

RECEIVING SYSTEMS

Receiving Systems to Cover any Capacity







Legacy

Since 1897 Sackett-Waconia has been on the cutting edge of the Fertilizer Industry, and always a leader in technology and innovation. With over 200 patents, equipment on 6 continents and in over 60 countries, 4 manufacturing plants, and joint ventures in Brazil and South Africa, we continue to provide state of the art technology and support throughout the world.

System Concepts

Sackett-Waconia Receiving systems can vary widely in components, applications, and capacities. However, they all have several steps in common: receiving and transfer, material elevation, and building distribution. Given the wide array of possible layouts and equipment combinations, Sackett-Waconia will work with you to understand your needs and develop a system that fits your location.

Engineering & Design

Listening to and understanding our customer's needs is a basic operation at Sackett-Waconia.

No matter the size of the project, we strive to:

- Take the time to assess every customer's needs
- Make sure we design the system that is the best fit for them
- Ensure the systems will meet their needs, and have the longest service life possible.

We understand that each business is an individual and we will take the time engineer the best solution for <u>your</u> needs. Our experience was built over a long history and comes from engineering the smallest retails plants and the largest hub plants.

Commitment

We are committed to our customers. At Sackett-Waconia, we see our customers as partners and our goal is to provide them with continuing service. Our service to you doesn't end with the sale or commissioning, it lasts a lifetime.

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.

Receiving Systems



Simplicity as a Principle

Our goal is to work with our customers to design and engineer systems that reduce complexity, limit the amount of installed equipment, and are both reliable and cost effective. Limiting complexity means fewer drives and provides our customers with safe, easy to use, low maintenance systems. Those core principles underly each type of system from truck and rail to marine receiving. With them, Sackett-Waconia receiving systems can reach capacities of 1200+ tph with peak efficiency.



Material Receiving and Transfer

Sackett-Waconia designs, engineers and fabricates a variety of systems to receive materials. Our systems can include options for shipment in bags, via truck, via rail, and via ship or barge. In general, all systems include a receiving hopper and conveyor, with options for delumping for river or marine systems.

Intake Hoppers

Standard receiving hoppers feature 304 stainless steel plate construction, stainless angles, clean-out access, and can include supports and grating as needed.



Bulk-Toters

Specifically designed to transfer free flowing bulk materials, the Bulk-Toter provides safe, dust tight, all weather, conveying. Combining the ability to convey at slopes up to 45° with integrated hoppers and self-regulating feed makes bulk-toters ideal for handling a large range of granular materials. Capacities range up to 600+ tph.



Standard Sackett-Waconia conveyors feature a 304 stainless steel formed channel design, and we will work with you to match idlers, pulleys, and drives to your project. Standard conveyors also feature industrial bearings and drives. Capacities range up to 1200+ tph.



De-Lumping

Designed to rapidly and efficiently break up large lumps in one pass, the Sackett-Waconia Lump-Buster is the best choice for use with firm lumps in high humidity conditions. Because the Lump-Buster has no screen to clear, maintenance is kept to a minimum.

Optional Equipment

All systems can include control panels and in some cases combination control panels that include a motor control center. Options are also available for VFDs to vary the capacity of the system.



Equipment to fit any application





Material Elevation

While some properties allow for low angle elevation of materials via bulk-toters or belt conveyors, the most common piece of equipment used to raise materials is the bucket elevator.

Sackett-Waconia bucket elevators are designed for high volume industrial applications, and each is engineered for their intended duty and environment. They handle materials from powder to granular, and can be found in process plants, fertilizer terminals, blending plants, and anywhere bulk materials are handled. Capacities range from 50tph to well over 1200+ tph.



Plant layouts that include barge receiving systems can generally use belt conveyors to achieve the elevation required to meet the building distribution system. In these cases, Sackett-Waconia can engineer and fabricate the required truss work and supports to reach the building distribution system.

In smaller plant layouts, with low pile heights, it may be possible for a bulk-toter to be used to both receive and elevate materials. This allows for lower power consumption and less maintenance.



Building Distribution

Sackett-Waconia has a wide array of conveyors available for distribution of materials throughout a building. We work close with our customers to recommend the proper system that meets their needs.

Tripper Conveyors

Sackett-Waconia tripper conveyors feature 304 stainless steel construction, heavy duty belting, winches, system interlocks, pull switches, pinch guards, head and tail covers, and zero speed switches. Their design allows for nearly infinite discharge positions along their travel, for optimal filling of storage, with manual or automatic positioning.



Shuttle Conveyors

With many of the same features as the tripper conveyor, shuttle conveyor add the ability to be fed from the center of the conveyor, are reversible, and allow the same optimal bin filling.

En Masse Chain Conveyors

Because of their small size and low maintenance requirements, Sackett-Waconia en masse conveyors are ideal for smaller spaces or locations with lower overhead clearance, and are ideal as over-bin conveyors. Our conveyors are built with a bent trough, bolted covers, and cover splice plates for dust-tight operation.

Customized or Special Applications

At Sackett-Waconia we leverage our 120+ years of experience to work with our customers and find solutions to fit all needs. From specialty product handling to high-speed terminals, we have the expertise to develop a system suited to your project. For specialty equipment, or materials that require special handling, we will research and develop custom systems to meet each customer's needs. Contact us for more information, or if you have question regarding special applications.



Receiving Systems

High Speed/High Capacity Systems

Sackett-Waconia has long experience in engineering and designing high-speed and high capacity systems. Whether the application is in a rail terminal, port facility, or river terminal, we have systems available for each need.

Inland Terminals & Hub Plants

Sackett-Waconia offers a full line of high capacity equipment for Bulk Fertilizer Terminals. Receiving systems range up 1200 tons per hour (or more), and can have the ability to unload rail cars without indexing.

River & Marine Receiving

River and marine terminals offer the challenge of finding the best way to transport materials as efficiently as possible while limiting potential failures driven by the environment. Like seagoing vessels, these terminal systems are tough, corrosion resistant, and designed to be as simple as possible. All standard systems feature 304 stainless construction, weather covers, and easy maintenance access. Material de-lumping and dust mitigation is also available, as is truss work and controls. These terminal systems can also include direct transload of materials as well.

Site Visits, Installation, and Commissioning

Sackett-Waconia has in-house project management and field/service technicians, as well as installation and service partners throughout the US and Canada, to provide our customers with local support and service. We strive to ensure proper installation of our equipment, and are happy to work with any engineering firm or general contractor you may choose to hire. While it may not be necessary for all systems, we can provide on-site engineering support and start-up/commissioning visits.

Partnerships

Sackett-Waconia has strategic partnerships in Brazil and South Africa to better serve our international customers.

Sackett do Brasil is based in Araxá, Brazil and provides service and support to the Brazilian Market. Our companies specialize in complete system design for bulk blending, bulk terminals, granulation (NPK, SSP, AMS), compaction/granulation, super phosphate and coating (powder, controlled release). To meet today's nutrient needs, and assist greater nutrient use efficiency, we engineer systems designed to maximize accuracy. www.sackettbrasil.com

Sackett-Waconia is a Proud 4R Partner.

Sackett-Waconia has been promoting the 4R Nutrient Stewardship program since its inception, and we are now a Proud 4R Partner. For more information on the program, please visit the link below.

https://nutrientstewardship.org/4rs/













1701 S. Highland Ave • Baltimore, MD 21224 • (410) 276-4466 680 Tacoma Blvd • Norwood Young America, MN 55368 • (952) 442-4450 www.sackettwaconia.com

