MATERIAL HANDLING COMMERCIAL SERIES





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- Bucket Elevators
- Drag Conveyors
- Zero-Entry Paddle Sweep
- Zero-Entry Sweep

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
- Interior lip to keep moisture out and dust in
- Expanded metal-back urethane liners standard, others available
- Tapered bushing at pulley to eliminate lateral movement
- Externally mounted, heavy-duty pillow block roller bearings
- Bearing alignment bolts on each side of bearing for proper pulley positioning
- Turned, ground, and polish shaft

INTERMEDIATE

- Patented squaring plates and alignment pins are placed at the top and bottom of every section to align trunking and eliminate twisted trunk sections making assembly easier
- Robot, fixture welded trunking for consistent square and parallel construction
- Hinged inspection door 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

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
- UHMW seals at shafts
- Heavy 1/4" structural frame with painted epoxy finish or hot-dipped galvanized option
- Corrosion-resistant Acme screw take-up
- Bolted construction for easy repair and replacement
- Drip guard/rain guard to prevent water running in bottom of boot







STANDARD FEATURES

BUCKETS

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



 No. 3 Vented buckets are standard; No. 4 venting optional

LOW IMPACT HEAD DESIGN

- The bucket elevator head is a controlled discharge 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

CROWN-FACED BOOT PULLEY

- Standard with any bucket elevator
- SLIDE-LAGGING HEAD PULLEY
- Replaceable slide-lagging is ideal for the feed and grain industry
- TURNED, GROUND, AND POLISHED SHAFT
- Sukup[®] utilizes a 1045 TG&P shaft allowing your entire elevator to run smoothly

BELTING

- Static Conductive, Oil Resistant, and Fire Retardant (SOFR) rubber belting
- Rubber belting has higher bolt retention properties which result in higher maximum bucket projection ratings, and provides maximum oil-based dust suppression additives; An extra 10 feet of belting is supplied with every order to facilitate any beltsplicing configuration

BEARINGS

- Spherical roller bearings on all head assemblies
- Split Roller Bearings come standard on 5⁷/₁₆" and larger head shaft sizes; Other types available upon request

HEAVY GAUGE TRUNKING

12 or 10 gauge trunking units

OPTIONAL FEATURES

GRAVITY TAKE-UP

- 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 optional on trunking

DISTRIBUTOR PLATFORM

Available in sizes 4x8 ft. and 4x10 ft.

STANDARD AND FLARED INLET HOPPERS

- Available with 10-gauge abrasionresistant (AR) or ceramic lining
- Additional magnet door

HEAD SERVICE PLATFORM

- 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

 Great option for concern 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°
- Uses the pulley's rotation to eject material out the sides of the pulley

ALSO AVAILABLE

- Valving
- DistributorsGuy Brackets
- Guy Brackets
 Motion Sensors
- Reducer Backstops
- 45° Inlet hopper







- Bearing and Surface Sensors
- Belt Misalignment Sensors
 - Ladder & Cage Assembly
 - 360º Head platform
 - Fall arrest ladder systems* *Compliant with OSHA standard 1910.28.









DRAG CONVEYORS GENERAL SPECIFICATIONS

14" AND 18"

81XHH (2.609" pitch) chain standard
 22" AND 26"

- WH124 (4.00" pitch) chain standard
- Upgradeable to WH124HD (4.063" pitch)

30" AND 34"

- WH132 (6.050" pitch) chain standard
- Upgradeable to WH150XHD (6.050" pitch)

DODGE BEARINGS

- Head S2000, Imperial ISAF or TAF or EXL, SAF-XT (Imperial IP option up to 4¹⁵/₁₆")
- Other bearing options upon request TARGET CHAIN SPEED
- 150 FPM

HOT-DIPPED GALVANIZED

Head, tail and trough sections



HEAD SPECIFICATIONS

SIDES

 Up to ¹/₄ " complete with welded bearing mount BEARING

- Mounts horizontally
- Spherical roller bearings standard
 SPROCKETS
- Split design
- Chain pitch 6" or greater use hunting (skip) tooth sprockets standard

SHAFT, BEARING, AND SPROCKET

Easily removed as an assembly

TAIL SPECIFICATIONS

SIDES

■ Up to ³/₁₆ " welded

TAKE-UP ASSEMBLY

- Utilizes a center or top pull, wide-slot bearing design TAIL SHAFT
- Drilled and tapped for speed switch (¹/₂ 13UNC)
 SPROCKETS
- Split design
- Sprocket styles and shielding same as head

TROUGH SPECIFICATIONS

BODY SECTIONS

- 3-piece design with a removable bottom SIDES
- Up to 26" tall are 10 gauge galvanized; Taller sizes are 7 gauge
- Both have ¼" welded flanges
 BOTTOMS
- Available in $\frac{3}{16}$, $\frac{1}{4}$, or $\frac{3}{8}$ AR200 or AR450 SIDE LINERS
- Available in 10 gauge, ³/₁₆ ", or ¹/₄ " AR200 or AR450 REPLACEABLE RAIL RETURNS
- Equipped with standard 10 gauge AR cap
- Optional ³/₁₆ ", or ¹/₄ " AR200 or AR450
- HOT-DIPPED GALVANIZED
- Bottoms, slides and covers
- PATENTED HIP STYLE BOLTED CONVEYOR COVERS
- Provides a weather-tight seal that leaves no area for water to leak into the conveyor



Fully welded hotdipped galvanized



Formed galvanized construction



Fully welded hotdipped galvanized



Formed galvanized construction



ZERO-ENTRY COMMERCIAL PADDLE SWEEP

5K COMMERCIAL PADDLE SWEEP

Available in bins with full aeration floors or flush floors



Patent Pending



Pivot Point Patent No. 9,327,921

ZERO-ENTRY COMMERCIAL PADDLE SWEEP

10K COMMERCIAL PADDLE SWEEP

Available in bins with flush floors only



10K Commercial

Patent No. 10,377,573

Paddle Sweep







HEAVY DUTY TAKE-UP BEARINGS supply long lasting durability and strength.



Serrated Paddle

Patent No. 10,836,582

A-SHAPED SHIELD

ZERO-ENTRY COMMERCIAL PADDLE SWEEP

Available in 5K and 10K

PRODUCT FEATURES

PIVOT POINT (PATENT NO. 9,327,921)

Allows the sweep to "free-float" to account for variations in concrete

A-SHAPED SHIELD

- Designed to better distribute load from grain
 CENTER SUMP
- Center sump plug switch
- 10K SWEEP cast in place and large 45" x 45" opening allows for maximum grain flow; Discharge is available in 16", 24", and 32" squares
- 5K SWEEP available to fit over a 16" or 21" wide Sukup Drag Conveyor or a cast in place option with a 16" or 24" square discharge

INDUSTRIAL GRADE WEAR TRACK

Protects aeration tunnels



HEAVY-DUTY STEEL PIVOT WHEELS

Bronze bushings



EXPLOSION-PROOF MOTORS

 Industrial Grade Gear Box and bearings for greater safety and durability

CONTROL BOX FEATURES

- VFD's supplied for all sweep motors
- Ability to interlock other equipment to the sweep controls

EMERGENCY STOP BUTTON

Enhances safety

PROGRAMMABLE LOGIC CONTROLLER (PLC)

Provides greater reliability

ZERO-ENTRY AUTOMATIC TOUCH SCREEN CONTROLS

 Allows the pushers' start and stop points to be user programmed on the touch screen to keep the paddles running efficiently based on a particular situation

ADJUSTABLE WALL SCRAPER

 Reduces amount of grain left between sweep and bin wall

HEAVY-DUTY ZERO-ENTRY EXPLOSION PROOF ROTATING CONTACT

- Provides power to the sweep
- 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

- Equipped with explosion-proof motors and foamfilled 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



- In automatic mode, the controller senses auger load and advances the sweep without overloading the paddle 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



HY-FLIGHT CONVEYORS GENERAL SPECIFICATIONS

- Capacity range up to 40,000 BPH
- Easily replaceable bottom along with sideliner packages extend equipment lifespan
- Patented cover design keeps dust in and water out (Patent #8,047,358)
- Adjustable bypass hopper
- Bearing, sprocket and shaft can be removed as one assembly
- Externally-mounted, heavy-duty pillow block bearings on head and tail
- Turned, ground and polished shaft
- 1/2" UHMW paddles eliminate steel-to-steel contact
- Corrosion-resistant Acme thread take-up screws at tail
- Hot-dipped galvanized construction
- ¹/₄" divider pan
- Single piece bend section in 5° increments

PRODUCT SPECIFICATIONS

- Curve sections are all single piece
- Curve sections available in 5° increments from 10° to 50°
- By-pass drive-over hoppers have an adjustable shroud to control flow and are available in 6', 8', and 10' lengths
- Longer by-pass hoppers on request; Low-profile, and wide by-pass hoppers available
- Grating available on standard by-pass hoppers only
- By-pass inlet hoppers are available in 3' and 4' lengths
- Body section liners available in 10 gauge, ³/₁₆", or ¹/₄" AR200 or AR450; Heavier liners and bottoms available upon request
- By-pass hopper liners available in 10 gauge, ³/₁₆", or ¹/₄" AR or ceramic







SPECIFICATIONS

BUCKET ELEVATORS

PULLEY		BUCKET		PULLEY	BELT SPEED	LEG
DIAMETER	BPH	SIZE	SPACING	RPM	(FPM)	CASING
42	10,000	14x8	10	57	627	22x14
48	10,000	14x8	11	56	704	22x14
42	12,000	16x8	9.75	57	627	22x14
48	12,000	16x8	11	56	704	22x14
42	15,000	18x8 LP	8.5	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	9.5	57	627	40x14
48	25,000	(2) 16x8	10.5	55	691	40x14
42	30,000	(2) 18x8 LP	8.5	57	627	44x14
48	30,000	(2) 18x8	10	56	704	44x14
42	35,000	(2) 18x8 LP	7.25	57	627	44x14
48	35,000	(2) 20x8	9.5	56	704	49x14
42	40,000	(2) 20x8 LP	7.5	57	627	49x14
48	40,000	(2) 20x8 LP	8.25	56	704	49x14
42	45,000	(2) 22x8 LP	7	57	627	53x14
48	45,000	(2) 22x8 LP	7.75	56	704	53x14
48	50,000	(2) 20x10 LP	9.75	52	654	53x16

Above specifications based on maximum cup fill and optimum belt speed. Other configurations available.

DRAG CONVEYORS

	CAPACITIES BPH					
MODEL NO.	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 #2 corn.





HY-FLIGHT CONVEYORS

TOP CHAIN SPEED					
MODEL NO.	100	125	150	175	
HF2026	6,397	7,996	9,595	11,195	
HF2630	9,734	12,168	14,601	17,035	
FH3034	12,855	16,069	19,283	22,496	
HF3438	16,409	20,511	24,613	28,715	
HF3642	19,313	24,142	28,970	33,798	
HF3845	21,924	27,405	32,886	38,368	
HF4445	25,412	31,765	38,118	44,471	



NOTE: Capacities based on clean, dry, whole #2 corn.

ZERO-ENTRY COMMERCIAL PADDLE SWEEP

10K COMMERCIAL PADDLE SWEEP

BIN DIAMETER	HP REQ.	PUSHERS	NO. 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

5K COMMERCIAL PADDLE SWEEP

BIN DIAMETER	HP REQ.	PUSHERS	NO. OF SECTIONS
36'	5	1	2
42'	5	1	2
48'	7.5	1	3
54'	7.5	1	3
60'	7.5	1	3
72'	10	1	4
75'	10	1	4
78'	10	1	4
90'	15	2	5
105	15	3	6



10K Commercial Paddle Sweep



5K Commercial Paddle Sweep







We've spent more than 55 years developing innovative, efficient, and reliable products to meet the ever-expanding needs of grain producers. With a full-line of product Solutions®, Sukup has all your grain handling, storage, drying, and steel building needs.





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