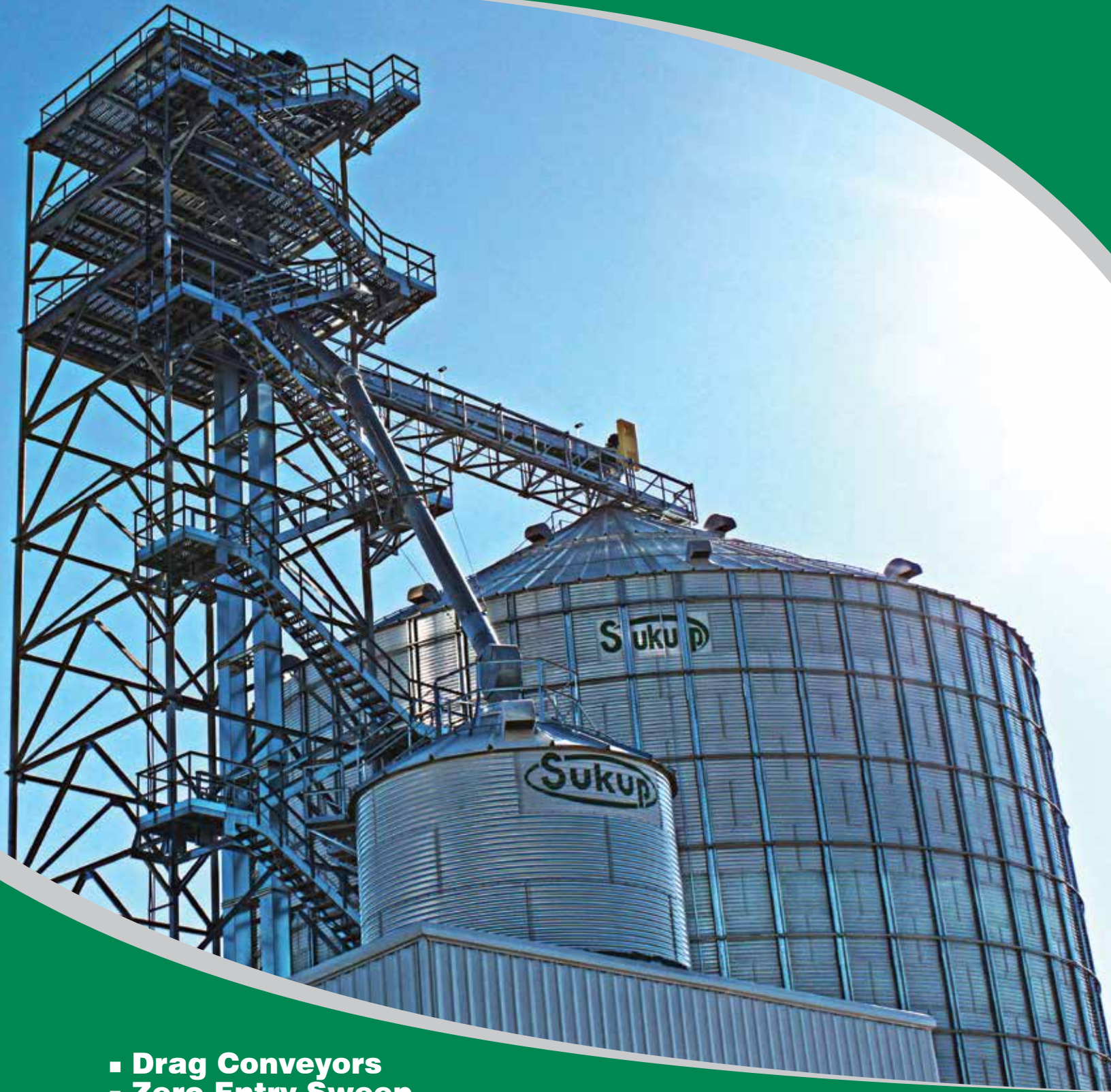




Material Handling

COMMERCIAL SERIES



- **Drag Conveyors**
- **Zero-Entry Sweep**
- **Zero-Entry Paddle Sweep**
- **Bucket Elevators**
- **Support Towers & Catwalks**



BUCKET ELEVATORS

HEAD DESIGN

- Low-impact head design
- Split-style hood allows for easy interior accessibility
- Lifting eyes are located on the hood of the elevator to ease hood assembly and removal
- Adjustable throat wiper
- Bearing jack bolts for easy belt alignment
- Interior lip to keep moisture out and dust in
- Expanded metal-back urethane standard, other liners available
- Tapered bushing at pulley to eliminate lateral movement
- Externally mounted, heavy-duty pillow block roller bearings



Lifting Eyes

INTERMEDIATE

- Our patented squaring plates and alignment pins are placed at the top and bottom of every section to align trunking and eliminate the nightmare of twisted trunk sections, making assembly easier.
- Built square and parallel for no-hassle construction
- Sliding view port can be placed in three positions on inspection section
- Ten foot inspection section facilitates belt and splice installation
- Heavy welded frame with large removable panels on inspection section
- Heavy-gauge, huck-bolted units
- Dust-tight and weather-tight protection
- Assembly-friendly tie angles



“The squaring plates made the trunking easy to assemble. Having one end held together with squaring plates made it easy to hold the other end while trying to put an entire section of trunking together. The ladder and rest platforms also assembled easily.”

-Bryan Blakstad
Lodermeier's Inc. - Goodhue, MN



Squaring Plates & Alignment Pins



View Port

BOOT

- Large, easy, tool-free access doors with a unique spring latch
- Large, easy-access clean-out doors with rollers on each end rack & pinion
- Hat section at bottom of clean-out doors to minimize contact with concrete
- Head and boot have UHMW seals at shafts
- Head and boot have heavy 1/4" structural frame
- Corrosion-resistant Acme screw take-up
- Bolted construction for easy repair and replacement



Clean-out Door



Access Door



STANDARD FEATURES

■ Buckets

We use high-density, non-sparking, polyethylene buckets. Nylon, Urethane, and Steel buckets are optional when using highly abrasive materials. Vented buckets are also available.



■ Low Impact Head Design

The Sukup Bucket Elevator head is a controlled design. Instead of the product bouncing off the interior of the head, it slides gently along the contour of the hood. Product damage and back-legging are minimized and the need for an internal shroud is eliminated.



■ Belting

Static conductive, Oil resistant, and Fire Retardant (SOFR) rubber belting is standard on all Sukup Bucket Elevators. Rubber belting has higher bolt retention properties which result in higher maximum bucket projection ratings, and provides maximum oil-based dust suppression additives. Sukup even supplies 10 extra feet of belting with every order to facilitate any belt-splicing configuration you would like to use.



■ Bearings

Sukup utilizes Roller Bearings for head shaft sizes 3¹⁵/₁₆" and larger. Split Roller Bearings come standard on 5⁷/₁₆" and larger head shaft sizes.

■ Heavy Gauge Trunking

12 or 10 ga. trunking units are standard on all elevators with 10,000 bph (or more) capacities.



OPTIONAL FEATURES



■ Gravity Take-Up *(Pictured on left)*

Eases overall use of your bucket elevator. Maintains proper belt tension, and reduces maintenance.

■ Pressure Relief Door

NFPA compliant pressure relief doors come standard on head section. This feature is also optional on trunking.

■ Distributor Platform

Available in sizes 3x8 ft. and 4x8 ft.

■ Standard and Flared Inlet Hoppers

(Standard Inlet Pictured)

Also available with optional 10-gauge abrasion-resistant liners.



■ Head Service Platform

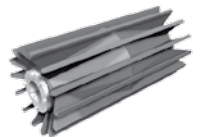
(Pictured on bottom right)

One of the largest in the industry! Increases safety because there is more room to work. Available in 3 different sizes. Head platforms come pre-assembled from factory.



■ Winged Boot Pulley

A Winged Pulley is a great option if you are concerned about material collecting on the pulley face.



■ Spiral Winged Boot Pulley

Increased pulley-to-belt contact over winged pulley. Eliminates noise caused by winged pulleys.



■ Herringbone Wing Boot Pulley

Wing angles of up to 45°, use the pulleys rotation to eject material out the sides of the pulley.



ALSO AVAILABLE...

- Valving
- Distributors
- Guy Brackets
- Shovel Pockets
- Motion Sensors
- Ceramic Lining
- Bearing and Surface Sensors
- Belt Misalignment Sensors
- Ladder & Cage Assembly
- Reducer Backstops

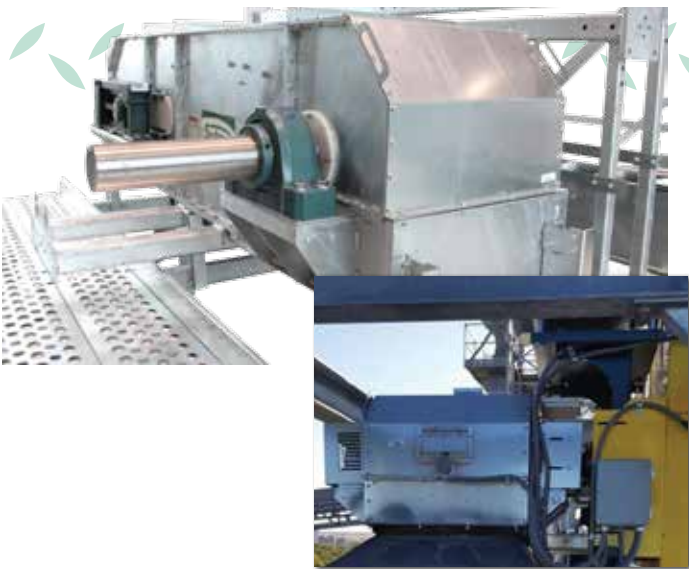


DRAG CONVEYORS



GENERAL SPECIFICATIONS

- **14" and 18"** - 81XHH (2.609" pitch) chain standard
- **22" and 26"** - WH124 (4.00" pitch) chain standard; upgradable to WH124HD (4.063" pitch)
- **30" and 34"** - WH132 (6.050" pitch) chain standard; upgradable to WH150XHD (6.050" pitch)
- **Dodge Bearings** - Head - S2000, Imperial ISAF or USAF500 (Imperial IP option up to 4 15/16")
- **Target Chain Speed** - 150 FPM
- **Hot-Dipped Galvanized** - Head, tail and trough sections are all hot-dipped galvanized



HEAD SPECIFICATIONS

- **Sides** - up to 1/4" complete with welded bearing mount
- **Bearing** mounts horizontally. All head bearings are spherical roller bearings.
- **Upper End Quarter** can be removed allowing shaft/bearing/sprocket to be easily removed.
- **Sprockets** are split design. Chain pitch 6" or greater use hunting (skip) tooth sprockets standard.



TAIL SPECIFICATIONS

- **Sides** - up to 3/16" welded
- **Take-Up Assembly** utilizes a center or top pull, wide-slot bearing design.
- **Tail Shaft** is drilled and tapped for speed switch (1/2 - 13UNC)
- **Sprockets** are split design. Sprocket styles and shielding same as head.



TROUGH SPECIFICATIONS

- 3-piece design with a removable bottom
- **Body Sections** - up to 26" tall are 10 ga. galvanized
Taller sizes - 7 ga. galvanized
- **Bottoms** - 3/16" (AR200 standard)
OPTIONAL: 1/4" or 3/8" - AR200 or AR450
- **Sides** - up to 7 ga. with welded 1/4" flanges
- **Side Liners** - 10 ga. bolted in (AR200 standard)
OPTIONAL: 3/16" or 1/4" - AR200 or AR450; Heavier liners and bottoms available upon request
- **Replaceable Rail Returns** are equipped with standard 3/16" abrasion resistant cap. Upgradable to 1/4" AR200 (standard) AR450 (optional)
- **Bottoms** are hot-dipped. Liners and rails unpainted.
- **Patented Hip Style Conveyor Covers** provide a weather-tight seal that leaves no area for water to leak into the conveyor.



SUPPORT TOWERS & CATWALKS

LEG SUPPORT TOWERS

Sukup Leg Support Towers are an excellent choice for supporting bucket elevators. Towers eliminate the need for guying cables that clutter your facility and eat up valuable real estate. In addition to providing the vertical support for the elevator legs, the towers can be designed to support bulk weighers, cleaners, and distributors – either inside or outside the tower.

STANDARD FEATURES

- Hot-dipped galvanized finish
- Heavy duty ASTM A325 hardware
- Knock-down design for economical shipping
- Modules available in 20', 10' and 5' sections
- Site specific and computer engineered, strength-staged for wind, seismic, cleaner, catwalk and other loads. Robust design based on ASCE 7-05
- Inverted V-Bracing on 14' x 14' and larger, X-Bracing on 12' x 12' and smaller

OPTIONAL FEATURES

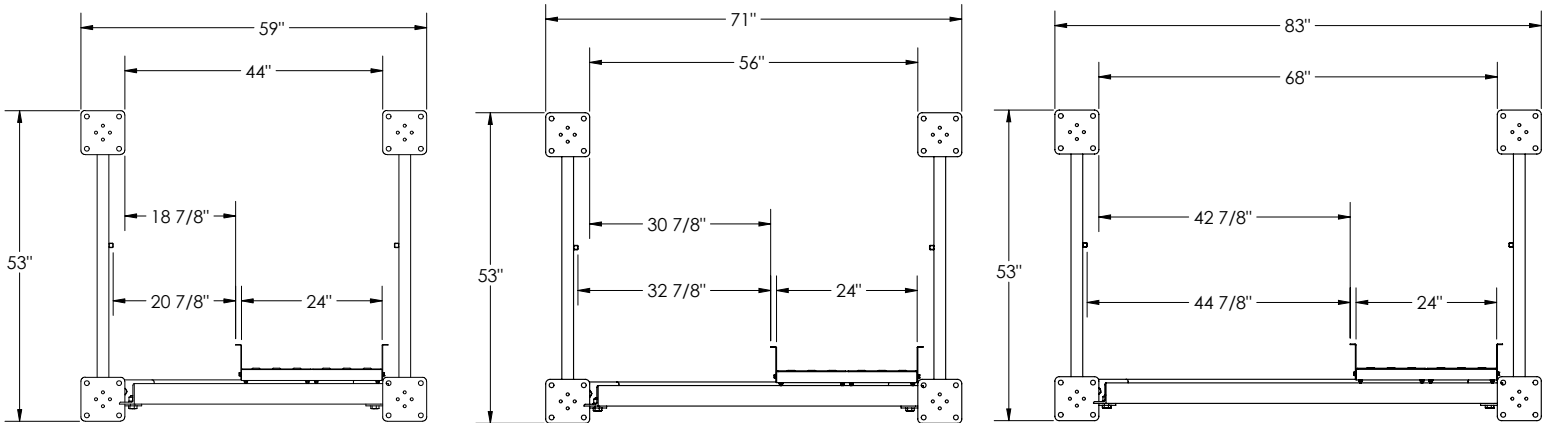
- Access bracing to accommodate spouting, catwalks, conveyors, etc.
- Catwalk support beams *(Pictured on right)*
- Easy fit stair design – wrap around or switch back
- Internal or external platforms – internal platforms have adjustable height up to 16'x16' towers
- Cast-in-place anchors
- Lugs for convenient bracing of leg to tower



HANDRAIL TRUSS CATWALKS

- Welded tubular side construction; bolt in bottom
- Knock-down design for economical shipping
- Hot-dipped galvanized finish
- Standard 2' walkway.
- 4', 5', 6' wide catwalks available
- Two-leg and four-leg support towers available
- 5', 8', 9', 10', and 20' sections available. Bolt together different combinations of sections to provide overall catwalk lengths in increments of 1', starting at 13'.
- Wing Plates (patent pending) provide a solid connection and offer more resistance to torsion than current connection methods offered by competitors.

(Pictured on right)



HD Catwalk Width Clearances (from L to R) 4', 5', 6'



CATWALK SUPPORT TOWERS

STANDARD FEATURES

- Hot-dipped galvanized finish
- Heavy duty ASTM A325 hardware
- Knock-down design for economical shipping
- Modules available in 5', 6', 7', 10', 20' sections

OPTIONAL FEATURES

- Tie back bracing to bin stiffeners for two-leg towers
- Internal bracing for four-leg towers





ZERO-ENTRY COMMERCIAL

AUGER or PADDLE

AUGER SWEEP



Adjustable Front Auger Shields reduce overfeeding of the sweep.



Patented Pivot Point allows the sweep to “free-float” to account for variations in concrete.



Auger Ends and Heavy-Duty 3” Hanger Bearings support the auger and supply long lasting durability and strength.

Model	Bin Diameter	BPH
12" System	48' - 135'	5 - 7,000 BPH
16" System	60' - 156'	8 - 10,000 BPH

BOTH SWEEPS INCLUDE:

Explosion-Proof Motors and Industrial Grade Gear Box and bearings for greater safety and durability.

Center Sump is cast in place and large 45" x 45" opening allows for maximum grain flow. Opening is available in 10", 24" and 32" squares.

Heavy-Duty Zero-Entry Explosion-Proof Rotating Contact provides power to the sweep. There is no need to enter the bin.

Adjustable Rubber-Tipped Scraper behind the auger/paddles that maximizes the amount of grain collected along the bin floor.



Industrial Grade Pushers are equipped with explosion-proof motors and foam-filled tires for safety and durability. Pusher speed is based upon their location on the auger through the use of varying gear ratios. This results in the pushers applying uniform pressure to the sweep, reducing wear on the inside pushers.



Heavy-Duty Frame designed to provide optimal strength to withstand the intense pressure of deep grain depths. (Paneling removed to show frame)



SWEEP

DID YOU KNOW?



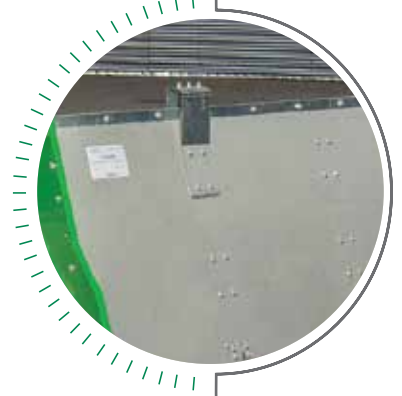
AE50 Awards are presented by the American Society of Agricultural and Biological Engineers for outstanding engineering innovations in agriculture.

In order to be chosen for an AE50 Award, products must be truly new innovations that are expected to save producers time, costs and labor.

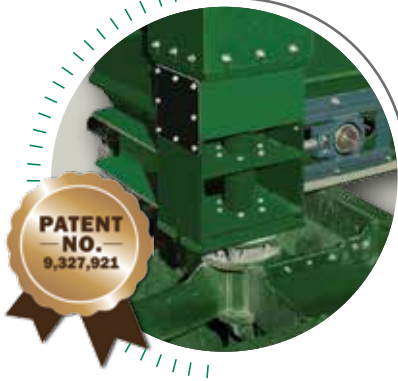
PADDLE SWEEP



Heavy duty take-up bearings supply long lasting durability and strength.



A-shaped shield designed to better distribute load from grain.



Patented Pivot Point allows the sweep to “free-float” to account for variations in concrete.



Industrial Grade Wear Track protects aeration tunnels.



Heavy-Duty Steel Pivot Wheels with bronze bushings.



Control Box

Emergency Stop Button for enhanced safety.

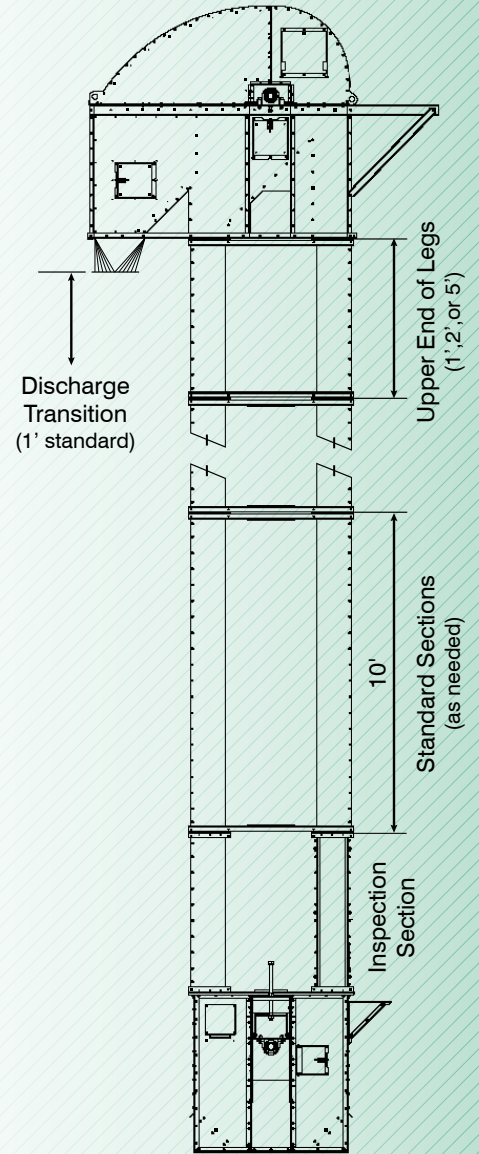
Zero-Entry Automatic Touch Screen Controls allow the pushers' start and stop points to be user programmed on the touch screen to keep the auger running efficiently based on a particular situation. In automatic mode, the controller senses auger load and advances the sweep without overloading the auger motor, preventing spinning of the pusher tires, which can cause extra wear. The sweep controls also have a manual mode that allows the operator to control sweep advancement.

Programmable Logic Controller (PLC) provides greater reliability.

SPECIFICATIONS

BUCKET ELEVATORS

Pulley Diameter	Bu/Hr	Bucket		Pulley RPM	Belt Speed (FPM)	Leg Casing
		Size	Spacing			
42	10,000	14x8	10	57	627	22x14
48	10,000	14x8	11	56	704	22x14
42	12,000	16x8	10	57	627	22x14
48	12,000	16x8	11	56	704	22x14
42	15,000	18x8	9	57	627	27x14
48	15,000	18x8	10	56	704	27x14
42	20,000	(2) 14x8	10	57	627	36x14
48	20,000	(2) 14x8	11	56	704	36x14
42	25,000	(2) 16x8	9.75	57	627	40x14
48	25,000	(2) 16x8	10.5	55	691	40x14
42	30,000	(2) 18x8	9	57	627	44x14
48	30,000	(2) 18x8		56	704	44x14
42	35,000	(3) 16x8	10.5	57	627	58x14
48	35,000	(2) 20x8	9.5	56	704	49x14
42	40,000	(3) 16x8	9	57	627	58x14
48	40,000	(3) 16x8	10	56	704	58x14
42	45,000	(3) 18x8	9	57	627	65x14
48	45,000	(3) 18x8	10	56	704	65x14
42	50,000	(3) 20x8	9	57	627	70x14
48	50,000	(3) 20x8	10	55	691	70x14

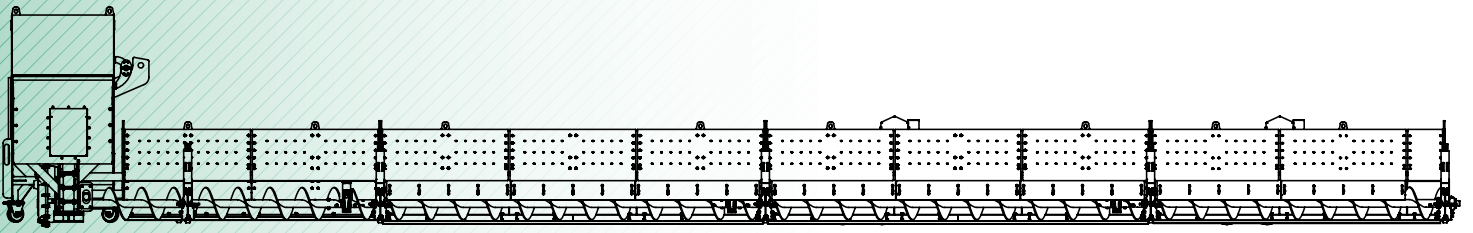


DRAG CONVEYORS

Model #	CAPACITIES BU/HR			
	100 FPM	125 FPM	150 FPM	175 FPM
1214	3,432	4,290	5,148	6,005
2014	5,556	6,946	8,335	9,724
1618	6,724	8,406	10,087	11,768
2018	8,185	10,231	12,277	14,323
2022	10,280	12,849	15,419	17,989
2622	13,423	16,779	20,135	23,491
2626	16,855	21,069	25,283	29,497
3226	20,803	26,003	31,204	36,405
3230	24,333	30,416	36,499	42,582
3630	27,411	34,264	41,116	47,969
3434	30,375	37,969	45,563	53,157
3834	33,989	42,486	50,984	59,481
4434	39,410	49,262	59,115	68,967

NOTE: Capacities based on clean, dry, whole grains;

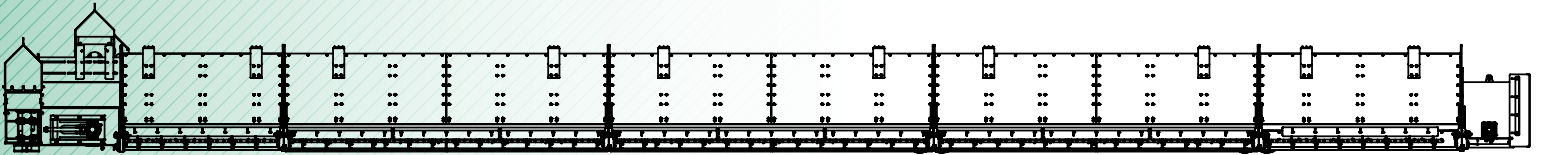




ZERO-ENTRY COMMERCIAL SWEEP

12" Zero Entry Bin Sweep			
Bin Diameter	HP Req.	Pushers	# of Sections
60'	15	1	3
72'	20	1	3
75'	20	2	3
78'	25	2	4
90'	30	2	4
105'	30	2	5
135'	40	3	6
156'	50	3	7

16" Zero Entry Bin Sweep			
Bin Diameter	HP Req.	Pushers	# of Sections
60'	20	1	3
72'	30	1	3
75'	30	2	3
78'	30	2	4
90'	40	2	4
105'	40	2	5
135'	50	3	6
156'	60	3	7



ZERO-ENTRY COMMERCIAL PADDLE SWEEP

Bin Diameter	HP Req.	Pushers	# of Sections
60'	10	1	3
72'	15	1	3
75'	15	2	3
78'	20	2	4
90'	20	2	4
105'	25	2	5
135'	30	3	6
156'	40	3	7



Photo credit to David Bohrer of NAM



DRYING, STORAGE and HANDLING SOLUTIONS®

As a family owned business, we've spent over 50 years developing innovative, efficient, and reliable products to meet the ever-expanding needs of grain producers. With a full-line of product Solutions®, you need look no further than Sukup for your grain handling, storage, drying, and steel building needs.

Bushel capacities per hour are based on a clean, dry, whole grain. Sukup Manufacturing Co. provides the information contained within this brochure to assist you in choosing the optimal equipment for your situation. Sukup specifications should only be used as estimates, and not as a warranty, expressed or implied, of how a particular Sukup unit will perform under your varying operating conditions. Because we are continually improving Sukup products, changes may occur that may not be reflected in the specifications.



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