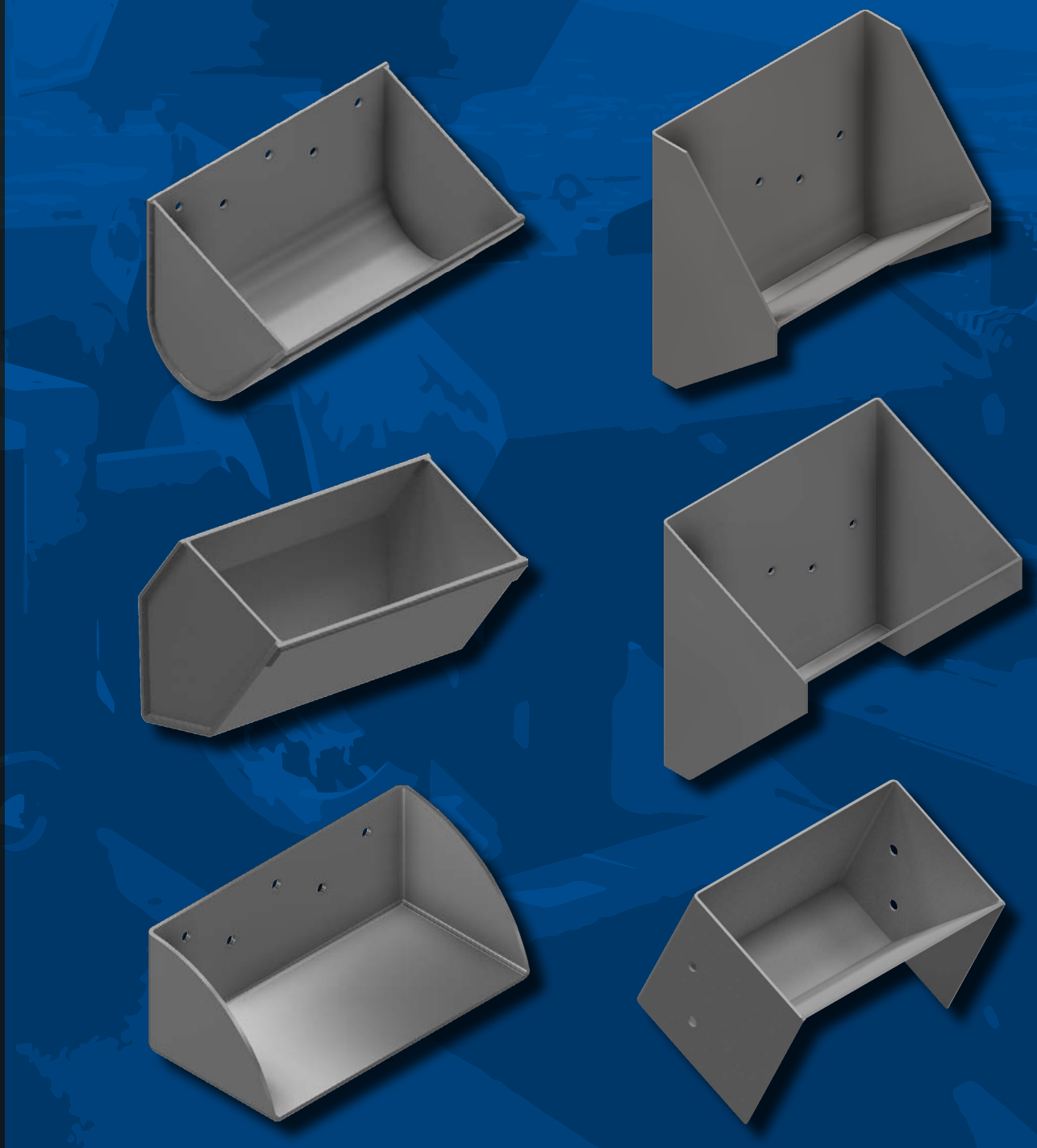
Martin

BUCKET OFFERINGS

- Centrifugal – AA, AC, C
- Continuous – MF, HF, SC
- Steel, Stainless Steel, AR Plate and Molded Plastic



Buckets

For more than 50 years, Martin has specialized in Bucket Elevators and other material handling solutions

Martin builds replacement buckets for existing Bucket Elevator equipment:

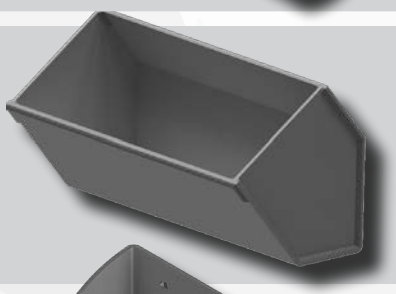
- **Standard buckets:**
  - » Direct from our catalog
  - » Built to industry standards for a precise fit
- **Custom or specialty buckets built to exact specification:**
  - » Our knowledgeable sales engineers and specialists will assist you in finding the best custom solution for your specific application and help you navigate the many factors that may affect your final design and cost.
- **Reverse Engineered:**
  - » Send us your bucket, our team of engineers, designers, and manufacturing experts will reverse engineer and build an exact duplicate for your application

Whether you have a Centrifugal Elevator, Continuous Elevator, Super Capacity Elevator, or a High Speed Grain Elevator, we can provide the right bucket, at the right price, right when you need it.

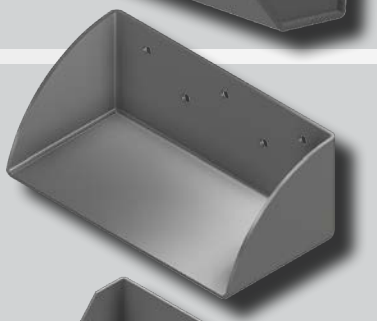
Centrifugal

AA Style

AC Style

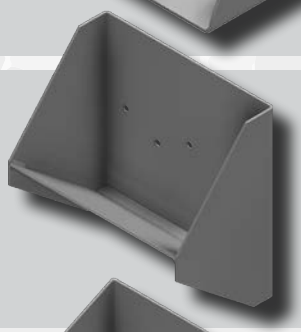


C Style

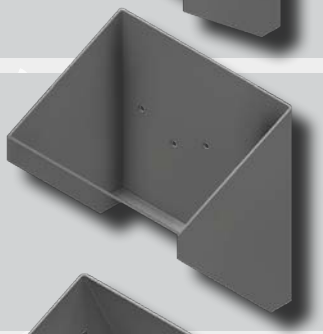


Continuous

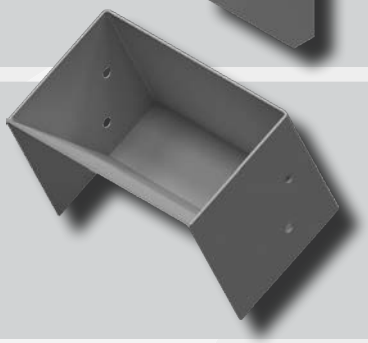
MF Style



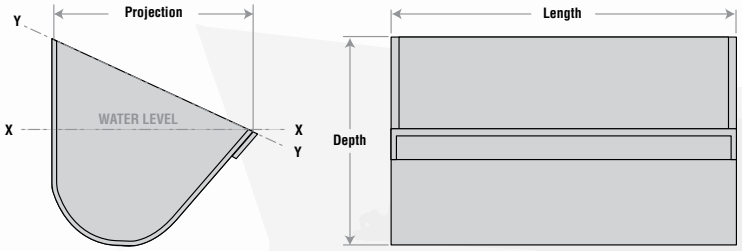
HF Style



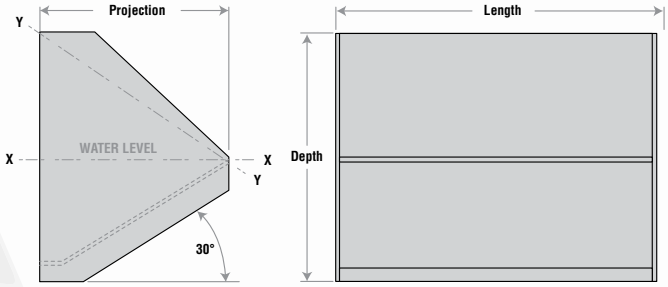
SC Style



CENTRIFUGAL STYLE



CONTINUOUS STYLE



AA	–	8	5	5	–	10	–	B6	–	
Type		Length	Projection	Depth		Thickness		Punching		Material

Bucket Nomenclature definitions:

Bucket Type

Centrifugal – **AA, AC, C**

Continuous – **MF**, **HF**, **SC**

Dimensions – Whole numbers only, rounded down. Examples:

5.5" would be **5**

7 5/8" would be **7**

Thickness – Only for metal buckets. Do not call out thickness on plastic buckets.

Sheet metal gauge – **16**, **14**, **12**, **10**

Sheet metal plate

3/16" = **7**

1/4" = **3**

> 1/4" = thickness x 64 (Ex. 3/8 = **24**)

Punching

Belt Punching* – **B1**, **B3**, **B4**, **B5**, **B6**, **B7**, **B8**

Chain Punching – Chain and attachment (ex. ER110K2)

** See Bucket Punching on page 10*

Material – Carbon steel is the default. You do not have to designate carbon steel.

Material other than carbon steel:

SS = 304 Stainless

S6 = 316 Stainless

NY = Nylon

UR = Urethane

Poly = Polyurethane

DI = Ductile Iron

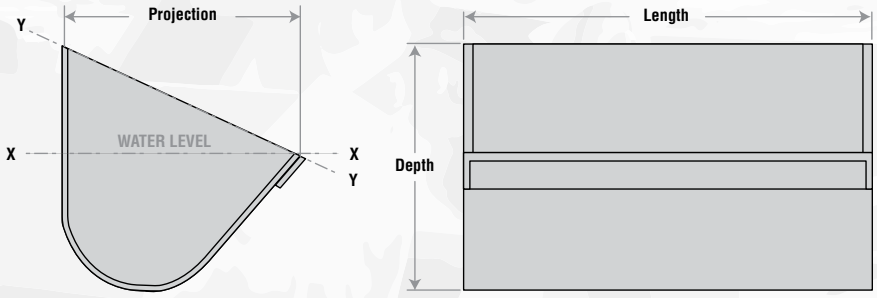
Style AA

What is the Martin AA Bucket?

Centrifugal

AA Style Buckets are centrifugal style generally used for dry, moderately free-flowing material that is not easily damaged. The smooth, curved bottom and angled front face of the AA Style Bucket provides efficient product discharge. AA Buckets typically do some "digging" during operation and therefore have a reinforced front edge for longer life. AA Buckets often mount to a reinforced multi-ply elevator belt but may also mount to chain.

Some common materials of construction are mild steel, stainless steel, AR plate and molded plastic models.



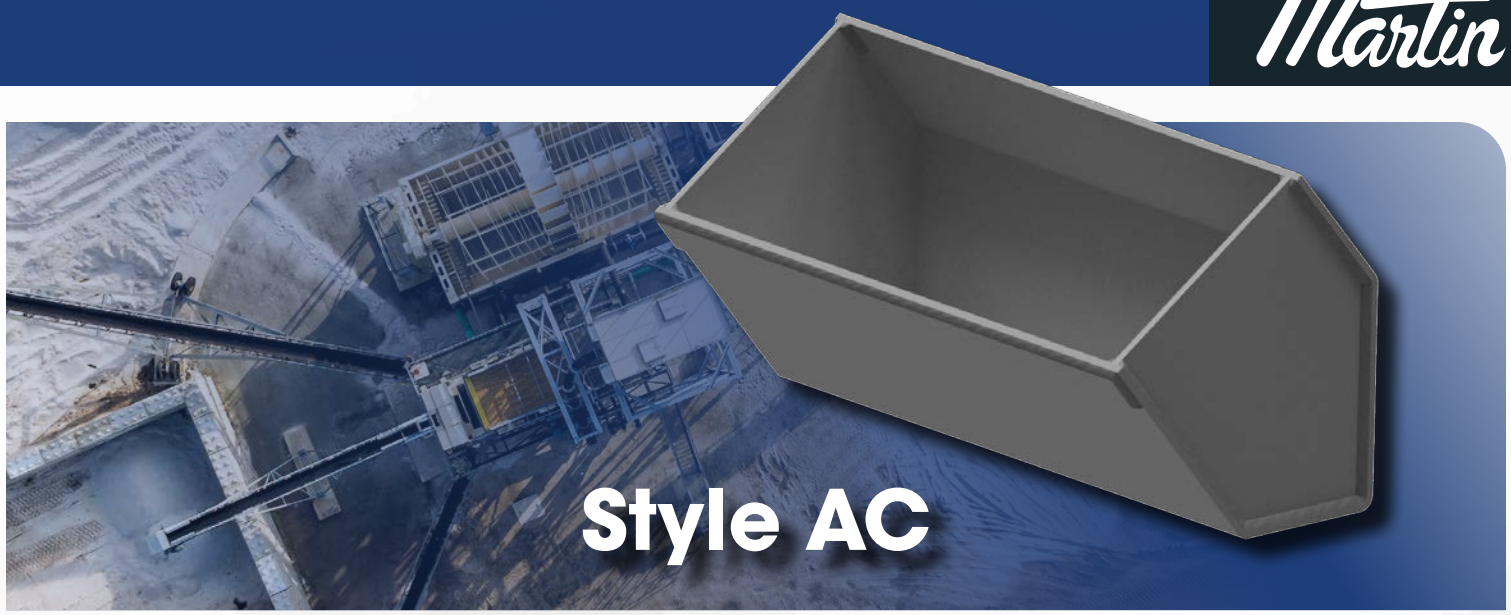
Typical Applications*:

- Sand
- Rock
- Aggregate
- Stone
- Fertilizer
- Clay
- Salt
- Coal
- Other Similar Granular Material

** AA Buckets are not continuous buckets.*

STANDARD BUCKET SIZE **	LENGTH (In)	PROJECTION (In)	DEPTH (In)	X-X (WATER LEVEL) CAPACITY ft³	Y-Y (100% FILL) CAPACITY ft³	EMPTY WT.* (lb)		
						10GA	3/16"	1/4"
4 X 3	4	2 3/4	3	.006	.01	1.50	1.95	-
6 X 4	6	4	4 1/4	.02	.03	3.02	3.96	5.27
8 X 5	8	5	5 1/2	.04	.07	5.33	7.06	9.39
10 X 6	10	6	6 1/4	.07	.12	7.37	9.79	13.02
12 X 7	12	7	7 1/4	.12	.19	10.42	13.93	18.53
14 X 8	14	8	8 1/2	.20	.32	13.90	18.64	24.80
16 X 7	16	7	7 1/4	.16	.26	13.03	17.47	23.24
16 X 8	16	8	8 1/2	.23	.34	15.41	20.67	27.49
18 X 8	18	8	8 1/2	.26	.40	16.92	22.70	30.19
18 X 10	18	10	10 1/2	.33	.63	21.48	28.88	38.41
20 X 10	20	10	10 1/2	.45	.70	22.19	30.35	40.20
24 X 10	24	10	10 1/2	.54	.84	25.67	35.10	46.52

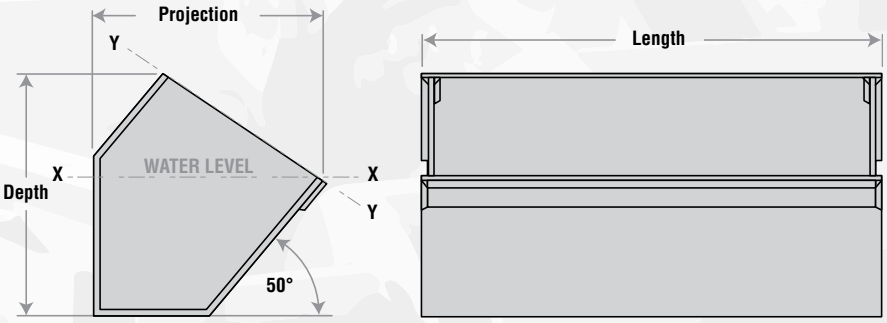
** Contact Martin for sizes not listed
* Estimated weight based on welded steel.
Price is affected by material type and thickness.



Style AC

Centrifugal

What is the Martin AC Bucket?



AC or Added Capacity style buckets are centrifugal style used for dry, free flowing to moderately free flowing, material that is not easily damaged. AC style elevator buckets have a high front for increased capacity. The angled front face and hooded back allows for closer mounting. Optional vent holes can help efficiently fill and discharge material. AC buckets may perform some "digging" of product in the elevator boot during operation. They can mount to a reinforced multi-ply elevator belt, or to a chain

Some common materials of construction are mild steel, stainless steel and AR plate.

Typical Applications*:

- Asphalt
- Aggregate
- Ore
- Shale
- Cement
- Clinker
- Coal
- Other Similar

Material

** AC Buckets are not continuous buckets.*

STANDARD BUCKET SIZE **	LENGTH (In)	PROJECTION (In)	DEPTH (In)	X-X (WATER LEVEL) CAPACITY ft³	Y-Y (100% FILL) CAPACITY ft³	EMPTY WT.* (lb)	
						10GA	3/16"
12 X 8 X 8	12	8	8 1/2	.231	.303	18.25	24.30
14 X 8 X 8	14	8	8 1/2	.271	.356	20.30	27.00
16 X 8 X 8	16	8	8 1/2	.311	.408	22.48	29.98
18 X 10 X 10	18	10	10 1/2	.488	.691	31.15	38.95
20 X 10 X 10	20	10	10 1/2	.542	.768	33.68	42.10
24 X 10 X 10	24	10	10 1/2	.651	.921	39.67	52.69
27 X 12 X 12	27	12	12 1/2	1.072	1.474	53.84	71.46

** Contact Martin for sizes not listed
* Estimated weight based on welded steel. Reinforcement plates are recommended when less than eight mounting bolts are used. Price is affected by material type and thickness.

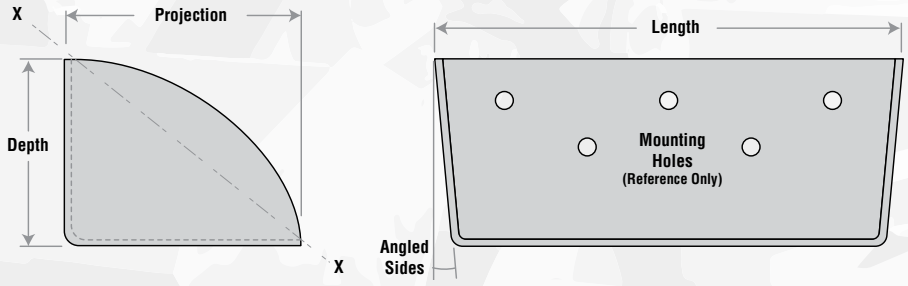
What is the Martin C Bucket?

Centrifugal

C Style Elevator Buckets are a centrifugal style bucket. They typically handle wet or sticky products, finely pulverized material, or products that easily pack. The open front face and angled sides allow the discharge of materials trapped by other bucket designs. C Style Buckets are low profile, permitting more buckets per foot than some other styles.

C Style buckets commonly mount on a multi-ply elevator belt.

Some common materials of construction are mild steel, stainless steel and AR plate



Typical Applications*:

- Sugar
- Salt
- Clay
- Powders
- Chemicals
- Similar Products

** C Buckets are not continuous buckets.*

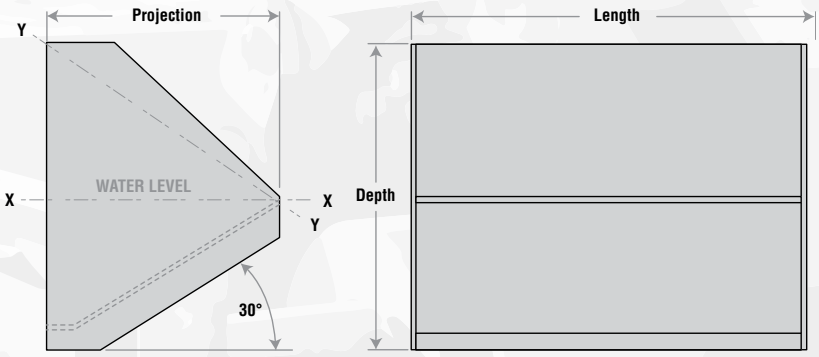
STANDARD BUCKET SIZE **	LENGTH (In)	PROJECTION (In)	DEPTH (in)	X-X (WATER LEVEL) CAPACITY ft³	EMPTY WT.* (lb)		
					12GA	10GA	3/16"
6 X 4 X 4	6	4 1/2	4	.026	2.00	2.59	3.50
8 X 4 X 4	8	4 1/2	4	.035	2.53	3.21	4.36
10 X 5 X 4	10	5	4	.052	3.23	4.10	5.58
12 X 5 X 4	12	5	4	.061	3.75	4.77	6.50
14 X 7 X 5	14	7	5 1/2	.138	6.34	8.08	11.09
16 X 7 X 5	16	7	5 1/2	.158	7.08	10.50	14.40

** Contact Martin for sizes not listed
* Estimated weight based on welded steel.
Price is affected by material type and thickness.

Style MF

Continuous

What is the Martin MF Bucket?



MF Style Elevator Buckets are continuous style with a medium front for slow speed product discharge. They gently handle dry, fragile, powdery, dusty, or abrasive materials. The angled face aids in product discharge and extended side panel bottom edges create a chute to direct product pouring from the previous bucket into the discharge. Optional vent holes can help provide maximum fill and product discharge. MF Buckets are not designed to "dig" through material in the elevator boot (bottom) during operation. MF style buckets can mount to a reinforced multi-ply elevator belt, or to a chain.

Some common materials of construction are mild steel, stainless steel, AR plate and molded plastic models.

Typical Applications*:

- Gypsum
- Cement
- Pellets
- Grain
- Salt
- Sand
- Aggregate
- Fertilizer
- Other Similar Granular Material

** MF Buckets are not centrifugal buckets.*

STANDARD BUCKET SIZE **	LENGTH (In)	PROJECTION (In)	DEPTH (In)	X-X (WATER LEVEL) CAPACITY ft³	Y-Y (100% FILL) CAPACITY ft³	EMPTY WT.* (lb)		
						10GA	3/16"	1/4"
8 X 5 X 7	8	5	7 3/4	.04	.07	6.30	8.70	-
10 X 5 X 7	10	5	7 3/4	.05	.09	7.40	10.20	-
10 X 7 X 11	10	7	11 5/8	.103	.180	11.90	16.50	-
12 X 7 X 11	12	7	11 5/8	.125	.218	13.40	18.60	24.80
12 X 8 X 11	12	8	11 5/8	.163	.275	14.40	20.00	26.10
14 X 7 X 11	14	7	11 5/8	.145	.253	14.90	20.70	27.60
14 X 8 X 11	14	8	11 5/8	.190	.325	16.00	22.20	29.10
16 X 8 X 11	16	8	11 5/8	.220	.375	17.60	24.50	32.00
18 X 8 X 11	18	8	11 5/8	.250	.420	19.20	26.70	35.00
20 X 8 X 11	20	8	11 5/8	.270	.470	20.80	29.00	38.00
24 X 10 X 11	24	10	11 5/8	.512	.850	27.40	38.20	50.00

** Contact Martin for sizes not listed
* Estimated weight based on welded steel.
Price is affected by material type and thickness.

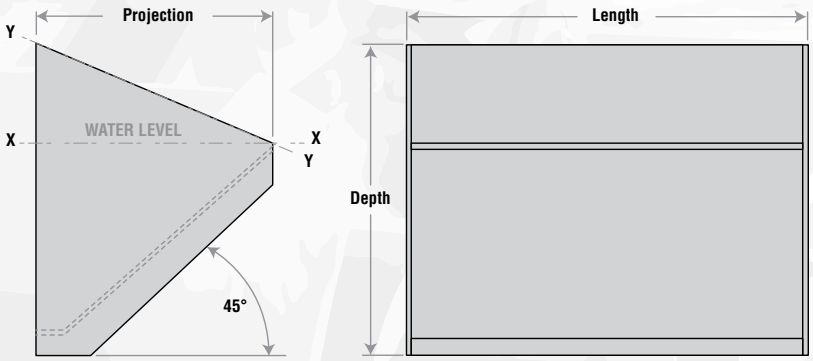
Style HF

What is the Martin HF Bucket?

Continuous

HF Style Elevator Buckets are continuous style with a high front place for greater capacity. Designed for slow speed product discharge, they gently handle dry, fragile, powdery, dusty, or abrasive materials. The angled front face aids in product discharge and extended side panel bottom edges create a chute to direct product pouring from the previous bucket into the discharge. Optional vent holes can provide maximum fill and product discharge. HF buckets do not "dig" material in the elevator boot (bottom) during operation. HF style buckets mount to a reinforced multi-ply elevator belt, or chain.

Some common materials of construction are mild steel, stainless steel and AR plate.



Typical Applications*:

- Gypsum
- Cement
- Pellets
- Grain
- Salt
- Sand
- Aggregate
- Fertilizer
- Other Similar Granular Material

** HF Buckets are not centrifugal buckets.*

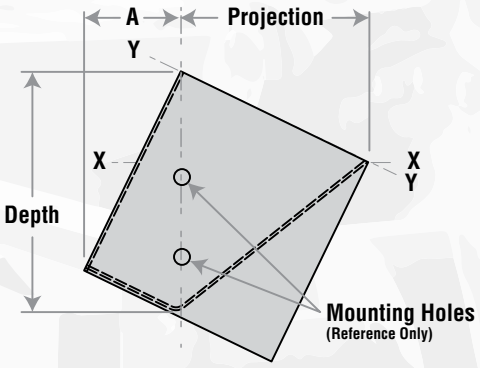
STANDARD BUCKET SIZE **	LENGTH (In)	PROJECTION (In)	DEPTH (In)	X-X (WATER LEVEL) CAPACITY ft³	Y-Y (100% FILL) CAPACITY ft³	EMPTY WT.* (lb)		
						10GA	3/16"	1/4"
8 X 5 X 7	8	5	7 3/4	.05	.08	6.20	8.50	-
10 X 5 X 7	10	5	7 3/4	.065	.100	7.30	10.00	-
10 X 7 X 11	10	7	11 5/8	.130	.190	11.60	16.00	20.90
12 X 7 X 11	12	7	11 5/8	.155	.240	13.20	18.20	23.90
12 X 8 X 11	12	8	11 5/8	.205	.295	14.30	20.00	26.00
14 X 7 X 11	14	7	11 5/8	.184	.280	14.80	20.40	26.70
14 X 8 X 11	14	8	11 5/8	.240	.350	16.00	22.40	28.10
16 X 8 X 11	16	8	11 5/8	.275	.395	17.70	24.70	32.20
18 X 8 X 11	18	8	11 5/8	.300	.447	20.51	28.44	37.67

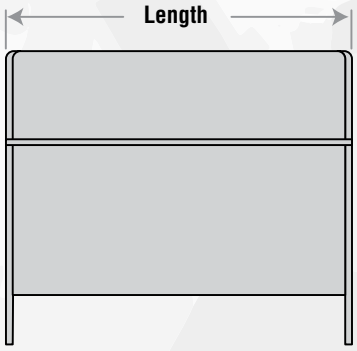
** Contact Martin for sizes not listed
* Estimated weight based on welded steel.
Price is affected by material type and thickness.

Style SC

Continuous

What is the Martin SC Bucket?





SC style elevator buckets are continuous style for use with Super Capacity Elevators and have increased capacity. They are designed for slow speed product discharge and very heavy materials. The angled front face aids in product discharge and extended side panels create a chute to direct product pouring from the previous bucket into the discharge. Optional vent holes can help provide maximum fill and product discharge. SC buckets do not "dig" material in the elevator boot during operation. SC style buckets mount between two strands of elevator chain.

Typical Applications*:

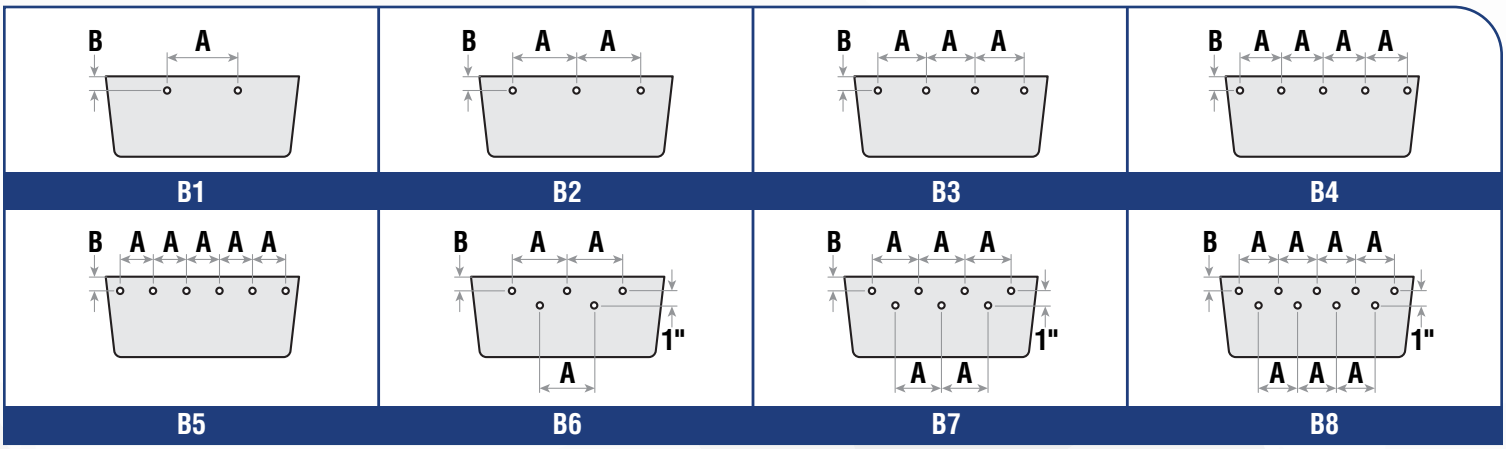
- Gypsum
- Cement
- Sand
- Fertilizers
- Clay
- Salt
- Coal
- Rocks
- Other Similar Material

** SC Buckets are not Centrifugal buckets.*

STANDARD BUCKET SIZE **	LENGTH (In)	PROJECTION (In)	A (In)	DEPTH	X-X (WATER LEVEL) CAPACITY ft³	Y-Y (100% FILL) CAPACITY ft³	EMPTY WT.* (lb)		
							10GA	3/16"	1/4"
12 X 8 X 11	12	8 3/4	4 9/16	11 5/8	.35	.54	22.00	29.00	39.00
14 X 8 X 11	14	8 3/4	4 9/16	11 5/8	.41	.63	23.00	31.00	41.00
16 X 8 X 11	16	8 3/4	4 9/16	11 5/8	.46	.72	25.00	34.00	45.00
16 X 12 X 17	16	12	6 1/2	17 5/8	1.11	1.55	43.00	58.00	76.00
18 X 8 X 11	18	8 3/4	4 9/16	11 5/8	.52	.81	27.00	36.00	48.00
20 X 8 X 11	20	8 3/4	4 9/16	11 5/8	.58	.90	29.00	39.00	52.00
20 X 12 X 17	20	12	4 9/16	17 5/8	1.40	1.94	49.00	67.00	88.00
24 X 12 X 17	24	12	4 9/16	17 5/8	1.68	2.33	55.00	75.00	104.00
30 X 12 X 17	30	12	6 1/2	17 5/8	2.11	2.91	65.00	88.00	117.00
36 X 12 X 17	36	12	6 1/2	17 5/8	2.53	3.49	73.00	99.00	132.00

** Contact Martin for sizes not listed
* Estimated weight based on welded steel.
Price is affected by material type and thickness.

Bucket Punching for Belt Mounting



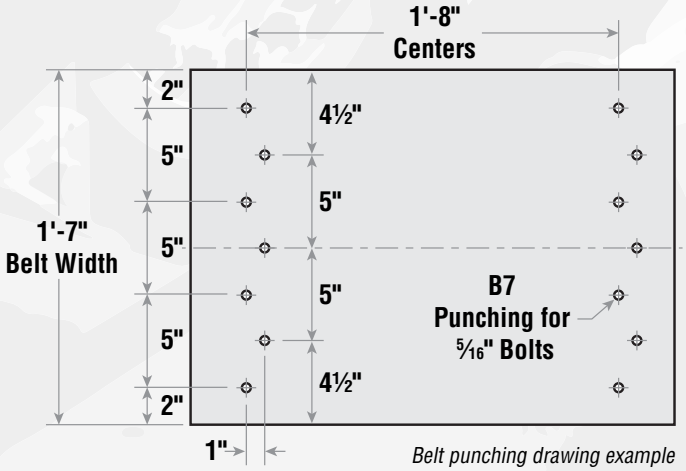
Centrifugal Bucket Belt Punching Patterns

Bucket Size	Style AA & C			
	Punch	A (In)	B (In)	** BOLTS
4 X 3	B1	2 5/16	1	1/4
6 X 4	B1	4 3/8	1	1/4
8 X 4	B6	3	1	1/4
8 X 5	B6	3	1	1/4
10 X 5	B6	3 1/2	1	5/16
10 X 6	B6	3 1/2	1	5/16
12 X 5	B6	4 1/2	1	5/16
12 X 7	B6	4 1/2	1	5/16
14 X 7	B7	4	1	5/16
14 X 8	B7	4	1	5/16
16 X 7	B7	4 1/2	1	5/16
16 X 8	B7	4 1/2	1	5/16
18 X 8	B7	5	1	5/16
20 X 10	B8	4	1	5/16
24 X 10	B8	5	1	5/16

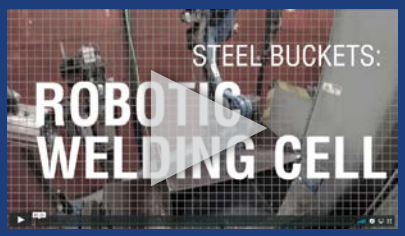
Continuous Bucket Belt Punching Patterns

Bucket Size	Style LF and MF			
	Punch	A (In)	B (In)	** BOLTS
8 X 5 X 7	B6	3	3 3/8	1/4
8 X 5 X 8	B6	3	3 3/4	1/4
10 X 5 X 7	B6	3 1/2	3 3/8	5/16
10 X 7 X 11	B6	3 1/2	5 5/16	5/16
12 X 7 X 11	B6	4 1/2	5 5/16	5/16
12 X 8 X 11	B6	4 1/2	5 5/16	5/16
14 X 7 X 11	B7	4	5 5/16	5/16
14 X 8 X 11	B7	4	5 5/16	5/16
16 X 8 X 11	B7	4 1/2	5 5/16	5/16
18 X 8 X 11	B7	5	5 5/16	5/16
20 X 8 X 11	B8	4	5 5/16	5/16
24 X 10 X 11	B8	5	5 5/16	5/16

* For bucket sizes or punching patterns not listed, contact Martin.
* For belt punching drawings call out pattern and bolt size.
** Bolt clearance hole diameter on metal fabricated buckets to be 1/16" larger than bolt size.



Belt punching drawing example

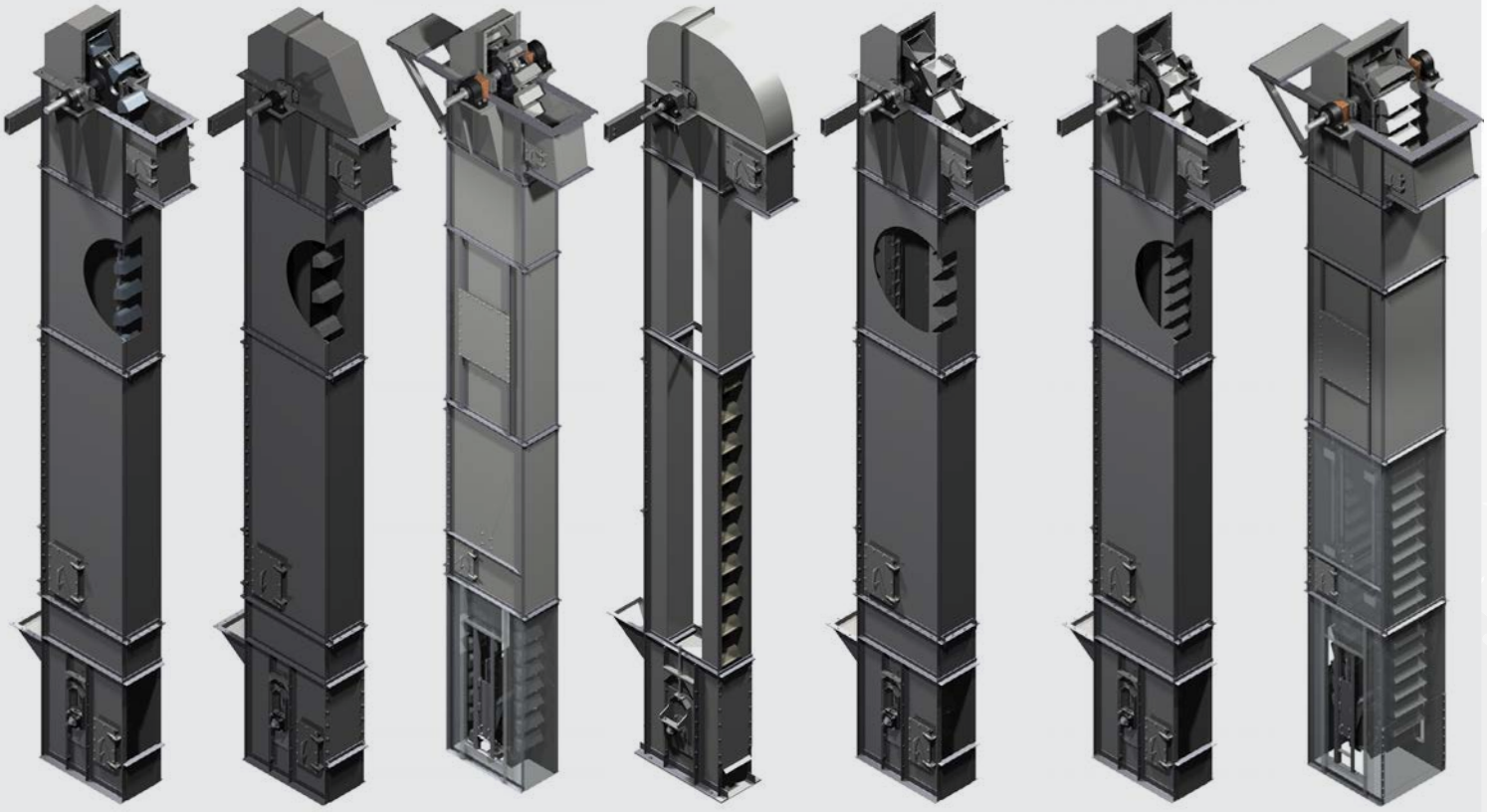


Watch Robot Welding Cell Video
scan QR code or visit: http://bit.ly/RoboWeld

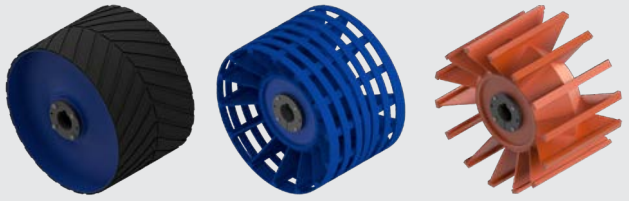
Complete Offering for your Bucket Elevator Needs

COMPLETE BUCKET ELEVATORS

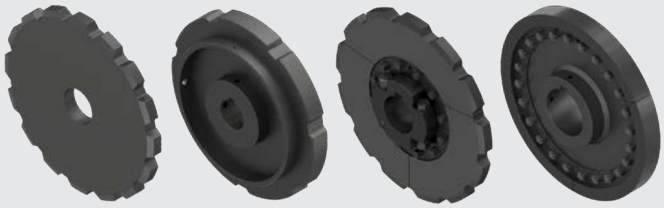
CENTRIFUGAL DISCHARGE				CONTINUOUS DISCHARGE		
STANDARD		AC STYLE	HIGH-SPEED GRAIN	STANDARD		SUPER CAPACITY
CHAIN	BELT	BELT/CHAIN	BELT	CHAIN	BELT	CHAIN



COMPONENTS & ACCESSORIES

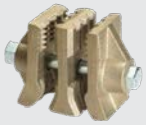


CONVEYOR PULLEYS



ENGINEERED CLASS SPROCKETS & TRACTION WHEELS

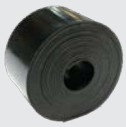
ELEVATOR BOLTS



ELEVATOR BELT SPLICE KITS

ASSEMBLY HARDWARE

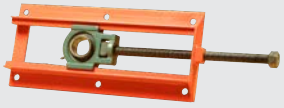
CUSTOM SHAFTING



ELEVATOR BELTING

SHAFT SEALS

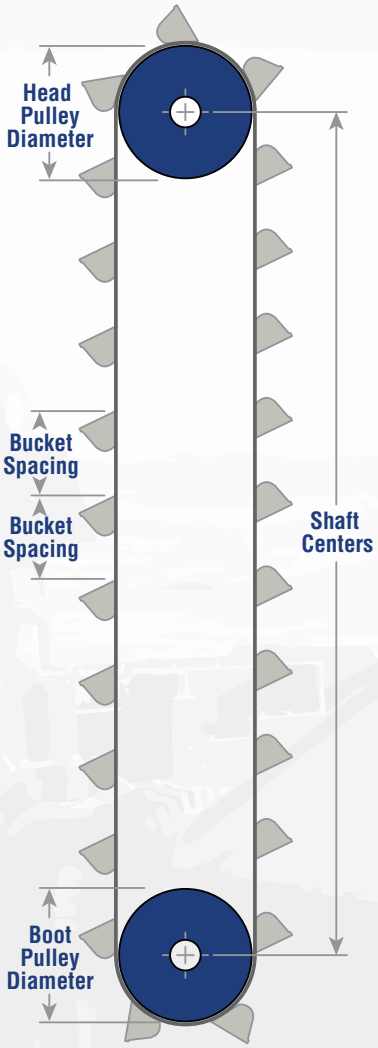
SHAFT BEARINGS



TAKE-UP FRAMES

Calculations & Required Information

How many Buckets do you need?



a) Calculate estimated **Vertical Length** using **Shaft Centers** distance.

Vertical Length = **Shaft Centers** x 2 = _____ in

b) Calculate estimated **Wrap** around pulleys/sprockets.

C_1 = **Head Pulley/Sprocket Diameter** x π = _____ in

C_2 = **Boot Pulley/Sprocket Diameter** x π = _____ in

Wrap = (C_1 + C_2) ÷ 2 = 0 in

c) Determine the **Total Loop** of the belt/chain (in inches):

_____ in + 0 in = 0 in

Vertical length | Wrap | Total Loop

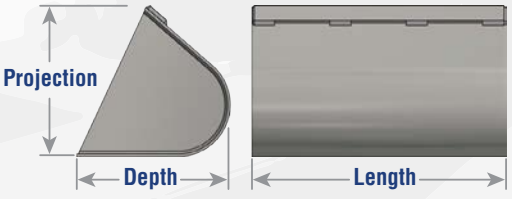
d) Divide the **Total Loop** of the belt/chain by the **Bucket Spacing**.

0 in ÷ _____ in = 0

Total Loop | Bucket Spacing | Buckets Needed

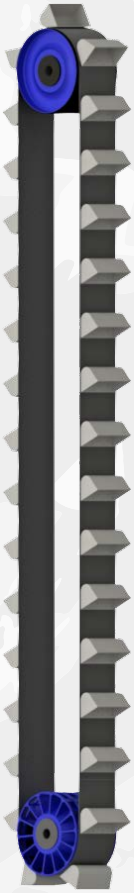
Request a Quote

CONVENIENT CONVERSIONS	
Cubic Inches to Cubic Feet	Divide By 1,728
Cubic Inches to Bushels	Divide By 2,150
Cubic Inches to Cubic Meters	Divide By 61,023.74
Pounds to Short Tons	Divide By 2,000
Pounds to Metric Tons	Divide By 2,204.62
π = 3.1416	



How to Measure a Bucket

See the specific **Bucket Style** page for bucket capacity. Lay the bucket on its back for easy measuring.



Martin Sales and Engineering will work with you to completely solve your power transmission and material handling needs. Since there are infinite amounts of possibilities and configurations our sales and engineering staff are prepared to assist you with a custom solution.

Call Martin, we will be happy to assist you!

Free Download Maintenance and Troubleshooting Guide

Scan to download

USA

Corporate Offices Sales & Manufacturing
Arlington, TX
817-258-3000 (FAX 817-258-3333)

Regional Manufacturing Plants
Albemarle, NC
704-982-9555 (FAX 704-982-9599)
Atlanta, GA
404-292-8744 (FAX 404-292-7771)
Burleson, TX
817-295-7151 (FAX 817-447-3840)
Danielsville, PA
610-837-1841 (FAX 610-837-7337)
Ft. Worth, TX
817-258-3000 (FAX 817-258-3173)
Montpelier, OH
419-485-5515 (FAX 419-485-3565)
Sacramento, CA
916-441-7172 (FAX 916-441-4600)

Branch Manufacturing Plants
Charlotte, NC
704-394-9111 (FAX 704-394-9122)
Chicago, IL
847-298-8844 (FAX 847-298-2967)
Denver, CO
303-371-8466 (FAX 303-371-7116)
Houston, TX
713-849-4330 (FAX 713-841-4807)
Kansas City, MO
816-231-5575 (FAX 816-231-1959)
Los Angeles, CA
323-728-8117 (FAX 323-722-7526)
Minneapolis, MN
952-829-0623 (FAX 952-944-9385)
Nashville, TN
615-871-4730 (FAX 615-871-4125)
Portland, OR
503-223-7261 (FAX 503-221-0203)
Tampa, FL
813-623-1705 (FAX 813-626-8953)

Manufacturing Only
Abilene, TX • Clarksville, TX
Dallas, TX • Mansfield, TX
Paragould, AR

CANADA
Cambridge, Ontario
519-621-0546 (FAX 519-621-4413)
Edmonton, Alberta
780-450-0888 (FAX 780-465-0079)
Mississauga, Ontario
905-670-1991 (FAX 905-670-2110)

MEXICO
Guadalajara, JAL
+52 33-3283-1188
(FAX +52 33-3271-8450)
Monterrey, N.L.
+52 811 156 6830
(FAX +52 81-1156-6833)
Toluca, MEX
+52 722 276 0800
(FAX +52 722-276-0801)

BRAZIL
São Paulo, SP
+55 19 3877 9400
(FAX +55 19-3877-9429)

martinsprocket.com