



**SLY**<sup>®</sup>  
AIR  
POLLUTION  
CONTROL

## Industrial Wet Scrubbers

Wet scrubbers are an increasingly popular type of air quality control for industrial applications to collect and remove soluble gases, vapors and particulates from the air or gas stream. Wet scrubbers filter out pollutants through the inertial impaction and absorption with a liquid, usually water. The larger the particulate, the more efficient the wet scrubber.

Sly offers a full line of standard and custom wet scrubbers including Impinjet Scrubbers, Venturi Scrubbers, Packed Tower Scrubbers, and Eductor Scrubbers to help keep you safe and compliant.

*The expertise you need. The service you deserve.*

# Impinjet® Wet Scrubber

Sly Impinjet Scrubbers collect particulates and absorb soluble vapors and gases. High particulate collection efficiencies, in excess of 99%, are achieved with low water recirculation rates and minimal pressure drop – water recirculation requirements are as low as 3 GPM per 1000 ACFM. Made with the future in mind, additional stages can be added to existing installations to improve efficiency to handle tomorrow’s requirements – without increasing water flow rates.

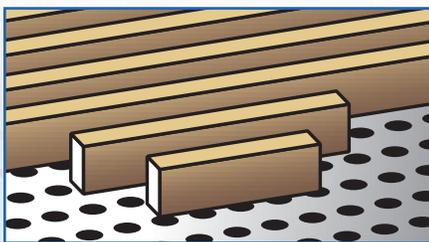


## Features & Benefits

- Capacities range from 740 to 77,000 ACFM
- Require less scrubbing fluid than most other scrubbers for lowered costs
- Unique perforated plate with impingement baffle strip design provides proven economies over other techniques
- Handles high gas temperatures and temperate fluctuations
- Handles combustible dusts safely, without modifications
- Optimal performance for cooling, condensing, and heat recovery for applications with hot flue gases

## Options

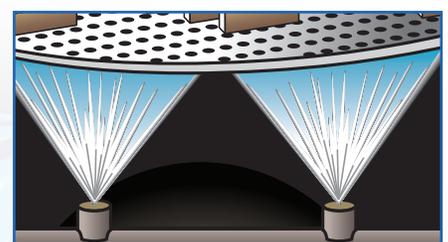
- Multiple sump configurations, including integral and detached
- Online monitoring and automation options
- Quick opening access doors and viewpoints to provide ease of maintenance
- Mist eliminator options to provide enhanced efficiency, including online cleaning
- Upstream evaporative quench to cool and precondition inlet gases with excessively high temperatures
- Construction from mild steel, stainless steel, or FRP



Impingement Baffle Plates create increased interaction between gas stream and liquid. Additional plates (trays, stages) provide increased efficiency.



Liquid Supply and Weir (dam) provides uniform distribution flow to plates.



Spray Section for cooling and entrapment of larger particles. Spray washes underside of plate and walls to prevent material build-up.

# Venturi Wet Scrubber

Sly Venturi Scrubbers collect particulates with a simple, yet efficient, design. The Venturi Scrubber uses a converging throat to increase inlet gas velocity and force entrained contaminants to free-flowing water to maximize collection efficiency while minimizing costs; featuring a non-clogging liquid introduction method, an adjustable throat for optimized efficiency, and a flooded elbow to protect against wear. Water recirculation requirements are as low as 8 GPM per 1000 ACFM. The Venturi Scrubber throat can be adjusted to accommodate changing inlet conditions.

## Features & Benefits

- Capacities range from 1500 to 76,000 CFM
- Collection efficiencies in excess of 99% for many dusts, including fine particles and mists
- Handles combustible dusts safely, without modifications
- Simple, open design has low potential for buildup and pluggage
- Removable scrubbing liquid piping design helps to keep maintenance costs low since there are no nozzles to wear down or plug
- Adjustable separator spin damper in separator inlet maintains proper velocity for collection of fine droplets



**Adjustable Throat**



**Water Inlets**

## Options

- Multiple sump configurations, including integral and detached
- Recirculation system designs to minimize total water consumption when the application allows
- Online monitoring and automation
- Quick opening access doors and view-ports to provide ease of maintenance
- Mist eliminator options to provide enhanced efficiency, including online cleaning
- Construction from mild steel, stainless steel, or FRP

# AIR POLLUTION CONTROL

## Complete Integrated Systems

As a subsidiary of Carrier Process Equipment Group (CPEG), Sly can provide additional processing equipment such as dryers, coolers, mixers and conveyors to handle various stages of material processing. These machines can be integrated upstream into existing or new process lines.

# Packed Tower Wet Scrubber

Sly Packed Tower Scrubbers collect soluble, acidic, alkaline, and volatile organic gaseous contaminants; such as sulfur dioxide, hydrogen chloride, and ammonia. High collection efficiencies are achieved with the use of internal packing that provides a large wetted surface to facilitate intimate contact between the contaminated air and the scrubbing liquid, while creating minimal pressure drop. The contaminant is absorbed into the scrubbing liquid, removing it from the gas phase.



## Features & Benefits

- Capacities range from less than 100 to 60,000 ACFM
- Collections efficiencies in excess of 99% for many gases, achieved at low pressure drop for increase energy savings
- Commonly used to capture SO<sub>2</sub>, HCl, NH<sub>3</sub>, H<sub>2</sub>S and other gases to protect your workplace and keep you compliant
- Upstream evaporative quench to cool and precondition inlet gases with excessively high temperatures
- Automatic pH control and reagent dosing systems for precise chemical usage when the application requires

## Options

- Recirculation system designs to minimize total water consumption when the application allows
- Online monitoring and automation options
- Quick opening access doors and view-ports to provide ease of maintenance
- Mist eliminator options to provide enhanced efficiency, including online cleaning
- Different types of packing available
- Construction from mild steel, stainless steel, or FRP



## FRP Wet Scrubbers

FRP (fiberglass reinforced plastic) wet scrubbers can be fabricated using different high-performance resins tailored to each application. Resin selection is typically based on the specific requirements and conditions of the intended industrial process or the gas stream that requires a wet scrubber.

The resin can provide chemical and temperature resistance. UV resistance is provided by a topcoat and the fiberglass within the composite supplies durability.



# Eductor Wet Scrubber

Sly Eductor Scrubbers collect particulates and absorb soluble vapors and gases by directing contaminated air and high-pressure scrubbing liquid into a venturi throat, forcing direct contact. They also induce gas flow by creating a vacuum at the gas inlet. This often eliminates the need for a separate exhaust fan or blower to convey the treated gas through the scrubber. Eductors can easily handle combustible dust, high gas temperatures and temperature fluctuations and are well-suited for collecting sticky and/or gummy particulate, reducing maintenance needs.

## Features & Benefits

- Capacities range from less than 100 to over 1300 ACFM
- Collection efficiencies in excess of 90% for many dusts and gases
- Simple, open design has low potential for buildup and pluggage
- Great for small applications and easily staged with other collection devices for flexibility and enhanced pollutant removal

## Options

- Recirculation system designs to minimize total water consumption
- Online monitoring and automation options
- Mist eliminator options to provide enhanced efficiency, including online cleaning
- Construction from mild steel, stainless steel, or FRP



## Aftermarket Parts Sales & Service

Sly understands that timely access to genuine spare parts is essential for maintaining the reliability and performance of your equipment. Our Aftermarket Sales team is committed to providing prompt, reliable ordering to ensure minimal downtime to keep your operations optimized.

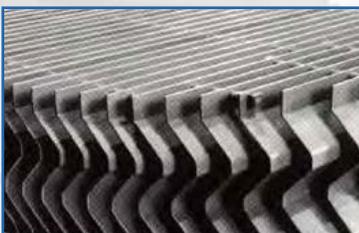
Our team is available to process your order any time of the day. We have inventory readily available for quick delivery. Most orders are processed within 24 hours.

### Impinjet® Replacement Parts

- Impingement Baffle Plates
- Mist Eliminators
- Nozzles
- Flow Meters
- Other Instrumentation
- Fan/Blower Parts

### Venturi & Separator Parts

- Spray Bars
- Mist Eliminators
- Nozzles
- Flow Meters
- Other Instrumentation
- Fan/Blower Parts



Mist Eliminator



Impinjet Baffle Plate

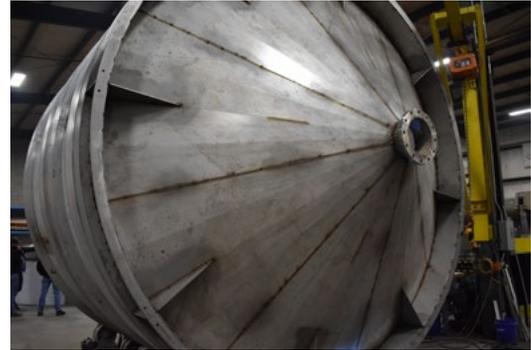


Nozzles

# Manufacturing & Engineering

Sly manufactures nearly everything in house, enabling us to have full control of the quality of our equipment, as well as the timing of completing orders.

- Manufacturing expertise working with mild steel, various grades of stainless steel, duplex steels and other exotic alloys for specialty applications
- 3D equipment modeling
- State-of-the-art manufacturing facilities
- Welders certified to ASME & AWS standards
- 350 ton press brake
- Plate roller capacity of up to 3/8" thick x 6' in width



## SLY History



### Founded

W. W. Sly founded what is now, Sly, LLC, as a manufacturer of foundry equipment.

1902

### Expansion

Opened a new plant in Mathiston, MS to expand operations.

2019

### Milestone

Sly celebrated 150 years in business.



1874

### First Patent

Sly received the first U.S. patent for a fabric filter.

1960

### Acquisition

Sly was acquired by Carrier Process Equipment Group, Inc. (CPEG), ending 145 years of being family owned and operated.

2024

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