

# SCC Bucket Elevators for feed and grain



*Designed for high efficiency plus high capacities to help cut handling costs.*

Designed and engineered to provide efficient, high capacities for handling various grains, feeds, mill stocks and similar free-flowing granular materials. Double trunk legging incorporates Nu-Weld® continuous seam weld on casing sections. Heavy angle connecting flanges on each 10 ft. section. Welded steel, weather-tight construction – jig-welded angle flanges assure perfect alignment of legging sections.

Capacity range – from 685 to 7070 bushels per hour and more depending on applications. Efficient performance assured with SCC high speed, high capacity SCC Polymer or Nu-Hy® Elevator Buckets.

Specifications and performance data on all models contained in our Bucket Elevator Catalog.

## **NU-WELD®** Casing Construction

Used on all SCC Bucket Elevators, Nu-Weld® construction means seam welded sections needing no vertical flange connections and continuously welded horizontal flanges. This means greater strength and stability, lower maintenance, longer service. Easily made commercially dust and weather proof by the addition of gaskets or sealing compound.

# SCC Bucket Elevators for industrial service

*Centrifugal and continuous models built for long life and rugged service in a wide variety of industrial applications.*

Incorporates Nu-Weld® continuous seam weld on casing sections.

End flanges of casing continuously welded.

Head is factory assembled with split design for easy access to pulley or sprocket for maintenance. Boot is factory assembled with bolted panel for easy access to pulley or sprocket.

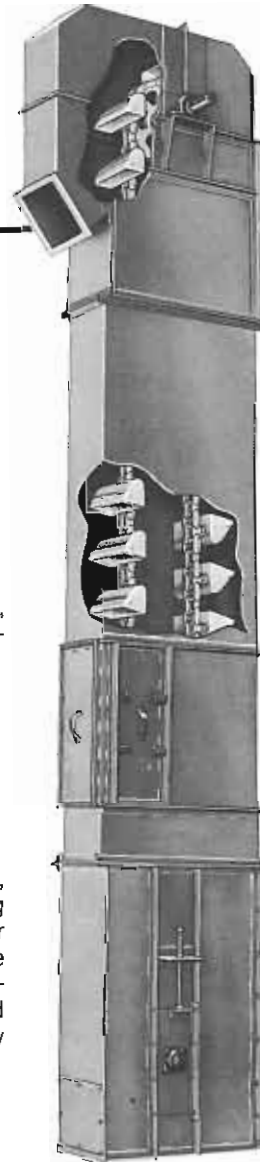
Ball bearings used throughout.

Ample inspection opening, in casing and head discharge spout.

Latest designs in ladders, safety cages, landing and service platforms are available as optional equipment.

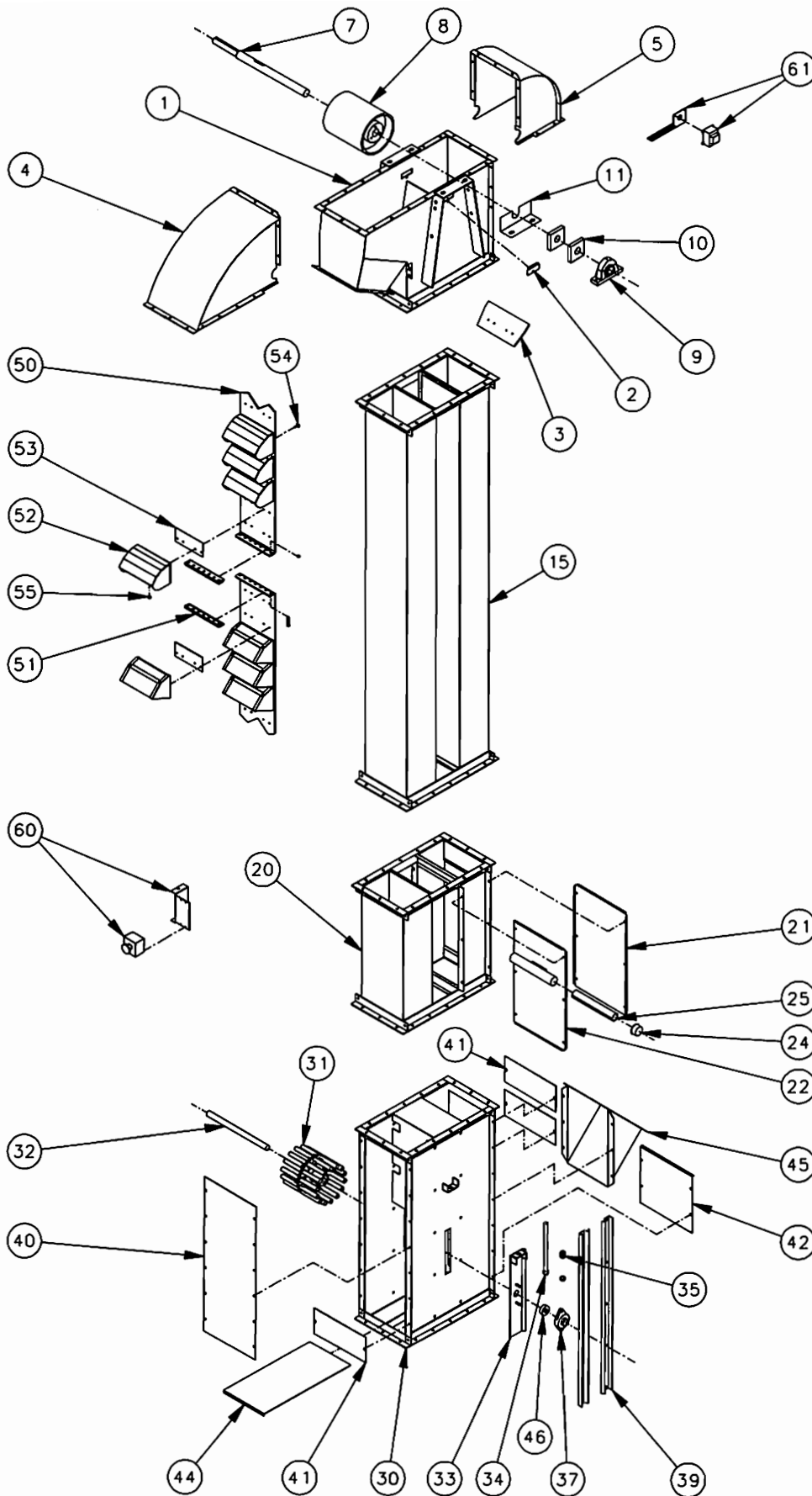
Four types and twenty-seven models described in our Bucket Elevator Catalog with complete technical data and capacities.

SCC Bucket Elevators offer economical, efficient and reliable means of elevating a variety of materials. Screw Conveyor Corporation's wide range of experience acquired through many years of specializing exclusively in the conveying and elevating of bulk materials means low maintenance and long service.



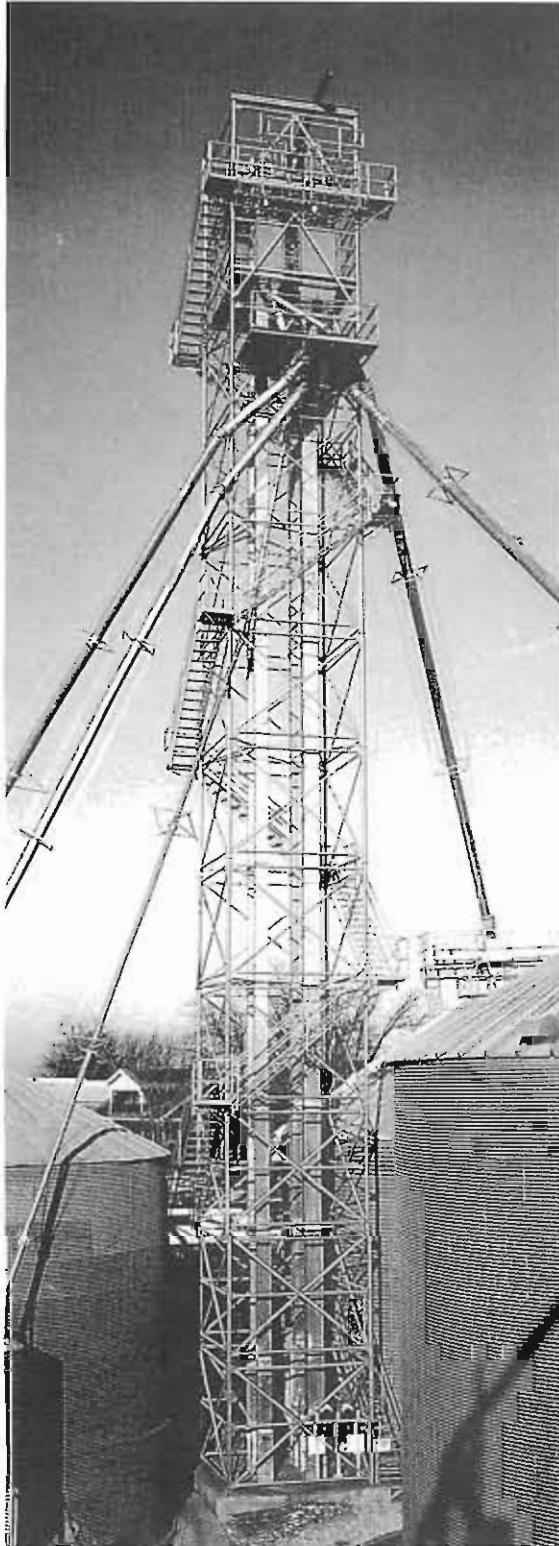
# Elevator Leg Replacement Parts

Note: Upgrading a leg and increasing capacity is a service provided by KC Supply Co. Ask for our spec sheet to upgrade your current leg or design a leg to meet your requirements



# LEG TOWERS

## HEAVY DUTY SUPPORT TOWERS



### STANDARD FEATURES:

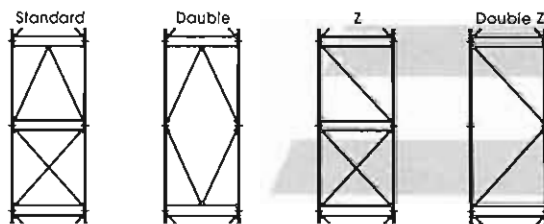
- Computerized tower staging. (must be done at the factory)
- Staging rated for 100 mph wind load/seismic zone 4 per Uniform Building Code...unless otherwise requested.
- Strength stages 0 through 6 available.
- Velvet gray polyester powdercoat finish.
- Tubular steel construction.
- Prefabricated modular design: bolt-together lengths 10 feet tall.
- Interior Cross Braces for towers that do not have an elevator leg installed inside the tower.
- Hardware to assemble tower sections furnished.

### STANDARD SIZES:

- 4-column 8' x 8'
- 4-column 10' x 10'
- 4-column 12' x 12'

### AVAILABLE OPTIONS:

- 4-column tower sizes 2' x 4' up to 16' x 16'.
- 6 or 9-column tower configurations.
- Custom tower sections up to 10' tall.
- Access Braces allow easy access through the side of tower.



- Spiral Stairways wind upward around the outside faces of the tower.
- Stairway Switch-Back Landings allow stairway system to be mounted on one face of the tower.
- Tower Side Walkways / Access Platforms: 24" or 48" wide walkway for outside face of tower. Toeboards on both sides of the walkway.
- Stairway Double-width Top Landings allow access into the tower from the stair system.
- Galvanized finish or custom color finish.
- "Coastal finish" - o two part powdercoat finish, based on pipeline standards, for installations in highly corrosive atmospheres.

# #6 CATWALKS - GRADE C & D



products meet or exceed OSHA / UBC / AISC / ASD standards.

## STANDARD FEATURES:

- Computer engineered for freespans without the use of cable trussing. *Refer to chart on page 1.*
- Capable of conveyor loads up to 700 lbs/ft with 34" tall conveyor.
- #6 C & D catwalks are available with conveyor mounting areas of 30", 44" and 60".
- Assembly option allows for enlarged drop thru opening.
- Knock-down design: bolt-together lengths in 3, 6 and 9 foot increments.
- 3" square tubular steel construction.
- 48 3/4" deep rigid double truss design.
- 3" square tubular steel handrails. 42" high handrails are on both sides.
- Galvanized steel mesh walkways.
- Galvanized toeboards on both sides of the walkway.
- Velvet gray polyester powdercoat finish.
- Simple three-step assembly. Only three bolt sizes for complete assembly.

CONVEYOR MOUNTING OPTIONS	30"	44"	60"
OVERALL WEIGHT GRADE C (lbs/ft)	124	132	134
OVERALL WEIGHT GRADE D (lbs/ft)	146	154	156
CLEARANCE WIDTH	73 5/8"	87 5/8"	103 5/8"

OVERALL HEIGHT - 51 3/16"

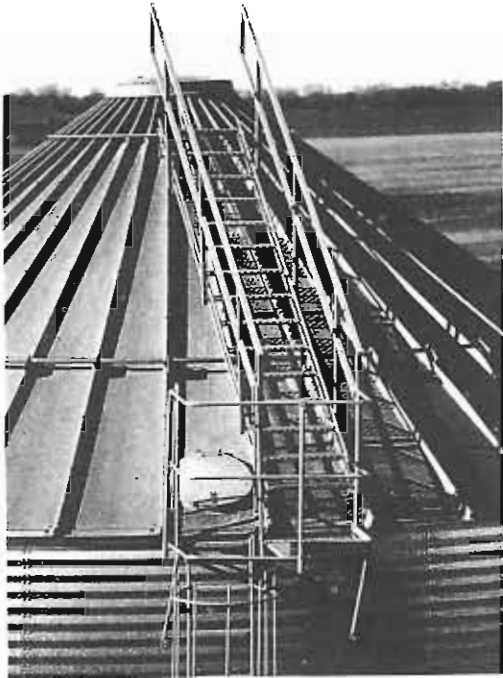
WALKWAY WIDTH - 24"

CLEARANCE NEEDED BELOW WALKWAY - 9 1/4"

## AVAILABLE OPTIONS:

- Handrail end enclosure.
- Full width steel mesh flooring.
- Stair steps on walkway side.
- Galvanized finish or custom color finish.
- "Coastal finish"- a two part powdercoat finish, based on pipeline standards, for installations in highly corrosive atmospheres.

# ROOF STAIRS



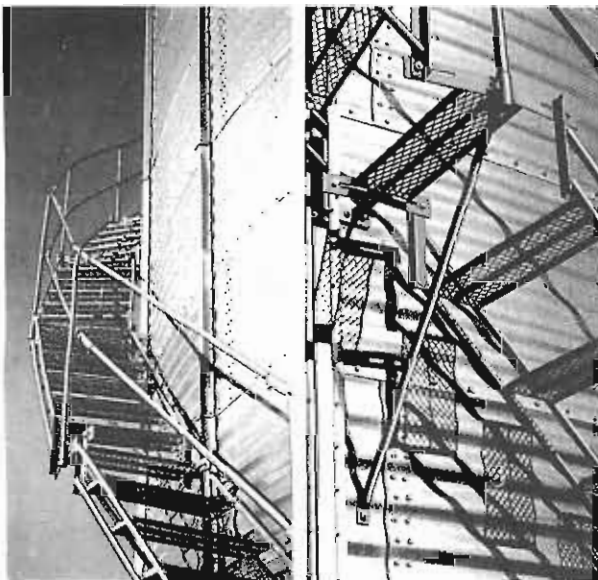
## STANDARD FEATURES:

- Prefabricated modular design: individual bolt-together sections, each up to 20 feet in length.
- 1" tubular steel construction.
- *New Design!* 1 1/2" tubular steel, 36" high bolt-together handrails. Handrails on both sides of stairs.
- 24" wide x 7" deep steps.
- #10 expanded steel mesh on steps.
- Velvet gray polyester powdercoat finish.
- Hardware to connect handrails and stairway sections furnished.  
(DOES NOT include hardware to attach stairway system to bin.)

## AVAILABLE OPTIONS:

- Lower manhole access rail.
- Roof stair end enclosure.
- 6' Hex top cap handrails.
- 8' Hex top cap handrails.
- Galvanized finish or custom color finish.
- "Coastal finish"- a two part powdercoat finish for highly corrosive atmospheres.

# SPIRAL BIN STAIRS



## STANDARD FEATURES:

- Prefabricated modular design: bolt-together sections, 45° incline with 5' rise.
- Bolt-on mounting brackets between each rise of stairs.
- 1" tubular steel construction.
- 25" x 31" top landing with toeboard.
- *New Design!* Welded 1 1/2" tubular steel, 36" high bolt-together outside handrail. (Old style handrail shown)
- 24" wide x 7" deep stairs.
- #10 expanded steel mesh on steps and landing.
- Velvet gray polyester powdercoat finish.
- Hardware to connect stairs, landing, toe boards and handrails furnished.  
(DOES NOT include hardware to attach stairway system to bin.)

**OPTION:** Double top landing, full floor

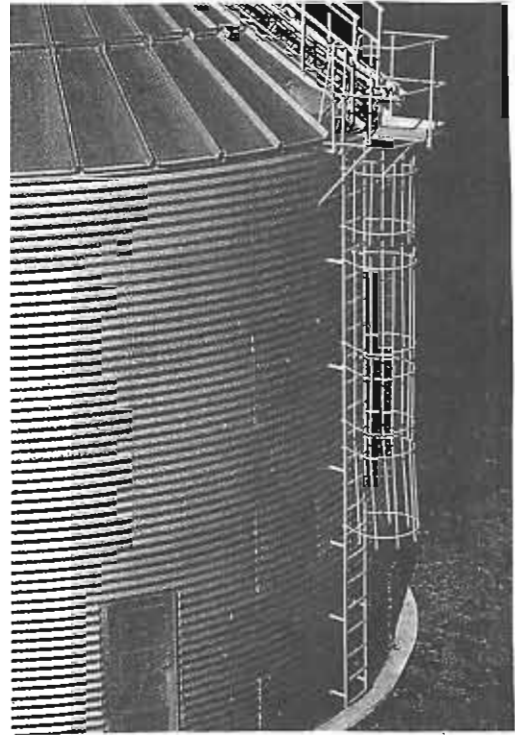
# Bin Ladder and Safety Cage

## STANDARD FEATURES:

- Prefabricated Modular Design: Ladder sections slip together in 3 or 4 foot lengths
- "L" Style Mounting Brackets
- 4 Foot Starter Section
- 1" Tubular Steel Runners
- Perforated Channeled Ladder Rungs designed for better traction
- 16 1/4" Rung width with 12" spacing between rungs
- Velvet gray polyester powdercoat finish
- Hardware furnished for connecting safety cages to ladder. Does not include hardware for attaching ladder system to bin.

## AVAILABLE OPTIONS:

- Heavy Duty Inside Bin Ladder
- Bolt-on walk through head section
- Safety Cage
- Plain landing for ladders without safety cage
- Double landing for ladders with safety cage
- Galvanized, Custom Color, or "Coastal Finish" for highly corrosive atmospheres



# Steel Ladder and Safety Cage

## FLAT STEP LADDER:

- Prefabricated Modular Design of 10, 14 or 20 ft
- Perforated Channeled Ladder Rungs design for better traction
- Velvet Gray Polyester Powdercoat finish

## ROUND RUNG LADDER:

- 1/4" x 2" Flat Side Rails
- 3/4" Round Rungs on 12" centers
- Standard Lengths of 10 and 20 ft
- Primed and painted standard gray

## ROUND STEEL CAGE

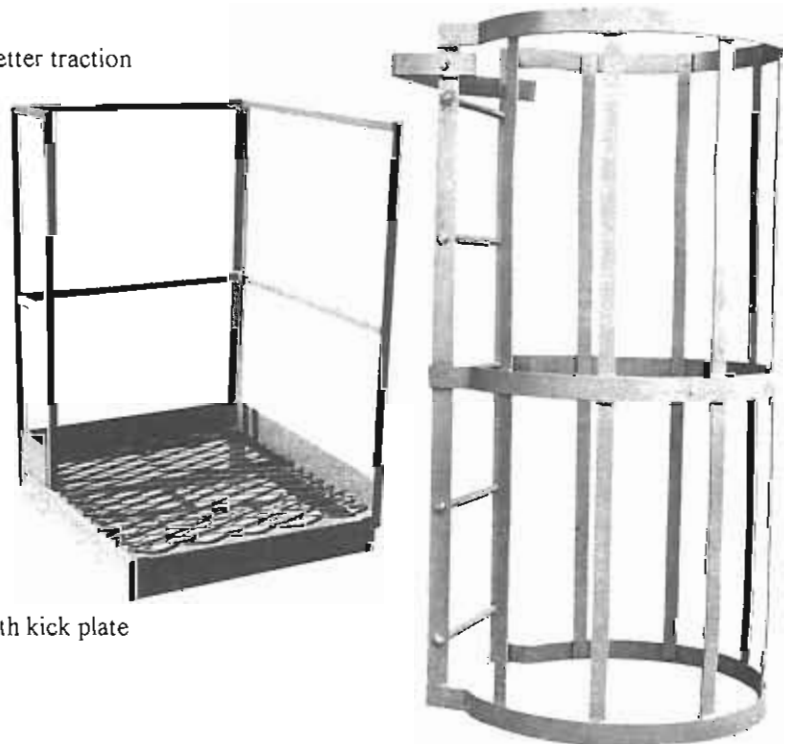
- Prefabricated in 3 or 4 foot bolt-to-ladder sections
- 4 foot flared cage
- Velvet Gray Polyester Powdercoat finish

## FLAT STEEL CAGE

- 28" inside diameter with 5 or 10 foot sections
- 3/16" x 2" hoops
- 1/8" x 1 1/2" stringers
- Primed and painted standard gray

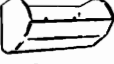
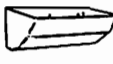

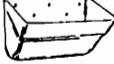

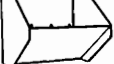
## REST PLATFORMS

- Deck made of 3.14# expanded metal gate
- 1 1/2" square tubing handrail and 42" high posts with kick plate
- Field assembly right or left hand
- Required for every 30 ft of ladder per OSHA







All Ladders and Cages meet OSHA requirements

## ELEVATOR BUCKETS sizes and styles available

SIZE (NOMINAL) INCHES	POLYETHYLENE, NYLON or URETHANE		NYLON	IRON or ALUMINUM	STEEL	
	 Style CC-HD & U-HD	 Low Profile	 Style AA	 Style AA	 Style CC	 Continuous
3 x 2	•	•			•	
4 x 2 3/4				•		
3 3/4 x 3	•	•				
4 x 3	•	•			•	
5 x 3 1/2				•		
5 x 4	•	•			•	
6 x 4	•	•	•	•	•	•
7 x 4	•	•			•	•
7 x 4 1/2	•	•		•		
6 x 5	•	•			•	•
7 x 5	•	•			•	•
8 x 5	•	•	•	•	•	•
9 x 5	•	•			•	•
10 x 5	•	•			•	•
11 x 5	•	•			•	•
12 x 5	•	•		•	•	•
15 x 5				•		
19 x 5				•		
9 x 5 1/2	•	•				
11 x 5 1/2	•	•				
8 x 6	•	•			•	•
9 x 6	•	•		•	•	•
10 x 6	•	•	•	•	•	•
11 x 6	•	•		•	•	•
12 x 6	•	•		•	•	•
13 x 6	•	•		•	•	•
14 x 6	•	•		•	•	•
10 x 7	•	•			•	•
11 x 7	•	•			•	•
12 x 7	•	•	•	•	•	•
13 x 7	•	•			•	•
14 x 7	•	•	•	•	•	•
15 x 7	•	•		•	•	•
16 x 7	•	•		•	•	•
10 x 8	•	•			•	•
11 x 8	•	•			•	•
12 x 8	•	•			•	•
13 x 8	•	•			•	•
14 x 8	•	•		•	•	•
15 x 8	•	•			•	•
16 x 8	•	•	•	•	•	•
18 x 8	•	•	•	•	•	•
20 x 8	•	•		•	•	•
24 x 8				•		
18 x 10			•	•		•

• Indicates available sizes and styles

## ELEVATOR BOLTS sizes and styles available

LENGTH INCHES	No. 1 				No. 3 		FANGED 	POINTED FANGED 	
	1/4-20	5/16-18	3/8-16	1/2-13	1/4-20	5/16-18	1/4-20	5/16-18	3/8-16
3/4	○ □ ◇	○ □			○ □	○ □	○ □ ◇		
1	○ □ ◇	○ □ ◇	○ □ ◇		○ □	○ □	○ □ ◇	○ □ ◇	
1 1/4	○ □ ◇	○ □ ◇	○ □ ◇		○ □	○ □	○ □ ◇	○ □ ◇	○ □
1 1/2	○ □ ◇	○ □ ◇	○ □ ◇	○ □	○ □	○ □	○ □ ◇	○ □ ◇	○ □
1 3/4	○ □	○ □ ◇	○ □ ◇				○ □ ◇	○ □ ◇	○ □
2	○ □	○ □ ◇	○ □ ◇	○ □				○ □ ◇	
2 1/4	○ □	○ □	○ □						
2 1/2	○ □	○ □	○ □	○ □					
2 3/4	○ □	○ □	○ □						
3	○ □	○ □	○ □	○ □					

○ Steel □ Zinc Plate ◇ Stainless

### POLYETHYLENE, NYLON OR URETHANE STYLE CC-HD & U-HD:

An agricultural duty bucket for handling grains, feeds, fertilizers, seeds, salt, sand, chemicals, food products and a variety of other free flowing materials. Polyethylene is ideal for most applications while nylon or urethane is recommended for highly abrasive products or extremely high thru put elevators.

### POLYETHYLENE, NYLON OR URETHANE LOW PROFILE:

The same CC-HD or U-HD style agricultural duty bucket as described above only modified to a "low profile" to allow closer spacing on the belt. Use to increase bucket elevator capacity over what can be achieved using conventional buckets and spacings.

### NYLON STYLE AA:

An industrial duty bucket for handling foundry sand, sand and gravel, coal, fertilizers, clay, salt, and many other industrial materials.

### IRON or ALUMINUM STYLE AA:

An industrial duty bucket for handling stone, foundry sand, sand and gravel, coal fertilizer, clay, salt and many other industrial materials. Iron is ideal for large, dense, sluggish products or sharp cutting products such as crushed glass. Aluminum is a light weight bucket for non-abrasive products in hot applications (250° to 400° F.) (121° to 204° C.) where nylon buckets could not be used because of the heat.

### STEEL STYLE CC:

An agricultural duty bucket for handling grains, feeds, fertilizers, seeds, salt, saw chemicals, food products and a variety of other free flowing materials. Steel is ideal for sharp cutting products such as crushed glass and hot applications (over 225° F) (107° C) where polyethylene or urethane could not be used.

### STEEL CONTINUOUS:

An agricultural and/or industrial duty buckets designed for use on "continuous type" bucket elevators. Runs at slow speeds for the gentle handling of a wide range of sluggish or fragile materials.

### NO. 1 NORWAY FLAT COUNTERSUNK HEAD:

A large diameter thin flat countersunk head bolt with plenty of surface area to secure bucket and minimize chances of head "pull through" during hang ups. For use on pulleys larger than 6 inches in diameter.


### NO. 3 ECLIPSE SLOTTED HEAD:

A smaller diameter ribbed head bolt for use on pulleys 6 inches and smaller in diameter.


**FANGED HEAD: (Blunt And Pointed End)**  
A large diameter thin countersunk head bolt similar to a No. 1 but with two fangs on the underside of head. Fangs penetrate the belt and prevent the bolt from turning during installation and removal. For use on pulleys larger than 6 inches in diameter. Pointed end for ease of installation, not available in 3/8-16.

# ELEVATOR WASHERS, NUTS AND SPACERS


## WASHERS AND SPACERS

FLAT	SIZE INCHES (ID)	PKG. QTY., PCS.	PKG. WEIGHT, LBS.
	1/4	100	.7
	5/16	100	1.1
	3/8	100	1.6


Available in zinc and stainless.

SPLIT RING LOCK	SIZE INCHES (ID)	PKG. QTY., PCS.	PKG. WEIGHT, LBS.
	1/4	100	.2
	5/16	100	.4
	3/8	100	.6


Available in zinc and stainless.

EXTERNAL TOOTH LOCK	SIZE INCHES (ID)	PKG. QTY., PCS.	PKG. WEIGHT, LBS.
	1/4	100	.7
	5/16	100	.7
	3/8	100	.7


Available in zinc and stainless.

FENDER	SIZE INCHES (ID)	PKG. QTY., PCS.	PKG. WEIGHT, LBS.
	1/4	100	1.3
	5/16	100	2.0
	3/8	100	3.0


Available in zinc and stainless.

LEATHER	SIZE INCHES (ID)	PKG. QTY., PCS.	PKG. WEIGHT, LBS.
	1/4	100	.3
	5/16	100	.3
	3/8	100	.3

Available in leather 1/8" thick.

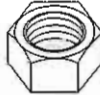
POLY SPACERS	SIZE INCHES (ID)	PKG. QTY., PCS.	PKG. WEIGHT, LBS.
	1/4	100	2.0
	5/16	100	1.8
	3/8	100	2.0

Available in polyethylene 1/4" and 1/8" thick.

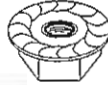
NEOPRENE	SIZE INCHES (ID)	PKG. QTY., PCS.	PKG. WEIGHT, LBS.
	1/4	100	1.1
	5/16	100	1.1
	3/8	100	1.1

Available in neoprene 1/4" thick.

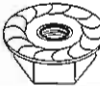
## NUTS

STANDARD HEX	SIZE INCHES (ID)	PKG. QTY., PCS.	PKG. WEIGHT, LBS.
	1/4-20	100	.7
	5/16-18	100	1.1
	3/8-16	100	1.6

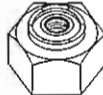
Available in zinc and stainless.

STANDARD FLANGE SERRATED LOCK	SIZE INCHES (ID)	PKG. QTY., PCS.	PKG. WEIGHT, LBS.
	1/4-20	100	.9
	5/16-18	100	1.2
	3/8-16	100	1.8


Available in zinc and stainless.

LARGE FLANGE SERRATED LOCK	SIZE INCHES (ID)	PKG. QTY., PCS.	PKG. WEIGHT, LBS.
	1/4-20	100	1.2
	5/16-18	100	2.3
	3/8-16	100	2.8

Available in zinc.

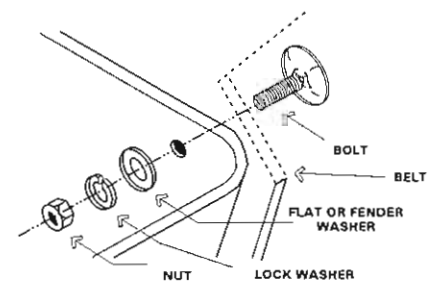
NYLON INSERT LOCK	SIZE INCHES (ID)	PKG. QTY., PCS.	PKG. WEIGHT, LBS.
	1/4-20	100	.8
	5/16-18	100	1.1
	3/8-16	100	2.8

Available in zinc and stainless.

SQUARE	SIZE INCHES (ID)	PKG. QTY., PCS.	PKG. WEIGHT, LBS.
	1/4-20	100	.9
	5/16-18	100	1.8
	3/8-16	100	2.6

Available in zinc and stainless.

Recommended bucket installation







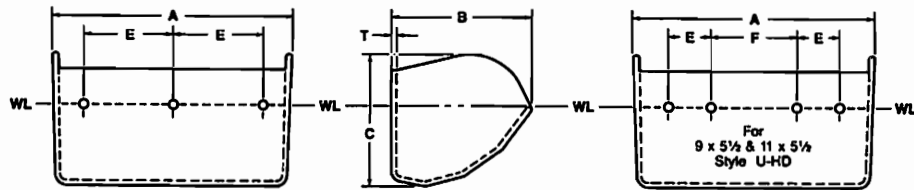
# BUCKET INDUSTRY HOLE PUNCHING\* COMPARISON CHART

– PLASTIC –	3x2	4x3	5x4	6x4	7x4	6x5	7x5	8x5	9x5	10x5	11x5	8x6	9x6	10x6	11x6	12x6	13x6	10x7	11x7	12x7	13x7	14x7	15x7	16x7	11x8	12x8	13x8	14x8	16x8	18x8	20x8	16x10	
Maxi-Lift	1 3/4	2 1/4	3 3/16	4 3/8	2 5/8	4 3/8	2 5/8	3 1/16	3 1/2	4	3 1/8	3 1/16	3 1/2	4	3	3 3/8	3 5/8	4	3	3 3/8	3 5/8	3	3 1/4	3 1/2	3 1/8	3 3/8	3 5/8	3	3 1/2	3 1/8	3 1/2	2 7/8	
Dura-Buket		2 1/4	3 3/16	4 3/8	2 1 1/16	4 3/8	2 5/8	3 1/16	3 1/4			3 1/16	3 1/2	4	3	3 3/8	3 5/8	4	3	3 3/8	3 5/8	3	3 1/4	3 1/2		3 3/8		3	3 1/2	3 1/8	3 1/2	2 7/8	
Tapco	1 3/4	2 1/2	3 3/16	4 3/8	2 1 1/16	4 3/8	2 1 1/16	3 1/16	3 5/8	4 1/8	3	3 1/16	3 5/8	4 1/8	3	3 3/8	3 5/8	4 1/8	3	3 3/8	3 5/8	3	3 1/4	2 7/8	3	3 3/8	3 5/8	3	2 7/8	3 1/8			
Grain Belt (KI Willis)				4 3/8		4 3/8	2 1 1/16	3 1/16	3 5/8				3 5/8	4 1/8	3	3 3/8	3 5/8		3	3 3/8	3 5/8	3		2 7/8		3 3/8		3	2 7/8	3 1/8		2 7/8	
Screw Conveyor				4 3/8	2 1 1/16		2 1 1/16	3 1/16	3 5/8				3 5/8	4 1/8	3	3 3/8			3	3 3/8		3		2 7/8					2 7/8	3 1/8	3 1/2		
4 B Elevator Components		2 1/4																															
		2 1/2	3 3/16	4 3/8	2 1 1/16	4 3/8	2 1 1/16	3 1/16	3 5/8				3 5/8	4 1/8	3	3 3/8			3	3 3/8		3		2 7/8		3 3/8		3	2 7/8	3 1/8	3 1/2		
– METAL –																																	
Grain Belt		2 1/2	3 3/16	4 3/8	2 1 1/16	4 3/8	2 1 1/16	3 1/16	3 5/8	4 1/8	3	3 1/16	3 5/8	4 1/8	3	3 3/8	3 5/8	4 1/8	3	3 3/8	3 5/8	3	3 1/4	2 7/8	3	3 3/8	3 5/8	3	2 7/8	3 1/8			
K. I. Willis	1 3/4	2 1/2	3 1/2	4 1/2	2 5/8	4 1/2	2 5/8	3 1/8	3 1/2	4	3 1/8	3 1/8	3 1/2	4	3 1/8	3 3/8	3 5/8	4	3 1/8	3 3/8	3 5/8	4	3 1/4	2 5/8	3 1/4	3 1/8	3 3/8	3 5/8	4	2 5/8	3 1/4	4	
4B Elevator Components				4 3/8			2 1 1/16	3 1/16	3 1/2				3 1/2	4	3	3-3/8			3	3-3/8				2 7/8					4	2 7/8			
									3-5/8				3-5/8	4-1/8	3-1/8														3				
Nu-Hy		2 5/16	3 3/16	4 3/8	2 1 1/16	4 3/8	2 1 1/16	3 1/16	3 5/8	4 1/8	3	3 1/16	3 5/8	4 1/8	3	3 3/8		4 1/8	3	3 3/8		3	3 1/4	2 7/8									
Salem		2 5/16	3 3/16	4 3/8				3 1/16	3 5/8	4 1/8			3 5/8	4 1/8	3	3 3/8	3 3/4	4 1/8	3	3 3/8	3 3/4	3	3 1/4	2 7/8	3 3/8			3	2 7/8	3 1/8			

\* Standards only — cups can be punched on any spacing.

\*\* Chart is a representation of the standard punching of each company. Punching patterns should be verified at time of purchase.

# TAPCO<sup>®</sup> "HEAVY DUTY" POLYETHYLENE ELEVATOR BUCKETS



Standard Bolt Holes Drilled on the WL (Water Level) Line  $\pm 1/4$ "

## STYLE CC-HD (HEAVY DUTY) BUCKETS

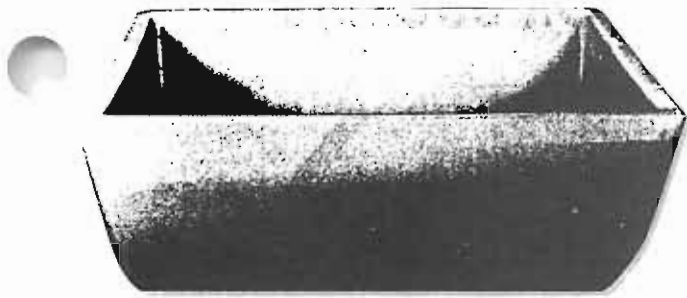
SIZE (Nominal) In.	DIMENSION-Actual (in.) Tolerance A,B,C $\pm 1/8$ - T $\pm 1/64$				DRILLING-Standard (in.) Holes drilled 1/32" oversize				CAPACITY $\text{\textcircled{D}}$				SPACING ON BELT (Minimum) In.	WEIGHT (lbs.)		NUMBER PER Carton
	Length A	Proj. B	Depth C	Thickness T	Center to Center E	Center to Center F	Number Holes	Bolt Diameter	WL		WL + 10%			Each (Average)	Per Carton (Average)	
									Cu. In.	Cu. Fl.	Cu. In.	Cu. Fl.				
3x2	3-1/4	2-1/2	2-1/16	11/64	1-3/4		2	1/4	6.0	.0035	6.6	.0038	3	.13	3.59	24
4x3	4-1/4	3-1/2	3-1/16	3/16	2-1/2		2	1/4	16.8	.0097	18.5	.0107	4	.26	7.08	24
5x4	5-1/4	4-1/2	4-1/16	13/64	3-3/16		2	1/4	35.8	.0207	39.4	.0228	5	.46	12.60	24
6x4	6-1/4	4-1/2	4-1/16	13/64	4-3/8		2	1/4	43.3	.0251	47.6	.0276	5	.53	14.28	24
7x4	7-1/4	4-1/2	4-1/16	13/64	2-11/16		3	1/4	49.7	.0288	54.7	.0316	5	.60	15.96	24
6x5	6-5/16	5-1/2	5-1/16	1/4	4-3/8		2	1/4	68.3	.0395	75.1	.0435	6	.80	20.88	24
7x5	7-5/16	5-1/2	5-1/16	1/4	2-11/16		3	1/4	75.8	.0439	83.4	.0483	6	.98	25.20	24
8x5	8-5/16	5-1/2	5-1/16	1/4	3-1/16		3	1/4	85.4	.0494	93.9	.0544	6	1.10	28.35	24
9x5	9-5/16	5-1/2	5-1/16	1/4	3-5/8		3	1/4	97.9	.0567	107.7	.0623	6	1.02	26.43	24
10x5	10-5/16	5-1/2	5-1/16	1/4	4-1/8		3	1/4	113.5	.0657	124.9	.0723	6	1.24	32.03	24
11x5	11-5/16	5-1/2	5-1/16	1/4	3		4	1/4	127.2	.0736	139.9	.0810	6	1.27	32.75	24
12x5	12-5/16	5-1/2	5-1/16	1/4	3-3/8		4	1/4	143.1	.0828	157.4	.0911	6	1.35	34.67	24
8x6	8-5/16	6-5/8	6-1/16	1/4	3-1/16		3	1/4	124.5	.0720	137.0	.0793	7	1.34	35.00	24
9x6	9-5/16	6-5/8	6-1/16	1/4	3-5/8		3	1/4	135.9	.0786	149.5	.0865	7	1.45	37.64	24
10x6	10-5/16	6-5/8	6-1/16	1/4	4-1/8		3	1/4	150.4	.0870	165.4	.0957	7	1.57	40.52	24
11x6	11-5/16	6-5/8	6-1/16	1/4	3		4	1/4	173.4	.1003	190.7	.1104	7	1.69	43.56	24
12x6	12-5/16	6-5/8	6-1/16	1/4	3-3/8		4	1/4	185.4	.1073	203.9	.1180	7	1.76	45.24	24
13x6	13-5/16	6-5/8	6-1/16	1/4	3-5/8		4	1/4	203.8	.1179	224.2	.1297	7	1.85	24.48	12
14x6	14	6-5/8	5-7/8	1/4	3		5	1/4	198.3	.1148	218.1	.1262	7	1.98	26.04	12
10x7	10-7/16	7-3/4	7-1/16	9/32	4-1/8		3	5/16	219.4	.1270	241.3	.1397	8	2.01	18.53	8
11x7	11-7/16	7-3/4	7-1/16	9/32	3		4	5/16	234.2	.1355	257.6	.1491	8	2.31	21.13	8
12x7	12-7/16	7-3/4	7-1/16	9/32	3-3/8		4	5/16	248.2	.1436	273.0	.1580	8	2.43	22.09	8
13x7	13-7/16	7-3/4	7-1/16	9/32	3-5/8		4	5/16	284.4	.1646	312.8	.1810	8	2.62	23.71	8
14x7	14-7/16	7-3/4	7-1/16	9/32	3		5	5/16	301.9	.1747	332.1	.1922	8	2.76	25.03	8
15x7	15-7/16	7-3/4	7-1/16	9/32	3-1/4		5	5/16	331.4	.1918	364.5	.2110	8	3.02	26.91	8
16x7	16-7/16	7-3/4	7-1/16	9/32	2-7/8		6	5/16	346.5	.2005	381.2	.2206	8	3.13	27.99	8

## STYLE CC-HD "SUPER CAPACITY" BUCKETS

10x8	10-7/16	8-3/4	8-13/16	11/32	4-1/8		3	5/16	297.0	.1719	326.7	.1891	9	2.95	26.60	8
11x8	11-7/16	8-3/4	8-13/16	11/32	3		4	5/16	325.9	.1886	358.5	.2075	9	2.99	26.92	8
12x8	12-7/16	8-3/4	8-13/16	11/32	3-3/8		4	5/16	362.0	.2095	398.2	.2304	9	3.02	27.16	8
13x8	13-7/16	8-3/4	8-13/16	11/32	3-5/8		4	5/16	390.2	.2258	429.2	.2484	9	3.17	28.81	8
14x8	14-7/16	8-3/4	8-13/16	11/32	3		5	5/16	429.6	.2486	472.6	.2735	9	3.31	29.93	8
15x8	15-7/16	8-3/4	8-13/16	11/32	3-1/4		5	5/16	458.9	.2656	504.8	.2921	9	3.72	33.21	8
16x8	16-7/16	8-3/4	8-13/16	11/32	2-7/8		6	5/16	511.1	.2958	562.2	.3254	9	3.84	34.27	8
18x8	18-7/16	8-3/4	8-13/16	11/32	3-1/8		6	5/16	564.4	.3266	620.8	.3593	9	4.37	38.51	8
20x8	20-7/16	8-7/8	8-15/16	11/32	3-1/2		6	5/16	644.2	.3728	708.6	.4101	9	5.77	51.50	8

## STYLE U-HD BUCKETS fit UNIVERSAL INDUSTRIES elevators

3-3/4x3					1-7/8		2	1/4	11.3	.0065	12.4	.0072				
6x4	6-1/4	4-1/8	4-1/16	13/64	2-3/4		2	1/4	35.4	.0205	38.9	.0225	4-1/4	.51	13.42	24
7x4-1/2	7-1/4	4-3/8	4-1/16	13/64	2-1/2		3	1/4	44.2	.0256	48.6	.0281	5	.58	15.10	24
9x5-1/2	9-5/16	5-1/2	5-1/16	1/4	1-3/4	3-1/2	4	1/4	97.9	.0567	107.7	.0623	6	1.02	26.43	24
11x5-1/2	11-5/16	6-5/8	6-1/16	1/4	1-3/4	2-3/4	5	1/4	173.4	.1003	190.7	.1104	6	1.69	43.56	24
11x7	11-7/16	7-3/4	7-1/16	9/32	3-1/8		4	5/16	234.2	.1355	257.6	.1491	8	2.31	21.13	8



**Tiger-Tuff** is a maximum duty terminal elevator bucket, designed and engineered to move more product faster, with less down time and lower maintenance costs. The heavy reinforced lip, corners and thickened back extends the life of the bucket. Projection + 2" = minimum vertical spacing on belt. The most common applications include grains, fertilizer, pellets, corn, wheat, soy beans and other agricultural and light industrial applications.

FEATURES	BENEFITS
Thicker walls, heavy front lip for digging	Increases elevator capacity
More capacity	Lowers elevator maintenance
Cleaner discharge	Extended bucket life
High impact and abrasion resistant	Decreases elevator down-time
Non-corrosive, non-sparking	Corrosion resistant

MATERIALS	HD POLYETHYLENE	NYLON	URETHANE	SPECIAL RESINS
<b>COLOR</b>	Orange/White	Tan	Green	As available
<b>APPLICATION</b>	Grain and food products	Hot, high impact, abrasive dense products	Heavy abrasion, sticky materials	Product conditions not suitable for "In Stock" bucket materials.
<b>TEMPERATURE RANGE</b>	-120°F to +180°F (210°F intermittent)	-60°F to +300°F (350°F intermittent)	-60°F to +180°F (210°F intermittent)	As required
<b>FDA APPROVED MATERIAL</b>	Yes	Available upon request	Yes	As required
<b>COMMENTS</b>	Economical, high density polyethylene. FDA approved material for handling food grade products.	Best for high heat applications, with tough impact and abrasion needs.	Most flexible and abrasion resistant. Resists product sticking and sharp cutting particles.	Engineered for specific requirements, such as extreme temperature, abrasion, color or product discharge.

## Tiger-Tuff® Elevator Bucket

Bucket Size	Bucket Size, Inches **			E Centers (Inches)	Number of Holes	Bolt Size (Inches)	Weight, Lbs.			Capacity Cu. Inches		Carton Qty.
	L Length	P Proj.	D Depth				(Poly) H.D.P.E.	Nylon	Urethane	Water Level X-X	Useable 5' Over X-X	
20x10	21	11	10	3-1/2	6	5/16	10.63	12.73	14.37	1,032.50	1,135.98	6
18x10	19	11	10	3-1/8	6	5/16	9.80	11.74	13.25	910.00	1,001.21	6
16x10	17	11	10	2-7/8	6	5/16	8.76	10.25	11.84	795.70	875.37	6
20x8	21	9-1/16	8-1/8	3-1/2	6	5/16	6.31	7.39	8.52	646.81	714.73	10
18x8	19	9-1/16	8-1/8	3-1/8	6	5/16	5.98	7.00	8.08	567.49	627.08	10
16x8	17	9-1/16	8-1/8	2-7/8	6	5/16	5.50	6.49	7.43	512.57	566.39	10
14x8	14-5/8	8-3/4	8-1/4	3	5	5/16	5.05	5.92	6.83	436.80	481.35	6
13x8	13-5/8	8-3/4	8-1/4	3-5/8	4	5/16	4.78	5.60	6.46	404.85	446.15	6
12x8	12-5/8	8-3/4	8-1/4	3-3/8	4	5/16	4.51	5.28	6.10	373.00	411.05	6
16x7	16-1/2	7-3/4	7	2-7/8	6	5/16	3.91	4.58	5.29	379.90	418.65	7
14x7	14-1/2	7-3/4	7	3	5	5/16	3.52	4.12	4.76	331.49	365.30	7
12x7	12-1/2	7-3/4	7	3-3/8	4	5/16	3.13	3.67	4.23	283.18	312.06	7

\*\*Actual dimensions may vary slightly on all elevator buckets, depending on specified raw material.



1.800 KC SUPPLY (527.8775)  
www.kcsupply.com

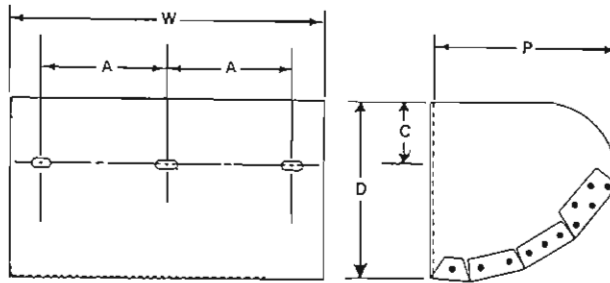
Phone 816.753.7676

Fax 816.753.0444

email: kcsupply@kcsupply.com

# Superior Metal Buckets

Buckets are vented as standard.  
Shaded buckets also stocked nonvented.



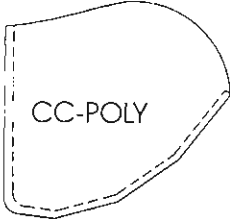
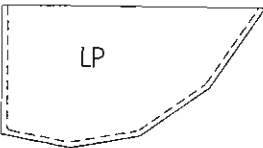
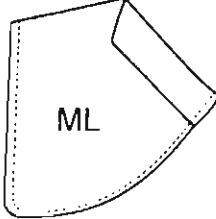
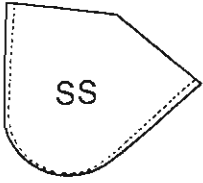
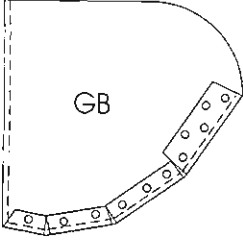
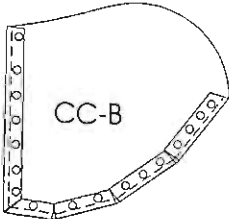
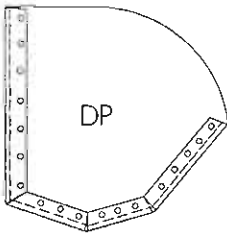
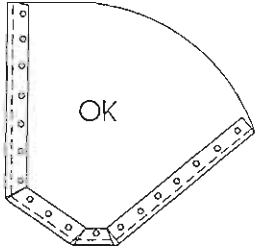
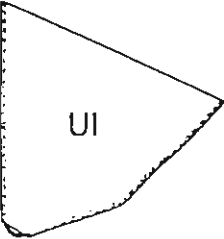
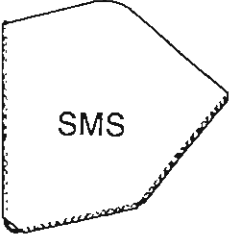
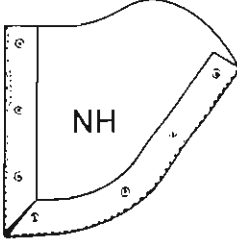
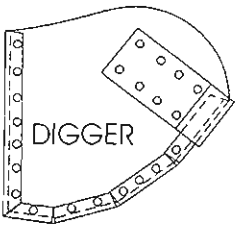
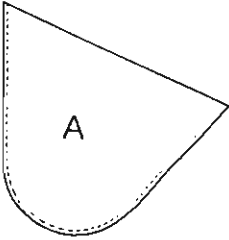
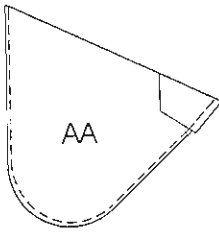
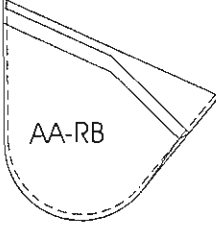
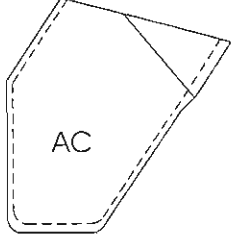
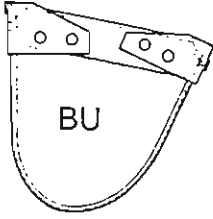
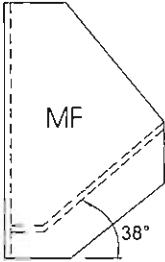
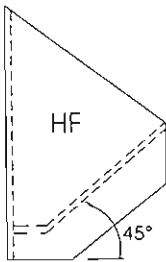
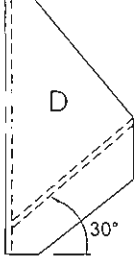
Size W x P	Act'l Proj. P	Centers Bolt Holes A	Number Holes	C	D	Bolt Sizes	Gauge	Approx. Weight	Gross Cu. In. Capacity	No. Per Box
4 x 3	3 <sup>3</sup> / <sub>16</sub>	2 <sup>1</sup> / <sub>2</sub>	2	7 <sup>7</sup> / <sub>8</sub>	2 <sup>11</sup> / <sub>16</sub>	1/2	16	.62	22	84
4 x 4	4 <sup>3</sup> / <sub>16</sub>	2 <sup>1</sup> / <sub>2</sub>	2	1 <sup>3</sup> / <sub>4</sub>	4	1/2	18	.90	39	84
5 x 4	4 <sup>3</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>16</sub>	2	1 <sup>3</sup> / <sub>4</sub>	4	1/4	18	.95	52	84
6 x 4	4 <sup>3</sup> / <sub>16</sub>	4 <sup>3</sup> / <sub>8</sub>	2	1 <sup>3</sup> / <sub>4</sub>	4	1/4	18	1.10	62	84
7 x 4	4 <sup>3</sup> / <sub>16</sub>	2 <sup>11</sup> / <sub>16</sub>	3	1 <sup>3</sup> / <sub>4</sub>	4	1/4	18	1.25	70	84
8 x 4	4 <sup>3</sup> / <sub>16</sub>	3 <sup>1</sup> / <sub>16</sub>	3	1 <sup>3</sup> / <sub>4</sub>	4	1/4	18	1.50	79	84
9 x 4	4 <sup>3</sup> / <sub>16</sub>	3 <sup>5</sup> / <sub>8</sub>	3	1 <sup>3</sup> / <sub>4</sub>	4	1/4	18	1.70	90	56
6 x 5	5 <sup>1</sup> / <sub>4</sub>	4 <sup>3</sup> / <sub>8</sub>	2	1 <sup>7</sup> / <sub>8</sub>	5	1/4	16	1.60	94	54
7 x 5	5 <sup>1</sup> / <sub>4</sub>	2 <sup>11</sup> / <sub>16</sub>	3	1 <sup>7</sup> / <sub>8</sub>	5	1/4	16	1.75	110	54
8 x 5	5 <sup>1</sup> / <sub>4</sub>	3 <sup>1</sup> / <sub>16</sub>	3	1 <sup>7</sup> / <sub>8</sub>	5	1/4	16	2.00	125	54
9 x 5	5 <sup>1</sup> / <sub>4</sub>	3 <sup>5</sup> / <sub>8</sub>	3	1 <sup>7</sup> / <sub>8</sub>	5	1/4	16	2.50	140	36
10 x 5	5 <sup>1</sup> / <sub>4</sub>	4 <sup>1</sup> / <sub>8</sub>	3	1 <sup>7</sup> / <sub>8</sub>	5	1/4	16	2.70	155	36
11 x 5	5 <sup>1</sup> / <sub>4</sub>	3	4	1 <sup>7</sup> / <sub>8</sub>	5	1/4	16	2.90	170	36
12 x 5	5 <sup>1</sup> / <sub>4</sub>	3 <sup>5</sup> / <sub>8</sub>	4	1 <sup>7</sup> / <sub>8</sub>	5	1/4	16	3.00	185	36
7 x 6	6 <sup>5</sup> / <sub>16</sub>	2 <sup>11</sup> / <sub>16</sub>	3	2 <sup>3</sup> / <sub>16</sub>	6	1/4	16	2.85	155	36
8 x 6	6 <sup>5</sup> / <sub>16</sub>	3 <sup>1</sup> / <sub>16</sub>	3	2 <sup>3</sup> / <sub>16</sub>	6	1/4	16	3.10	178	36
9 x 6	6 <sup>5</sup> / <sub>16</sub>	3 <sup>5</sup> / <sub>8</sub>	3	2 <sup>3</sup> / <sub>16</sub>	6	1/4	16	3.40	202	24
10 x 6	6 <sup>5</sup> / <sub>16</sub>	4 <sup>1</sup> / <sub>8</sub>	3	2 <sup>3</sup> / <sub>16</sub>	6	1/4	16	3.50	222	24
11 x 6	6 <sup>5</sup> / <sub>16</sub>	3	4	2 <sup>3</sup> / <sub>16</sub>	6	1/4	16	3.75	244	24
12 x 6	6 <sup>5</sup> / <sub>16</sub>	3 <sup>5</sup> / <sub>8</sub>	4	2 <sup>3</sup> / <sub>16</sub>	6	1/4	16	4.00	267	24
13 x 6	6 <sup>5</sup> / <sub>16</sub>	3 <sup>5</sup> / <sub>8</sub>	4	2 <sup>3</sup> / <sub>16</sub>	6	1/4	16	4.50	289	24
14 x 6	6 <sup>5</sup> / <sub>16</sub>	3	5	2 <sup>3</sup> / <sub>16</sub>	6	1/4	16	4.75	312	24
8 x 7	7 <sup>3</sup> / <sub>16</sub>	3 <sup>1</sup> / <sub>16</sub>	3	3 <sup>3</sup> / <sub>16</sub>	7	5/16	14	4.60	242	24
9 x 7	7 <sup>3</sup> / <sub>16</sub>	3 <sup>5</sup> / <sub>8</sub>	3	3 <sup>3</sup> / <sub>16</sub>	7	5/16	14	4.80	276	24
10 x 7	7 <sup>3</sup> / <sub>16</sub>	4 <sup>1</sup> / <sub>8</sub>	3	3 <sup>3</sup> / <sub>16</sub>	7	5/16	14	5.00	302	16
11 x 7	7 <sup>3</sup> / <sub>16</sub>	3	4	3 <sup>3</sup> / <sub>16</sub>	7	5/16	14	5.25	333	16
12 x 7	7 <sup>3</sup> / <sub>16</sub>	3 <sup>5</sup> / <sub>8</sub>	4	3 <sup>3</sup> / <sub>16</sub>	7	5/16	14	6.25	362	16
13 x 7	7 <sup>3</sup> / <sub>16</sub>	3 <sup>5</sup> / <sub>8</sub>	4	3 <sup>3</sup> / <sub>16</sub>	7	5/16	14	6.75	393	16
14 x 7	7 <sup>3</sup> / <sub>16</sub>	3	5	3 <sup>3</sup> / <sub>16</sub>	7	5/16	14	7.00	424	16
15 x 7	7 <sup>3</sup> / <sub>16</sub>	3 <sup>1</sup> / <sub>4</sub>	5	3 <sup>3</sup> / <sub>16</sub>	7	5/16	14	7.50	454	8
16 x 7	7 <sup>3</sup> / <sub>16</sub>	2 <sup>7</sup> / <sub>8</sub>	6	3 <sup>3</sup> / <sub>16</sub>	7	5/16	14	8.00	486	8
18 x 7	7 <sup>3</sup> / <sub>16</sub>	3 <sup>5</sup> / <sub>8</sub>	6	3 <sup>3</sup> / <sub>16</sub>	7	5/16	14	8.50	544	8
20 x 7	7 <sup>3</sup> / <sub>16</sub>	3 <sup>1</sup> / <sub>2</sub>	6	3 <sup>3</sup> / <sub>16</sub>	7	5/16	14	9.25	605	8
22 x 7	7 <sup>3</sup> / <sub>16</sub>	4	6	3 <sup>3</sup> / <sub>16</sub>	7	5/16	14	10.00	664	8
24 x 7	7 <sup>3</sup> / <sub>16</sub>	3 <sup>1</sup> / <sub>2</sub>	7	3 <sup>3</sup> / <sub>16</sub>	7	5/16	14	10.75	725	8
9 x 8	8 <sup>1</sup> / <sub>8</sub>	3 <sup>5</sup> / <sub>8</sub>	3	3 <sup>1</sup> / <sub>2</sub>	8	5/16	14	5.60	349	16
10 x 8	8 <sup>1</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>8</sub>	3	3 <sup>1</sup> / <sub>2</sub>	8	5/16	14	6.10	388	16
11 x 8	8 <sup>1</sup> / <sub>8</sub>	3	4	3 <sup>1</sup> / <sub>2</sub>	8	5/16	14	6.75	427	16
12 x 8	8 <sup>1</sup> / <sub>8</sub>	3 <sup>5</sup> / <sub>8</sub>	4	3 <sup>1</sup> / <sub>2</sub>	8	5/16	14	7.50	466	16
13 x 8	8 <sup>1</sup> / <sub>8</sub>	3 <sup>5</sup> / <sub>8</sub>	4	3 <sup>1</sup> / <sub>2</sub>	8	5/16	14	7.75	505	16
14 x 8	8 <sup>1</sup> / <sub>8</sub>	3	5	3 <sup>1</sup> / <sub>2</sub>	8	5/16	14	8.25	543	16
15 x 8	8 <sup>1</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>4</sub>	5	3 <sup>1</sup> / <sub>2</sub>	8	5/16	14	8.50	582	8
16 x 8	8 <sup>1</sup> / <sub>8</sub>	2 <sup>7</sup> / <sub>8</sub>	6	3 <sup>1</sup> / <sub>2</sub>	8	5/16	14	9.00	621	8
17 x 8	8 <sup>1</sup> / <sub>8</sub>	3	6	3 <sup>1</sup> / <sub>2</sub>	8	5/16	14	9.50	660	8
18 x 8	8 <sup>1</sup> / <sub>8</sub>	3 <sup>5</sup> / <sub>8</sub>	6	3 <sup>1</sup> / <sub>2</sub>	8	5/16	14	9.75	698	8
20 x 8	8 <sup>1</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>2</sub>	6	3 <sup>1</sup> / <sub>2</sub>	8	5/16	14	10.75	776	8
22 x 8	8 <sup>1</sup> / <sub>8</sub>	4	6	3 <sup>1</sup> / <sub>2</sub>	8	5/16	14	11.50	854	8
24 x 8	8 <sup>1</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>2</sub>	7	3 <sup>1</sup> / <sub>2</sub>	8	5/16	14	12.00	931	8

\* Supplied with lip brace. Lip braces optional on other sizes at slightly higher cost.

NOTE: When using standard CC-Style buckets, the manufacturer's recommend that the buckets are spaced not closer than projection plus 2". (Ex. 9 x 6 should be spaced at least 8" apart). This allows for better filling. However, when using low profile buckets, the spacing is usually projection less 1". Please consult our sales office for help with your application.

Also, when elevating material that has a tendency to set up and harden, steel digger buckets should be spaced approximately every 10 buckets when using plastic buckets. Digger buckets are wider and have more projection than standard plastic buckets. This will keep a clear path for the plastic bucket causing less wear from abrasion and increase the life of the buckets.

# Bucket Identification Chart

 CC-POLY	 LP	 ML	 SS
 GB	 CC-B	 DP	 OK
 UI	 SMS	 NH	 DIGGER
 A	 AA	 AA-RB	 AC
 BU	 MF 38°	 HF 45°	 D 30°

## Custom Fabricated Buckets

KC Supply can fabricate elevator buckets for both agricultural and industrial use. We offer mild and stainless steel buckets in any gauge. Plus, KC Supply can provide AR steel plate, special alloys, wear lips, hardened surfaces as well as hard bead welds. We can customize buckets to meet your specifications. Call us for engineering and quotations.



CUSTOM DESIGN



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www.kcsupply.com

Phone 816.753.7676  
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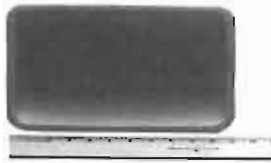
Fax 816.753.0444

# INFORMATION REQUIRED TO ORDER BUCKETS

## 1. MEASURE THE WIDTH, PROJECTION AND DEPTH OF THE BUCKET

Most manufacturers identify sizes by molding the nominal dimensions into the bottom of the bucket.

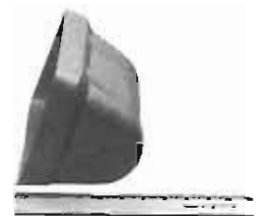
Width



Projection (Water Level)



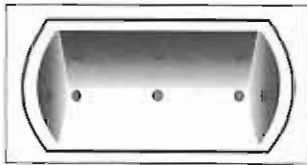
Depth



## 2. CHOOSE THE BUCKET STYLE - (Standard CC-style, low profile, etc.)

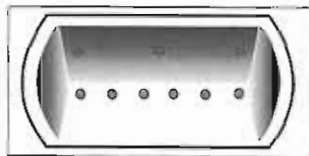
## 3. CHOOSE THE BUCKET MATERIAL - (Steel, Poly, Urethan, Nylon, etc.)

## 4. CHOOSE VENT PATTERN - (if necessary, to improve discharge)



**#1 Standard Vent**

Same holes in body as bolt mounting holes, plus a hole in each end cap.



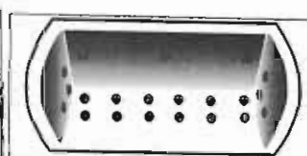
**#2 Vent**

Twice as many holes in body as bolt mounting holes.



**#3 Vent**

Same as #2, but two rows, or four times as many holes as bolt mounting.



**#4 Vent**

Same as #3, plus three holes in each end cap.

## 5. CHOOSE PUNCH PATTERN - See inside page of the back cover for manufacturer's standard patterns.

## 6. CHOOSE DIGGER BUCKETS - if necessary.

## 7. CHOOSE BUCKET ACCESSORIES: BOLTS, WASHERS, NUTS, SPACERS

## COMPUTE BUCKET ELEVATOR CAPACITY

CAPACITY of the bucket at water level (cubic inches)	NUMBER OF BUCKETS per foot (12" ÷ spacing in inches)	NUMBER OF ROWS of buckets on belt	SPEED of belt or chain FPM (Feet Per Minute)	CUBIC INCHES PER HOUR See below for conversion
--	--	-----------------------------------	--	---

$$\underline{\hspace{2cm}} \times (12'' \div \underline{\hspace{1cm}}) \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} \times 60 \text{ minutes} = \underline{\hspace{2cm}}$$

Multiply the CAPACITY of the bucket times the NUMBER OF BUCKETS per foot (12 divided by spacing) times the NUMBER OF ROWS of buckets. This will give you the capacity in cubic inches of each running foot of the belt or chain. Multiply the answer times the SPEED of the belt or chain in FPM for the capacity discharged per minute. Then multiply by 60 minutes to get cubic inches per hour. For engineering purposes, most manufacturer's recommend using water level capacity. Actual capacity can range from 10% to 20% above water level, therefore your results may be multiplied by 1.10 for more applicable results. Actual bucket fill will vary depending on the product and operational conditions.

## CONVERSION FROM CUBIC INCHES PER HOUR TO:

Bushels = Divide by 2150

Cubic Feet = Divide by 1728

Tons = Multiply cubic feet capacity times weight of product per cubic foot and divide by 2,000

Metric Tons = Multiply cubic feet capacity times weight of product per cubic foot and divide by 2,204.62

## FEET PER MINUTE FORMULA

$$3.1416 \times \frac{\text{Head Pulley (Dia. in Inches)}}{\text{RPM}} \div 12 = \text{Feet Per Minute}$$

### CALCULATE ELEVATOR BELT WORKING TENSION

B = Belt weight in pounds per lineal foot. Start with belt that is adequate for bucket projection given, obtain belt weight in pounds P.I.W. and multiply times belt width

C = Weight of each bucket in pounds

D = Discharge height of elevator (use 1/2 of belt length if discharge height is not given).

K = Capacity of each bucket in CUBIC FEET.

S = Bucket spacing in inches

W = Weight of material being elevated in pounds per cubic foot.

- |                                       |  |  |
|---------------------------------------|--|--|
| 1. Tension due to weight of belt      | $B \times D =$                                   |  |
| 2. Tension due to weight of buckets   | $(12 \times C \times D) \div S =$                |  |
| 3. Tension due to load in each bucket | $(12 \times K \times D \times 2) \div S =$       |  |
| 4. Tension due to scoop factor        | $\{(12 \times K \times W) \div 12\} \times 25 =$ |  |
| TOTAL TENSION = Add lines 1 thru 4 =  |  |  |

Divide by belt width to obtain MINIMUM belt tension rating. Check rating selected to be sure maximum bucket projection is not exceeded.

NOTE: For belts with more than one row of buckets, calculate the tension for one row only using the appropriate percentage of belt width in step 1. Ex. A 30" wide belt with 2 rows of buckets should figure the tension using 15" of belt width.

#### Information Needed for Ordering Correctly Sized Belt

- |  |                                |
|--|--------------------------------|
| 1. Pulleys Center-to-Center: _____ Ft. | BUCKET DETAIL                  |
| 2. Head Pulley Diameter: _____ Inches  | A. Manufacturer _____          |
| 3. Tail Pulley Diameter: _____ Inches  | B. Construction Material _____ |
| 4. Head Shaft RPM: _____               | C. Size _____                  |
| 5. Belt Width: _____ Inches            | D. Style _____                 |
| 6. Material Handled _____              | E. Number of Bolt Holes _____  |
| 7. Material Weight _____ Lb./cu ft     | F. Bolt Size _____             |
| 8. Rows of Bucket on Belt: _____       | G. Bolt Hole Centers _____     |
| 9. Bucket Spacing _____ Inches         | H. Bucket Capacity _____       |

#### GENERAL TECHNICAL INFO

For best results, the diameter of the head pulley should be at least 5 times the projection of the bucket - with the diameter increasing for taller legs.

The chute or discharge box should be located at least 2 inches below the bottom of the head pulley. The throat to the down-leg should be closed as much as possible with a piece of rubber. Venting on the roof is optional but some form of air relief is recommended. The head pulley to tail pulley ratio also affects the performance of an elevator. A small tail pulley decreases the loading efficiency as well as increases the wear and tear on the buckets and belt. Feeding on the up leg above the tail shaft is preferred.

#### TABLE OF SPEED - CC BUCKETS

Pulley Inch Dia	RPM Range	FPM - Belt Range
8	85-170	176-352
10	85-170	224-448
16	55-100	230-418
20	55-85	286-443
22	55-80	316-460
24	42-80	264-502
30	42-80	330-628
36	42-80	395-753
42	40-70	439-769
48	40-65	503-817
54	40-65	565-919
60	40-60	628-942
72	40-55	754-1036

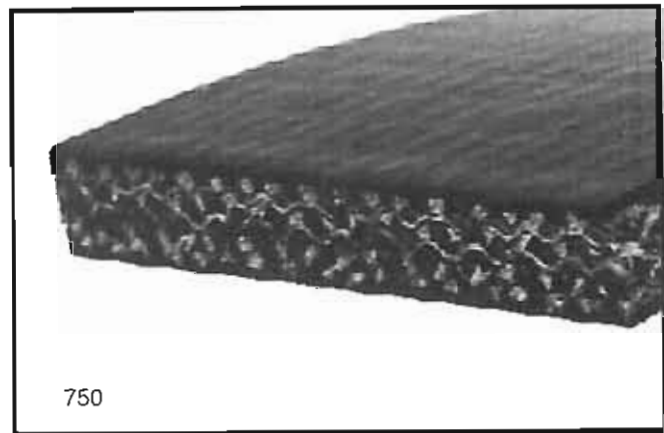
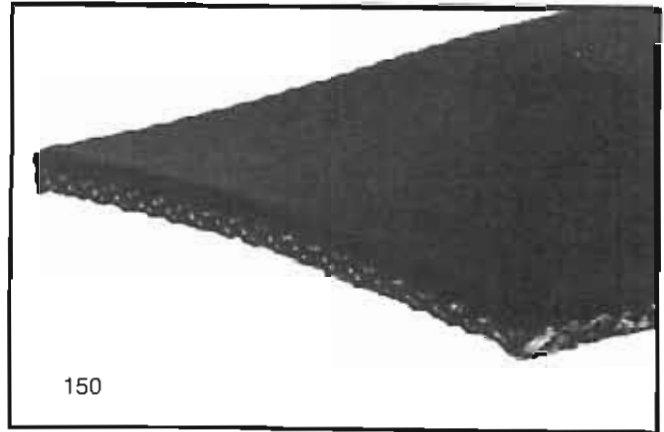
All formulas and charts are for reference only and does not necessarily mean that the calculations will represent actual results.

# PVC Belting

PVC provides an economical solution for elevator and conveyor service. This specification is ideal for light to medium applications including grain or fertilizer.

Some of PVC's characteristics include fire retardant, oil and moisture resistant, and static conductive properties, excellent fastener and bolt holding capabilities, durable and long-wearing with low stretch.

Some agricultural applications require a heavier duty belt. These high-performance, high-value elevator belts allows for 7 - 10" bucket projections.



Style	Description	Tension Rating lbs. / P.I.W (per in. width)	Nominal Thickness Inches	Nominal Weight lbs. / PIW	Minimum Pulley Diameter Inches	Maximum Bucket Projection
PVC 150	Black, Cover Both Sides	150	0.185	.0100	2.5	5
PVC200	Black, Cover Both Sides	200	0.230	0.140	4	6
PVC250	Black, Cover Both Sides	250	0.250	0.150	6	7
PVC300	Black, Cover Both Sides	300	0.280	0.150	8	7
PVC350	Black, Cover Both Sides	350	0.300	0.160	8	8
PVC450	Black, Cover Both Sides	450	0.350	0.180	10	9
PVC650	Black, Cover Both Sides	650	0.380	0.200	14	9
PVC750	Black, Cover Both Sides	750	0.400	0.210	18	10