

Series 40,000 and 70,000 Catenary Belt Conveyor Idlers

Link-Belt Series 40,000 and 70,000 Catenary Belt Conveyor Idlers combine the proven capabilities of the Link-Belt roll design with the benefits of a catenary suspension to form a smooth natural trough and ideal load conveying surface.

Series 40,000 and 70,000 Catenary Idlers are manufactured to withstand heavy impact at loading and transfer points as required by wide belts through 96-inch width. Superior performance and proven dependability are the result of rugged roll construction, exclusive labyrinth seal design and high-capacity “sealed for life” tapered roller bearings.

Especially suited to loading areas or transfer points in reclaiming installations where high impact loads must be absorbed, these catenary idlers have the design and built-in ability to adjust under varying loading conditions.

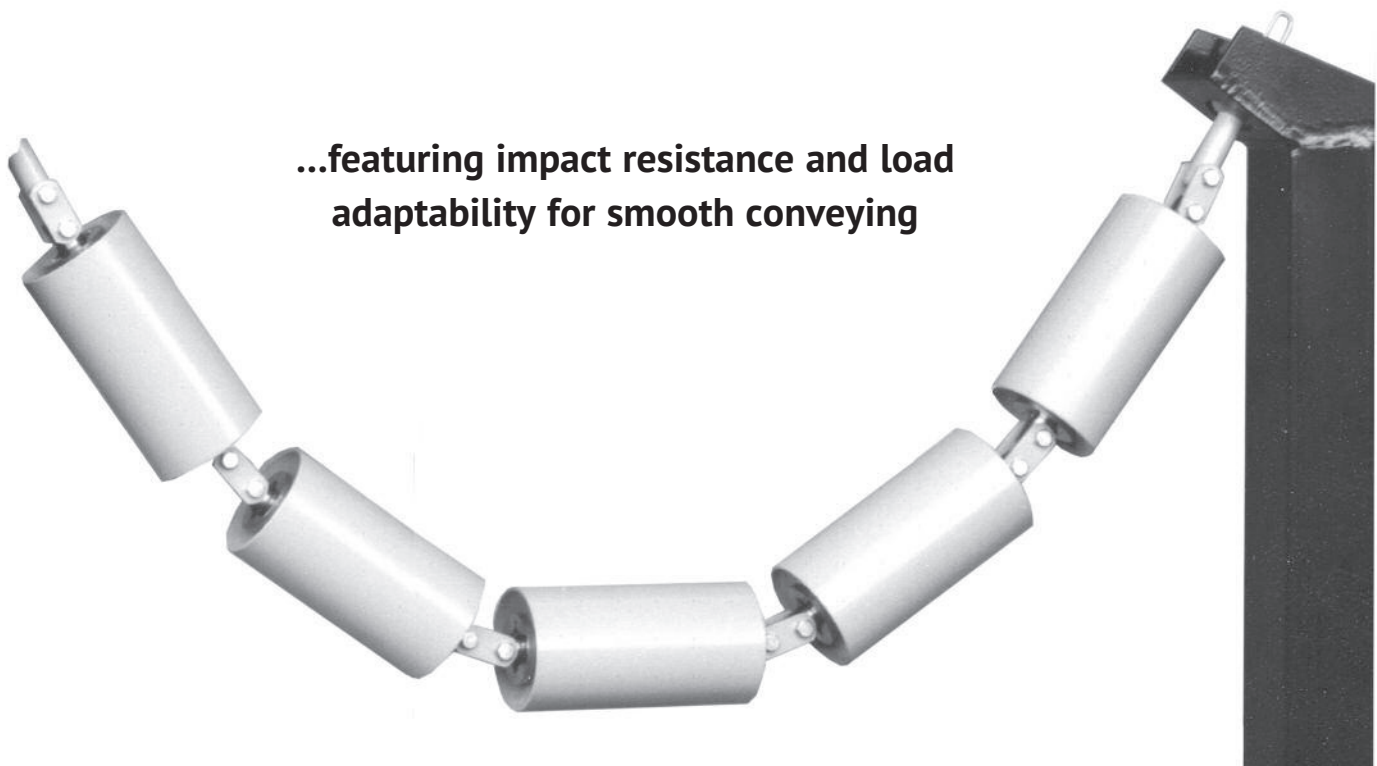
The Series 40,000 exclusive outboard seal effectively protects bearings three ways... a triple lip nitrile rubber primary seal... triple labyrinth... and grease-filled clearances. This design makes the idlers impervious to moisture and contaminants, extending idler life.

The complete line of Link-Belt Series 40,000 Catenary Belt Conveyor Idlers includes 35° 3-roll Troughing Idlers, 55° 5-roll Impact Idlers, and 10° and 15° 2-roll V-Return Idlers. V-Return Idlers are supplied with steel rolls. This full range of idlers provides the design engineer with components required to select an efficient material conveying system.

All Series 40,000 idlers are available for belt widths from 36 up to 96-inches and can be supplied with either 6- or 7-inch diameter rolls. Prior to shipping, rolls are protected by a baked on polymeric powder coating.

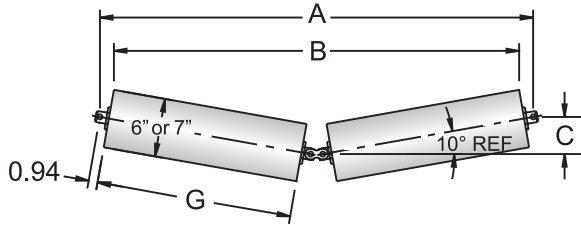
When load carrying requirements exceed standard limitations, the Series 70,000 Catenary Idler provides more than double the capacity of the Series 40,000 Belt Conveyor Idler.

Catenary Chain Connecting Devices are an economical and effective means for suspension of 3-roll Troughing Idlers and 2-roll V-Return Idlers. A bar link arrangement for 5-roll Impact Idlers is also available. There are various other Connecting Devices available for the Link-Belt Catenary Idlers which allow the conveyor designer complete freedom in choice of support structures. Details can be furnished upon request. Quick Disconnect Devices for Syntron Material Handling Catenary Idlers can also be provided, which permit operators to drop an idler out of service without stopping the conveyor.



10° 2-Roll V-Return Idlers

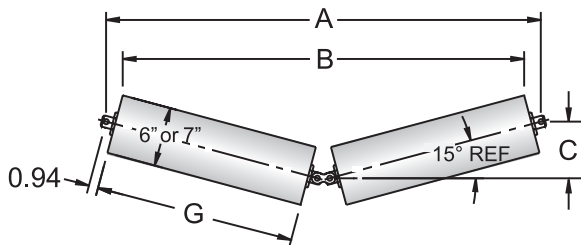
40,000



Belt width, inches	Dia.	Idler number	Idler weight, pounds	A	B	C	G
				Inches			
36	6"	40656-36	91	44.56	41.69	3.81	20.12
	7"	40756-36	102	44.56	41.50	3.81	20.12
42	6"	40656-42	106	51.88	48.94	4.44	23.81
	7"	40756-42	119	51.88	48.81	4.44	23.81
48	6"	40656-48	119	58.12	55.25	5.00	27.00
	7"	40756-48	133	58.12	55.06	5.00	27.00
54	6"	40656-54	137	66.75	63.88	5.81	31.38
	7"	40756-54	153	66.75	63.69	5.81	31.38
60	6"	40656-60	146	71.44	68.56	6.19	33.75
	7"	40756-60	163	71.44	68.38	6.19	33.75
72	6"	40656-72	173	84.50	81.62	7.31	40.38
	7"	40756-72	193	84.50	81.44	7.31	40.38
84	6"	40656-84	198	96.31	93.44	8.38	46.38
	7"	40756-84	220	96.31	93.25	8.38	46.38
96	6"	40656-96	228	110.94	108.06	9.69	53.81
	7"	40756-96	254	110.94	107.88	9.69	53.81

15° 2-Roll V-Return Idlers

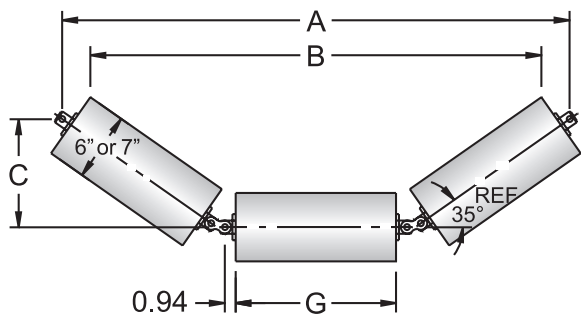
40,000



Belt width, inches	Dia.	Idler number	Idler weight, pounds	A	B	C	G
				Inches			
36	6"	40656-36	91	43.75	40.38	5.69	20.12
	7"	40756-36	102	43.75	40.12	5.69	20.12
42	6"	40656-42	106	50.88	47.50	6.62	23.81
	7"	40756-42	119	50.88	47.25	6.62	23.81
48	6"	40656-48	119	57.06	53.69	7.50	27.00
	7"	40756-48	133	57.06	53.44	7.50	27.00
54	6"	40656-54	137	65.50	62.12	8.62	31.38
	7"	40756-54	153	65.50	61.88	8.62	31.38
60	6"	40656-60	146	70.06	66.69	9.25	33.75
	7"	40756-60	163	70.06	66.44	9.25	33.75
72	6"	40656-72	173	82.88	79.50	10.94	40.38
	7"	40756-72	193	82.88	79.25	10.94	40.38
84	6"	40656-84	198	94.50	91.12	12.50	46.38
	7"	40756-84	220	94.50	90.88	12.50	46.38
96	6"	40656-96	228	108.81	105.50	14.44	53.81
	7"	40756-96	254	108.81	105.19	14.44	53.81

35° 3-Roll Troughing Idlers

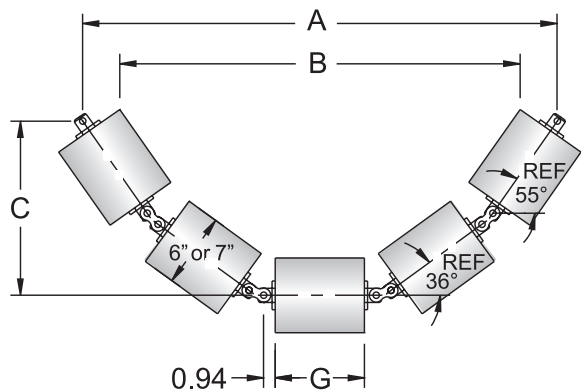
40,000



Belt width, inches	Dia.	Idler number	Idler weight, pounds	A	B	C	G
				Inches			
36	6"	40655-36	100	44.44	39.50	9.44	14.06
	7"	40755-36	112	44.44	38.94	9.44	14.06
42	6"	40655-42	112	49.69	44.75	10.62	16.06
	7"	40755-42	126	49.69	44.19	10.62	16.06
48	6"	40655-48	125	55.00	50.06	11.75	18.06
	7"	40755-48	140	55.00	49.50	11.75	18.06
54	6"	40655-54	137	60.44	55.50	12.94	20.12
	7"	40755-54	153	60.44	54.94	12.94	20.12
60	6"	40655-60	151	66.38	61.44	14.25	22.38
	7"	40755-60	169	66.38	60.88	14.25	22.38
72	6"	40655-72	179	78.56	73.62	16.88	27.00
	7"	40755-72	200	78.56	73.06	16.88	27.00
84	6"	40655-84	206	90.12	85.19	19.38	31.38
	7"	40755-84	230	90.12	84.62	19.38	31.38
96	6"	40655-96	233	102.00	97.06	22.00	35.88
	7"	40755-96	260	102.00	96.50	22.00	35.88

55° 5-Roll Impact Idlers

40,000

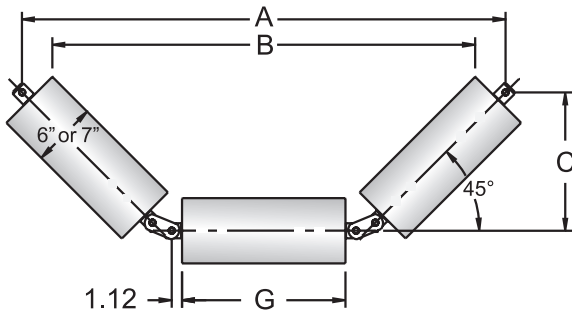


Belt width, inches	Dia.	Idler number	Idler weight, pounds	A	B	C	G
				Inches			
36	6"	40657-36	98	38.31	32.31	14.06	7.19
	7"	40757-36	111	38.31	31.50	14.06	7.19
42	6"	40657-42	111	43.19	37.25	15.88	8.50
	7"	40757-42	126	43.19	36.38	15.88	8.50
48	6"	40657-48	127	49.12	43.12	18.06	10.06
	7"	40757-48	143	49.12	42.25	18.06	10.06
54	6"	40657-54	139	53.31	47.38	19.69	11.19
	7"	40757-54	156	53.31	46.56	19.69	11.19
60	6"	40657-60	152	58.25	52.31	21.50	12.50
	7"	40757-60	171	58.25	51.44	21.50	12.50
72	6"	40657-72	179	68.12	62.19	25.19	15.12
	7"	40757-72	200	68.12	61.31	25.12	15.12
84	6"	40657-84	209	79.19	73.25	29.31	18.06
	7"	40757-84	233	79.19	72.38	29.31	18.06
96	6"	40657-96	229	86.94	81.00	32.25	20.12
	7"	40757-96	257	86.94	80.12	32.25	20.12

45°

3-Roll Troughing Idlers

70,000

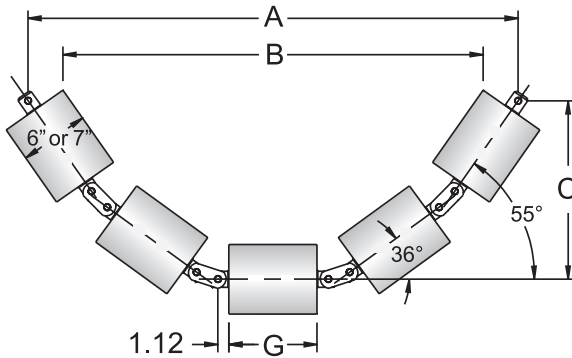


Belt width, inches	Dia.	Idler number	Idler weight, pounds	A	B	C	G
				Inches			
48	6"	70655-48	166	52.00	46.12	14.88	17.56
	7"	70755-48	180	52.00	54.44	14.88	17.56
54	6"	70655-54	182	56.94	51.12	16.31	19.62
	7"	70755-54	198	56.94	50.44	16.31	19.62
60	6"	70655-60	198	61.62	55.81	17.69	21.56
	7"	70755-60	215	61.62	55.12	17.69	21.56
72	6"	70655-72	231	71.31	65.44	20.56	25.56
	7"	70755-72	251	71.31	64.75	20.56	25.56
84	6"	70655-84	263	80.94	75.12	23.38	29.56
	7"	70755-84	286	80.94	74.44	23.38	29.56
96	6"	70655-96	296	90.62	84.81	26.19	33.56
	7"	70755-96	321	90.62	84.06	26.19	33.56

55°

5-Roll Impact Idlers

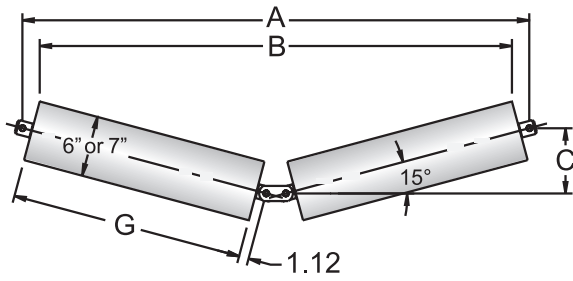
70,000



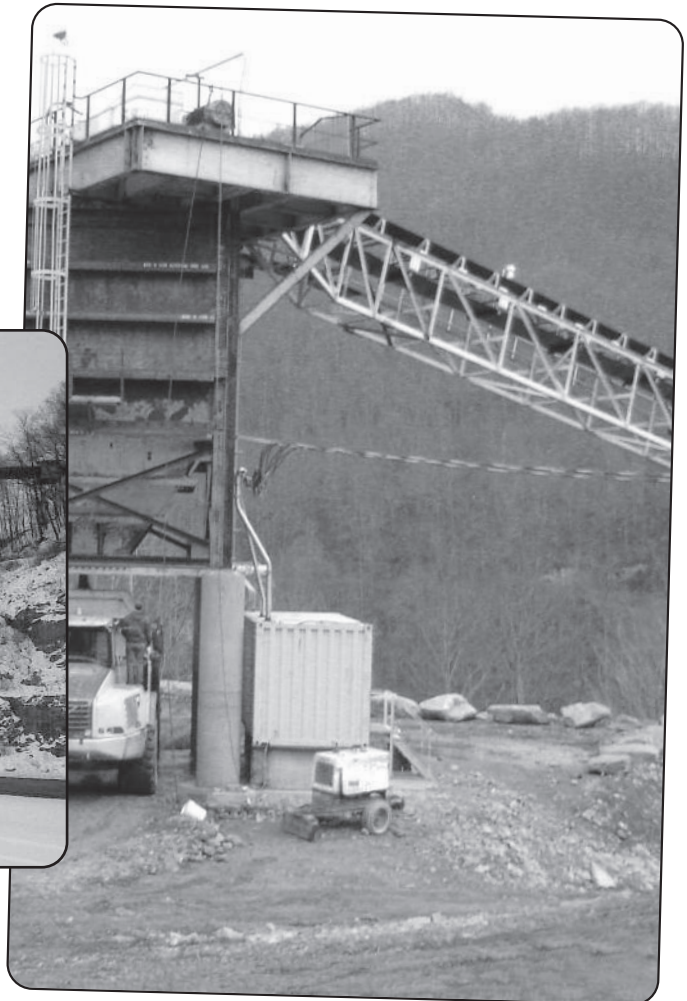
Belt width, inches	Dia.	Idler number	Idler weight, pounds	A	B	C	G
				Inches			
48	6"	70657-48	160	49.31	43.12	17.94	8.88
	7"	70757-48	174	49.31	42.31	17.94	8.88
54	6"	70657-54	177	54.00	47.81	19.69	10.12
	7"	70757-54	193	54.00	47.00	19.69	10.12
60	6"	70657-60	193	58.50	52.31	21.38	11.31
	7"	70757-60	210	58.50	51.50	21.38	11.31
72	6"	70657-72	226	67.69	61.50	24.81	13.75
	7"	70757-72	246	67.69	60.62	24.81	13.75
84	6"	70657-84	259	76.88	70.69	28.25	16.19
	7"	70757-84	282	76.88	69.81	28.25	16.19
96	6"	70657-96	292	86.00	79.81	31.69	18.62
	7"	70757-96	317	86.00	79.00	31.69	18.62

15° 2-Roll V-Return Idler

70,000

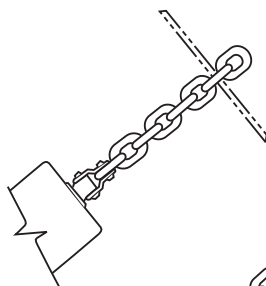


Belt width, inches	Dia.	Idler number	Idler weight, pounds	A	B	C	G
				Inches			
48	6"	70656-48	160	58.25	54.56	7.50	26.75
	7"	70756-48	173	58.25	54.31	7.50	26.75
54	6"	70656-54	176	64.06	60.31	8.31	29.75
	7"	70756-54	191	64.06	60.06	8.31	29.75
60	6"	70656-60	192	69.88	66.12	9.06	32.75
	7"	70756-60	209	69.88	65.88	9.06	32.75
72	6"	70656-72	225	81.44	77.75	10.62	38.75
	7"	70756-72	244	81.44	77.50	10.62	38.75
84	6"	70656-84	257	93.06	89.31	12.19	44.75
	7"	70756-84	279	93.06	89.06	12.19	44.75
96	6"	70656-96	290	104.62	100.94	13.75	50.75
	7"	70756-96	314	104.62	100.62	13.75	50.75

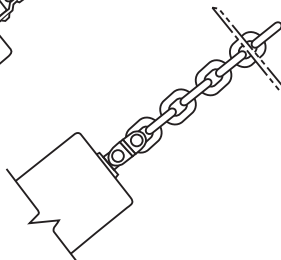


Catenary Connecting Devices

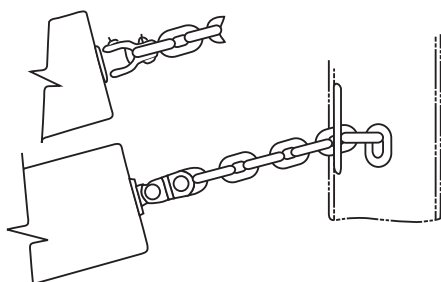
The designs of support structures for Catenary Idlers are not limited. The Link-Belt range of standard designs of Catenary Connecting Devices accommodates most applications. Typical connecting devices are illustrated. Other designs are available upon request. Heavy-duty chain links on each end of the Catenary Idler Suspension Assembly compensate for variable distances between support structures.



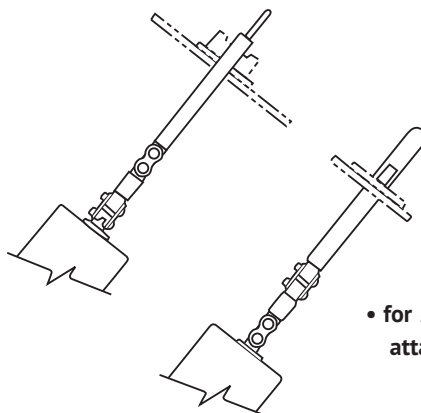
• for 3-roll assembly attachment A



• for 2-roll v-return assembly attachment B



• for 5-roll impact assembly attachment C



Catenary Quick Disconnect

The Quick Disconnect will permit dropping an idler assembly out of service without stopping the conveyor. A simple mechanical device facilitates quick operation.

