

# Caclone Pneumatic Grain Moving System



- Conveniently, Efficiently Move Grain
- High Quality, Industrial-Grade Components
- Best Accessories in the Industry



### Why a Pneumatic System?

A pneumatic (air) system is the ideal grain conveying system for new and existing drying operations. This type of system is especially well-suited to moving grain from a continuous flow dryer into cooling and/or storage bins. An air system gives you flexibility that you can't get with traditional legs and conveyors. You can easily direct grain to multiple bins from one location, even around corners and into areas that are difficult to reach.

An air system also makes expanding your system simple - to include more bins, just add more tubing. The Sukup Cyclone Pneumatic System is made up of heavy-duty, industrial-grade components and easy-to-use controls. The Sukup Cyclone is designed to give you years of trouble-free operation and is backed by Sukup's dedication to customer service and a one-year warranty.

### Pneumatic System Operation

A pneumatic system is a convenient, efficient way to move grain; however, attention must be given to the operation of the system to maintain grain quality. This is true with any pneumatic grain moving system. The key to minimizing grain damage is controlling the velocity of the grain.

If grain is moved too fast, it will be damaged. Grain speed is regulated by air pressure. Contrary to what you may think, the higher the pressure, the slower the grain moves, and the less damage that will occur. A rule of thumb is to have at least 3 psi of line pressure and to frequently check the quality of grain that is being discharged into storage.

Make sure that tubing is properly installed and aligned and that the airlock is turning in the correct direction to utilize shear protection (counter clockwise when looking at the non-drive end of the airlock). Following these general rules of operation will help maintain grain quality. Refer to your Sukup Cyclone installation/operation manual for additional guidelines.



### **Standard Cyclone System Components**



The Rotary Airlock used on Sukup Cyclone Systems is heavier and built better than any other available, resulting in longer life. The thicker vanes eliminate the need for adjustable tipped vanes.



Positive displacement pumps and electric motors with shielded belt drive provide the air pressure for Sukup Cyclone Systems. Blower components are mounted on a heavy-duty, galvanized skid. An industrial air filter on the blower cleans the air entering the system. A filter restriction gauge lets you know when the filter needs to be cleaned.



### The Sukup Control Box

features a digital ammeter, which is more accurate than analog meters. Other controls include; start/stop, fault indicators, and pressure gauge. A time delay clears grain from the system after the fill auger shuts down.



**Dual Motor Drive** option gives you up to 30 horsepower, even in areas where only single phase power is available.



## The Best in the Industry!



A deadhead uses an expansion chamber to remove grain from the air stream. The Sukup deadhead is 10% larger than competing brands and features an all-galvanized construction. It can be moved away from the fill hole to allow you to fill the bin with an auxiliary auger.







Galvanized 30" Dia. Cyclone is lined with long-lasting UHMW to protect the grain as it decelerates. All-galvanized construction and 11 ga. steel lining on the cone ensure long life. The Sukup cyclone is 66% larger than competing cyclones. The large diameter handles larger volumes of grain with less wear.



Optional Poly Cyclone has increased wear resistance and no weld liner replacement.



Pre-Cleaner extends filter life by removing up to 85% of dirt from the air before it enters the filter.

Silencer reduces blower noise.



Telescoping Cam-lock System allows you to quickly and easily route grain to other tubes.

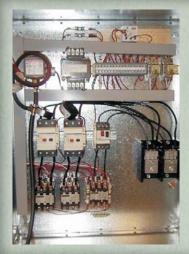
7-Way Distributor Valve routes grain to up to seven bins quickly and easily. Can be mounted horizontally or vertically. When mounted vertically, the valve is operated

from the bottom.



30°, 60°, and 90° elbows are designed with straight ends for better connections and less grain damage.

Offset tubes also available.



Power distribution block ready to accept incoming power and provide complete motor circuit protection is standard.



**Sight Glass** allows you to monitor grain flow and velocity.



Compensator Valve maintains consistent line pressure to prevent grain damage.



Adapter Kit attaches the airlock to your Sukup Dryer.

## Sukup Has What You Need





Adjustable bipod or quad-pod support brackets. Adjustable legs come in two lengths: 15"-25" or 30"-45".





### **Sidewall Bracket**

The best in the industry!

- features three legs for better support and stability.



5" System Estimated Capacities						
System	Bu/Hr 100 ft	Bu/Hr 200 ft	Bu/Hr 300 ft	Bu/Hr 400 ft		
5", 2x10 hp	800	650	450	-		
5", 2x15 hp	1100	925	650	-		
5", 20 hp	1200	1000	750	-		
5", 30 hp	1500	1250	900	-		
5", 40 hp	1700	1450	1050	400		

6" System Estimated Capacities						
System	Bu/Hr 100 ft	Bu/Hr 200 ft	Bu/Hr 300 ft	Bu/Hr 400 ft		
6", 40 hp	1800	1550	1150	500		
6", 50 hp	2100	1850	1450	800		
6", 60 hp	2250	2000	1600	950		
6", 75 hp	2400	2150	1750	1100		

Notes: These capacities are estimates based on conveying corn and may vary depending on condition of the grain (test weight, moisture content, grain temperature, kernel shape, etc.) the ambient temperature and humidity, as well as the layout of each system. The effective length of a system is determined by adding the horizontal length to twice the vertical rise plus allowing 20 extra feet for each elbow.

Sukup Manufacturing Co provides this information to assist you in choosing the optimal equipment for your situation. This information is calculated and is not a guarantee of product specifications or performance. Based on these factors, Sukup specifications should only be used as estimates, and not as a warranty, express or implied, of how a particular Sukup unit will perform under your operating conditions. Because we are continually improving Sukup products, changes may occur that may not be reflected in the specifications.



### Sukup Grain Dryers

- The Sukup Grain Dryer's patented Quad Metering Rolls pull the drier, inner grain down the column faster, preventing overdrying and providing more even moisture content.
- QuadraTouch<sup>™</sup> controls make the Sukup Dryer easy to operate.
- Advanced self-diagnostics simplify trouble-shooting.
- Single fan/heater, dual fan/heater and double and triple stacked models are available.
- Stacked Dryers feature Sukup's exclusive Grain Cross-Over™ System to move grain from one side of the dryer to the other as it passes between columns.
- Sukup Dryers have received multiple AE50 awards from the American Society of Agricultural and Biological Engineers for outstanding engineering innovations in agriculture.



Sukup Manufacturing Co. www.sukup.com Box 677 ■ 1555 255th St. ■ Sheffield, IA 50475-0677 ph 641.892.4222 ■ fx 641.892.4629 ■ email info@sukup.com

#### Distribution Centers

Arcola, IL 61910 980 E. State Rte. 133 ph 217.268.3026 fx 217.268.3522

Aurora, NE 68818 1705 Hwy. 34 E. ph 402.694.5922 fx 402.694.5921

Cameron, MO 64429 7426 NE 352<sup>nd</sup> St. ph 816.649.2226 fx 816.649.2225

Defiance, OH 43512 7724 Rte. 66 N. ph 419.784.9871 fx 419.784.9872

Jonesboro, AR 72403 5917 E. Johnson Ave. ph 870.932.7547 fx 870.933.8946

Watertown, SD 57201 2701 Piper Ave. ph 605.882.6697 fx 605.884.0467