applications, some applications benefit from the use of the EXALON roll product. Applications with environments that are highly corrosive, abrasive, wet or have a tendency for material buildup on the roller are ideal for the EXALON roll and its additional features and benefits.

#### **MSHA** Certified

Tube-based, with higher concentricity further enhanced by final machining (poly-body) for reduced belt wear, the EXALON roll offers balanced, vibration-free running. These fully conductive rolls are MSHA-certified as safe for underground use. They have two certifications: IC-56/1 – flame-resistant and IC-56/2 – flame-resistant and static-dissipating.

## **EXALON Rolls**

#### Extend belt life and reduce downtime



By extending belt life and reducing downtime, EXALON rolls deliver significant savings to mine operators.

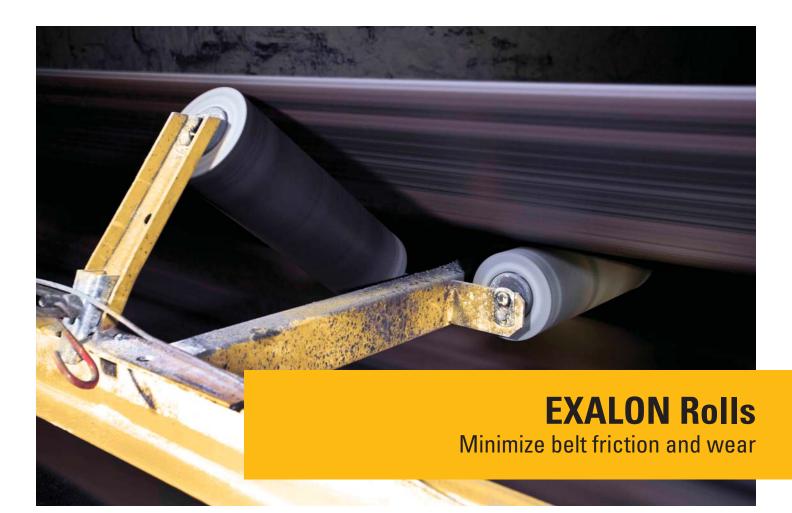
#### Versatile, Low-Maintenance

EXALON rolls can be retrofitted to any frame — even those of competitors. Custom sizes can be ordered for special applications. EXALON heads are installed using a unique "spin-welding" method, creating a single-piece roll construction.

#### **Tested for Quality**

All Cat EXALON and steel rolls are processed through an automated assembly system, which tests and records rotational torque, total indicator run-out and axial end play. Upon acceptance, each idler roll is then permanently marked with a serial number and date of manufacture.





#### **EXALON Benefits**

#### **MSHA** Certified

Certified for underground use:

- IC-56/1 flame resistant and
- IC-56/2 flame resistant and static dissipating.

#### **Longer Shell Life**

EXALON rolls last two to three times longer than steel rolls in highly corrosive and/or highly abrasive environments.

#### **Low Maintenance**

Cat Idler PAL ensures life-long grease management.

#### **Reduced Belt Damage**

The smooth PE surface minimizes belt friction and wear and acts as a slider bar in the event of a bearing seizure. The all-PE body means there are no sharp 'pizza cutter' edges.

#### **Corrosion-proof**

Being made of HMWPE, the EXALON roll is not subject to corrosion.

#### **Sound Dampening**

Reduce noise by up to 20%, particularly in underground applications.

#### **Resistance to Material Buildup**

The smooth, non-adhesive HMWPE surface resists material buildup.

#### **Cost-efficient**

EXALON offers cost savings through extended life, reduced downtime, longer replacement intervals and reduced belt damage.

#### **Versatile**

The entire EXALON product line can be produced to fit any existing manufacturer's top-side and return frame assemblies.

## **Idler PAL**

## Grease stays where you need it







#### **Greased for Life**

Every roll has plenty of grease for a lifetime of trouble-free operation. Our automated assembly process includes three separate, metered grease inputs.

The Idler PAL bearing cavity design allows for extra lubricant capacity, which is unmatched in the industry and assures that the grease stays where you need it: in the bearing.

#### **Idler PAL Positive Automatic Lubrication**

- Grease moves due to taper of rolling elements in the bearing
- Grease expands due to increased bearing temperatures in operation
- The compensator disc moves outward, compressing the wave spring
- When rotation stops and grease contracts, the wave spring exerts slight pressure on the compensator disc, ensuring no voids in the grease



## **Steel Rolls**

Retrofit our rolls into virtually any frame

#### **Cat Steel Rolls**

Easily replace rolls at your operation with our retrofitable steel rolls. The Cat roll design is the result of over two years of design and engineering effort and represents new technology in idler designs. Our shaft end configuration allows you to retrofit Cat rolls into virtually any competitor's frame with a unique retrofit adapter. Our end cap (bearing housing) has been redesigned for increased strength and a close fit to the deflector cap.

# **Electronic Quality Tracking**

#### Accurately monitor roll life

#### **Electronic Quality Tracking: An Industry First**

Each shaft end is coded at time of assembly with:

- Day of the year
- Production year
- Individual serial number
- Automatic data recording of rotational torque,
   TIR (Total Indicated Runout) and bearing play of each individual roll is tied to the serial number

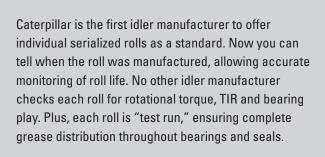


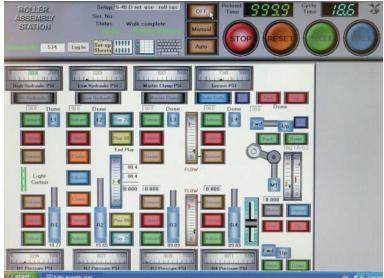
For example, this roll was assembled on the 85th day of 2005 and it was the 35th roll assembled that day.



Cat® steel rolls go through an automated five-stage assembly and testing process.







### Notes

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at **www.cat.com** 

© 2014 Caterpillar All rights reserved

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

CAT, CATERPILLAR, SAFETY.CAT.COM, their respective logos, "Caterpillar Yellow" and the "Power Edge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

AEHQ6940 (08-2014)

