

thomas conveyor  
company®

## BUCKET ELEVATOR CAPABILITIES

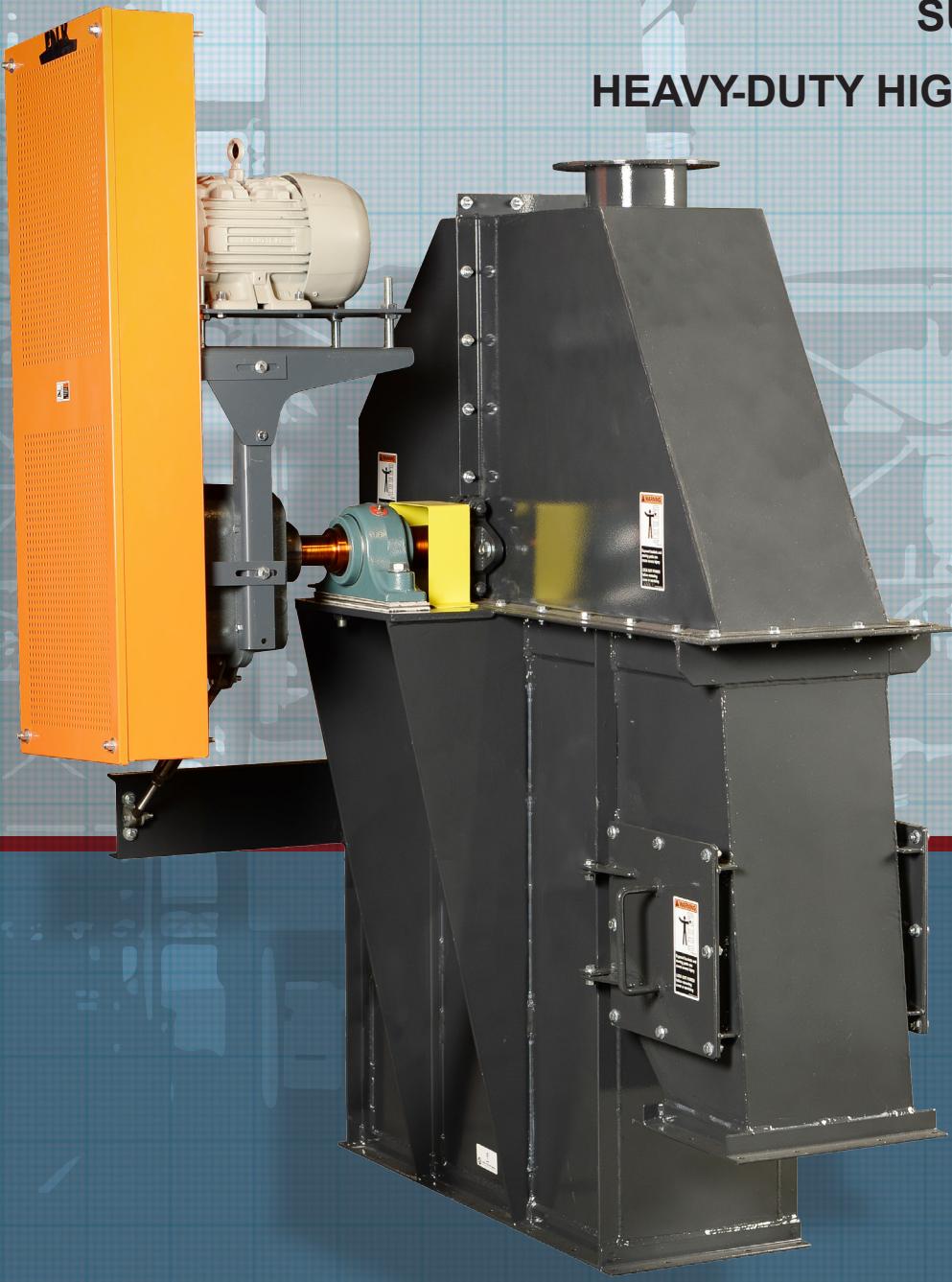
SINGLE, DOUBLE CHAIN AND BELT

CENTRIFUGAL AND CONTINUOUS DISCHARGES

MILL DUTY

SUPER CAPACITY

HEAVY-DUTY HIGH-SPEED GRAIN





## Bucket Elevators

**thomas** offers a complete line of material handling solutions available to the marketplace. Our conveyor products are designed to efficiently handle most varieties of dry, free-flowing bulk materials. Exacting design standards, manufacturing standards, and service second to none.

**thomas** offers a variety of configurations to efficiently handle most any material handling needs.

Continuous Bucket Elevators are designed to handle fragile materials to minimize product damage. They will lift all types of free flowing, sluggish or abrasive materials. The material is loaded into the buckets from a "feeder." It is lifted into the bucket and is discharged over the face of the preceding bucket after passing around the head sprocket or pulley. The close spacing of the buckets allows material to flow over the backside of the proceeding bucket

whose extended sides form a chute to guide the material into the discharge spout.

This style conveyor generally operates at lower speeds to minimize breakage of friable materials.

Centrifugal Bucket Elevators operate at high speeds to throw material by centrifugal force out of the buckets into the discharge spout as the buckets pass over the head sprocket or pulley. These buckets are spaced at wider intervals to assure maximum fill of the buckets at the boot while moving at higher speeds.

Both types of bucket elevators are available with either a chain drive or a belt carrier line.

FEATURE	FUNCTION	BENEFIT
Modified Radius Hood	Minimize wear	Improve discharge flow
Machined, UHMW Shaft Seals	Longer lasting sealing surface	Reduction in product loss
Heavy-Duty Roller Bearings	Higher load ratings	
Hinged Service Doors	Easy access for routine maintenance	
Clean Out Door	Easy access	Reduces downtime and maintenance costs
Screw or Internal Take-up	For belt or chain tensioners	
Split hood	Easily removable for Pulley/Sprocket access	
Laser Cut	Assures straightness of elevator	Superior operation, easier installation, and better alignment
Fixture welded, structural angle iron flanges are continuously welded on the outside and stitch welded on the inside	Superior strength and durability	Easier installation and longer life
Weather tight design	Eliminates moisture problems	Reduces product loss and contamination
Fully adjustable throat plate	Helps material discharge properly	Keeps material from falling back down into the boot
Multiple drive configurations available	Allows for standardization with other equipment	Less spares to stock

### CONFIGURATIONS / OPTIONS

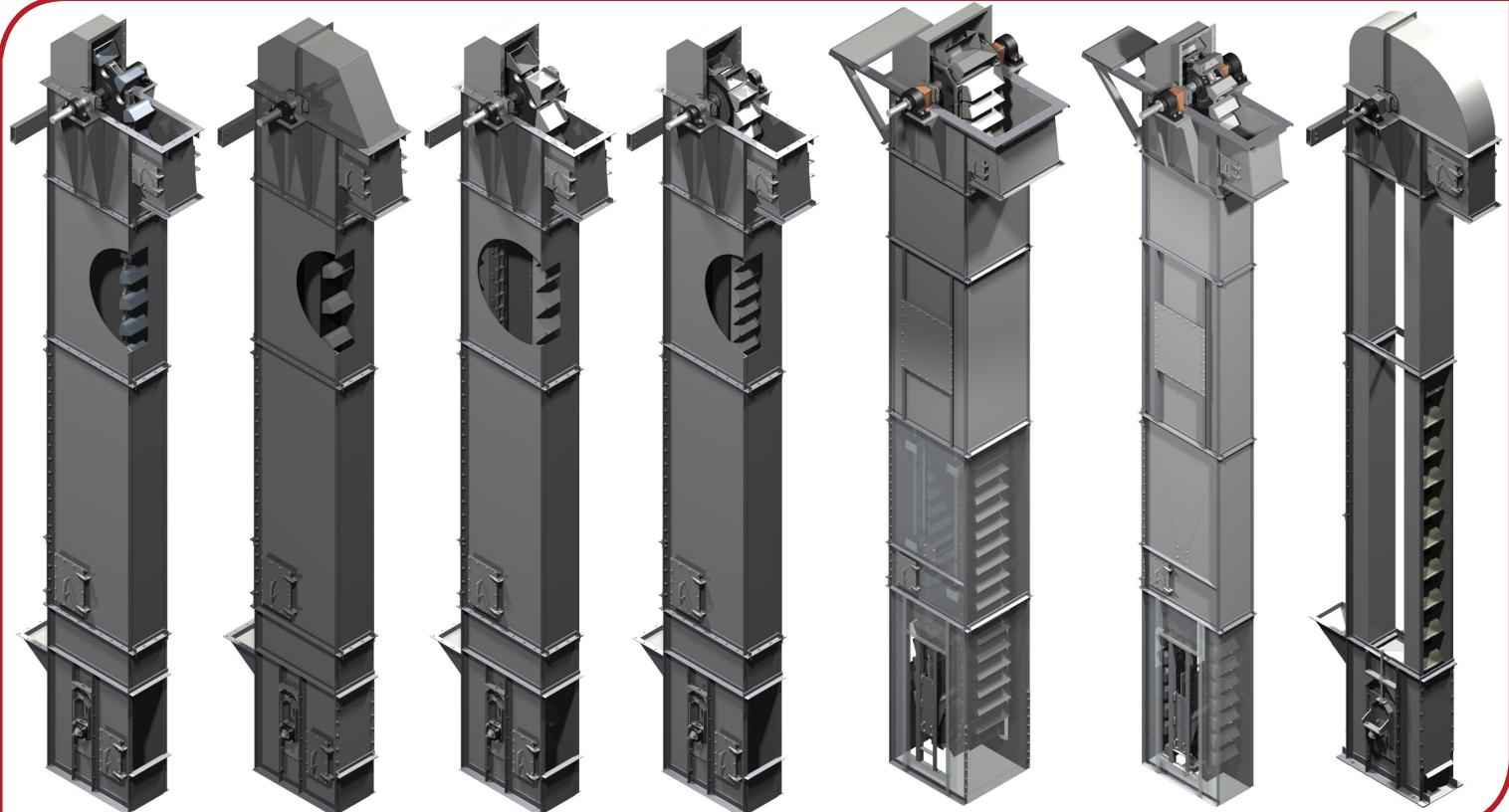
Type of Steel	<ul style="list-style-type: none"> <li>Carbon</li> <li>High Brinell Carbon — AR Steel</li> <li>Stainless</li> <li>Hot Dip Galvanized</li> </ul>
Capacity	<ul style="list-style-type: none"> <li>Up to 22,440 CFH</li> </ul>
Belts	<ul style="list-style-type: none"> <li>Rubber Covered</li> <li>PVC Belting Various Ply and PIW</li> <li>Food Grade Belting</li> </ul>
Chains	<ul style="list-style-type: none"> <li>Cast Block Links and Steel Connecting Side Bars</li> <li>All Steel (Fabricated)</li> </ul>
Buckets	<ul style="list-style-type: none"> <li>Style AA -Ductile Iron Buckets, Plastic</li> <li>Style C - Fabricated Buckets</li> <li>Continuous - Medium Front - Non-Overlapping Fabricated Steel Buckets</li> <li>AC Welded Steel or Ductile Iron</li> <li>SC Welded Steel</li> <li>AR or Hard-faced Reinforced Lip</li> </ul>
Sprockets	<ul style="list-style-type: none"> <li>Segmental Rim</li> <li>Segmental Rim Induction Hardened Traction Wheels</li> <li>Split</li> </ul>
Options	<ul style="list-style-type: none"> <li>Machinery and Service Platforms</li> <li>Ladders and Safety Cage</li> <li>Intermediate Rest Platforms</li> <li>Hoisting Davits — Hoist Beam</li> <li>Inlet &amp; Discharge Liners</li> <li>Air/Grease Purgable Seals</li> <li>Head Take-Up Available</li> <li>AR &amp; Ceramic Liners for Boot &amp; Head</li> </ul>

### AVAILABLE CONFIGURATIONS

Series 100 Centrifugal Discharge	Handle a variety of relatively free-flowing dry materials with small to medium lump sizes that are mildly to moderately abrasive. Configured with "AA", "A", "AA-RB", and Salem style buckets. Style "C" may also be specified for wet or sticky materials.	
	Chain	Furnished with combination chain for light to medium service or all steel (steel knuckle) chain for medium to severe service or when a higher chain working load is required.
	Belt	100% polyester carcass PVC belting or rubber covered ply belts specifically designed for years
Series 700 Continuous Discharge	Handle a variety of free-flowing or sluggish materials which contain medium to large lumps and are mildly, moderately, or extremely abrasive.	
	Chain	Furnished with combination chain for light to medium service, or all steel (steel knuckle) chain for medium to severe service or when a higher chain working load is required.
	Belt	100% polyester carcass PVC belting or rubber covered ply belts specifically designed for years of elevator service. Other types are also available.
Mill Duty Centrifugal Discharge Chain and Belt	Handle a variety of relatively free flowing dry materials with small to medium lump sizes that are mildly to moderately abrasive. Extensively used in cement industries.	
Double Row Mill Duty Centrifugal Discharge Belt	Handle high capacities of various relatively free flowing dry materials with small to medium lump sizes that are mildly to moderately abrasive.	
Super Capacity Continuous Discharge Chain	Handle high capacity of various free flowing dry materials ranging from fines to lumps, moderate to extremely abrasive, and those that tend to pack.	
Heavy-Duty High-Speed Grain Centrifugal Discharge Belt	Handles free flowing dry materials such as 48 lb. grains which have a small lump size and are mildly abrasive.	



thomas conveyor  
company®



Centrifugal  
Discharge  
Chain

Centrifugal  
Discharge  
Belt

Continuous  
Discharge  
Chain

Continuous  
Discharge  
Belt

Super Capacity  
Continuous  
Discharge  
Chain

Mill Duty  
Centrifugal  
Discharge Belt

Heavy-Duty  
High-Speed  
Grain Centrifugal  
Discharge Belt

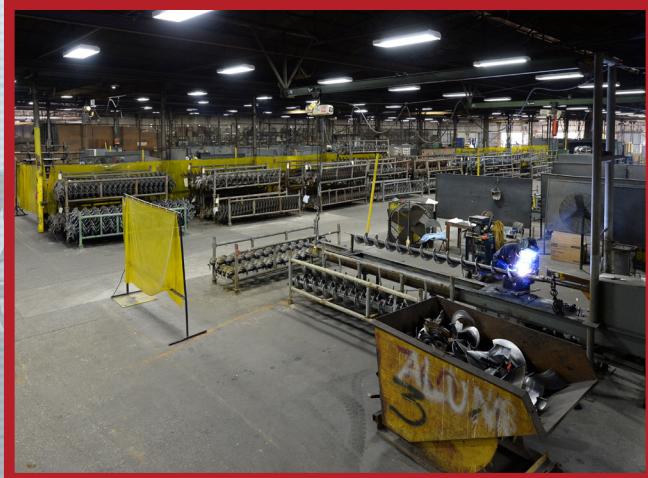


Stainless Steel Bucket Elevator



Painted Steel Bucket Elevator

\*Conveyors shown without cover for illustration purposes only. Please follow manufacturing safety guidelines when operating conveyors.



**MANUFACTURERS SPECIALISTS ENGINEERS**



**thomas conveyor  
company®**

555 N. Burleson Blvd Burleson, TX 76028  
817-295-7151 • FAX 817-447-3840 (800) 433-2217  
[www.thomasconveyor.com](http://www.thomasconveyor.com)