

# **Coating Systems**

# From Dust Control to Encapsulation



**High Capacity** 

**Continuous Coating** 

# Legacy

For over 120 years Sackett-Waconia has been on the leading edge of the Fertilizer Industry. Since in 1897, we have been a leader in technology and innovation. With over 200 patents, equipment on 6 continents and in over 60 countries, and joint ventures in Brazil and South Africa, we continue to provide industry leading technology and support in the US and throughout the world.

# Technology

Coating, encapsulation, and impregnation are an important part of the fertilizer industry. Sackett-Waconia offers a wide array of systems for the incorporation of liquid and powder additives. Systems are available for the production process and at each step up to the retail level. All Sackett-Waconia blending systems offer options for coating and impregnation.

Our long experience in the industry has provided a wealth of knowledge and experience that allows us to work with existing systems and provide innovative solutions for our customers.

# Systems

Granulation plants can require everything from mixing to tumbling in order to apply various additives or coatings during the process. These include nutrients, encapsulation, protective coatings, and/ or de-dusting agents. Sackett-Waconia has been a trusted name in granulation since we began building process plants in the 1930's. We will bring that breadth of experience and work with you the ensure maximum efficiency and the best quality product you can make.

Blending plants and Terminal locations make for a large share of customized coating and impregnation application. We have a full line of equipment that can be incorporated into both types of locations. All Sackett-Waconia blending systems are capable of coating, and most can accept multiple inputs.

*Standalone systems* are available for any type of location, and can include small-scale tower units, various blenders, or custom systems engineered as required.

# **Research and Development**

Sackett-Waconia's R&D department can work with you to test the compatibility of your product and our equipment, develop processes, and test application rates. R&D regularly tests new products as they are released, and in many cases has worked with manufacturers to test their products for prior to reaching the market. Please contact us for further details, or to set up trials.

# **Coating Systems**

# **Batch Coating**

The HIM Mixer. The HIM is the most efficient way to batch blend and/or coat the wide variety of materials on the market today. It's unique design allows for complete dispersion of materials, allows for short blend cycles, and creates a mixing action that is gentle on materials. The HIM is well suited for powdered coatings and all types of liquids, including polymers. Systems featuring the HIM also allow for quickly adjustable retention times, useful for application of multiple ingredients.

**Orbital Mixers.** Sackett-Waconia Orbital mixers combine the high quality rolling action of a drum with lifting flights for high particle movement within the mixer. The orbital's mixing action makes it a great choice for powders or liquids.

**Vertical Blenders.** A mainstay of the industry for decades, TA series vertical blenders are an "all in one" weigh hopper and blender that can be used for coating with easily dispersible liquids or powders and they are available with large batch sizes.

**Rotary Blenders.** Rotary blenders are effective for both powders and liquids. Designed to roll and agitate materials, an internal auger can be added to improve overall blend quality.

# **Continuous Coating**

*Drums.* High quality, gentle and continuous coating is the hallmark of drumbased coating systems. Generally used in process systems, but available for standalone application, Sackett-Waconia drums are constructed of carbon or stainless steel and are designed to give not only consistent coating, but handle 24 hour operation with high reliability.

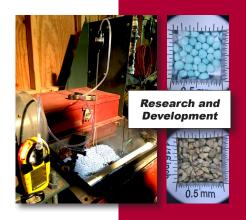
High Speed Continuous Coating. With capacities exceeding 500tph, these systems are an excellent option for plants and terminals that have a high-output need. Multiple designs and options are available, and these units can be custom designed to meet a large variety of high capacity coating applications.

Continuous Mixer/Coater. Commonly found in our Declining Weight blending systems, continuous mixers and coaters are based on augers, but feature a mixing zone that lengthens retention time and creates better coating transfer between granules. Continuous coaters and mixers can be provided as standalone devices, and we have several options for feed and down stream conveying available, including conditioning systems (i.e. de-lumping prior to coating).

# Batch Style Coating Systems Start 5 sec







# Safety

If there is one underlying principle to our engineering and fabrication, it's to NEVER compromise safety. All Sackett-Waconia equipment meets or exceeds OSHA regulations, and we will work with you to ensure any site or company specific requirements or concerns are met and addressed. Safety is a primary feature of every Sackett-Waconia System.

# Sackett-Waconia

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