# **BUCKET ELEVATORS**

# FOR INDUSTRIAL AND AGRICULTURAL ENVIRONMENTS





# **Bucket Elevators: Centrifugal and Continuous Designs**

Bucket Elevators provide an economical and efficient method to vertically elevate a wide range of dry, free-flowing materials. Material data and complete application information are critical in the proper sizing and selection of bucket elevators.

#### **How to Select the Proper Elevator:**

Critical Information Required (See Bucket Elevator Data Sheet on page 11 or at www.screwconveyor.com)

Type of Material Handled
Discharge Height of Elevator
Maximum Lump Size
Material Characteristics

Material Density
Material Temperature
% of Lumps
Duty/Hours of Operation

Capacity Required in Cubic Feet/Hour Material Moisture Content % Environmental Temperature Range

**Drive Package Required** 

The Centrifugal and Continuous Bucket Elevator Specification Tables found in this catalog provide the suggested elevator models based on specific volumetric capacities.

Final Bucket Elevator selection will be made by Screw Conveyor Corporation engineers once all of the application information provided on the Data Sheet is reviewed.

#### Centrifugal



**Typical Capacities:** 290 to 6929 cubic feet/hour

10 to 260 tons/hour

**Elevator Heights:** 12 to 200 feet

**Applications:** Non-abrasive to highly

abrasive products

Elevators are sized based on a specific volume of material uniformly and continuously fed to the inlet of the elevator. Feed capacity, material characteristics and material classification are required to properly design the elevator. The operating environment and service duty (i.e. 24/7/365 days per year) are also important.







## **Centrifugal Bucket Elevators**

### **Centrifugal Design**

- Built to meet the requirements of a diverse range of applications and environments
- · Buckets are mounted and spaced on either belt or chain
- Design offers a lower inlet point which makes loading easier
- Elevators must be control fed, i.e. materials fed into the elevator must be regulated or metered
- Buckets are spaced further apart than the Continuous Elevator
- Inlet chute and curved bottom boot section direct material into the buckets
- Buckets are also designed to dig the material out of the boot and discharge material via centrifugal force (Bucket travel speed is higher than the Continuous Elevator)
- Operating speed is critical to insure proper discharge of materials

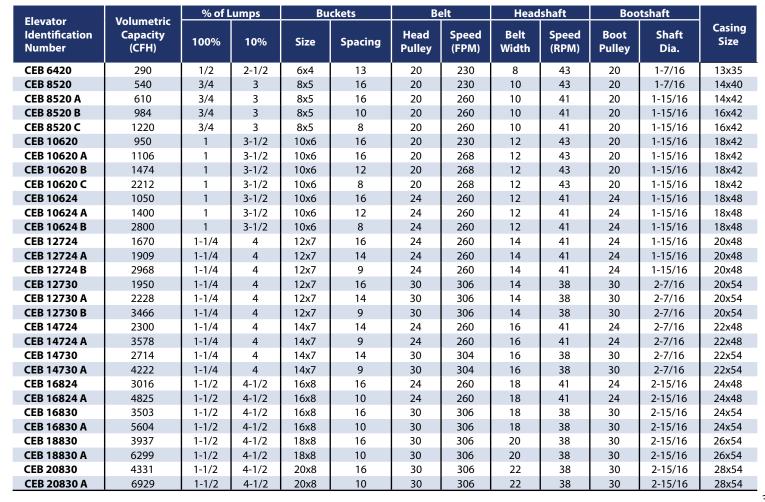
#### **Materials Handled**

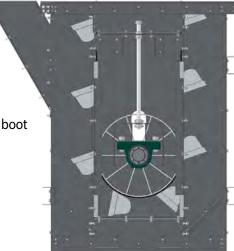
- Recommended for handling fine, free-flowing materials that can be dug from the elevator boot
- Small-to-medium sized lumps and a lower percentage of lumps can be handled with proper sizing of buckets



- A higher percentage of applications use belting as their elevating medium due to lower cost, less noise, as well as low wear in abrasive and/or corrosive environments
- Chain is suggested where lumpy, abrasive and hot materials are handled

#### Specifications Table: Centrifugal Belt – Type CEB





# Standard Industrial Bucket Elevators: Centrifugal Belt – Type CEB Headshaft Diameter and Motor HP (Horsepower)

Elevator		lb / cu. ft. Materia			lb / cu. ft. Materi		<del></del>	0 lb / cu. ft. Mate	rial
Identification	Center	Headshaft	Motor	Center	Headshaft	Motor	Center	Headshaft	Motor
Number	Distance (ft)	Dia. (in)	HP	Distance (ft)	Dia. (in)	HP	Distance (ft)	Dia. (in)	HP
	Up to 67	1-15/16	1.0	Up to 41	1-15/16	1.0	Up to 26	1-15/16	1.0
CEB 6420	68 to 85	1-15/16	1.5	42 to 72	1-15/16	1.5	27 to 48	1-15/16	1.5
	-	-	-	73 to 85	1-15/16	2.0	49 to 71	1-15/16	2.0
	-	-	-	-	-	-	72 to 85	1-15/16	3.0
	Up to 31	1-15/16	1.0	Up to 15	1-15/16	1.0	Up to 19	1-15/16	1.0
	32 to 55	1-15/16	1.5	16 to 31	1-15/16	1.5	20 to 31	1-15/16	2.0
CEB 8520	56 to 78	1-15/16	2.0	32 to 46	1-15/16	2.0	32 to 55	1-15/16	3.0
	79 to 85	1-15/16	3.0	47 to 75	1-15/16	3.0	56 to 65	1-15/16	5.0
	-	1 15/16	- 1.0	76 to 80	2-7/16	3.0	66 to 85	2-7/16	5.0
	Up to 21	1-15/16	1.0 1.5	Up to 20	1-15/16	1.5	Up to 20	1-15/16	2.0
CEB 8524	22 to 42 43 to 60	1-15/16 1-15/16	2.0	21 to 34 35 to 61	1-15/16 1-15/16	2.0 3.0	21 to 41 42 to 60	1-15/16 1-15/16	3.0 5.0
CED 8324	61 to 80	1-15/16	3.0	62 to 70	1-15/16	5.0	61 to 85	2-7/16	5.0
	81 to 85	2-7/16	3.0	71 to 85	2-7/16	5.0	011063	2-7/10	-
	Up to 35	1-15/16	2.0	Up to 30	1-15/16	3.0	Up to 22	1-15/16	3.0
	36 to 40	1-15/16	3.0	31 to 35	2-7/16	3.0	23 to 25	1-15/16	5.0
CEB 10620	41 to 63	2-7/16	3.0	36 to 65	2-7/16	5.0	26 to 50	2-7/16	5.0
CED 10020	64 to 80	2-7/16	5.0	66 to 75	2-15/16	5.0	201030	2-7/10	3.0
	81 to 85	2-15/16	5.0	76 to 85	2-15/16	7.5	<u> </u>	_	_
	Up to 25	1-15/16	2.0	Up to 25	1-15/16	3.0	Up to 20	1-15/16	5.0
	26 to 35	1-15/16	3.0	26 to 30	1-15/16	5.0	21 to 40	2-7/16	5.0
CEB 10624	36 to 49	2-7/16	3.0	31 to 60	2-7/16	5.0	41 to 45	2-7/16	7.5
CLD 10024	50 to 75	2-7/16	5.0	61 to 85	2-15/16	7.5	46 to 65	2-15/16	7.5
	75 to 85	2-15/16	5.0	01 (0 65	2-13/10	7.5	66 to 75	2-15/16	10.0
	Up to 20	1-15/16	3.0	Up to 35	2-7/16	5.0	Up to 20	2-7/16	5.0
	21 to 29	2-7/16	3.0	36 to 39	2-15/16	5.0	21 to 25	2-7/16	7.5
	30 to 45	2-7/16	5.0	40 to 63	2-15/16	7.5	26 to 42	2-15/16	7.5
CEB 12724	46 to 64	2-15/16	5.0	64 to 85	2-15/16	10.0	43 to 64	2-15/16	10.0
	65 to 85	2-15/16	7.5	-	-	-	65 to 70	2-15/16	15.0
	-	-	-	-	-	-	71 to 75	3-7/16	15.0
	Up to 40	2-7/16	5.0	Up to 30	2-7/16	7.5	Up to 20	2-7/16	7.5
	41 to 47	2-15/16	5.0	31 to 46	2-15/16	7.5	21 to 28	2-15/16	7.5
CEB 12730	48 to 85	2-15/16	7.5	47 to 71	2-15/16	10.0	29 to 46	2-15/16	10.0
	-	-	-	72 to 80	2-15/16	15.0	47 to 65	2-15/16	15.0
	-	-	-	81 to 85	3-7/16	15.0	66 to 85	3-7/16	15.0
	Up to 20	2-7/16	3.0	Up to 24	2-7/16	5.0	Up to 31	2-15/16	7.5
	21 to 30	2-7/16	5.0	25 to 49	2-15/16	7.5	32 to 50	2-15/16	10.0
CEB 14724	31 to 48	2-15/16	5.0	50 to 65	2-15/16	10.0	51 to 70	3-7/16	10.0
	49 to 80	2-15/16	7.5	66 to 72	3-7/16	10.0	-	-	-
	81 to 85	3-7/16	7.5	73 to 85	3-15/16	15.0	-	-	-
	Up to 25	2-7/16	5.0	Up to 20	2-7/16	7.5	Up to 18	2-15/16	7.5
	26 to 34	2-15/16	5.0	21 to 32	2-15/16	7.5	19 to 34	2-15/16	10.0
CEB 14730	35 to 65	2-15/16	7.5	33 to 54	2-15/16	10.0	35 to 45	2-15/16	15.0
C25 1 17 50	66 to 75	2-15/16	10.0	55 to 60	2-15/16	15.0	46 to 64	3-7/16	15.0
	76 to 85	3-7/16	10.0	61 to 85	2-15/16	15.0	65 to 80	3-7/16	20.0
					-	-	81 to 85	3-15/16	20.0
	Up to 35	2-15/16	7.5	Up to 28	2-15/16	10.0	Up to 25	2-15/16	15.0
CED 16036	36 to 45	2-15/16	10.0	29 to 35	2-15/16	15.0	26 to 35	3-7/16	15.0
CEB 16830	46 to 56	3-7/16	10.0	36 to 55	3-7/16	15.0	36 to 50	3-7/16	20.0
	57 to 80	3-7/16	15.0	56 to 65	3-7/16	20.0	51 to 56	3-15/16	20.0
	81 to 85	3-15/16	15.0	66 to 85	3-15/16	20.0	57 to 78	3-15/16	25.0
	Up to 35	2-15/16	7.5	Up to 28	2-15/16	10.0	Up to 25	2-15/16	15.0
CER 10020	36 to 45	2-15/16	10.0	29 to 35	2-15/16	15.0	26 to 35	3-7/16	15.0
CEB 18830	46 to 56	3-7/16	10.0	36 to 55	3-7/16	15.0	36 to 50	3-7/16	20.0
	57 to 80	3-7/16 3-15/16	15.0 15.0	56 to 65	3-7/16 3-15/16	20.0	51 to 56	3-15/16 3-15/16	20.0 25.0
	81 to 85			66 to 85	3-15/16	20.0	57 to 78		<del> </del>
	Up to 35 36 to 45	2-15/16 2-15/16	7.5 10.0	Up to 28 29 to 35	2-15/16 2-15/16	10.0 15.0	Up to 25 26 to 35	2-15/16 3-7/16	15.0 15.0
CER 20920		3-7/16	10.0	36 to 55	3-7/16	15.0	<del>†                                      </del>	3-7/16	+
CEB 20830	46 to 56			_			36 to 50		20.0
	57 to 80	3-7/16	15.0	56 to 65	3-7/16	20.0	51 to 56	3-15/16	20.0

# Standard Industrial Bucket Elevators: Centrifugal Chain — Type CEC Headshaft Diameter and Motor HP (Horsepower)

Elevator	50	lb / cu. ft. Materi	al	75	lb / cu. ft. Materi	al	10	0 lb / cu. ft. Mate	rial
Identification	Center	Headshaft	Motor	Center	Headshaft	Motor	Center	Headshaft	Moto
Number	Distance (ft)	Dia. (in)	HP	Distance (ft)	Dia. (in)	HP	Distance (ft)	Dia. (in)	HP
	Up to 67	1-15/16	1.0	Up to 41	1-15/16	1.0	Up to 26	1-15/16	1.0
CEC 6420	-	-	-	44 to 65	1-15/16	1.5	27 to 48	1-15/16	1.5
CEC 0420	-	-	-	73 to 85	1-15/16	2.0	49 to 71	1-15/16	2.0
	-	-	-	-	-	-	72 to 85	1-15/16	3.0
	Up to 31	1-15/16	1.0	Up to 15	1-15/16	1.0	Up to 19	1-15/16	1.0
	32 to 55	1-15/16	1.5	16 to 31	1-15/16	1.5	20 to 31	1-15/16	2.0
CEC 8520	56 to 78	1-15/16	2.0	32 to 46	1-15/16	2.0	32 to 55	1-15/16	3.0
	79 to 85	1-15/16	3.0	47 to 75	1-15/16	3.0	56 to 65	1-15/16	5.0
	-	-	-	76 to 80	2-7/16	3.0	66 to 85	2-7/16	5.0
	Up to 21	1-15/16	1.0	Up to 20	1-15/16	1.5	Up to 20	1-15/16	2.0
CEC 8524	22 to 42	1-15/16	1.5	21 to 34	1-15/16	2.0	21 to 41	1-15/16	3.0
LEC 8524	43 to 60	1-15/16	2.0	35 to 61	1-15/16	3.0	42 to 60	1-15/16	5.0
	61 to 80	1-15/16	3.0	62 to 70	1-15/16	5.0	61 to 85	2-7/16	5.0
	81 to 85 Up to 35	2-7/16 1-15/16	3.0 2.0	71 to 85 Up to 30	2-7/16 1-15/16	5.0 3.0	Up to 22	1-15/16	3.0
	36 to 40	1-15/16	3.0	31 to 35	2-7/16	3.0	23 to 25	1-15/16	5.0
EC 10620	41 to 63	2-7/16	3.0	36 to 65	2-7/16	5.0	26 to 50	2-7/16	5.0
.LC 10020	64 to 80	2-7/16	5.0	66 to 75	2-15/16	5.0	201030	-	
	81 to 85	2-15/16	5.0	76 to 85	2-15/16	7.5		-	_
	Up to 25	1-15/16	2.0	Up to 25	1-15/16	3.0	Up to 20	1-15/16	5.0
	26 to 35	1-15/16	3.0	26 to 30	1-15/16	5.0	21 to 40	2-7/16	5.0
CEC 10624	36 to 49	2-7/16	3.0	31 to 60	2-7/16	5.0	41 to 45	2-7/16	7.5
	50 to 75	2-7/16	5.0	61 to 85	2-15/16	7.5	46 to 65	2-15/16	7.5
	75 to 85	2-15/16	5.0	-	-	-	66 to 75	2-15/16	10.0
	Up to 20	1-15/16	3.0	Up to 35	2-7/16	5.0	Up to 20	2-7/16	5.0
	21 to 29	2-7/16	3.0	36 to 39	2-15/16	5.0	21 to 25	2-7/16	7.5
	30 to 45	2-7/16	5.0	40 to 63	2-15/16	7.5	26 to 42	2-15/16	7.5
CEC 12724	46 to 64	2-15/16	5.0	64 to 85	2-15/16	10.0	43 to 64	2-15/16	10.0
	65 to 85	2-15/16	7.5	-	-	-	65 to 70	2-15/16	15.0
	-	-	-	-	-	-	71 to 75	3-7/16	15.0
	Up to 40	2-7/16	5.0	Up to 30	2-7/16	7.5	Up to 20	2-7/16	7.5
	41 to 47	2-15/16	5.0	31 to 46	2-15/16	7.5	21 to 28	2-15/16	7.5
EC 12730	48 to 85	2-15/16	7.5	47 to 71	2-15/16	10.0	29 to 46	2-15/16	10.0
	-	-	-	72 to 80	2-15/16	15.0	47 to 65	2-15/16	15.0
	-	-	-	81 to 85	3-7/16	15.0	66 to 85	3-7/16	15.0
	Up to 20	2-7/16	3.0	Up to 24	2-7/16	5.0	Up to 31	2-15/16	7.5
	21 to 30	2-7/16	5.0	25 to 49	2-15/16	7.5	32 to 50	2-15/16	10.0
EC 14724	31 to 48	2-15/16	5.0	50 to 65	2-15/16	10.0	51 to 70	3-7/16	10.0
	49 to 80	2-15/16	7.5	66 to 72	3-7/16	10.0	-	-	-
	81 to 85	3-7/16	7.5	73 to 85	3-15/16	15.0	-	-	-
	Up to 25	2-7/16	5.0	Up to 20	2-7/16	7.5	Up to 18	2-15/16	7.5
	26 to 34	2-15/16	5.0	21 to 32	2-15/16	7.5	19 to 34	2-15/16	10.0
EC 14730	35 to 65	2-15/16	7.5	33 to 54	2-15/16	10.0	35 to 45	2-15/16	15.0
	66 to 75	2-15/16	10.0	55 to 60	2-15/16	15.0	46 to 64	3-7/16	15.0
	76 to 85	3-7/16	10.0	61 to 85	2-15/16	15.0	65 to 80	3-7/16	20.0
		2.15/16	7 -	20	2.15/16	10.0	81 to 85	3-15/16	20.0
	Up to 35	2-15/16	7.5	Up to 28	2-15/16	10.0	Up to 25	2-15/16	15.0
TEC 16020	36 to 45	2-15/16	10.0	29 to 35	2-15/16	15.0	26 to 35	3-7/16	15.0
EC 16830	46 to 56	3-7/16	10.0	36 to 55	3-7/16	15.0	36 to 50	3-7/16	20.0
	57 to 80	3-7/16 3-15/16	15.0 15.0	56 to 65 66 to 85	3-7/16 3-15/16	20.0 20.0	51 to 56 57 to 78	3-15/16	20.0 25.0
	81 to 85	3-15/16 2-15/16	7.5		3-15/16 2-15/16	10.0	<del>                                     </del>	3-15/16 2-15/16	15.0
	Up to 35 36 to 45	2-15/16	10.0	Up to 28 29 to 35	2-15/16	15.0	Up to 25 26 to 35	3-7/16	15.0
CEC 18830	46 to 56	3-7/16	10.0	36 to 55	3-7/16	15.0	36 to 50	3-7/16	20.0
.EC 10030	57 to 80	3-7/16	15.0	56 to 65	3-7/16	20.0	51 to 56	3-7/16	20.0
	81 to 85	3-7/16	15.0	66 to 85	3-7/16	20.0	57 to 78	3-15/16	25.0
	Up to 35	2-15/16	7.5	Up to 28	2-15/16	10.0	Up to 25	2-15/16	15.0
EC 20830	36 to 45	2-15/16 3-7/16	10.0	29 to 35	2-15/16 3-7/16	15.0	26 to 35	3-7/16 3-7/16	15.0
CLC 20030	46 to 56	3-7/16 3-7/16	10.0	36 to 55	3-7/16 3-7/16	15.0	36 to 50	3-7/16 3-15/16	20.0
	57 to 80 81 to 85	3-7/16 3-15/16	15.0 15.0	56 to 65 66 to 85	3-7/16 3-15/16	20.0	51 to 56 57 to 78	3-15/16 3-15/16	20.0 25.0

## **Continuous Bucket Elevators**

#### **Continuous Design**

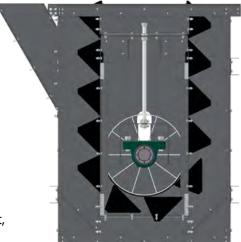
- Built to meet the requirements of a diverse range of applications and environments
- Buckets are mounted and closely spaced on either belt or chain
- Designed with a higher inlet point to feed materials directly into the buckets
- Elevators must be control fed, i.e. materials fed into the elevator must be regulated or metered
- Buckets are designed so that the front and extended sides of the bucket provide a chute for the trailing bucket
- Close bucket spacing allows material to discharge out of the bucket,
   off the chute-like back of the preceding bucket and down the discharge chute
- Operating speed of this elevator is slower than the Centrifugal since the Continuous design relies on gravity to discharge the material from the buckets

#### **Materials Handled**

- Recommended for handling sluggish, aerated and friable material as well as product that contains a higher percentage of lumps
- Materials that need to be handled in a more delicate manner



- A higher percentage of applications use belting as their elevating medium due to lower cost, less noise, as well as low wear in abrasive and/or corrosive environments
- Chain is suggested where lumpy, abrasive and hot materials are handled



#### Specifications Table: Continuous Belt – Type COB

		% of L	_umps	Buc	:kets	В	elt	Head	shaft		Bootshaf	t
Elevator Identification Number	Volumetric Capacity (CFH)	100%	10%	Size	Spacing	Head Pulley	Speed (FPM)	Belt Width	Speed (RPM)	Boot Pulley	Shaft Dia.	Casing Size
COB 8520	600	3/4	2-1/2	8x5	8	20	125	9	24	16	1-7/16	14x40
COB 8520 A	600	3/4	2-1/2	8x5	8	20	125	9	24	16	1-7/16	14x40
COB 10620	750	3/4	2-1/2	10x6	8	20	125	11	24	16	1-15/16	16x42
COB 10620 A	750	3/4	2-1/2	10x6	8	20	125	11	24	16	1-15/16	16x42
COB 10724	1025	1	3	10x7	12	20	125	11	19	16	1-15/16	16x48
COB 10724 A	1025	1	3	10x7	12	20	125	11	19	16	1-15/16	16x48
COB 12724	1250	1	3	12x7	12	24	125	13	19	20	1-15/16	18x48
COB 12724 A	1250	1	3	12x7	12	24	125	13	19	20	1-15/16	18x48
COB 14724	1425	1	3	14x7	12	24	125	15	19	20	1-15/16	20x48
COB 14724 A	1425	1	3	14x7	12	24	125	13	19	20	1-15/16	20x48
COB 12824	1550	1-1/4	4	12x8	12	24	125	13	19	20	2-7/16	18x48
COB 12824 A	1550	1-1/4	4	12x8	12	24	125	13	19	20	2-7/16	18x48
COB 14824	1850	1-1/4	4	14x8	12	24	125	15	19	20	2-7/16	20x54
COB 14724 A	1850	1-1/4	4	14x8	12	24	125	15	19	20	2-7/16	20x54
COB 16824	2100	1-1/2	4-1/2	16x8	12	24	125	17	19	20	2-15/16	22x48
COB 16824A	2100	1-1/2	4-1/2	16x8	12	24	125	17	19	20	2-15/16	22x48
COB 18824	2350	1-1/2	4-1/2	18x8	12	24	125	19	19	20	2-15/16	24x48
COB 1824 A	2350	1-1/2	4-1/2	18x8	12	24	125	19	19	20	2-15/16	24x48

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## Standard Industrial Bucket Elevators: Continuous Belt – Type COB

Elevator	50 lb	/ cu. ft. Materia		75 lb	/ cu. ft. Materia	l	100 l	b / cu. ft. Materi	al
Identification	Center	Headshaft	Motor	Center	Headshaft	Motor	Center	Headshaft	Motor
Number	Distance (ft)	Dia.(in)	HP	Distance (ft)	Dia. (in)	HP	Distance (ft)	Dia. (in)	HP
	Up to 29	1-15/16	1.0	Up to 16	1-15/16	1.0	Up to 21	1-15/16	1.5
COB 8520	30 to 35	1-15/16	1.5	17 to 30	1-15/16	1.5	22 to 30	1-15/16	2.0
COB 6520	36 to 50	2-7/16	1.5	31 to 45	1-15/16	2.0	31 to 51	2-7/16	3.0
	51 to 60	2-7/16	2.0	46 to 60	2-7/16	3	52 to 60	2-15/16	5.0
	Up to 29	1-15/16	1.0	Up to 30	1-15/16	1.5	Up to 21	1-15/16	1.5
	30 to 40	1-15/16	1.5	31 to 35	1-15/16	2.0	22 to 30	1-15/16	2.0
COB 8520A	41 to 50	2-7/16	1.5	36 to 45	2-7/16	2.0	31 to 53	2 -7/16	3.0
	51 to 71	2-7/16	2.0	46 to 70	2-7/16	3.0	54 to 60	2-7/16	5.0
	72 to 75	2-7/16	3.0	71 to 75	2-15/16	5.0	61 to 75	2-15/16	5.0
	Up to 21	1-15/16	1.0	Up to 22	1-15/16	1.5	Up to 23	1-15/16	2.0
	22 to 30	1-15/16	1.5	23 to 25	1-15/16	2.0	24 to 25	1-15/16	3.0
	31 to 36	2-7/16	1.5	26 to 32	2-7/16	2.0	26 to 40	2-7/16	3.0
COB 10620	37 to 53	2-7/16	2.0	33 to 45	2-7/16	3.0	41 to 60	2-15/16	5.0
	54 to 65	2-7/16	3.0	46 to 56	2-15/16	3.0	-	-	-
	-	-	-	57 to 60	2-15/16	5.0	_	_	_
	Up to 20	1-15/16	2.0	Up to 30	1-15/16	3.0	Up to 22	1-15/16	3.0
	21 to 30	1-15/16	3.0	31 to 35	2-7/16	3.0	23 to 25	1-15/16	5.0
COB 10620A	32 to 36	2-7/16	3.0	36 to 65	2-7/16	5.0	26 to 50	2-7/16	5.0
COD 10020A	37 to 53	2-7/16	5.0	66 to 75	2-7/10	5.0	-	-	-
	54 to 65					7.5	-	-	-
		2-15/16	5.0	76 to 85	2-15/16	•	- 11n to 20	1 15/16	-
	Up to 25	1-15/16	2.0	Up to 25	1-15/16	3.0	Up to 20	1-15/16	5.0
COD 40724	26 to 35	1-15/16	3.0	26 to 30	1-15/16	5.0	21 to 40	2-7/16	5.0
COB 10724	36 to 49	2-7/16	3.0	31 to 60	2-7/16	5.0	41 to 45	2-7/16	7.5
	50 to 75	2-7/16	5.0	61 to 85	2-15/16	7.5	46 to 65	2-15/16	7.5
	75 to 85	2-15/16	5.0		-	-	66 to 75	2-15/16	10.0
	Up to 20	1-15/16	3.0	Up to 35	2-7/16	5.0	Up to 20	2-7/16	5.0
	21 to 29	2-7/16	3.0	36 to 39	2-15/16	5.0	21 to 25	2-7/16	7.5
COB 10724A	30 to 45	2-7/16	5.0	40 to 63	2-15/16	7.5	26 to 42	2-15/16	7.5
	46 to 64	2-15/16	5.0	64 to 85	2-15/16	10.0	43 to 64	2-15/16	10.0
	65 to 85	2-15/16	7.5	-	-	-	65 to 70	2-15/16	15.0
	-	-	-	-	-	-	71 to 75	3-7/16	15.0
	Up to 20	1-15/16	3.0	Up to 35	2-7/16	5.0	Up to 20	2-7/16	5.0
	21 to 29	2-7/16	3.0	36 to 39	2-15/16	5.0	21 to 25	2-7/16	7.5
COB 12724	30 to 45	2-7/16	5.0	40 to 63	2-15/16	7.5	26 to 42	2-15/16	7.5
COB 12/24	46 to 64	2-15/16	5.0	64 to 85	2-15/16	10.0	43 to 64	2-15/16	10.0
	65 to 85	2-15/16	7.5	-	-	-	65 to 70	2-15/16	15.0
	-	-	-	-	-	-	71 to 75	3-7/16	15.0
	Up to 20	2-7/16	3.0	Up to 24	2-7/16	5.0	Up to 31	2-15/16	7.5
	21 to 30	2-7/16	5.0	25 to 49	2-15/16	7.5	32 to 50	2-15/16	10.0
COB 12724A	31 to 48	2-15/16	5.0	50 to 65	2-15/16	10.0	51 to 70	3-7/16	10.0
	49 to 80	2-15/16	7.5	66 to 72	3-7/16	10.0	-	-	-
	81 to 85	3-7/16	7.5	73 to 85	3-15/16	15.0	-	-	-
	Up to 25	2-7/16	5.0	Up to 20	2-7/16	7.5	Up to 18	2-15/16	7.5
	26 to 34	2-15/16	5.0	21 to 32	2-15/16	7.5	19 to 34	2-15/16	10.0
	35 to 65	2-15/16	7.5	33 to 54	2-15/16	10.0	35 to 45	2-15/16	15.0
COB 14724	66 to 75	2-15/16	10.0	55 to 60	2-15/16	15.0	46 to 64	3-7/16	15.0
	76 to 85	3-7/16	10.0	61 to 85	2-15/16	15.0	65 to 80	3-7/16	20.0
	-	-	-	-		-	81 to 85	3-15/16	20.0
	Up to 35	2-15/16	7.5	Up to 28	2-15/16	10.0	Up to 25	2-15/16	15.0
	36 to 45	2-15/16	10.0	29 to 35	2-15/16	15.0	26 to 35	3-7/16	15.0
COB 14724A	46 to 56	3-7/16	10.0	36 to 55	3-7/16	15.0	36 to 50	3-7/16	20.0
COD 17/24A	57 to 80	3-7/16	15.0	56 to 65	3-7/16	20.0	51 to 56	3-7/16	20.0
							1		
	81 to 85	3-15/16	15.0	66 to 85	3-15/16	20.0	57 to 78	3-15/16	25.0

## Standard Industrial Bucket Elevators: Continuous Belt – Type COB

Elevator	50 lb	/ cu. ft. Material		75 lb	/ cu. ft. Materia	I	100 l	b / cu. ft. Materi	al
Identification	Center	Headshaft	Motor	Center	Headshaft	Motor	Center	Headshaft	Motor
Number	Distance (ft)	Dia.(in)	HP	Distance (ft)	Dia. (in)	HP	Distance (ft)	Dia. (in)	HP
	Up to 35	2-15/16	7.5	Up to 28	2-15/16	10.0	Up to 25	2-15/16	15.0
	36 to 45	2-15/16	10.0	29 to 35	2-15/16	15.0	26 to 35	3-7/16	15.0
COB 12824	46 to 56	3-7/16	10.0	36 to 55	3-7/16	15.0	36 to 50	3-7/16	20.0
	57 to 80	3-7/16	15.0	56 to 65	3-7/16	20.0	51 to 56	3-15/16	20.0
	81 to 85	3-15/16	15.0	66 to 85	3-15/16	20.0	57 to 78	3-15/16	25.0
	Up to 35	2-15/16	7.5	Up to 28	2-15/16	10.0	Up to 25	2-15/16	15.0
	36 to 45	2-15/16	10.0	29 to 35	2-15/16	15.0	26 to 35	3-7/16	15.0
COB 12824A	46 to 56	3-7/16	10.0	36 to 55	3-7/16	15.0	36 to 50	3-7/16	20.0
	57 to 80	3-7/16	15.0	56 to 65	3-7/16	20.0	51 to 56	3-15/16	20.0
	81 to 85	3-15/16	15.0	66 to 85	3-15/16	20.0	57 to 78	3-15/16	25.0
	Up to 35	2-15/16	7.5	Up to 28	2-15/16	10.0	Up to 25	2-15/16	15.0
	36 to 45	2-15/16	10.0	29 to 35	2-15/16	15.0	26 to 35	3-7/16	15.0
COB 14824	46 to 56	3-7/16	10.0	36 to 55	3-7/16	15.0	36 to 50	3-7/16	20.0
	57 to 80	3-7/16	15.0	56 to 65	3-7/16	20.0	51 to 56	3-15/16	20.0
	81 to 85	3-15/16	15.0	66 to 85	3-15/16	20.0	57 to 78	3-15/16	25.0
	Up to 35	2-15/16	7.5	Up to 28	2-15/16	10.0	Up to 25	2-15/16	15.0
	36 to 45	2-15/16	10.0	29 to 35	2-15/16	15.0	26 to 35	3-7/16	15.0
COB 14824A	46 to 56	3-7/16	10.0	36 to 55	3-7/16	15.0	36 to 50	3-7/16	20.0
	57 to 80	3-7/16	15.0	56 to 65	3-7/16	20.0	51 to 56	3-15/16	20.0
	81 to 85	3-15/16	15.0	66 to 85	3-15/16	20.0	57 to 78	3-15/16	25.0
	Up to 35	2-15/16	7.5	Up to 28	2-15/16	10.0	Up to 25	2-15/16	15.0
	36 to 45	2-15/16	10.0	29 to 35	2-15/16	15.0	26 to 35	3-7/16	15.0
COB 16824	46 to 56	3-7/16	10.0	36 to 55	3-7/16	15.0	36 to 50	3-7/16	20.0
	57 to 80	3-7/16	15.0	56 to 65	3-7/16	20.0	51 to 56	3-15/16	20.0
	81 to 85	3-15/16	15.0	66 to 85	3-15/16	20.0	57 to 78	3-15/16	25.0
	Up to 35	2-15/16	7.5	Up to 28	2-15/16	10.0	Up to 25	2-15/16	15.0
	36 to 45	2-15/16	10.0	29 to 35	2-15/16	15.0	26 to 35	3-7/16	15.0
COB 16824A	46 to 56	3-7/16	10.0	36 to 55	3-7/16	15.0	36 to 50	3-7/16	20.0
	57 to 80	3-7/16	15.0	56 to 65	3-7/16	20.0	51 to 56	3-15/16	20.0
	81 to 85	3-15/16	15.0	66 to 85	3-15/16	20.0	57 to 78	3-15/16	25.0
	Up to 35	2-15/16	7.5	Up to 28	2-15/16	10.0	Up to 25	2-15/16	15.0
	36 to 45	2-15/16	10.0	29 to 35	2-15/16	15.0	26 to 35	3-7/16	15.0
COB 18824	46 to 56	3-7/16	10.0	36 to 55	3-7/16	15.0	36 to 50	3-7/16	20.0
	57 to 80	3-7/16	15.0	56 to 65	3-7/16	20.0	51 to 56	3-15/16	20.0
	81 to 85	3-15/16	15.0	66 to 85	3-15/16	20.0	57 to 78	3-15/16	25.0
	Up to 35	2-15/16	7.5	Up to 28	2-15/16	10.0	Up to 25	2-15/16	15.0
	36 to 45	2-15/16	10.0	29 to 35	2-15/16	15.0	26 to 35	3-7/16	15.0
COB 18824A	46 to 56	3-7/16	10.0	36 to 55	3-7/16	15.0	36 to 50	3-7/16	20.0
	57 to 80	3-7/16	15.0	56 to 65	3-7/16	20.0	51 to 56	3-15/16	20.0
	81 to 85	3-15/16	15.0	66 to 85	3-15/16	20.0	57 to 78	3-15/16	25.0



**Huck® Bolt Connection** 



**Boot Clean-Out** 

## **Standard Industrial Bucket Elevators: Continuous Chain – Type COC**

Elevator		/ cu. ft. Materia	l	75 lb	/ cu. ft. Materia	ıl	100 lb	/ cu. ft. Materia	al
Identification	Center	Headshaft	Motor	Center	Headshaft	Motor	Center	Headshaft	Motor
Number	Distance (ft)	Dia. (in)	HP	Distance (ft)	Dia. (in)	HP	Distance (ft)	Dia. (in)	HP
	Up to 29	1-15/16	1.0	Up to 16	1-15/16	1.0	Up to 21	1-15/16	1.5
COC 0530	30 to 35	1-15/16	1.5	17 to 30	1-15/16	1.5	22 to 30	1-15/16	2.0
COC 8520	36 to 50	2-7/16	1.5	31 to 45	2-7/16	2.0	31 to 51	2-7/16	3.0
	51 to 60	2-7/16	2.0	46 to 60	2-7/16	3	52 to 60	2-15/16	5.0
	Up to 29	1-15/16	1.0	Up to 30	1-15/16	1.5	Up to 21	1-15/16	1.5
	30 to 40	1-15/16	1.5	31 to 35	1-15/16	2.0	22 to 30	1-15/16	2.0
COC 8520A	41 to 50	2-7/16	1.5	36 to 45	2-7/16	2.0	31 to 53	2-7/16	3.0
	51 to 71	2-7/16	2.0	46 to 70	2-7/16	3.0	54 to 60	2-7/16	5.0
	72 to 75	2-7/16	3.0	71 to 75	2-15/16	5.0	61 to 75	2-15/16	5.0
	Up to 21	1-15/16	1.0	Up to 22	1-15/16	1.5	Up to 23	1-15/16	2.0
	22 to 30	1-15/16	1.5	23 to 25	1-15/16	2.0	24 to 25	1-15/16	3.0
	31 to 36	2-7/16	1.5	26 to 32	2-7/16	2.0	26 to 40	2-7/16	3.0
COC 10620	37 to 53	2-7/16	2.0	33 to 45	2-7/16	3.0	41 to 60	2-7/10	5.0
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	54 to 65	2-7/16	3.0	46 to 56	2-15/16	3.0		-	
	-	1 15/16	-	57 to 60	2-15/16	5.0	-	- 1 15/16	-
	Up to 20	1-15/16	2.0	Up to 30	1-15/16	3.0	Up to 22	1-15/16	3.0
	21 to 30	1-15/16	3.0	31 to 35	2-7/16	3.0	23 to 25	1-15/16	5.0
COC 10620A	32 to 36	2-7/16	3.0	36 to 65	2-7/16	5.0	26 to 50	2-7/16	5.0
	37 to 53	2-7/16	5.0	66 to 75	2-15/16	5.0	-	-	-
	54 to 65	2-15/16	5.0	76 to 85	2-15/16	7.5	-	-	-
	Up to 25	1-15/16	2.0	Up to 25	1-15/16	3.0	Up to 20	1-15/16	5.0
	26 to 35	1-15/16	3.0	26 to 30	1-15/16	5.0	21 to 40	2-7/16	5.0
COC 10724	36 to 49	2-7/16	3.0	31 to 60	2-7/16	5.0	41 to 45	2-7/16	7.5
	50 to 75	2-7/16	5.0	61 to 85	2-15/16	7.5	46 to 65	2-15/16	7.5
	75 to 85	2-15/16	5.0	-	-	1	66 to 75	2-15/16	10.0
	Up to 20	1-15/16	3.0	Up to 35	2-7/16	5.0	Up to 20	2-7/16	5.0
	21 to 29	2-7/16	3.0	36 to 39	2-15/16	5.0	21 to 25	2-7/16	7.5
<b>50540504</b>	30 to 45	2-7/16	5.0	40 to 63	2-15/16	7.5	26 to 42	2-15/16	7.5
COC 10724A	46 to 64	2-15/16	5.0	64 to 85	2-15/16	10.0	43 to 64	2-15/16	10.0
	65 to 85	2-15/16	7.5	-	-	-	65 to 70	2-15/16	15.0
	-	-	-	-	-	-	71 to 75	3-7/16	15.0
	Up to 20	1-15/16	3.0	Up to 35	2-7/16	5.0	Up to 20	2-7/16	5.0
	21 to 29	2-7/16	3.0	36 to 39	2-15/16	5.0	21 to 25	2-7/16	7.5
	30 to 45	2-7/16	5.0	40 to 63	2-15/16	7.5	26 to 42	2-15/16	7.5
COC 12724	46 to 64	2-15/16	5.0	64 to 85	2-15/16	10.0	43 to 64	2-15/16	10.0
	65 to 85	2-15/16	7.5	-	2 13/10	-	65 to 70	2-15/16	15.0
	03 (0 83	2-13/10	- 7.5	_	_		71 to 75	3-7/16	15.0
	Up to 20	2-7/16	3.0	- Up to 24	2-7/16	5.0	Up to 31	2-15/16	7.5
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COC 127244	21 to 30	2-7/16	5.0	25 to 49	2-15/16	7.5	32 to 50	2-15/16	10.0
COC 12724A	31 to 48	2-15/16	5.0	50 to 65	2-15/16	10.0	51 to 70	3-7/16	10.0
	49 to 80	2-15/16	7.5	66 to 72	3-7/16	10.0	-	-	-
	81 to 85	3-7/16	7.5	73 to 85	3-15/16	15.0	-		-
	Up to 25	2-7/16	5.0	Up to 20	2-7/16	7.5	Up to 18	2-15/16	7.5
	26 to 34	2-15/16	5.0	21 to 32	2-15/16	7.5	19 to 34	2-15/16	10.0
COC 14724	35 to 65	2-15/16	7.5	33 to 54	2-15/16	10.0	35 to 45	2-15/16	15.0
	66 to 75	2-15/16	10.0	55 to 60	2-15/16	15.0	46 to 64	3-7/16	15.0
	76 to 85	3-7/16	10.0	61 to 85	2-15/16	15.0	65 to 80	3-7/16	20.0
	-	-		-	-	-	81 to 85	3-15/16	20.0
	Up to 35	2-15/16	7.5	Up to 28	2-15/16	10.0	Up to 25	2-15/16	15.0
	36 to 45	2-15/16	10.0	29 to 35	2-15/16	15.0	26 to 35	3-7/16	15.0
COC 14724A	46 to 56	3-7/16	10.0	36 to 55	3-7/16	15.0	36 to 50	3-7/16	20.0
	57 to 80	3-7/16	15.0	56 to 65	3-7/16	20.0	51 to 56	3-15/16	20.0
	81 to 85	3-15/16	15.0	66 to 85	3-15/16	20.0	57 to 78	3-15/16	25.0

## **Standard Industrial Bucket Elevators: Continuous Chain – Type COC**

Elevator	50 lb	/ cu. ft. Materia	ıl	75 lb	/ cu. ft. Materia	ıl <u> </u>	100 lb / cu. ft. Material		
Identification Number	Center Distance (ft)	Headshaft Dia. (in)	Motor HP	Center Distance (ft)	Headshaft Dia. (in)	Motor HP	Center Distance (ft)	Headshaft Dia. (in)	Motor HP
Hamber	Up to 35	2-15/16	7.5	Up to 28	2-15/16	10.0	Up to 25	2-15/16	15.0
	36 to 45	2-15/16	10.0	29 to 35	2-15/16	15.0	26 to 35	3-7/16	15.0
COC 12824	46 to 56	3-7/16	10.0	36 to 55	3-7/16	15.0	36 to 50	3-7/16	20.0
COC 12024	57 to 80	3-7/16	15.0	56 to 65	3-7/16	20.0	51 to 56	3-15/16	20.0
	81 to 85	3-15/16	15.0	66 to 85	3-15/16	20.0	57 to 78	3-15/16	25.0
	Up to 35	2-15/16	7.5	Up to 28	2-15/16	10.0	Up to 25	2-15/16	15.0
	36 to 45	2-15/16	10.0	29 to 35	2-15/16	15.0	26 to 35	3-7/16	15.0
COC 12824A	46 to 56	3-7/16	10.0	36 to 55	3-7/16	15.0	36 to 50	3-7/16	20.0
	57 to 80	3-7/16	15.0	56 to 65	3-7/16	20.0	51 to 56	3-15/16	20.0
	81 to 85	3-15/16	15.0	66 to 85	3-15/16	20.0	57 to 78	3-15/16	25.0
	Up to 35	2-15/16	7.5	Up to 28	2-15/16	10.0	Up to 25	2-15/16	15.0
	36 to 45	2-15/16	10.0	29 to 35	2-15/16	15.0	26 to 35	3-7/16	15.0
COC 14824	46 to 56	3-7/16	10.0	36 to 55	3-7/16	15.0	36 to 50	3-7/16	20.0
	57 to 80	3-7/16	15.0	56 to 65	3-7/16	20.0	51 to 56	3-15/16	20.0
	81 to 85	3-15/16	15.0	66 to 85	3-15/16	20.0	57 to 78	3-15/16	25.0
	Up to 35	2-15/16	7.5	Up to 28	2-15/16	10.0	Up to 25	2-15/16	15.0
	36 to 45	2-15/16	10.0	29 to 35	2-15/16	15.0	26 to 35	3-7/16	15.0
COC 14824A	46 to 56	3-7/16	10.0	36 to 55	3-7/16	15.0	36 to 50	3-7/16	20.0
	57 to 80	3-7/16	15.0	56 to 65	3-7/16	20.0	51 to 56	3-15/16	20.0
	81 to 85	3-15/16	15.0	66 to 85	3-15/16	20.0	57 to 78	3-15/16	25.0
	Up to 35	2-15/16	7.5	Up to 28	2-15/16	10.0	Up to 25	2-15/16	15.0
	36 to 45	2-15/16	10.0	29 to 35	2-15/16	15.0	26 to 35	3-7/16	15.0
COC 16824	46 to 56	3 -7/16	10.0	36 to 55	3-7/16	15.0	36 to 50	3-7/16	20.0
	57 to 80	3- 7/16	15.0	56 to 65	3-7/16	20.0	51 to 56	3-15/16	20.0
	81 to 85	3-15/16	15.0	66 to 85	3-15/16	20.0	57 to 78	3-15/16	25.0
	Up to 35	2-15/16	7.5	Up to 28	2-15/16	10.0	Up to 25	2-15/16	15.0
	36 to 45	2-15/16	10.0	29 to 35	2-15/16	15.0	26 to 35	3-7/16	15.0
COC 16824A	46 to 56	3-7/16	10.0	36 to 55	3-7/16	15.0	36 to 50	3-7/16	20.0
	57 to 80	3-7/16	15.0	56 to 65	3-7/16	20.0	51 to 56	3-15/16	20.0
	81 to 85	3-15/16	15.0	66 to 85	3-15/16	20.0	57 to 78	3-15/16	25.0
	Up to 35	2-15/16	7.5	Up to 28	2-15/16	10.0	Up to 25	2-15/16	15.0
	36 to 45	2-15/16	10.0	29 to 35	2-15/16	15.0	26 to 35	3-7/16	15.0
COC 18824	46 to 56	3-7/16	10.0	36 to 55	3-7/16	15.0	36 to 50	3-7/16	20.0
COC 18824	57 to 80	3-7/16	15.0	56 to 65	3 -7/16	20.0	51 to 56	3-15/16	20.0
	81 to 85	3-15/16	15.0	66 to 85	3-15/16	20.0	57 to 78	3-15/16	25.0
	Up to 35	2-15/16	7.5	Up to 28	2 -15/16	10.0	Up to 25	2-15/16	15.0
	36 to 45	2-15/16	10.0	29 to 35	2-15/16	15.0	26 to 35	3-7/16	15.0
COC 18824A	46 to 56	3-7/16	10.0	36 to 55	3-7/16	15.0	36 to 50	3-7/16	20.0
	57 to 80	3-7/16	15.0	56 to 65	3-7/16	20.0	51 to 56	3-15/16	20.0
	81 to 85	3-15/16	15.0	66 to 85	3-15/16	20.0	57 to 78	3-15/16	25.0



**Elevator Boot Section** 



**Elevator Head Section** 

### **Bucket Elevator Data Sheet**

Company:	Contact Name:
Address:	E-mail:
	Phone Number:
Bucket Elevator Layout	
Is material control-fed to the inlet? Yes / No	
Elevator is fed by:	
Height from floor to discharge of elevator:	
Material Handled, Bulk Density & Capacity	
Material Name:	
Bulk Density:	
Capacity Conveyed:	
Other Material Characteristics	
Moisture Content:	
Temperature of Material:	
Maximum Lump Size:	
Percentage of Lumps:	
Abrasive? Yes / No	Corrosive? Yes / No
Hours of Operation:	Environmental Temperature:
Other Information	
Drive Package Required? Yes / No	Electric Power at Site? Yes / No
Gear Box Preference:	
Motor Preference:	
Identify any Special Requirements (i.e. Explosion Proof, Water	Tight, ect.):
Special Construction	
Stainless Steel (Type 304, Type 316, ect.):	
AR-400 Abrasion Resistance Steel:	

• The Bucket Elevators listed in this catalog represent Screw Conveyor Corporation's standard line of elevators. Customized elevators to 75,000 cubic feet/hour running capacity with full capacity to 100,000 cubic feet/hour have been designed and manufactured. For all bucket elevator applications, please provide the Data Sheet information to your Inside Sales Representative for review.

Liners:

• Screw Conveyor Corporation also manufactures Screw Conveyors, Drag Conveyors and Truck Dumpers. Please visit our website at www.screwconveyor.com for product literature. The website also enables you to find your Field Sales Representative as well as your Inside Sales Specialist.

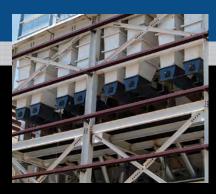
#### Performance proven industrial bulk material handling equipment for almost a century.

Technology, reliability and craftsmanship are the keys to almost 100 years of continued growth. Today, we're one of the nation's oldest manufacturers of bulk material handling equipment-including screw conveyors, drag conveyors, vertical lifts and bucket elevators. At Screw Conveyor Corporation we stand behind everything we specify, manufacture and sell...From complete customized bulk material handling equipment to replacement parts.

We offer these guarantees because we have... "The Experience to Handle it Right!"







#### **Proud Member of**







# **Screw Conveyor Corporation**°

Since 1932

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