



BUCKET  
ELEVATORS



TOMORROW'S PROCESSES, **TODAY.**

[FEECO.com](http://FEECO.com)

SINCE 1951



# ABOUT

Since 1951, FEECO has been designing and supplying custom [bulk material handling systems](#) for industries around the world. Whether you're looking for a single piece of equipment, or a complete system, we can offer you a customized solution tailored to your unique handling needs.

## RUGGED, YET REFINED

You can rest assured when you purchase FEECO equipment, you're getting a system that was built with longevity in mind. Our engineers work closely with our in-house fabricators to ensure everything is crafted just right. Our bucket elevators are built to provide reliable and efficient handling, despite challenging process conditions.

## CUSTOM SOLUTIONS

What sets FEECO apart from our competitors is not just the quality of craftsmanship, but the level of customization we offer. We look at our customers' unique needs, from facility layout, to material characteristics and process goals, in order to design a system that operates at optimal efficiency, and accomplishes exactly what the customer is looking for. Our familiarity with hundreds of materials allows us to provide you with the best handling solution possible.

## WHO WE WORK WITH

Many of the world's most notable companies, across nearly all industries, rely on FEECO for innovative solutions in process design, engineering, and manufacturing, including:



## INDUSTRIES WE SERVE

- Chemical
- Fertilizer & Granulation
- Mining & Minerals
- Power Generation
- Forest Products
- Waste Transformation

## COMMONLY PROCESSED MATERIALS

- Aggregates
- Animal Feeds
- Calcined Coke
- Coal
- Fertilizer
- Fly Ash
- Frac Sand
- Lime
- Minerals
- Potash
- Woodchips
- Sulfur

Frac sand unloading/  
transfer bucket elevator





# BUCKET STYLES

FEECO [bucket elevators](#) are available in a variety of configurations and sizes, as shown here. These various designs can accommodate any handling job, from dry, dusty powders like fly ash, to heavy, abrasive materials, such as iron ore pellets.

Not sure which elevator is right for you? FEECO has decades of experience designing custom bucket elevators and complete material handling systems. We can guide you through the bucket elevator selection process with ease, helping you to choose the right bucket elevator for your precise handling needs.

All FEECO bucket elevators are designed around the unique characteristics of the material to be handled.

### FEATURES

- Removable top covers
- Access doors for easy maintenance
- Horizontally and vertically heavy-reinforced, jig-welded head, boot, and intermediate sections
- Adjustable throat plate at discharge
- Inspection doors on both sides of discharge
- Service platforms and access ladders available

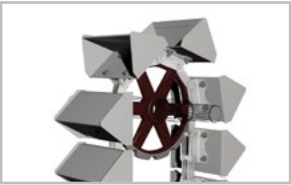
For a labeled diagram of components, visit [FEECO.com/bucket-elevators/](https://FEECO.com/bucket-elevators/)



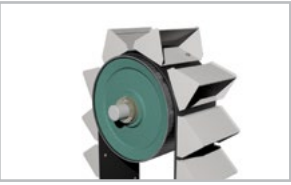
## CONTINUOUS ELEVATORS

Continuous bucket elevators are primarily used when gentle handling is required. Direct loading of the material, combined with the slow speed of this elevator type avoids the “throwing” action associated with centrifugal-style elevators, making it ideal for use with fragile materials, or materials that are light and/or prone to aeration.

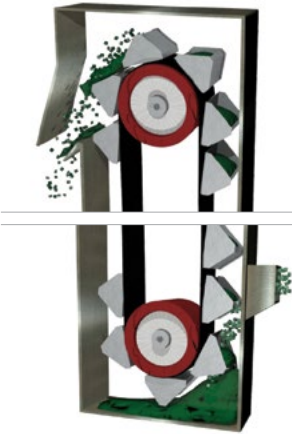
Material is fed into buckets from an inlet chute. Buckets are designed to facilitate a gentle discharge; material pours out of the bucket and slides down the inverted bucket ahead into the discharge chute.



CONTINUOUS  
CHAIN



CONTINUOUS  
BELT



*\*Continuous double chain models are also available for increased capacity needs.*

## CENTRIFUGAL ELEVATORS

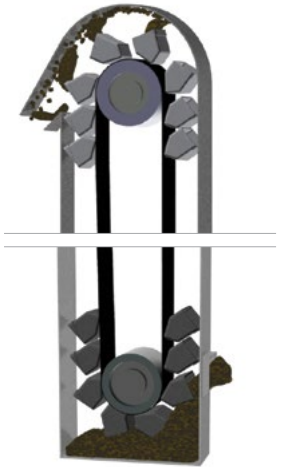
Centrifugal bucket elevators are chosen when there is a need to move large amounts of material quickly. This elevator type can yield material degradation, and is therefore best fit for handling durable and abrasive materials like sand, gravel, woodchips, and other free-flowing bulk solids where fragility is not a concern. Instead of direct loading, buckets serve as the loading apparatus, scooping material up from the boot or inlet section. For this reason, durable buckets should be selected with this design. Centrifugal force at the head pulley “throws” material from the buckets into the discharge chute. The design of this style yields optimized material fill and reduced interference between buckets.



CENTRIFUGAL  
CHAIN



CONTINUOUS  
BELT



With both continuous and centrifugal elevator types, the choice between belt or chain is based on many factors. Belt elevators are a lower capital cost, but not always a fit for the application. Chain-type elevators are more suited to heavy-duty, high-capacity settings, or where the material being handled is hot or has a potential for combustion. FEECO can work with you to determine which selection is a better fit for your specific application.

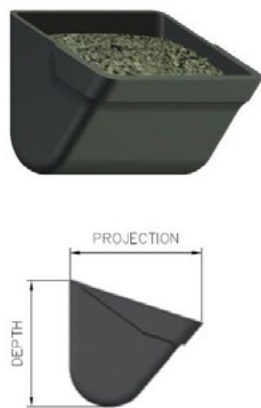
# BUCKET STYLES

FEECO offers a selection of bucket styles for both centrifugal and continuous bucket elevators to accommodate the varying demands of different applications and materials.

## CENTRIFUGAL BUCKET STYLES

Centrifugal bucket styles are designed to be robust and withstand the digging and scooping action of a centrifugal elevator. Both styles feature a reinforced lip around the leading edge to prevent distortion while scooping abrasive or heavily packed materials. Both styles can be configured in side-by-side or staggered alignment to increase handling capacities.

### STYLE AA

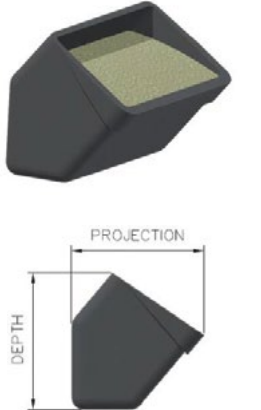


BUCKET SIZE			WT. (lbs.)	CAPACITY/CU. FT.	
LENGTH (inches)	PROJECTION (inches)	DEPTH (inches)		STRUCK CAPACITY	WATER LEVEL CAPACITY
6	4	4 1/4	2.7	0.03	0.018
8	5	5 1/2	4.8	0.07	0.042
10	6	6 1/4	7.7	0.12	0.072
12	7	7 1/4	12.0	0.19	0.114
14	7	7 1/4	13.9	0.23	0.138
14	8	8 1/2	21.8	0.32	0.204
16	7	7 1/4	23.24	0.265	0.165
16	8	8 1/2	27.49	0.362	0.231
18	8	8 1/2	30.19	0.407	0.260

#### Materials of Construction

- Ductile Iron
- Fabricated Carbon Steel
- Stainless Steel
- Aluminum
- Various Plastics

### STYLE AC



BUCKET SIZE			WT. (lbs.)	CAPACITY/CU. FT.	
LENGTH (inches)	PROJECTION (inches)	DEPTH (inches)		STRUCK CAPACITY	WATER LEVEL CAPACITY
12	8	8 1/2	24.3	0.30	0.23
14	8	8 1/2	27.0	0.35	0.27
16	8	8 1/2	30.0	0.41	0.31
18	10	10 1/2	39.0	0.70	0.49
20	10	10 1/2	42.1	0.77	0.54
24	10	10 1/2	52.69	0.92	0.65

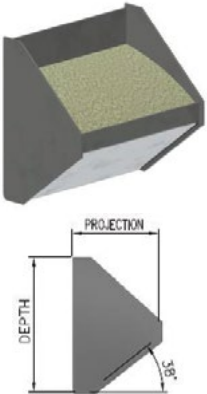
#### Materials of Construction

- Ductile Iron
- Fabricated Carbon Steel
- Stainless Steel
- Aluminum
- Nylon

## CONTINUOUS BUCKET STYLES

Continuous bucket styles are designed to reduce material degradation during handling. Buckets act as part of the discharge chute to provide a smoother, more continuous discharge. All styles are available for both belt- and chain-type elevators. Optional vent/drain holes are also available.

### MEDIUM-FRONT

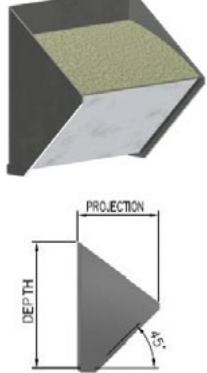


BUCKET SIZE			WT. (lbs.)				CAPACITY/CU. FT.	
LENGTH (inches)	PROJECTION (inches)	DEPTH (inches)	12 Ga.	10 Ga.	3/16"	1/4"	STRUCK CAPACITY	WATER LEVEL CAPACITY
8	5	7 3/4	5.1	6.3	8.7	-	0.070	0.040
10	5	7 3/4	5.9	7.4	10.2	-	0.090	0.050
10	7	11 3/4	9.3	11.9	16.5	-	0.180	0.103
12	7	11 3/4	10.4	13.4	18.6	-	0.218	0.125
12	8	11 3/4	11.2	14.4	20.0	26.1	0.275	0.163
14	7	11 3/4	11.6	14.9	20.7	-	0.253	0.145
14	8	11 3/4	12.4	16.0	22.2	29.1	0.325	0.190
16	8	11 3/4	13.7	17.6	24.5	32.0	0.375	0.220
18	8	11 3/4	14.9	19.2	26.7	35.0	0.420	0.250

#### Materials of Construction

- Fabricated Carbon Steel
- Stainless Steel
- Aluminum
- Various Plastics

### HIGH-FRONT

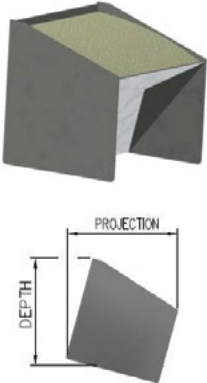


BUCKET SIZE			WT. (lbs.)				CAPACITY/CU. FT.	
LENGTH (inches)	PROJECTION (inches)	DEPTH (inches)	12 Ga.	10 Ga.	3/16"	1/4"	STRUCK CAPACITY	WATER LEVEL CAPACITY
8	5	7 3/4	4.9	6.2	8.5	-	0.080	0.052
10	5	7 3/4	5.7	7.3	10.0	-	0.100	0.065
10	7	11 5/8	9.1	11.6	16.0	20.9	0.190	0.130
12	7	11 5/8	10.3	13.2	18.2	23.9	0.240	0.155
12	8	11 5/8	11.3	14.3	20.0	26.0	0.295	0.205
14	7	11 5/8	11.5	14.8	20.4	26.7	0.280	0.184
14	8	11 5/8	12.6	16.0	22.4	28.1	0.350	0.240
16	8	11 5/8	13.9	17.7	24.7	32.2	0.395	0.275

#### Materials of Construction

- Fabricated Carbon Steel
- Stainless Steel
- Aluminum

### SUPER CAPACITY



BUCKET SIZE			WT. (lbs.)				CAPACITY/CU. FT.	
LENGTH (inches)	PROJECTION (inches)	DEPTH (inches)	10 Ga.	3/16"	1/4"	5/16"	STRUCK CAPACITY	WATER LEVEL CAPACITY
12	8 3/4	11 3/4	22	29	39	49	0.54	0.35
14	8 3/4	11 3/4	23	31	41	51	0.63	0.41
16	8 3/4	11 3/4	25	34	45	56	0.72	0.46
16	12	17 3/4	43	58	76	95	1.55	1.11
18	8 3/4	11 3/4	27	36	48	60	0.81	0.52
20	8 3/4	11 3/4	29	39	52	65	0.90	0.58
20	12	17 3/4	49	67	88	110	1.94	1.40
24	12	17 3/4	55	75	104	130	2.33	1.68
30	12	17 3/4	65	88	117	146	2.91	2.11
36	12	17 3/4	73	99	132	165	3.49	2.53

#### Materials of Construction

- Fabricated Carbon Steel
- Stainless Steel
- Aluminum





## ABOUT FEECO

FEECO International, Inc. was founded in 1951 as an engineering and equipment manufacturer. We are recognized globally as an expert in industry-leading process design, engineering capabilities (including everything from process development and sample generation, to feasibility studies and detailed plant engineering), custom equipment manufacturing, and parts and service. We serve a range of industries, including fertilizer and agriculture, mining and minerals, power/utility, paper, chemical processing, forest products, and more. As the leading manufacturer of processing and handling equipment in North America, no company in the world can move or enhance a concept from process development to production like FEECO International, Inc.

The choice to work with FEECO means a well-rounded commitment to quality. From initial feasibility testing, to engineering, manufacturing, and parts and service, we bring our passion for quality into everything we do.

FOR DETAILED PRODUCT INFORMATION & CAPABILITIES, **DOWNLOAD THE FEECO HANDBOOK** AT: [FEECO.com/FEECO-handbook/](https://www.feeco.com/FEECO-handbook/)