



VERSAMILL® 101

WHAT IS A VERSAMILL®?

The VersaMill®—developed by RMS Roller-Grinder—is a “direct drive roller mill”. The VersaMill® allows the operator to control two additional grinding variables. The system eliminates the need for belts and pulleys, and provides the ability to easily manipulate roll speed and speed differential. This results in improved grind consistency, while also offering significant energy savings compared to conventional roller mills or hammermills.

Typically, dialing in particle size is done by adjusting the feed rate, the roll gap, or the corrugations on the rolls themselves. The VersaMill®, due to its mechanical and electrical design, facilitates easy manipulation of the roll speed and particle shearing abilities. This delivers powerful control of the particle size, as well as increased throughput in certain applications.

HOW IS A VERSAMILL® DIFFERENT FROM A CONVENTIONAL ROLLER MILL?

The biggest difference between a VersaMill® and a conventional roller mill is the VersaMill®’s ability to achieve fine particle sizes simply unachievable in conventional roller mills. Conventional roller mills typically max out at around the 375 to 400 micron range. By comparison, the VersaMill® is capable of grinding material down to the sub 275 microns. It does this by adjusting the speed of each individual roll. By allowing each roll to spin at different speeds, the mill is able to shear more and create a finer grind.

It has been found and verified by 3rd party companies that when compared to a conventional roller mill, the


VersaMill® provides an average of 15%-30% energy savings. When compared to a conventional hammermill, the RMS VersaMill® is approximately 30-60% more energy efficient in terms of kilowatts used per ton of grain ground. It does this in several ways:

- The VersaMill®’s simple mechanical drive reduces wasted energy by eliminating belts.
- The advanced drive system will slowly ramp startup speeds to eliminate sudden energy surges.
- The patented electrical system is more electrically efficient by capturing energy that is normally lost in the grinding process and reusing it.

The implementation of an energy-efficient VersaMill® over a conventional mill can also lead to tax benefits and rebates! In some instances, electric companies are offering anywhere from \$25,000 to \$200,000 rebates after the purchase of a VersaMill®. This makes decisions like the VersaMill® an easy one for those looking to lower their carbon footprint or stay ahead of the ever-increasing cost of energy.

MORE VERSAMILL® BENEFITS

- More versatility - less machinery
- Significant decrease in overall energy costs
- Remote troubleshooting
- Less mechanical parts = less ongoing maintenance
- Finer grinds

A photograph showing several pink pigs in a farm setting, gathered around a dark metal trough to eat feed. The trough is filled with a light-colored, finely ground grain. The background shows a dirt floor and wooden structures, likely part of a barn or feedlot. The image is partially overlaid by a blue text box on the right side.

In a Kansas State University agricultural feed case study, it was determined that for every 100 microns that is decreased in particle size, there is a \$1 to \$3 return per animal. This means that a farmer raising 100,000 to one million pigs per year could save anywhere from \$100,000 or even a million dollars per year if they switch to a roller mill that provides a finer and more consistent grain— a mill like a VersaMill®.

**KANSAS STATE UNIVERSITY
AGRICULTURAL FEED CASE STUDY**



USES IN INDUSTRY

- Ag Feed
- Ethanol
- Industrial (bulk solid & powder)
- Brewing
- Distilling
- Brewstillery
(One machine for grinding for brewing and distilling)
- Soy

WHY YOU NEED A VERSAMILL®

The VersaMill® is “future proof” due to its technology and ability to adapt with an ever-changing industry. Through research and development, agricultural professionals have been able to determine that a finer grind of materials leads to quicker and more efficient weight gain in animals. The VersaMill® is able to provide those finer grinds that a conventional roller mill cannot, meaning animals are able to go to market sooner. As the industry develops and changes even further, the VersaMill® has the technology to adapt.

RMS ROLLER-GRINDER ENDURANCE ROLL PROGRAM

The team at RMS Roller-Grinder is proud to introduce our Endurance Roller Program. This program consists of two components: an improved roll design, and on-site education and training for owners and operators. The rollers that are used in this program are designed to last 3 to 5 times longer than a traditional cast-iron roller.

In addition to the longer-lasting rolls, the Endurance Roll Program offers reinforced training and support from on-site professionals. These specialists can review the equipment, provide reports on equipment status, and train operators on best practices for cleaning, calibration, and performance. This can be done on a quarterly, bi-annual, or annual basis.

VERSAMILL® PRODUCT FEATURES

- Capability of producing particle sizes ranging from 275 to 3000 microns
- Enrolled into the Endurance Rolls Program
- Automatic preventative maintenance
- Improved flexibility and control by controlling roll speeds and roll differentials

IMPROVE YOUR EFFICIENCY AND ROI WITH AN RMS VERSAMILL®

With the speed in which the world is changing—whether it be in technology, energy efficiency, or cost-of-production—staying ahead of the curve in your business is essential to maintaining or even improving your ROI. Let RMS Roller-Grinder help by introducing you to the VersaMill®. The VersaMill® can improve the efficiency of your grinding abilities, allowing you to achieve the consistent grind you’re looking for while also opening your business up to the opportunity for energy efficiency rebates and fewer energy costs.

When you’re ready to improve your roller mills, [contact RMS Roller-Grinder!](#)