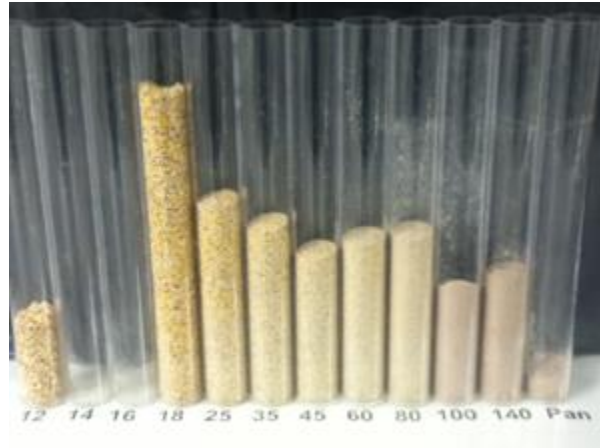


Particle Size and Distribution of Particle Size Are Important

TUESDAY, 18 APRIL 2017 BY GILBERT VANDENHEUVEL



Particle size analysis after particle separation



April 17, 2017

by Gilbert VandenHeuvel

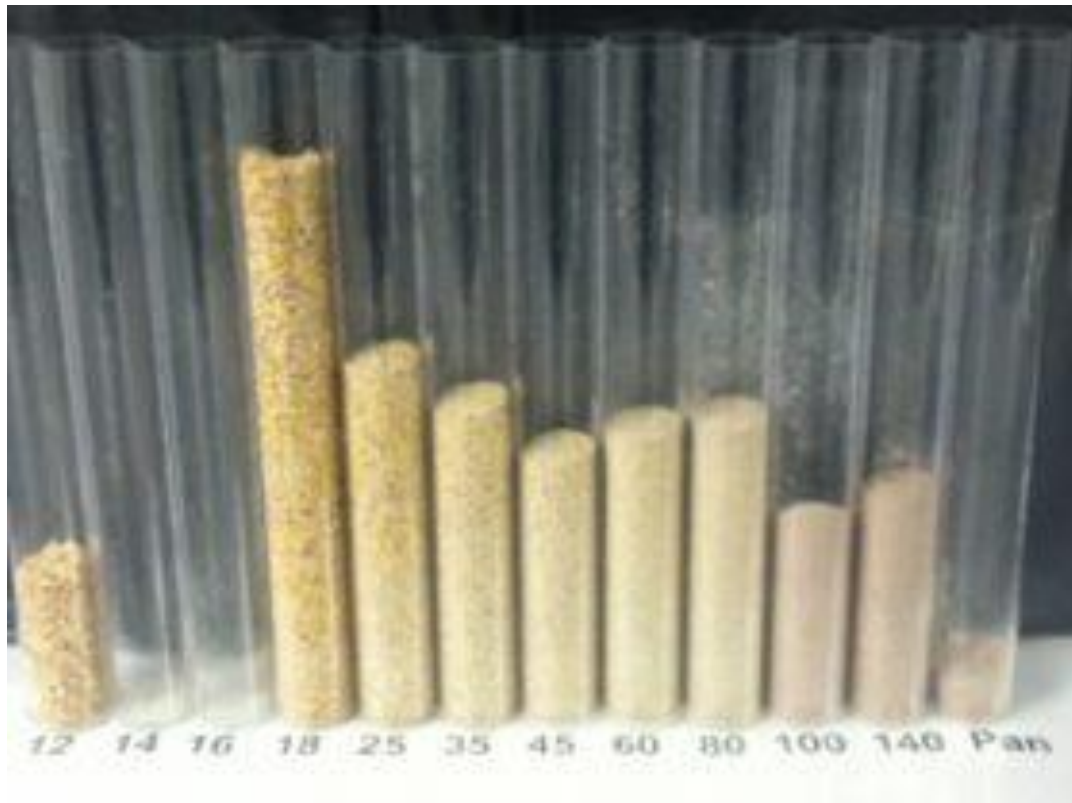
With margins tight for hog producers, finding areas to save feed dollars is always a good thing.

In a previous Blog, feed particle size was discussed at length.

The main points where:

- put feed particle size testing into your regular maintenance schedule every 1000 tonnes of feed processed.
- The goal is to have your corn ground between 700 and 800 microns.
- 1.5% change in feed efficiency comes with every 100 micron change in particle size.
- As your corn moisture changes, the screen size needs to be changed too.
- That can certainly add up to lots of feed dollars saved for those who put in the effort in getting the right grinder set up properly and keeping it maintained.

Here is a link to a concise study done by Iowa State University on Particle Size on Growers and Sows. [CLICK HERE](#)



Particle size analysis after particle separation

verage particle size isn't the only thing you need to look at while doing this test. Distribution of particle size is important too.

The best grind has most of the product in the 500 – 800 micron range (25 – 45 sieve size shown here) . Too much large very small or very large particles isn't helping the feeding program. The large pieces simply go through the pig's digestive system, hurting your Feed Conversion and the very fine particles can lead to bleeding ulcers and reduced flowability in bins and feeders. An ideal grind in this picture would have a nice Bell shape to it. Lots of product in the ideal sieve range of 25 – 45 and as little as possible on either end.

Below is a chart showing good Standard Deviation at 3.37 and a nice bell curve in the graph.

[Particle Size Spreadsheet blog](#)

Dwyer Manufacturer offers free particle size testing with printed results to all it's mill customers and a small fee to anyone else. Simply put a couple handfuls in the mail or drop some off the next time your in the area.