



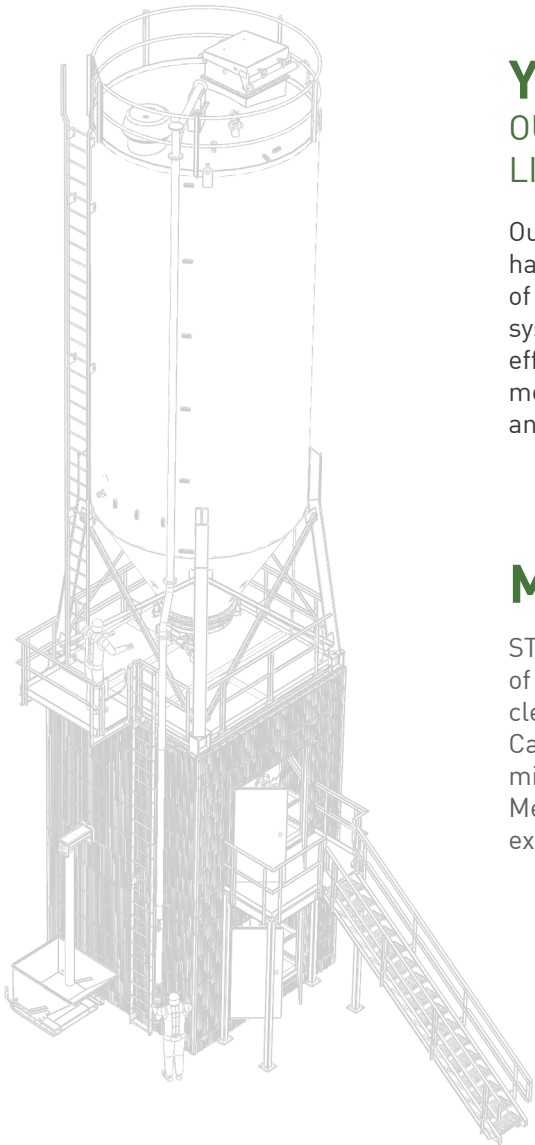
DESIGN, PROTECT & MAINTAIN YOUR LIME STORAGE, HANDLING & SLAKING SYSTEMS

YOUR LIME HANDLING EXPERTS OUR CORE COMPETENCY IS UNDERSTANDING YOUR LIME-BASED MATERIALS & PROCESSES

Our 50+ years of designing, integrating, installing, and maintaining lime storage, handling and slaking systems provides us with the expertise of how each part of the process functions both as an individual component and as an integrated system. We engineer solutions that fit your needs and exceed your safety, efficiency, and reliability standards. Our lifecycle approach to these systems means that we will work with you to keep your lime system running efficiently and free of unplanned interruptions for the life of your system.

MEMBER OF THE CARMEUSE GROUP

STT operates as a wholly owned subsidiary of Carmeuse, a global manufacturer of lime and limestone products used in a variety of applications, which provide cleaner air, safer water and improved soil characteristics. Founded in 1860, Carmeuse is a privately owned Belgian company evolving from a calcium-based mineral provider into a company that continues to add integrated services. As a Member of the Carmeuse Group, STT leverages this extensive knowledge and expertise in lime-based products across diverse industries and applications.



WHO WE ARE

OUR MISSION

We design, install, and maintain custom and standard lime systems.

OUR VISION

A global leader in lime storage, handling, and slaking systems.

OUR PROMISE

We empower you to do your job better by expertly handling your lime.

OUR VALUES

- Customer Focus
- Long Term
- Responsibility
- Respect
- Efficiency

WHAT WE DO

LIME STORAGE, HANDLING & SLAKING SYSTEM SOLUTIONS

Having the right lime handling system is essential to each customer's process. Based on your chemical type, safety requirements, site, storage volume, consumption rate, and more, STT designs and supplies standalone lime storage and handling systems, as well as systems and components integrated into existing applications that best meets your project's specifications. STT can assist you with the following elements of a lime handling system:



SILO STORAGE SOLUTIONS

Dry Storage Silos

Any processing plant that uses dry bulk chemicals like quicklime, hydrated lime, soda ash, and magnesium oxide in large quantities, requires an efficient method for storing these chemicals as part of your overall storage silo and chemical processing system. STT helps you select and design the right bulk materials silo system to meet your plant's storage and process needs.

- Shop Welded
- Bolted – Field Erected
- Level Instrumentation

Bin Vent Filters

Transporting lime during unloading can cause lime dust accumulation. Our bin vent filters help prevent dust particles and other harmful products from being emitted into the atmosphere by venting displaced air from the storage silos while being filled via a pneumatic or mechanical convey system.

- Bin Vent Filter Square/Rectangular
- Bin Vent Filter Cylindrical
- Replacement Filters

FLOW PROMOTION SOLUTIONS

Flowability of lime out of the storage silo can be increased by vibration of the silo cone or injection of air into the silo preventing common problems like product buildup, bridging, and ratholing from occurring. STT provides a variety of solutions to keep materials moving freely, effectively and consistently, making it easier to handle.

- Bin Activators
- Aeration Bottoms
- Air Pads
- Impactors

TRUCK UNLOADING & PNEUMATIC CONVEYING SOLUTIONS

Unload Systems

STT designs unload systems to efficiently meet your operational needs offloading your dry bulk lime-based chemicals from truck or rail into your storage silo. We tailor each system to your specifications based on volumes, transfer times and whether you require offloading from trucks versus railcars.

Pneumatic Conveying Systems

We design dilute phase pneumatic conveying systems to get your lime products to their destination within your process plant, in the quantity required, with the care needed for your specific requirement. We identify the component parts that work together at the appropriate pressure or vacuum to move your lime materials from one area to another.



FEEDING SOLUTIONS

Moving your lime material from your silo to your downstream process at the necessary feed rate without losing product and minimizing degradation is key to improving your overall productivity. STT factors in your product's specifications and process needs when designing the right feeding solution that offers you the reliability and accuracy required to make your material handling cost-effective.

- Rotary Airlock Valves
- Volumetric Screw Feeders
- Loss in Weight Feeders
- Screw Conveyors



LIME SLAKING SOLUTIONS

When using quicklime, the quality of your slaked lime can have a major impact on chemical consumption, material cost, and operating cost of your system. The first step toward avoiding ineffectively slaked lime is selecting the right type of slaker based on your parameters, such as pebble size and water temperature. We collaborate with you to determine the best option for your process and budget, offering the following types of lime slakers:

- ZMI Portec Detention Slaker
- VERTIMILL® Ball Mill Slaker
- Batch Slakers / Mix Tanks



SLURRY STORAGE SOLUTIONS

Storing your lime slurry is a key component of your lime slaking system. Proper mixing configuration and process understanding are key in keeping the lime slurry in suspension when storing. STT considers several variables when designing your tank: continuous or batch process, your process' volume or storage time, space availability, and the required injection rate to the downstream application.



PUMPING & SLURRY HANDLING SOLUTIONS

Transferring the lime slurry to your downstream application is the final major component of your lime handling system. Lime slurry contains high amounts of solid particles, making it difficult to pump. Thus, selecting the right pump is critical to your process. STT has the expertise in designing solutions to effectively keep the slurry moving allowing for the accurate delivery of a measured quantity to your downstream application.

STANDARD LIME STORAGE & MIXING SYSTEMS

In addition to our customized chemical feed solutions, STT has developed several standard chemical feed systems, which are modular and provide integrated solutions for receiving, storing, feeding, slaking (if quicklime application) and delivering quicklime, hydrated lime, soda ash, and magnesium oxide from a truck through to pumping of slurry or solution off to a chemical injection or chemical metering point.

- Standard Quicklime Feed System in a Box
- Standard Hydrated Lime and Soda Ash Feed System in a Box
- Standard Hydrated Lime and Soda Ash Feed System in a Can



LIME INJECTION SYSTEMS FOR ELECTRIC ARC FURNACE (EAF) STEEL PLANTS

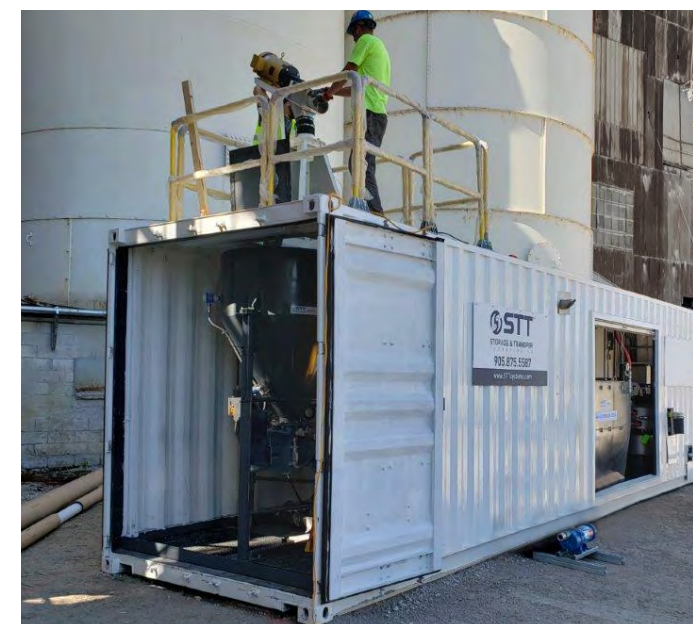
STT, in partnership with Schenck Process and Carmeuse, offers a lime injection system for EAF steel plants that is customized based on each site's specific requirements. The components of this system includes truck offloading, silo storage, pneumatic conveying, controls, and piping up to the injection nozzle. Our lime injection systems are designed to minimize lime loss during delivery to the furnace, offer better control of slag, eliminate dusting, and reduce maintenance needs. Design and installation can be in new sites or integrated into existing sites.



MOBILE SLURRY PRODUCTION & STORAGE SOLUTIONS

The mobile lime slaker from STT is a self-contained lime detention slaking system that is equipped with all the necessary components needed in a turnkey solution. This lime slaking unit is a plug-and-play slaking plant and with its trailer capability, you can transfer it easily making it both a cost-effective and convenient way to use lime slurry no matter the job and/or location.

STT also offers a storage mix tank to provide you a complete mobile system for lime slurry preparation. The storage mix tank is designed to keep the lime solids in suspension and avoid solids build-up at the bottom of the tank.





CONSTRUCTION, COMMISSIONING & START-UP SERVICE SOLUTIONS

You are making an investment in your business when you purchase a lime handling system, lime slaker, or system/component retrofit from STT. Protect your investment from day one by beginning with proper installation, commissioning, and start-up. You can count on STT, your lime handling experts, to do it right.

- Construction Supervision
- Commissioning and Start-Up



AFTERMARKET SOLUTIONS

Proper design of a lime handling system will add to the ease of operating the system; however, maintenance must be carried out on your lime system to ensure it continues to run efficiently. STT is dedicated to ensuring your lime storage, handling, and slaking system continues to work correctly for years to come. We offer a variety of solutions to improve the efficiency and lifecycle of your system.

SYSTEM RETROFITS & UPGRADE SOLUTIONS

Retrofitting your older lime system with new technologies can help to make your system safer and more efficient at a fraction of the cost of a complete system replacement. STT continually makes improvements to existing components and offers new features that make equipment, like your lime slakers safer, more reliable and more productive no matter the brand.

ONSITE AUDITS

Proper system audits can extend the lifecycle of your system and/or increase its efficiency by revealing issues before it is too late and becomes too costly. Our technicians will inspect individual pieces of equipment, controls, as well as entire processes to assess and give you feedback on any operational or maintenance concerns, mechanical failures, and/or process inefficiencies before breakdowns occur.

AUTOMATION & CONTROLS

Our experience in total PLC migrations, as well as routine programming and maintenance, provides us with the expertise to assist you with selecting and customizing a new automation system designed for your specific needs. Our collaborative approach to these automated systems means that we will work with you to keep your system running efficiently and free of unplanned interruptions. We have established relationships with Allen Bradley, Siemens, Schneider Electric, GE Automation and more.

REPLACEMENT PARTS & COMPONENTS

We understand that being able to get the right parts and components when you need them is critical to keeping your processes and equipment up and running. Whatever your needs may be from an aftermarket parts standpoint, STT has the experience, personnel, and inventory to provide a solution that is tailored to your specific application and requirements.

- Rotary Airlock Valves
- Bin Vent Filter Replacement Filters
- Impactors
- Wet Dust Scrubbers
- Wetting Bowl
- And much more...



Count on the experts
to do it right.

**THE
STT
DIFFERENCE**

At STT, we realize that a trusted partnership is based on the quality and service we provide. We are committed to our customers and have designed our offerings with your needs in mind.

- Backed by Carmeuse, one of the world's largest lime producers
- Over 50+ years of expertise in lime handling across a variety of industries and applications
- Proper systems, components specifications and recommendations
- Customized solutions to address customer's needs (environments, systems, new processes, and site conditions)
- State-of-the-art products like our ZMI Portec Detention Slaker and the patented *VERTIMILL* retrofit
- Partner with customers throughout entire lifecycle of their lime system and equipment
- Post-installation onsite audits, maintenance repairs, parts and support services
- Over 100 years of design and engineering experience within the company



STORAGE & TRANSFER
TECHNOLOGIES

MEMBER OF CARMEUSE GROUP

OUR NAMES HAVE CHANGED. **OUR COMMITMENT TO QUALITY REMAINS.**



LET US HELP PROVIDE A **SOLUTION FOR YOUR NEEDS.**

STT is the expert in handling lime that designs, installs, and maintains systems to achieve peak performance for your application so that you are confident that your operations will run more efficiently. As a member of the Carmeuse Group, we are knowledgeable in lime, have over 50+ years of diverse experience, offer state-of-the art products, and partner with customers throughout the lifecycle of their system and equipment. To speak with one of our experts, contact us at:

SALES@STTSYSTEMS.COM

+1-905-875-5587

STTSYSTEMS.COM

CANADIAN HEAD OFFICE:
8485 PARKHILL DRIVE
MILTON, ON L9T 5E9, CANADA

US HEAD OFFICE:
3600 NEVILLE ROAD
PITTSBURGH, PA 15225



STT operates as a wholly owned subsidiary of Carmeuse, a leading manufacturer of lime, limestone and mineral-based products.



STT and the STT logo are registered trademarks of Storage & Transfer Technologies, Inc. Carmeuse and the Carmeuse logo are registered trademarks of Carmeuse Lime, Inc. METSO is a registered trademark of Metso Outotec Corporation. VERTIMILL is a registered trademark of Metso Minerals Industries, Inc. © 2022 Storage & Transfer Technologies, All rights reserved. v2022.07.26