

VacBoss™ with BlowerGard™
Filtration is the result of our customers' demands for a truly industrial grain vac... one that would last even when conveying large volumes of dusty, sticky products. VacBoss™ is the first grain vac able to withstand rigorous conveying conditions in commercial grain and seed handling environments.







## New, Exclusive Technology

5-Year/
2,500
Hour
AbrasionFree Blower
Limited Warranty

VacBoss™ with BlowerGard™ Filtration is the world's first and only industrial grain vac featuring a 5-Year/2,500-Hour Abrasion-Free Blower Limited Warranty!

Because of the exclusive technology found in BlowerGard™ Filtration, wear to the blower caused by incoming abrasive dust and debris is virtually eliminated. This technology allows us to offer an outstanding warranty program which is unprecedented in the industry-5-Year/ 2,500-Hour Abrasion-Free Blower Limited Warranty. Please contact VacBoss™ for full details.

\*Certain restrictions and conditions apply, two year mechanical warranty applies.

# BlowerGard™ Filtration with MicroTube™ Filters and VibraShaker™ Cleaning System

- Increases blower life due to nearly 100% filtering efficiency. An array of MicroTube™ filters captures abrasive and sticky dust before it enters the blower.
- Allows users to convey grains and a multitude of dusty products, including meals and feeds without abrasion wear to the blower.
- Maintains high conveying capacities over time because blower efficiency doesn't decrease.
- Decreases power requirements. Compared to grain vacs with equivalent capacities, VacBoss™ is 35% more energy efficient!



BlowerGard™ Filtration eliminates compressed air, reverse air flushing, dumping and other complicated or messy cleaning methods.

BlowerGard™ Filtration is the first commercially available positive filtration system designed for high-dust applications. Using a high-density array of MicroTube™ filters (patent pending), BlowerGard™ blocks about 99.97% of the abrasive dust particles\*. The exclusive VibraShaker™

cleaning system (patent pending)

cleans the MicroTube™ filters quickly and efficiently by shaking the dust off the filters and back into the grain stream.



### New, Exclusive Features

### RVI™ Reduced Velocity Inlet

- Decreases the air velocity by up to 60%. Therefore, the grain deceleration begins prior to entering the receiving cone. This
  - results in better efficiency, gentler handling of product and less wear.
- The RVI™ is placed low on the VacBoss™ for increased performance, lower power requirements, reduced



The RVI<sup>™</sup> offers a multitude of benefits, such as increased performance and reduced wear.

wear and easier pipe connection.

### Airlock Truck™ Access System

- Simplifies airlock adjustment, the most important and often overlooked maintenance item on grain vacs.
- For easy maintenance, the airlock rolls out from under the receiving cone on a track for quick and simple inspection. Adjust the airlock in minutes without a crane or heavylifting.





Service the airlock tips in minutes with the VacBoss exclusive Airlock Truck™ Access System.

### **Vacuum Breaker**

 Huge time saver at the touch of a lever. Halt conveying without shutting off the VacBoss™ or removing the nozzle from the grain.





Halt conveying without removing the nozzle from the grain - saving time and labor

### **Features**

The VacBoss™ has a package of standard features tailored to the needs of commercial grain and seed handling operations.



Diesel

### PTO Shaft and Gearbox (PTO Only)

The PTO shaft includes a clutch that provides protection and smooth power transmission to the VacBoss™ without a shear bolt. The gearbox delivers direct, smooth power from the PTO shaft to the blower and hydraulic pump. The gearbox eliminates side load to the blower shaft and bearings. It is an extremely efficient and reliable means of transferring horsepower.

### 2 Diesel Engine (Diesel Only)

The fuel efficient, water-cooled diesel engine features a dual element air filter system, engine shroud, high ambient radiator, and city critical exhaust muffler. The engine package comes complete with a 60 gallon (227 liters) fuel tank with gauge and full safety instrumentation in a lockable enclosure.



The gearbox delivers smooth, direct power to the blower and hydraulic pump.

### Blower

The VacBoss™ is equipped with a positive displacement, highperformance blower.

### Silencer

The maintenance free silencer minimizes noise emissions to 90 dB at 10 feet (3.3m).

#### Vacuum Breaker

The vacuum breaker allows the operator to halt conveying at the touch OHydraulic Truck Loading Kit of the lever. There is no need to shut off the VacBoss™ or remove the nozzle from the grain.

### Inlet)

The design and placement of the RVI™ (Reduced Velocity Inlet) provides higher capacities, minimized power requirements, gentle product handling, reduced wear, and easier pipe handling.

### ☑BlowerGard™ Filtration with MicroTube™ Filters and VibraShaker™ Cleaning System

BlowerGard™ Filtration captures virtually all the abrasive dust before entering the blower, eliminating wear. As air passes through an array of MicroTube™ filters, dust is captured before entering the blower. Cyclonic separation is eliminated, further decreasing horsepower requirements. The VibraShaker™ cleaning system shakes the dust off the filters and back into the grain stream.

#### Airlock

The hydraulically-driven, blow-through style cast iron airlock is self-cleaning. The airlock speed is adjustable and its direction can be reversed without tools in the case of an obstruction. It features adjustable steel tips and endplates. It is designed for gentle seed handling.

### Airlock Truck™ Access System

The Airlock Truck™ access system easily allows the airlock to be rolled out from

under the receiving cone for inspection and maintenance in minutes.

The hydraulic truck loading kit allows truck loading from the side, corner, or rear with a clearance of 12' 2". The Truck Loading Kit is hydraulically raised and lowered at a touch of a lever. It features heavy-duty bearings to rigidly hold the truck loading kit during unloading.



Heavy-duty bearings hold the truck loading kit securely in place during unloading.

#### Camlock Coupled Lower Elbow

The camlock coupled lower elbow can easily be detached without tools in applications where the truck loading kit is not used-such as filling bins, silos, and bunkers. Camlock couplers provide sure alignment and positive seal at every connection.



The camlock coupled lower elbow can easily be removed for blowing applications where the truck loading kit is not used.

### **ODischarge Cyclone**

The discharge cyclone is constructed of abrasion resistant steel and has an easily replaceable wear liner. The rubber discharge boot contains grain flow in a tight pattern.



The discharge cyclone's heavy-duty construction provides durability.

Optimal VacBoss<sup>100</sup> performance and maximum capacity is possible with the pressure (L), differential (C) and vacuum (R) gauges.

### Safety Relief Valves

The vacuum and pressure relief valves are activated if limits are exceeded. Valves automatically protect the blower and reset themselves.

# ②Self-Contained Hydraulic System

Dependable hydraulics power the airlock, truck loading kit ram, vacuum breaker, and VibraShaker™ cleaning system. The system comes complete with gauge, filter and reservoir tank.



Self-contained hydraulic system with gauge, filter and reservoir tank.

### **10**Operation Gauges

The VacBoss™ is fitted with pressure, differential and vacuum gauges. The gauges allow the operator to precisely set the VacBoss™ for maximum capacity and simplifies troubleshooting.

#### **19**Hourmeter

To help facilitate the scheduling of proper maintenance, the VacBoss™ is equipped with an hourmeter. It is excellent for timing rental or custom work.

### Offset Frame w/ Fenders (PTO Only)

The patent-pending frame with an offset hitch provides optimum truck clearance, even when using a tractor with duals or long axles. The fenders with rubber mud flaps help keep stones and mud off the VacBoss™. Radial tires are standard.

### • 4-Wheel Heavy-Duty Trailer (Diesel Only)

The 4-wheel heavy-duty trailer has 12,000 lb capacity, lighting hookup and brakes. Radial tires are standard.

### Canner and Platform

The ladder and platform offer easy access to inspect the MicroTube $^{\text{TM}}$  filters and monitor operations.

#### **Camlock Couplers**

Without tools camlock couplers on pipes provide sure alignment and positive seal at every connection. Perfect alignment reduces handling damage, air leaks, and pipe wear.

#### Paint and Finish

Following steel grit blasting, surfaces are primed and painted with polyurethane enamel for lasting protection against corrosion.

### **Options**

### Pipe Rack (Diesel Only)

For secure and convenient transport of pipe, the VacBoss™ can be equipped with a pipe rack that holds 15' lengths of pipe.

#### **Chrome Hardened Airlock**

The airlock can be chrome hardened utilizing a special process for extra wear resistance.

### Fully Lined Discharge Cyclone

For additional abrasion resistance, a replaceable wear liner for the discharge cyclone cone is available.

### High Clearance Truck Loading Kit

When loading into high grain trucks, the VacBoss™ can be fitted with a high clearance truck loading kit that has a clearance of 13′ 6″.

### **Receiving Cone Liner**

The receiving cone can be fitted with a replaceable wear liner for ultimate abrasion resistance.

### **Applications**





The VacBoss<sup>™</sup> has suction intake and pressure discharge with detachable truck loading kit which provides the versatility needed to attack nearly any application.

- Elevator Cleaning boot pits, head houses, under scales
- Emergency Clean-up train wreck, truck accident
- Filling and Unloading bins, flat storage, silos, graineries, bunkers
- Unloading Railcars
- Removing Hot Spots
- Handling Seed

### Capacity

**Hose Length** 

10 ft. (3.3m)

40 ft. (12.2m)

80 ft. (24.4m)

120 ft. (36.6m)

Oats	Barley	Corn	Wheat	Soybeans
3,800-4,300	3,800-4,200	3,900-4,000	3,600-4,000	3,400-3,800
(66-74)	(86-95)	(99-102)	(95-105)	(91-102)
3,800-4,200	3,800-4,200	3,650-3,850	3,200-3,800	3,000-3,600
(66-73)	(86-95)	(93-98)	(84-100)	(80-97)
3,500-4,000	3,400-3,800	3,200-3,600	2,600-3,200	2,400-3,000
(60-69)	(77-86)	(81-92)	(68-84)	(64-80)
3,000-3,800	2,800-3,500	2,100-2,500	1,500-2,500	1,300-2,300
(51-66)	(67-80)	(53-64)	(40-66)	(34-62)

Capacities are approximate and will vary depending upon altitude, ambient temperature, pipe setup and the type, condition and moisture content of the grain. Conveying capacities are given in bushels per hour (metric tons per hour).

### Background

hristianson Systems, Inc., makers of VacBoss™, is a leading manufacturer of ship unloaders and pneumatic conveying systems for bulk materials, such as grains, seed, feeds, fertilizers, and plastics. Christianson's equipment serves the agriculture, commercial bulk handling, and marine port industries in both the domestic and international markets.

Christianson's product line is extensive and ranges from small bulk seed conveyors to large ship unloaders for discharging ocean-going vessels. Christianson offers equipment under the brand names of SuperTower®, Chem-Vac®, Handlair®, Vac-u-Vator®, and Seed Vac™. Christianson has focused on providing innovative, reliable, high-quality equipment by investing in the latest computer-aideddesign technology.



Christianson's equipment is used worldwide, including grain ship unloaders.

### Testing

The VacBoss™ concept was a result of our customers' demands for a truly industrial grain vac where the blower would last even when conveying dusty and sticky product. Christianson Systems, Inc. has over 25 years of experience making some of the world's largest grain handling equipment. They took that technology and downsized it into a portable grain vac for the commercial user. Over the

last two years, VacBoss™ has gone through a rigorous testing process. The VacBoss™ has been subjected to the harshest of conditions, including endurance tests where the VacBoss™ was run 24-hours a day for days on end. Dirty, moldy grain was conveyed to test the BlowerGard™ Filtration system. Handling damage and power requirements were monitored.



Weighing the grain for accurate capacity ratings.



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