

# LO/PRO® Packaged Odor Control System

Siemens Water Technologies offers a full range of chemical scrubber odor control systems for municipal and industrial odor control.

## LO/PRO Multi-Stage Scrubber

The patented LO/PRO® multi-stage scrubber system is the most efficient and versatile chemical odor control system available. By promoting different chemical reactions in each stage, the LO/PRO system can target a range of compounds in a single scrubber system.

The LO/PRO can treat up to 30,000 cfm (50,000 m<sup>3</sup>/h) of odorous air in a single scrubber with very compact footprint. Because of the low profile it may easily be installed indoors or outdoors.

## Standard Configuration

In the standard configuration, the first stage uses NaOH to remove 70% of the H<sub>2</sub>S. Subsequent stages use NaOH and NaOCl to remove the remaining H<sub>2</sub>S and organic odors. This multi-chemistry system reduces chemical costs to less than half that required by conventional packed tower scrubbers.

## Special Configurations

The LO/PRO system may also be configured to remove ammonia and amines in the first stage using H<sub>2</sub>SO<sub>4</sub>, and then remove H<sub>2</sub>S and organic odors in successive stages using NaOH and NaOCl. This configuration is well suited to dewatering and solids handling operations, where lime stabilization causes ammonia and amine odors. When elevated levels of mercaptans and organic sulfides exist the LO/PRO may be operated

at high ORP levels to maximize oxidation. In such systems NaOH may be used in the final stage to prevent any residual chlorine odors.

## Standard Features

- Patented multi-stage odor control process
- Removes H<sub>2</sub>S, mercaptans, organic sulfides, ammonia and amines in one system
- Low profile enables indoor installations
- Factory assembled for near “plug & play” installation
- FRP construction
- Siemens service and support

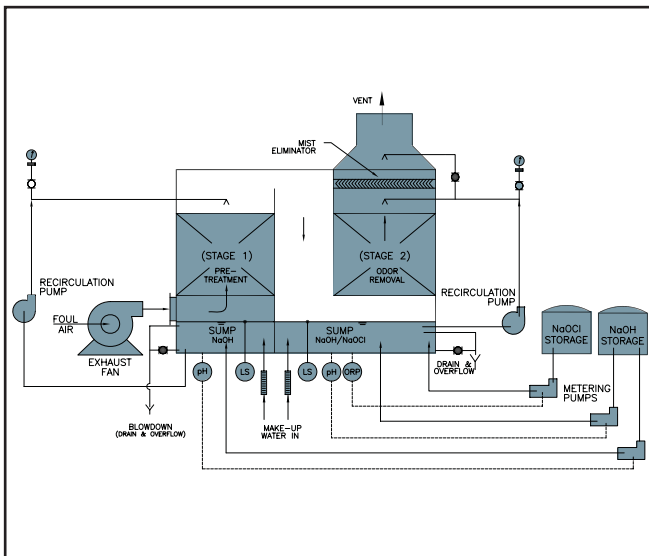


## LO/PRO Design Information

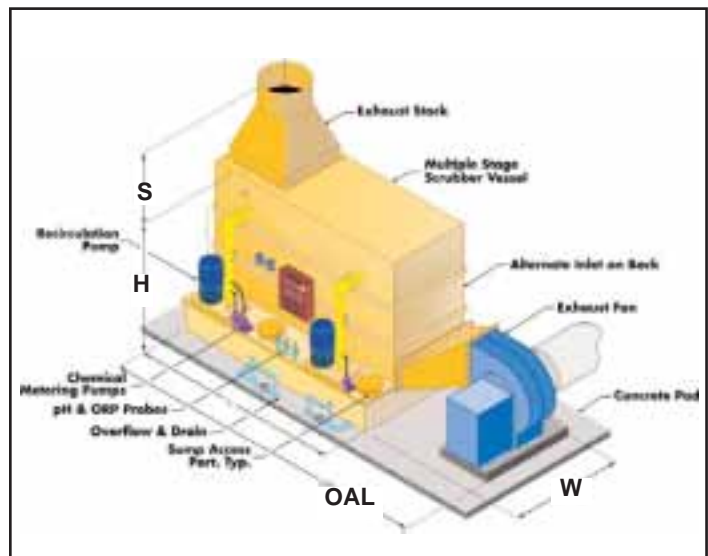
Model	Airflow Rate	Dimensions LxWxH*	Overall Length (OAL)	Shipping Wt	Operating Wt	Estimated System Power
Unit	cfm	ft	ft	lbs	lbs	HP
LP-1750	1,300	5.25 x 4.25 x 9.25	10.0	1,600	4,500	9.5
LP-2000	1,700	6.00 x 4.50 x 9.25	11.0	2,200	6,000	12.5
LP-2250	2,200	6.75 x 4.75 x 9.25	12.5	2,500	7,000	17
LP-2500	2,700	7.50 x 5.00 x 9.50	13.0	1,100	8,000	17.5
LP-2750	3,300	8.25 x 5.25 x 9.50	15.0	3,700	9,500	20
LP-3000	4,000	9.00 x 5.50 x 10.50	15.5	4,400	11,000	23.5
LP-3500	5,500	8.75 x 6.00 x 11.00	16.0	5,000	12,000	24
LP-4000	7,100	10.00 x 6.50 x 11.00	17.5	5,600	14,500	33
LP-4500	9,100	11.25 x 7.00 x 11.25	19.5	6,200	17,000	43
LP-5000	11,200	12.50 x 7.50 x 11.50	20.5	6,800	19,500	48
LP-5500	13,600	13.75 x 8.00 x 11.75	22.0	7,500	22,000	48
LP-6000	16,200	15.00 x 8.50 x 12.00	24.0	8,300	22,500	58
LP-6500	20,000	16.25 x 9.00 x 12.25	26.0	9,100	28,500	73
LP-7000	24,500	17.50 x 9.50 x 12.50	27.0	10,000	32,000	93
LP-7000Q	30,000	28.00 x 9.50 x 12.50	38.0	16,000	51,000	133

\* Standard Exhaust Stack "S" is Five feet

## Process Flow Diagram



## Isometric Drawing



Siemens  
Water Technologies  
12316 World Trade Drive, Suite 100  
San Diego, California 92128  
Phone: 858-487-2200  
E-Mail: [odorcontrol.water@siemens.com](mailto:odorcontrol.water@siemens.com)

© 2008 Siemens Water Technologies Corp.  
OC-RILOUSA-dr-DS-0408  
Subject to change without prior notice.

The United States and Trademark Office has recognized the novelty of the design of the LO/PRO with the award of two patents (U.S. Patent Nos. 5,876,662 & 6,174,498) An additional patent is now pending.

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 the contract.