

WS

Grain Cleaner



● Separates By Density Using Unique Air Flows

The WS Sosnowski [sos NOW ski] grain cleaning machines use unique air flows to separate good grain from almost any crop material by an air flow created by centrifugal force. Seed cleaning using air flow is gentle. The air flow adjustment determines the cleaning action and its proper control is key to obtaining good results. A central diffusing element and a unique pattern of seed spreaders is also key. With the excellent design of the Sosnowski grain cleaner, grain cleaning quality is improved to almost twice that of most other similar machines on the market.

Regulating the air flow controls the separating action. Air is sucked up through the center tube in a unique pattern and exits out the exhaust. Anything less dense (weight X surface area) than the good grain will exit the machine through the exhaust. Even material that is heavier than the good seed may be taken out if its surface area is large enough. For example, wheat heads can be taken out even though they are heavier than the good seed because its surface area is much larger.



INNOVATIONS IN AGRICULTURE

● Cleans Various Grains

The WS machines will clean many types of common grains such as barley, beans, corn, durum, hemp, lentils, maize, oats, peas, poppy, rape, rye, soybeans, spelt, sunflower, wheat, and many more. After cleaning, the grain will be ready for storage, for planting, or for grain burning furnaces. These cleaners have also been used for separating wood chips from sawdust and plastic from sand or bark.

● Solution For Disease In Grain

Quality standards vary for cleaning grain depending on its end use. Harmful fungus and toxins such as vomitoxin, aflatoxin, fusarium, and ergot is harbored mostly in the chaff, the light seeds, and the cracked kernels. These diseases can easily double in a month when stored in slightly damp conditions. Removing this part of the crop from the good grain will lower the infection rate. The air flow through the grain will help dry down a high moisture crop. Cleaning tests with popcorn and spelt were conducted and the results tested by a certified lab. The popcorn was infested with

a vomitoxin level of 11.2 which is unusually high. The spelt tested at 1.5 vomitoxin. After being cleaned with a WS machine, the popcorn tested at 1.8 and the spelt tested at 0.7.



● **Small Investment, Short Payback**

It is easy to increase the value of your crop such as one farmer did in Saskatchewan. In 2016, he had 6,000 bushels of wheat that was contaminated with a high level of Fusarium fungus. It was rated as a grade 3 grain which was unfit for food or feed. The most that he was offered was \$2.50/bu. Since the fungus consumes the inner part of the kernel, the thins, the lights, the cracks, and the fines are the most susceptible to this infection. After cleaning the grain with a WS machine, this part of the grain was removed which contained most of the fungus. The grain was then upgraded to a grade 1 and the offer on the wheat was \$6.60/bu. This price difference was \$4.10 per bushel which amounted to an increased value of over \$24,000 for the crop. His Return On Investment was short and his purchase added more profit to his bottom line.

● **Grading Seed Adds Value**

Field trials have confirmed that using only the healthy, plump seeds for planting may increase yields up to 30% or more. An added benefit is that the crop may mature more uniformly and up to a week earlier. Grading out the heaviest, healthiest seed can be accomplished by performing a hard separation. Increasing the air flow will cause the lighter seeds, which are often the malnourished or diseased seeds to be separated from the healthiest, plumpest seeds having the highest test weight. Premium prices can be obtained for high value grain. The other separations can be used for feed or sold as a lower grade grain.

● **Durable, Maintenance Free**

Multiple thousands of these Sosnowski grain cleaning machines are in use today. They are made of quality components and operate for many years without fail. One company bought a cleaning machine in 2013 to separate plastics. It was used 24/7 for two years non-stop including holidays and weekends. The third year it ran 12 hours a day, five days a week. It has operated with no down time during that time period.

The fan is mounted directly on the motor and is the only moving part on the machine. There are no lubrication points and no spare parts are needed.

● Consistent, Efficient, User Friendly

Because these machines have no screens to clean, it's hard to beat their consistency and efficiency. The settings on these machines can be changed very quickly, even for different crops. Grain cleaning machines using screens are often slow and complex to operate which was best accomplished by a professional custom grain cleaning operator. Choosing the correct screens is a continuous process because the kernel size of grain may vary from year to year or even from different areas of the same field in the same year. This variation is caused by differences in weather, soil fertility, and plant health. Screens must be cleaned regularly to maintain consistency and becomes an ongoing, arduous task. Cleaning your own grain for seed like a pro is now possible for the average Joe. Best of all, these machines are very user friendly and crazy simple to operate!

● Compact, Agile Design

These machines can be set up almost anywhere. This can reduce seed, herbicide, and transportation costs saving you time, money, and frustration. Their footprint is small. They can be integrated

permanently into grain handling systems.

Mounting them on small trailers or on a frame with castors will keep the unit mobile.

Some operators who already own a good screen machine will purchase a WS grain cleaner and set it up to



pre-clean grain before it runs through a screen machine for the sole purpose of speeding up the cleaning process. Much time is saved when screens don't need to be cleaned as often.

WS GRAIN CLEANER MODELS

SEED CLEANING
CAPACITY IS 50%
OR LESS OF GRAIN
CLEANING RATE

SPECIFICATIONS

250+ bu/hr Seed Cleaning
Length 60"
Width 31"
Height 36"
Weight 165 lbs
.5 HP/110V/7.2A
Item Code : SCALP

WS SCALPER



WS 100



SPECIFICATIONS

110 bu/4.5 T/hr : 330 bu/10 T/hr
46" Length 35"
30" Width 35"
48" Height 61"
62 lbs Weight 110 lbs
.33 HP/110V : .75 HP/110V
.25 KW/4.1A : .55 KW/7.5A

1018 : Item Code : 2036

WS 350



SPECIFICATIONS

730 bu/22 T/hr : 1500 bu/45 T/hr
48" Length 56"
38" Width 40"
67" Height 72"
198 lbs Weight 265 lbs
1.5 HP/110V : 2 HP/110V
1.1KW/13.5A : 1.5KW/21A
3968 : Item Code : 5594

WS 750



WS 1500



SPECIFICATIONS

2600 bu/78 T/hr : 3600 bu/130 T/hr
54" Length 64"
39" Width 38"
84" Height 146"
368 lbs Weight 540 lbs
5 HP : 7 HP
6511 : Item Code : 8715

WS 2500

WS 3500

Machines with yellow title bars are usually in stock.

WS 4500

SPECIFICATIONS

WS 5500

4600 bu/275 T/hr:5600 bu/550 T/hr

85" Length 97"

51" Width 51"

185" Height 180"

946 lbs Weight 1166 lbs

10 HP : 15 HP

108190 : Item Code : 149260



● WS Grain Cleaner Animation

Auger brings grain to the hopper.

Grain floats down the center tube by gravity through a column of air going up created by centrifugal force.

An auger takes the clean grain away from the collection hopper under the main cleaning tube.

Winnowings (chaff, cracked kernels, light seeds, and other foreign material) exit through the exhaust elbow.

Air escapes through the filter fabric.

Winnowings are collected in the used feed bag. An auger, a bulk sack, a sleeve, a straight pipe or other options can be used to collect or discharge winnowings depending on the application.



● Choosing A Size

When choosing a size, consider how much grain you have to clean, how much time you have to clean it, and the purpose of cleaning. The machines can be run at full capacity to remove dockage. When cleaning for seed or food, use a rate less than 50% of capacity. If the settings on the harvester leave a lot of large trash in the crop material like thistle seed heads, long straw stems,



large insects, etc the crop needs to be run through the grain cleaner at a slower rate. The momentum of a strong grain flow will tend to drag foreign material along down with it. Slowing down the grain flow will give the machine the best chance at separating out these bulkier items. The speed of cleaning will also depend on other factors such as the amount of foreign material in the grain, moisture content, & quality requirements.

Sizing a machine for your budget is easy with various model choices. Results are the same with each model. These economical little workhorses pack a lot of punch for a fraction of the cost compared to other machines in the same class. There is no other grain cleaning machine that gives you more bang for your buck!

● What Our Customers Say

“In our area, Johnsongrass is a good forage crop but when it gets into the oats, it’s a big problem. I use this machine to separate out the oats. I then run the exhaust material through again to take out the Johnsongrass. We can sell both the oats and the Johnsongrass for seed to the area farmers. We really like this machine. We are willing to talk to anyone if they have any questions about these grain cleaners.” -Andy B., FL



“This machine makes my job so much easier. I can do it alone and don’t need anyone else’s help. It takes me so much less time to do my job. I would recommend this machine to anyone who cleans grain.” -Janet B., KY

“I’m grateful that you make a grain cleaner that’s affordable so that even the small farmers can afford to clean their own grain.” -Guy S., WA

“It does a phenomenal job for it’s compact size and the high capacity. It is very easy to use. The large trash pieces have been a problem but . . . the sieve accessory [scalper] . . . will take care of this problem.” -Dennis O., WI

“I’m very satisfied with this machine. I mounted it on top of a rotary cleaner and it really speeds up the cleaning process. It eliminates the plug-ups I used to have. It is easy to operate. It keeps me really busy to run this cleaner even at half of it’s capacity.” -Fred W., SK

“Really happy with my grain cleaner both with my corn and rye. Very quick and efficient compared to conventional cleaners.” -Luke L, PA



“I just used the WS machine by itself and was very impressed with the cleaning. I think with the other cleaner [scalper] it will be close to perfect. Thanks.” Daryl F., PA



Contact us for a quote today.

 GrainCleanerOH.com



330.390.1618