

SERIES IV CO₂ SCRUBBERS



FEATURES

- ▣ Various Sizes for Various Storage Capacities
- ▣ PLC / CO₂ / Optional O₂ Analyzers Onboard
- ▣ Individual Room Sequencing
- ▣ Auto Room Pressure Testing
- ▣ New HP Blowers with Greater Energy Efficiency
- ▣ Energy Efficient Variable Frequency Drives[‡]
- ▣ 8" Color TFT Touchscreen for Increased Visibility
- ▣ Ozone Sanitation Cycle

PROGRAM FEATURES

- ▣ MultiQueue for Stacked Scrub Cycle Sharing
- ▣ Pre-Scrub for More Accurate DCA Control
- ▣ Gas Sampling for Smart Control
- ▣ N₂ Mains Purge & Flush Functions for DCA
- ▣ VFD[‡] Control
- ▣ CO₂ Sensing of Beds
- ▣ Data Logging to USB
- ▣ Remote Access from Any Internet/Ethernet Device
- ▣ Email Alarm Notifications/Daily Status Reports
- ▣ MCP Flush - Evacuate High Room CO₂ After MCP
- ▣ Electric Room Balance Valve Control
- ▣ Temperature Monitoring (Up to 4 Probes per Room)
- ▣ Apple Conditioning Period & Temperature Logging

[‡] VFD available only on larger models

Storage Control Systems, Inc. has long been a producer of efficient Carbon Dioxide Scrubbers for CO₂ control inside Controlled Atmosphere storages. The massive success of our eIII Scrubbers has spawned the *Series IV*, bringing greater control to the next generation of SCS Scrubbers.

Updated features begin with gas sampling of the lines for smart scrubbing control. Our new Pre-Scrub option evacuates the main trunk lines into a standard CA room prior to initiating a scrub cycle on a DCA or ULO room. Doing this prevents stray O₂ in the lines from disrupting levels in sensitive rooms where control is key. Another new feature is MultiQueue, which allows multiple rooms to sequentially share the same scrub cycle, helping to keep room levels more consistent, as well as helping to reduce the number of complete scrub cycles required of a machine.

As always, the operator interface allows for easy programming of unique facility room numbers & settings/alarms, CO₂ concentrations for peak performance scrub and purge times, background timing defaults, CO₂ scrub cycle history, log of CO₂ levels, scrubber capacity ratio, single or multi-room sequencing, as well as auto room pressure testing. Oxygen Control is also a feature for the smaller warehouse operator.

Large models feature Variable Frequency Drives[‡] to insure maximum efficiency CO₂ adsorption for various warehouse installations across the world. Neither 50Hz or various piping should change the adsorber characteristics.

As the scrubber reduces the CO₂ in the room, the cycle time adjusts accordingly making the scrubber more efficient each cycle. This ultimately will reduce your cycle times and make the oxygen in the room easier to control. ULO is easily achieved on SmartFresh treated rooms.



Series IV CA Piping Manifold in Hallway

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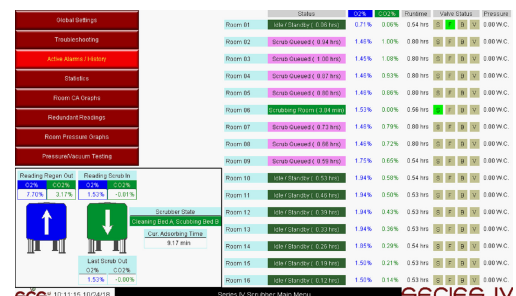


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ADVANTAGES OF USING sIV SCRUBBERS

- ▣ Built in the USA at SCS Facilities
- ▣ Top-Grade Carbon specially formulated for CO₂ Removal
- ▣ 8" Touch Screen w/ PLC-Control
 - Room Pressure Monitoring and Logging
 - Room Pressure Testing Feature
 - MODBUS with SCS Controls
 - Automatically Logs Run-Time to Prove Capacity
 - Alarm Screen Allows Shut-Down for Over Pressure and Blower Failure
- ▣ PLC-Input Driven On-Board CO₂ Analyzer
 - Controls Switching of the Cycles
 - As the CO₂ Decreases The Cycle Times Change
- ▣ Simple, Clean, Energy-Efficient Design
 - Typically Half the Kilowatt Draw of Competitors units
 - Analyzer-Dependant, Variable Cycle Times Save Energy & Increase Lifespan of Carbon Beds
 - Highly-Organized Design For Efficiency as well as Aesthetic Appeal
 - White Powder-Coated Panels Conceal Moving Parts, Keeping Everything Clean
 - Engineered for Easy Service
- ▣ No Auxiliary Air Compressor Required
- ▣ Lung Option for DCA
- ▣ Direct Drive, USA-Made Blowers Eliminate Belt Headaches
- ▣ Variable Frequency Drives (VFDs)
 - Insure Proper Airflow to Each Room
 - Maximize Efficiency on Long Runs
- ▣ Independent Sample System with 3/8" Tubing
- ▣ Escalated CO₂ Exposure Increases Firmness
- ▣ Room Sharing of Scrub Cycles
- ▣ Automatic Room Pressure Testing
- ▣ Room Pressure Safety Sensing



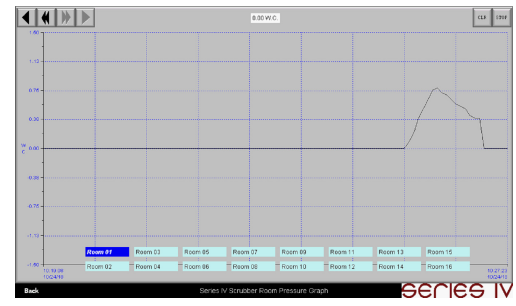
series IV Main Screen



series IV Pressure Testing Screen



series IV Redundant Readings from Scrubber @ 6000



series IV Room Pressures Screen

LIME vs. CO₂ SCRUBBING OVER NINE MONTHS IN CA

VARIETY: RED DELICIOUS
 CA BEGIN DATE: 11 OCT 06
 ROOM OPENED: 26 JUN 07
 NO SMARTFRESH TREATMENT

DATA PROVIDED BY DR. JENNIFER R. DeELL
 FRESH MARKET QUALITY PROGRAM LEAD
 ONTARIO MINISTRY OF AGRICULTURE, FOOD & RURAL AFFAIRS
 SIMCOE, ONTARIO, CANADA

LIME TREATMENT

O₂: 2.0%
 CO₂: 0.0-0.3%

CO₂ SCRUBBING

2.0% :O₂
 2.5% :CO₂



SHELF-LIFE AT ROOM TEMPERATURE
 PRESSURE TEST AVERAGES

12.8	1 DAY	14.4
13.0	6 DAY	14.0
11.7	13 DAY	12.6
10.6	19 DAY	11.5



The nature of our company is to constantly improve upon our products. This may therefore result in changes to products depicted in this brochure. Please contact SCS for the most current information.

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SERIES IV SCRUBBER PROGRAM SCREENSHOTS



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