



Seed cleaning

Crop value increase when cleaning standards met

How to increase the value of crops on farm is a key consideration for many arable farmers. Andrew Stovin who farms 500ha alongside his father Alan and brother Mathew, at N M Stovin Farms near Alford on the edge of the Lincolnshire Wolds, has achieved just that by cleaning their grass seed on farm. JK Machinery's JCM VibroMAX vibrating sieve cleaner, from McArthur Agriculture, allows the Stovins to meet the exacting cleaning standards of their grass seed merchants and is also used to clean home saved seed.

"As well as growing wheat, barley and spring beans and having around 60 suckler cattle, we grow around 160ha of grass seed. Before we had the JCM VibroMAX we had to pay our seed merchants to clean the seed for us," explained Andrew Stovin.

"They would come and take a sample and anything below 98 percent pure seed had to be cleaned. It is not hard to see that paying for cleaning quickly eroded our profit margin."

Recognising the capacity!

A couple of years ago Stovin saw one of his university friends using a JCM VibroMAX to clean grain and immediately saw its potential to clean grass seed. "Following discussions with Scott McArthur, Director at McArthur Agriculture, my father, brother and I took a sample of our grass seed to McArthur's Flixborough depot to conduct a trial with the JCM VibroMAX," said Stovin "Seed cleaning of any kind has a lot of variables that can affect the quality of the outcome and predicting the quality of the cleaned seed can be difficult. However, the results achieved with the JCM VibroMAX gave us the confidence that it would deliver the high standard required by our seed merchants."

The Stovins' JCM VibroMAX 10122 moves the grass seed



across two vibrating sieves and the impurities are separated based on physical dimensions, before entering an aspirator where they are separated by weight and aerodynamic properties. The VibroMAX's vibration technology delivers simple to control high-output processing with low energy requirements, on a small footprint. For harvest 2021 the Stovins used the JCM VibroMAX cleaner as a stand-alone machine. Before making any additional investment in handling equipment, they wanted the cleaner to prove that it would deliver as expected.

“The JCM VibroMAX performed extremely well so we asked McArthur Agriculture to design a handling system to further streamline the processing of our grass seed in time for harvest 2022,” added Stovin.

Grass seed is now tipped into a Skandia Elevator AB KTG above ground intake which feeds one of two Skandia SE140

belt and bucket elevators transporting the grain to the JCM VibroMAX. Once cleaned, the seed is taken by the second belt and bucket elevator to feed a Skandia KTF horizontal chain and flight conveyor which carries the seed to one of three bunkers housed in the same shed as the cleaner. One outlet allows filling directly into a trailer, whilst another has been fitted with ducting designed for filling bulk bags.

A community benefitting design

“The JCM VibroMAX plays a key role in helping to drive up the all-important bottom line. We have reduced what we pay for grass seed to be cleaned by our seed merchants, plus as we can now clean our home-saved seed on farm, we are no longer having to pay for a mobile seed cleaning lorry to clean it for us. We don't have to wait for the mobile seed cleaning team to fit us in, we can clean the seed as and when we need to, which helps speed up our entire seed handling process,” continued Stovin.

McArthur Agriculture has designed the current seed handling system so that it is easy for the Stovins to extend their cleaning or handling capability. “We are hoping to generate another revenue stream by offering neighbouring farmers the opportunity to take advantage of the benefits which the JCM VibroMAX has delivered for us, by allowing them to reduce their costs by producing their own cleaned home saved seed, regardless of the crop.

“Looking at the big picture around how we have been able to successfully utilise the JCM VibroMAX, I anticipate that we will meet our expectation of achieving a return on our investment within three to four years,” said Stovin. “Anyone considering on farm cleaning would do well to talk to McArthur Agriculture about JK Machinery's range of vibrating sieve cleaners.”