STT®
STORAGE & TRANSFER
TECHNOLOGIES
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DATA SHEET

# PORTABLE LIME SLAKER SYSTEM




## THE VERSATILE LIME SLAKING SOLUTION

The portable lime slaker from STT is a self-contained lime 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, no building systems, 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.

## WHY USE THE PORTABLE SLAKER SYSTEM FROM STT?

- Turnkey solution for lime slurry production
- Ideal for up to 2,495 dry kg/hr (5,500 dry lbs/hr) quicklime consumption
- Best in class, industry proven STT detention slaker
- Designed in a standard 40 ft container – for easy transport, safety and setup

| FEATURES | BENEFITS |
|---|---|
| STT (ZMI Portec) detention slaker | Industry proven for reliability and safety |
| Containerized design | Portable, self-contained, easy access, safe design |
| Turnkey solution | Pre-installed, pre-wired, pre-commissioned for quick setup |
| High accuracy feeder | For tight control on lime feed from bulk bag, conveyor or silo |
| PLC controller and motor starters | For automatic operation with minimal operators |
| Dust suppression system | Keeps emissions down by reducing the steam and dust-laden air from slaking process |
| De-gritting system | Reduces downstream process issues by removing over-sized particles from lime slurry |

## SPECIFICATIONS

- **System Output:** 189 l/min (50 US GPM) lime slurry at a solid concentration of 20-25% (by weight)
- **Lime Throughput:** 590 – 2,495 kg/hr (1,300 – 5,500 lbs/hr) dry pebble or fine quicklime
- **Feeder:** volumetric screw feeder with variable frequency drive
- **Slaker:** STT (ZMI Portec design) carbon steel detention lime slaker
- **Dust Suppression System:** stainless steel wetting bowl, scrubber and draft inducer with capacity up to 6.3 $m^3$/min (222 $ft^3$/min)
- **De-Gritting Screen:** vibratory screen with stainless steel deck and mesh (US #16 standard)
- **Transfer Pump:** vertical slurry service pump with integral tank delivers lime slurry at 189 l/min at ~15m (50 US GPM at ~50 ft) of total discharge head
- **Electrical:** designed specifically to meet local codes at installation location
- **Requirements (not included)**
  - Potable water 325 l/min (85 US GPM)
    - 89 l/min (50 US GPM) for slaker operation, with additional capacity required for emergency quench situation
  - Electrical supply per system specifications
  - Grit removal vessel – can be wheelbarrow or small dumpster
  - Connection piping for lime slurry directly to process or storage
  - Lime feed source – 19mm (¾") minus (reactivity dependent on CaO content)

## OPTIONS

- Stainless steel slaker
- De-gritting screen mesh sizes
- Electrical components and approvals to meet site specific needs
- Remote monitoring assistance
- Slurry density measurement
- Loss-in-weight variable frequency drive screw feeder
- Lime feed system to meet site needs (e.g. bag breaker or conveyor from silo)
- Water supply piping materials: galvanized carbon steel, stainless steel, PVC
- Slurry delivery piping materials: galvanized carbon steel, stainless steel, PVC
- Additives package – to achieve higher solids concentration
- Electric water heater for cold water inlet
- STT Liquid Lime Slurry Storage Tank available

## IMPORTANT NOTICE

*The information contained in this product data sheet is, to the best of our knowledge, true and accurate. As application-specific factors may impact performance, users are advised to evaluate the product independently to determine suitability for the intended application and use conditions. Product availability and specifications are subject to change without notice.*

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## YOUR **LIME HANDLING** EXPERTS™

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:

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