

PORTABLE LIME SLAKER SYSTEM



DATA SHEET



THE VERSATILE LIME SLAKING SOLUTION

The portable lime slaker from Carmeuse Systems 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 CARMEUSE SYSTEMS?

- 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 Carmeuse Systems detention slaker
- Designed in a standard 40 ft container – for easy transport, safety and setup

Applicability can vary by system make and model. For an evaluation, contact us: salesinquiries@carmeuse.com

FEATURES

Carmeuse Systems (ZMI Portec) detention slaker

Containerized design

Turnkey solution

High accuracy feeder

PLC controller and motor starters

Dust suppression system

De-gritting system

BENEFITS

Industry proven for reliability and safety

Portable, self-contained, easy access, safe design

Pre-installed, pre-wired, pre-commissioned for quick setup

For tight control on lime feed from bulk bag, conveyor or silo

For automatic operation with minimal operators

Keeps emissions down by reducing the steam and dust-laden air from slaking process

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:** Carmeuse Systems (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 m³/min (222 ft³/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
- Carmeuse Systems Liquid Lime Slurry Storage Tank available

YOUR LIME HANDLING EXPERTS™

Carmeuse Systems is your trusted partner for designing, integrating, and upgrading lime handling systems. As part of the Carmeuse Group, our teams have unrivaled expertise in understanding the role of lime handling equipment within your operation. From selecting the appropriate raw material, to system engineering, enhancements, and maintenance, our teams provide End-2-End support and guidance. We make complex projects seem simple and help our customers every step of the way. Let's start a conversation, contact us at:

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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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