

Palmer 99.9% Scrubbers: 2500, 4000, 6000cfm



2500, 4000, 6000cfm scrubbers for Amine or SO₂. Scrubbers are vertical and designed for 99% removal efficiency with an inlet loading of 335ppm. Scrubbers require a 12' packed bed.

Features

1. Scrubber tower is fabricated from ¼" thick black polypropylene with top and bottom connecting flanges.
2. Scrubber reservoir is fabricated from ½" thick black polypropylene with flanged inlet and welded to tower. Reservoir has sloped bottom with PVC drain valve.
3. Scrubber top transition is flanged and fabricated from ¼" thick black polypropylene.
4. Scrubber packing is designed for 99.9% removal efficiency made from polypropylene.
5. Clear PVC spray nozzle view port.
6. One (1) 4" thick polypropylene mesh pad mist eliminator is installed above spray nozzles for mist removal to 10 micron.
7. Motor for each:
 - One (1) 2500cfm @ 4" static pressure constant speed V-belt drive with 316SS airstream components and 5 hp TEFC motor.
 - One (1) 4000cfm @ 4" static pressure constant speed V-belt drive with 316SS airstream components and 7.5 HP TEFC motor.
 - One (1) 6000cfm @ 4" static pressure constant speed V-belt drive with 316SS airstream components and 7.5 HP TEFC motor.

8. Pump for each:

- 2500cfm: One (1) 1½ HP CPVC vertical pump to circulate 55gpm with valve and strainer.
- 4000cfm: One (1) 2 HP CPVC vertical pump to circulate 85gpm with valve and strainer.
- 6000cfm: One (1) 5 HP CPVC vertical pump to circulate 130gpm with valve and strainer.

9. Removable flanged spray header with hollow cone spray nozzles.

10. Scrubber includes pH monitor with removable probe for calibration.

11. Automatic water refill and fresh solution make-up solenoid mounted in liquid reservoir for evaporative make-up and fresh make-up. This is a pneumatic fail safe closed ball valve with air solenoid.

12. One (1) air diaphragm pump for automatic reagent adds with air solenoid for pump control based on level.

13. One (1) Flowline flow switch for pump on during make-up of fresh scrubber liquid.

14. Electrical control panel mounted on scrubber support frame includes the following:

- Enclosure 24 x 24 x 12 Hoffman Ultra series Non Metallic Enclosure.
- Back Plate 21 x 21
- Control Transformer 350va with primary and secondary fuse protection
- Power supply 5a 24vdc
- DC power fuse

AB Micro-Logix 1100 PLC 10 inputs 6 outputs:

Inputs:

- I/0 High level switch
- I/1 Spare
- I/2 Spare
- I/3 Spare
- I/4 MS1 aux contact Fan Run
- I/5 MS2 aux contact Pump Run
- I/6 PH Temperature
- I/7 PHI input from external PH control
- I/8 FS5 Pump flow check (Flow Line Flow switch FT10-5305
- I/9 Control On/Off

Analog I/1 Ultrasonic level control outputs:

- O/0 MS1 Fan motor starter
- O/1 MS2 Pump motor starter
- O/2 Reagent Add Solenoid
- O/3 Water Add Solenoid
- O/4 Air Safety Solenoid
- O/5 System Alarm

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AB Panel-View C600 color Touch screen Component HMI Ethernet communication

- Interconnect cable from HMI to PLC
- AB IEC contactor with overload relay for
 - 1.5 hp pump for 2500cfm
 - 2 hp pump for 4000cfm
 - 5 hp pump for 6000cfm
- AB IEC contactor with overload relay for
 - 5hp fan for 2500cfm
 - 7.5hp fan for 4000cfm
 - 7.5hp fan for 6000cfm.
- RK Electronics RC networks for contactor and solenoid surge suppression
- AB Power distribution block
- AB 22mm 2position Selector switch for Control ON/Off with legend
- AB 22mm MH red maintained E-stop Button with legend
- AB 22mm pilot light for system alarm
- AB 30amp J Fuse Rotary Disconnect switch with internal & external handle
- (1) One Flow line switch LU-1305:
 - a. FS1 High level safety
- (1) One Flowline FT10-5305 Flow Switch FS5 detect pump flow mounted in Pump discharge line to spray bars
- (1) Flow line LU-12-5001 Ultrasonic level control
- (1) Signal conditioner 4-20ma input 0-10volt output
- Terminal strips as necessary
- Pduit as necessary
- All Necessary Labeling as required by NEC Panel is designed to minimum of 22k SCCR
- Signet 3-8750-2 pH/ORP Transmitter with pH electrode, Pre-Amplifier and mounting base

Options

- Hinged window kit for panel view
- Stack light horn and light upgrade
- Baffled inlet box for particulate removal ¼" polypropylene.