

# VARI-AIR SYSTEMS

Vari-able Speed Grain Conveying Systems



Complete Systems - Controls - Accessories Designed for Agricultural Applications

## **VARI-AIR DESIGN – TRI-LOBE**

- Less Than 1/2 the Noise of a Twin Lobe
- Less Than 1/2 the Blower RPM of a Twin Lobe
- Fewer Back Pressure Spikes for Longer Lifetime
- Three Lobes Deliver More Air Than Two Lobes
- · Steady Air Flow with Three Lobes
- PSI Control for Precise Load Control
- Variable Frequency Drives for Efficient Operation
- Customization Available on Every System
- Installation Services
- Factory Trained Support Staff
- Innovative Accessories
- · Complete Parts Availability
- UL/ETL Listed Control Panels
- 5"-6" Blower Systems Available

#### PSI/VFD

Our system adjusts speed according to air pressure. When more corn is in the system, air pressure elevates; when less corn in the system, the air pressure lowers. Our system auto-corrects. This means, as air pressure increases or decreases, our system automatically makes the PSI/speed changes. Once the system is up and running, you do not have to adjust any settings.

#### **Tri-Lobe Blower**

Our Tri-Lobe Blower features three lobes per shaft versus twin lobe, which has two lobes per shaft. A tri-lobe blower system will run at a lower RPM than that of a twin lobe system. Lower RPM gives you considerably less audible noise, along with smoother air delivery, and increased lifetime on all the mechanical components inside the blower unit.

## **On-Site Start Up**

As a quality control measure, we come on-site and run the blower system to ensure performance, as well as show the end-user how to operate the system. While there, we shoot pictures and video of the system in operation. We then post the images and video on a website. These helpful resources enable users to refer back and see what settings the system was originally operating at. We also complete a start-up sheet on-site that records all operating conditions.



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## **Reduce Dust and Damage to Grain**

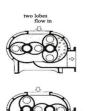
Moving your grain at variable speed allows it to proceed at lower flow rates. The benefit of lower flow rates? When compared with traditional methods, this variable speed process provides better protection for the grain being moved.

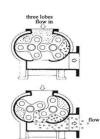
When you purchase the Vari-Air System, you receive the Blower System on a skid, the Air-Lock system on a skid, and the Control System. The Control System is in a UL/ETL rated control box and is offered in either outdoor or indoor configurations.

## **Complete Systems**

Our systems come from our facility with motors installed, and are completely systemtested before shipment. We support our products 100% at all times.









Variable Frequency Drives offer: Phase conversion (Single Phase to Three Phase), Soft-Start for slow start to minimize current in-rush during start-up, Speed Control (100% speed = 100% power/75% speed = 50% power).

By using our Variable Frequency Drive on our system, you will double the lifetime of the blower/electric motor combination. Lower speeds = Longer bearing lifetime.

We are a certified UL/ETL panel shop, so all controls meet and exceed all NEC codes and regulations.

All system components are programmed and tested before shipment to assure quality before delivery.





### **System Capacity Chart**

The following is a Bu/Hr chart based on conveying #2 yellow corn. If you are running other commodities through the air system, please call to confirm what kind of capacities you should be seeing.

#### 5" Vari-Air Bushel/Hour Ratings

Length	5"-20hp	5"-30hp	5"-40hp
50	1177	1712	1926
100	1150	1685	1899
150	1123	1658	1872
200	1070	1605	1819
250	989	1498	1712
300	882	1364	1551
350	749	1177	1364
400	588	963	1123
450	374	695	829
500	_	_	428

### 6" Vari-Air Bushel/Hour Ratings

Length	6"-50hp	6"-60hp	6"-75hp
50	2354	2514	2675
100	2327	2487	1648
150	2300	2461	2621
200	2247	2407	2568
250	2140	2300	2461
300	1979	2140	2300
350	1792	1952	2113
400	1551	1712	1872
450	1257	1417	1578
500	856	1016	1177