

# **Sukup® Unloading Equipment**



- Sweepway® Power Sweeps
- Tube & Well
- U-Trough Power Sweeps



# Sweepway®

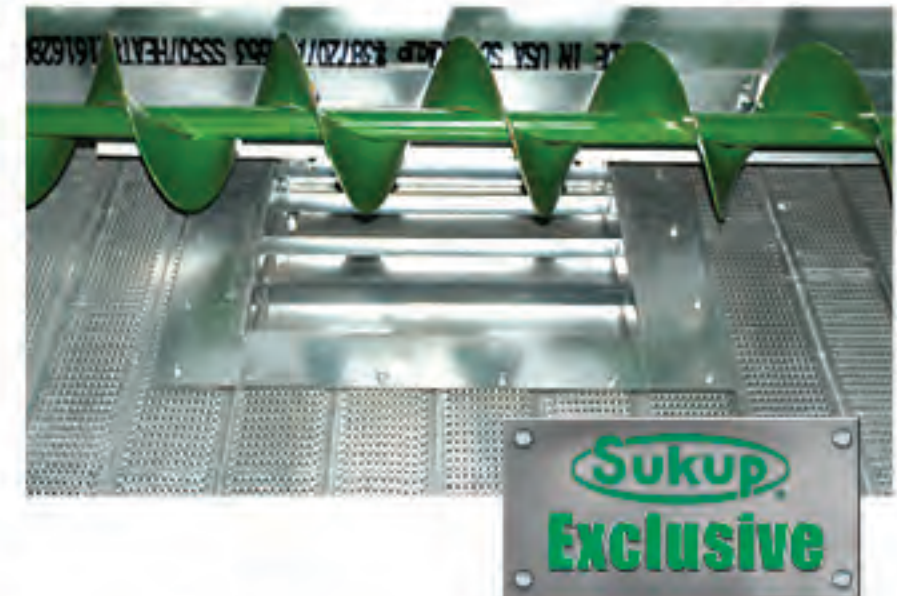
## The Fastest, Easiest Way to Unload Grain



⚠ Augers are dangerous. Individuals should never enter a grain bin while the bin is being loaded or unloaded. Follow all applicable safety regulations.

### The Sweepway® is the ultimate bin unloading system.

- The unloading sweep is permanently installed in the bin for easy operation. No heavy sweep and motor to carry in and out.
- The Sweepway® saves time and labor. There's no need to enter the bin; the Sweepway® advances into the grain, removing it without back-breaking scooping.
- Special design prevents opening the intermediate sumps without opening the center sump to protect the sidewalls from uneven unloading.
- Split backboard on units larger than 60' reduces sidewall stress during unloading.
- Intermediate sumps are welded to the unload tube at the factory, so there's no assembly necessary.
- Number of intermediate sumps is predetermined based upon bin diameter - up to six sumps are used.
- Standard band-on independent intermediate sump can be used to unload bin without stressing sidewalls if center sump becomes blocked. It is three times larger than standard intermediate sumps.



Unloading Capacities*			
	6"	8"	10"
Horizontal	1500 bu/hr	2600 bu/hr	4000 bu/hr
Vertical	1250 bu/hr	2500 bu/hr	3750 bu/hr
Incline	1000 bu/hr	2000 bu/hr	3400 bu/hr

\*Sweepway® and Tube and Well Systems capacities during gravity unload.

### Just one pass and the Sweepway® Power Sweep will clean up.

#### Exclusive Reduction Drive Wheel

Exclusive polyurethane reduction drive wheel comes standard on sweeps in bins 36' and larger using 8" and 10" Sweepway® Power Sweeps. New 16-to-1 drive decreases wheel speed without sacrificing forward movement. All other Sweepways have standard 4-to-1 Reduction Drive Wheel. With the lower speeds, wheel slippage is reduced and wheel life is prolonged.



#### Galvanized Backboard

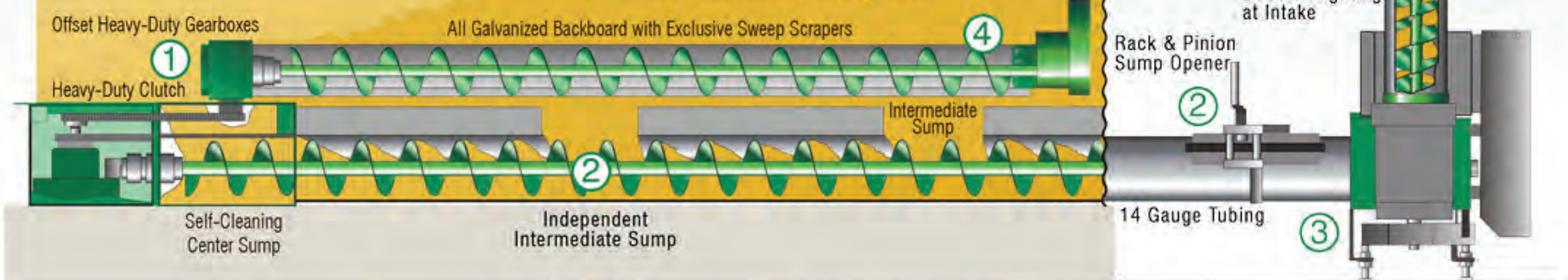
The Sweepway® Power Sweep is equipped with a galvanized backboard that keeps the sweep close to the floor as it propels itself around the bin. The tall galvanized backboard prevents grain flow over the top.



# High Capacity Unloading

## Easy Operation; Fast Unloading

- ① Open center sump and unload until gravity flow stops.
- ② Open intermediate sumps and unload until gravity flow stops.
- ③ Stop equipment and engage clutch. Remove grain with one pass of the sweep.
- ④ Return sweep to position over the intermediate sump gates.



## Increased unloading capacities and trouble-free operation with the Sweepway's unique design.

- Sukup manufactures and assembles the gearbox and center sump to ensure top quality.
- Upper and lower gearboxes are offset to provide a larger opening for grain to flow.
- Unload flighting extends past bin center to maximize capacity.
- Heavy-duty external clutch enables the unload auger to operate without the power sweep, so you can unload with gravity before engaging the power sweep.
- 8" & 10" sumps have a larger bearing mount that is 1½ times stronger than previous designs and a thicker bearing housing for greater durability.
- Self-cleaning center sump and slide gates allow you to control the flow of grain from the bin.
- 8" center sump is 1½ times larger than a traditional 8" center sump for better grain flow.
- Sealed roller bearings (standard equipment) make it easier for center slide gate to move under pressure from even high grain depths. 8" and 10" intermediate sumps also have sealed roller bearings.



Shields removed to show detail. Keep shields in place.

System Size	Floor Clearance
6"	12"
8"	13¼"
10"	13¼"

### Patented, Adjustable Scrapers

A galvanized scraper is attached to the backboard to ensure that the most grain possible is picked up off the floor. The scraper is adjustable to different heights.



U.S. Patent #6,254,329

### Exclusive Carrier Wheels

Sukup sweeps for 40' diameter bins and larger feature a carrier wheel mounted to the back side of the backboard to keep the sweep running level. Backboards for bins larger than 48' diameter feature a patented carrier wheel that is in line with the auger to improve forward movement without interfering with grain discharge.



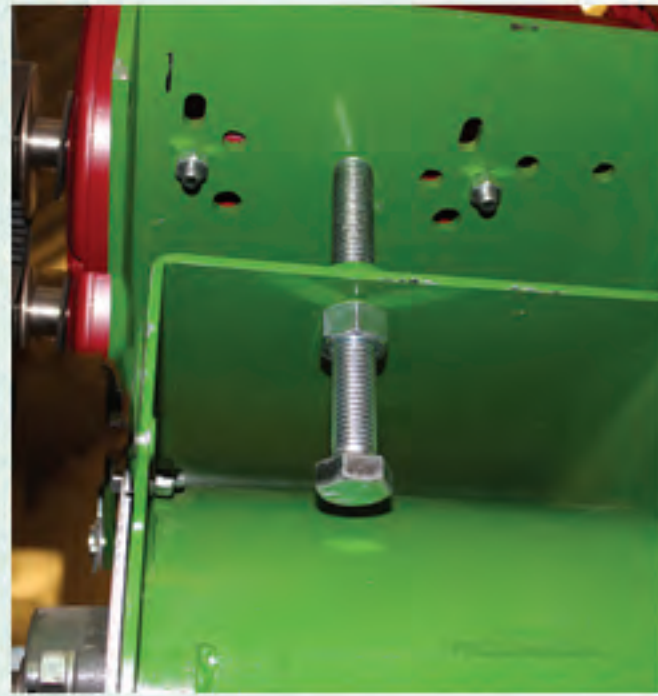
U.S. Patent #6,948,902



# Simple, Rock-Solid Powerheads for

## Easy Belt Adjustment

The powerhead design for both the Sweepway® and Tube & Well systems makes belt adjustments easier. A hinge on all powerheads allows the belt to be tightened by simply turning one 3/4" bolt. By removing the hinge pin, the motor may be easily moved to another bin.



## Better Serviceability

Why remove the powerhead to service the flighting on your unloading equipment? You don't have to with Sukup powerheads or vertical augers. Sukup's special design allows you to pull the flighting without removing the powerhead, so Sukup units are much easier to service.



In addition, Sukup unload augers attach to the gearbox with a square shaft, rather than bolting to it. This arrangement makes it possible to remove the auger from the gearbox and continue unloading, if necessary. The tapered end makes it easier to connect the shaft to the auger.



## Sukup Sweepways® are built to last.

Sukup uses 7 gauge flighting on 6" and 8" Sweepway® unload augers and 1/4" flighting on 10" Sweepways. This means you're getting commercial-grade strength and durability in each and every unit.

## Safer - No need to enter bin.

- All controls are located on the outside of the bin, so there's no reason to enter the bin while augers are running.
- All 8" and 10" Sweepway® powerheads are equipped with a rack and pinion sump opener.



- The exclusive sweep stop may be swung out from the wall to stop the sweep after one pass around the bin. Flip the sweep stop back and the bin is ready to fill.



- Standard Cluster Buster™ breaks up grain clumps around the center sump that block the flow of grain. This simple, unique system is completely operated from outside the bin, eliminating the need to enter the bin.



- All 6" Sweepways are equipped with a specially-designed opener that provides extra leverage for opening sumps even under deeper grain.



# Sweepway® or Tube & Well Systems

## **Sukup Vertical Augers provide the highest unloading capacities in the industry.**

- Available in 6" or 8" diameters, top or bottom drive, 16' or 20' heights. 10" available in 16' height.
- Double flighting at the bottom of the vertical auger picks up grain from the unload tube faster to increase capacity without the necessity of using a larger diameter vertical tube.
- Vertical auger turns faster than the horizontal unload auger to move grain up and out more quickly.
- Special boot design provides unrestricted grain flow from the horizontal unload tube into the vertical.



## **Galvanized Incline Augers**

- 5', 25° incline on 6" or 8" systems; 7', 20° incline on 10" systems.
- Goes from 6" to 8" on 6" systems, 8" to 10" on 8" systems, and 10" to 12" on 10" systems.
- Heavy-duty universal joint with support bushing.
- 6" or 8" inclines attach to bin with two chains. Optional support legs are also available.



## **Drive Options for Sukup Sweepway® & Tube & Well Unloading Systems**



Single Motor Horizontal Drive



Two Motor Vertical Drive - Top or Bottom

### **Also Available:**

- 8" Power-Take-Off Horizontal Drive
- Single Motor Vertical Drive - 6" only

\*Shields removed to show detail. Always keep shields in place.

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.

**⚠ DANGER!** Failure to heed these warnings may result in serious injury or death. Keep away from moving parts. Keep children away when operating. Keep all shields in place. See manual for othersafety warnings & instructions.



# Tube & Well

**Low Cost • Easy to Service • Move Bin to Bin**



## Sweep can be moved from bin to bin

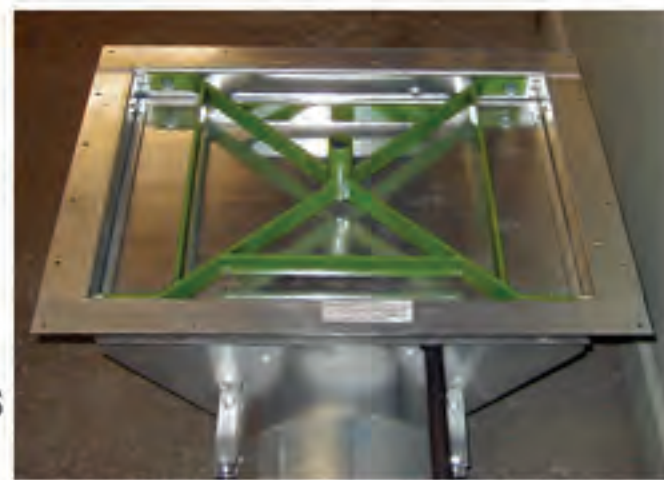
With the Sukup carry-in sweep, you can easily move the entire unit from one bin to another.

- The Sukup carry-in sweep includes the drive belt, galvanized backboard with patented sweep scrapers, and direct drive wheel.
- Reduction drive wheel, as shown on the Sweepway™, is an option on all 6" and 8" carry-in sweeps up to 40'.
- Reduction drive is standard on 8" carry-in sweeps over 40' and all 10" carry-in sweeps.



## Center Sumps

- 6" and 8" galvanized center sumps are available in full gate or concrete (half-gate) style.
- 10" center sumps are full gate style only. 10" sumps fit under 13 1/4" supports.



## Intermediate Sumps

- Intermediate sumps are band-on half gate for 6" and 8", full gate on 10".
- Optional rollers are available for 6" and 8".
- Control rods on 6" and 8" are telescoping, center pull type.
- Rods are located on both sides of the tube on 10" systems.
- The intermediate sump top is separate from the sump for easy installation.

## Choose Angle Ring or Sleeve Mount

- 6" and 8" Sukup Tube & Well systems are available as either angle ring or sleeve mount units.
- 10" systems are available as sleeve mount only.
- Angle ring units are compatible with other brands of equipment and feature 24" of stub flighting in the powerhead.
- Sleeve mount units feature one piece flighting.
- Roller bearings are standard on 10" center sumps. Roller bearings or nylon slide rails optional on 6" and 8" center sumps.



Completely Enclosed Shields Standard

Tube & Well Specifications				
CAPACITY* w/horizontal w/vertical	6"	8"	10"	12"
	1500 Bu/Hr 1250 Bu/Hr	2600 Bu/Hr 2500 Bu/Hr	4000 Bu/Hr 3750 Bu/Hr	6000 Bu/Hr -
<b>SLEEVE MOUNT</b>				
Unload Flighting	one piece	one piece	one piece	not available
Shaft & Bearing dia.	1"	1 1/4"	2" sh., 1 1/4" b.	
Flighting Gauge	11	11	7	
Unload Tube	14 ga. painted or galvanized	14 ga. painted or galvanized	12 ga. galvanized	
<b>ANGLE RING</b>				
Unload Flighting	used w/stub flighting	used w/stub flighting	not available	used w/stub flighting
Shaft & Bearing dia.	1"	1 1/4"		2 1/2"
Flighting Gauge	11	11		1 1/4"

\*Capacities are for Sweepway® and Tube and Well Systems during gravity unload.



# U-Trough Power Sweep

**10 inch U-Trough up to 6,000 bu/hr\***

- Requires 13 ¼ in. floor clearance
- Long-Life
- Heavy-Duty
- Available with horizontal powerhead and incline



## 1. Exclusive Reduction Drive Wheel

Exclusive 16-to-1 polyurethane reduction drive wheel comes standard on all Sukup U-Trough power sweeps. The 16-to-1 drive decreases wheel speed without sacrificing forward movement. With the lower speeds, wheel slippage is reduced and wheel life is prolonged.



## 2. Hanger Bearings

Oil impregnated wood hanger bearings are used to support the unload auger, allowing it to operate smoothly. The bearing is secured within a heavy-duty steel housing that is self-aligning to the trough and allows installation/removal of the auger when the bin is full.



## 3. Rack and Pinion Openers

The Sukup U-Trough comes with two independent rack and pinion openers. One opener controls the center sump and first intermediate sump. The other opener controls the rest of the intermediate sumps in tandem. These openers use machined gears to provide smooth, hassle-free control of the slide gates.



Cover removed to show detail. Keep cover in place.

## 4. Independent Intermediate Sump

The independent intermediate sump can be utilized as the primary unload sump if the center sump becomes plugged or blocked. This is the closest intermediate sump to the center sump and is operated with the center sump control rod. Sealed roller bearings (standard equipment) make it easier for center slide gate and intermediate gates to move under pressure of high grain depths. All Sukup U-Trough intermediate sumps are 1½ times larger than the standard Sweepway® sumps.

## 5. Center Sump

The upper and lower gearboxes are offset to provide a larger opening for grain to flow. Unload flighting extends past bin center to maximize capacity. Sukup manufactures and assembles the gearbox and center sump to ensure top quality. The center sump is located in the exact center of the bin so the top gearbox does not interfere with grain flow during sweeping.



## 6. External Clutch

The heavy-duty clutch is external from the gearbox and enables the unload auger to operate without the power sweep, so you can unload with gravity before engaging the power sweep. Robust external clutch components are accessible outside of the gearbox. This makes maintenance and repair much easier as well as being a time saver.



## 7. Horizontal or Incline Powerheads

The 20° incline utilizes a 12" diameter auger to help maintain capacity. Fully enclosed shields are used to meet all OSHA requirements. The pivoting motor mount allows for easy belt adjustment and quick removal.



\*During gravity unloading based on clean, dry corn



# No Matter How Big Your Operation, Sukup Has the Equipment You Need.



# Sukup®

## GRAIN BINS

**Available Sizes:**

18' to 156' diameter, holding capacities up to 1.522M bushels.



### Transfer, Utility and Roof Augers

Sukup transfer, utility and roof augers are just what you need to complete your bin system.

#### Transfer augers

- 20' lengths
- 6" or 8" diameters

#### Utility augers

- 10', 15' or 20' lengths
- 4", 6", 8" or 10" diameters

#### Roof-Mounted Augers

- 14', 20', 24' or 28' lengths
- 8" or 10" diameters



### Drag Conveyors

- 909, 1209, 1609 and 2109 Sukup Drag Conveyors fit under 15 7/8" tall bin floors.
- Up to 6200 bu/hr. capacity
- Galvanized construction for long life.
- Turned, ground and polished shafts for smooth operation.
- Entire bearing, sprocket and shaft assembly can be removed without having to separate the components.
- Chains are engineered for each specific unit.
- UHMW paddles, 1/2" thick, eliminate steel-to-steel contact.



**Sukup Manufacturing Co. • [www.sukup.com](http://www.sukup.com)**

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