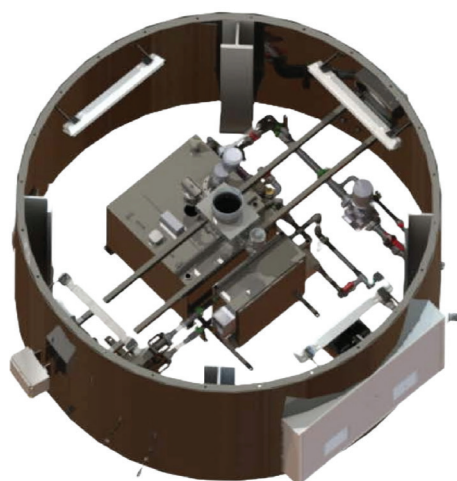


MAKO™

HIGH DENSITY LIME SILO SYSTEM

**Reducing Scaling, Maintenance,
and Handling of Hydrated Lime**



SOLUTIONS THAT WORK



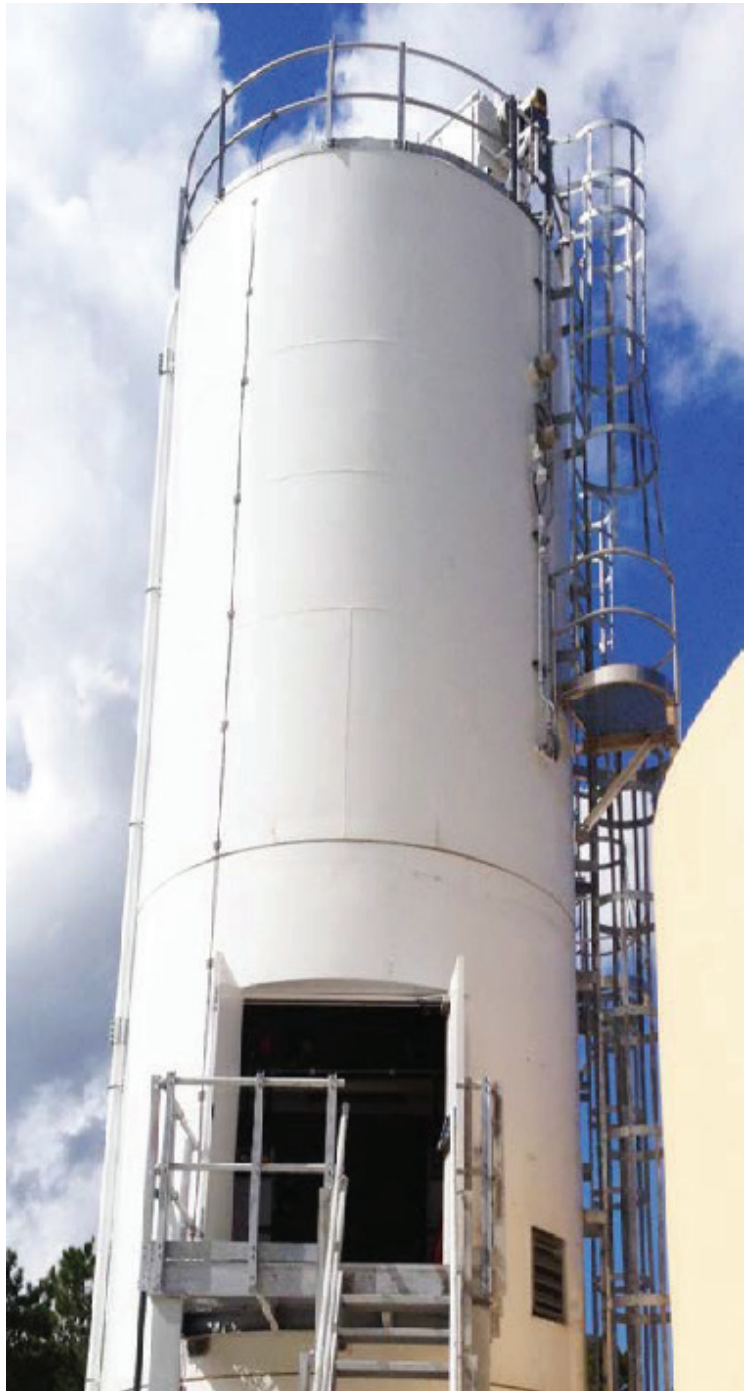
A History of Optimizing Chemical Processing

VeloDyne has over thirty years of chemical feed systems, silo design experience, and in-house fabrication expertise. This has refined our approach for optimizing performance, quality, reliability, system layout, and ease of installation.

VeloDyne's MAKO™ High Density Lime (HDL) systems are used in a variety of municipal and industrial water and wastewater treatment processes. Our technology reduces scaling in pipes and maintenance of equipment common with conventional lime slurry systems.

MAKO™ HDL Process Benefits:

- Reduces cost of lime supply: on-site preparation of high-density slurry concentrations ranging from 32-38%, eliminates the need for costly delivery of lime in slurry form.
- HDL Slurry remains in suspension, drastically reducing scaling & build-up in pipe and equipment.
- HDL reduces operator maintenance and equipment downtime and prolongs equipment life.



The MAKO™ Modular HDL System Benefits

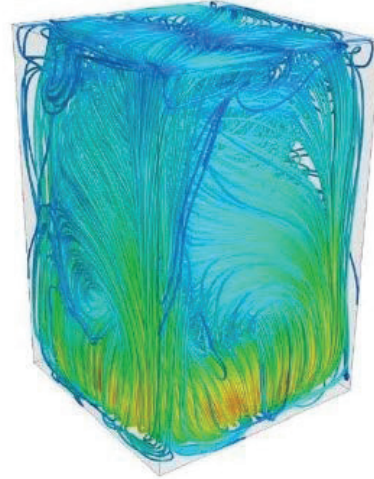
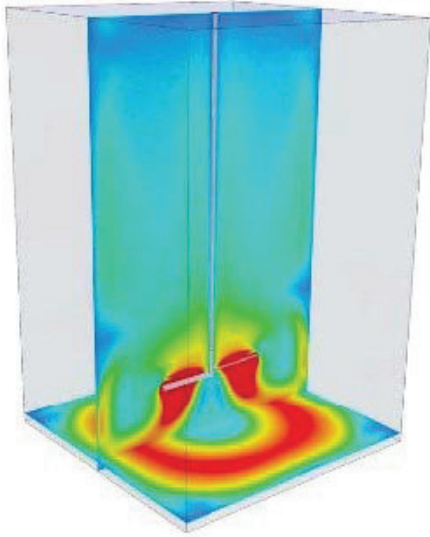
The VeloDyne MAKO™ series two-piece, high-density lime (HDL) system is a state-of-the-art, modular technology that optimizes performance, quality, and reliability while minimizing installation and commissioning time.

- Makedown equipment, plumbing, electrical wiring, and controls are fully factory installed, tested and shipped to the job site as a complete, finished and tested unit - no equipment is removed for shipping or is required to be reinstalled.
- Our factory-built design allows for optimal equipment layout, running piping and conduit underneath the floor grating system, along walls and overhead, resulting in minimal operator obstructions
- The equipment room is shipped complete and upright as opposed to on its side, avoiding common damage during shipping
- After setting and anchoring the lower section equipment room to the concrete pad, there are five easy steps to completing the system installation:
 - Install the bin vent and level sensors on the storage section using factory installed conduit and air lines
 - Install the ladder and hand-rail system
 - Erect, set, and bolt together the storage section to the equipment section & interconnect the flexible adapter to the feed equipment
 - Electrically interconnect the storage section to the lower section through factory installed junction boxes
 - Interconnecting power, water, drain, and slurry feed piping



The VeloDyne Difference

VeloDyne's MAKO™ HDL Slurry System utilizes state-of-the-art CFD modeling to design and optimize the mixing of HDL slurries.



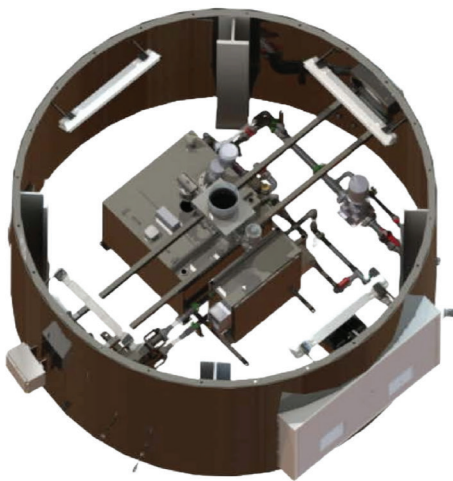
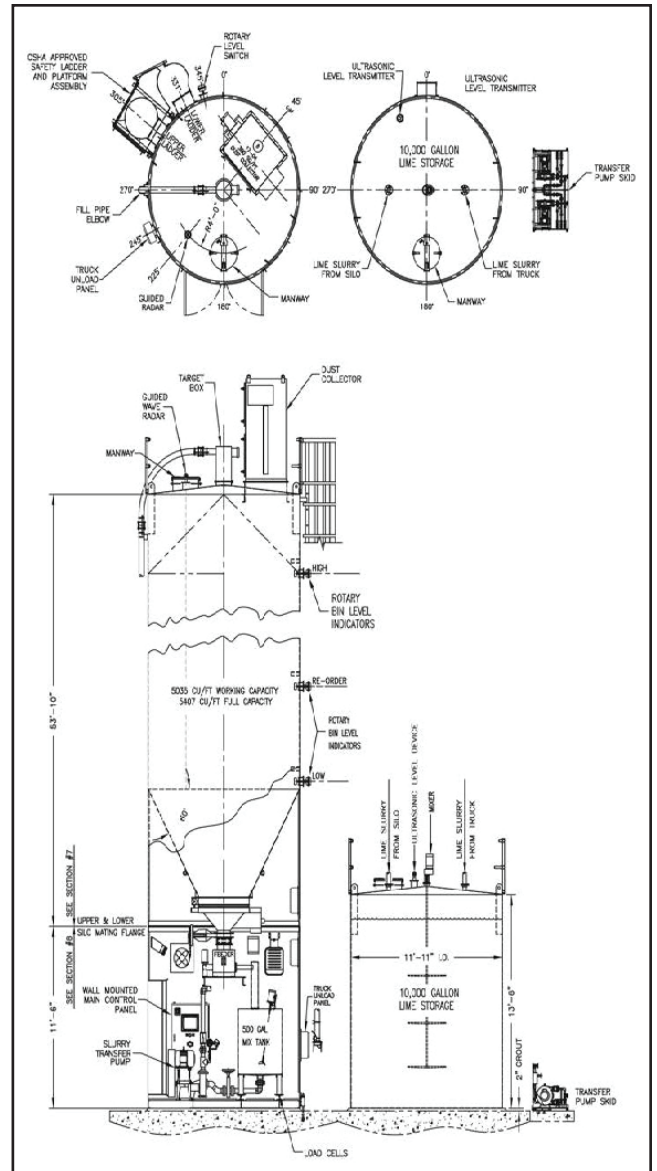
VeloDyne's MAKO™ HDL Slurry System utilizing weight and density control and monitoring.



VeloDyne's MAKO™ HDL system reduces the yearly expenditure of lime, drastically minimizes scaling, and lime build-up in pipes and equipment, reduces maintenance and our two-piece modular design reduces installation time and cost.

MAKO™ HDL System Features and Options

- MAKO™ HDL slurry make-down system is a proven design using state-of-the-art Computational Fluid Dynamics (CFD) to optimize slurry mixing.
- Local control system with programmable logic controller (PLC) and color touch screen.
- Weight and density monitoring and control.
- Single or modular two-piece silo designs.
- Factory authorized testing for customer approval (two-piece systems only)
- 10', 12' and 14' diameters available.
- Pneumatic silo fill pipe assembly with NEMA 4X operator station.
- Bin-Vent dust collection system (roof mounted).
- OSHA approved caged ladder and handrail for roof access.
- Silo level devices. Continuous and/or point level.
- Bin Activator and Vibrators.
- Barracuda™ volumetric screw feeder with wash-down, inverter duty motor.
- Storage/feed tank with mixer, and level devices.
- Slurry feed pumps.
- Equipment room ventilation fans, heaters, and lighting & optional insulation.
- Optional silo load cell system for inventory monitoring.



Related Products

Velodyne - Three Decades of Experience

For over thirty years our team has been dedicated to excellence. Through knowledge gained from thousands of installations worldwide, VeloDyne unites proven technologies with unsurpassed experience. Contact us to learn how our products and services can help optimize your treatment process.

More Proven Solutions From Velodyne

Dry Polymer Activation



Auger Feeders & Conveyors



Manual Bag Systems



Liquid Chemical Metering & Feed Systems



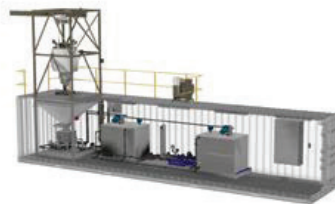
Bulk-Bag Systems



Lime Slakers



Containerized Systems



Silo Systems



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The information provided in this literature contains merely general descriptions or characteristics of performance which in actual case of use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of a written contract.