

# **CR** AIR POLLUTION CONTROL SYSTEMS

## **CROLL-REYNOLDS CO., INC.**

### **MULTI-CHANNEL BED SCRUBBER (MCBS)**

Croll-Reynolds' Multi-Channel Bed Scrubber (MCBS) is designed to collect particles above 2 microns with 99% efficiency. The MCBS system utilizes a turbulent layer of liquid, air, bubbles and mist for 99% scrubbing efficiency of SO<sub>2</sub>, HCl, gas cooling and odor control. Continuous self-cleaning eliminates clogging, even with tar mist.



**MCBS on the Dryer Exhaust for particulate and cooling.**



**MCBS on the Press Exhaust for Formaldehyde scrubbing.**

**Multi-Channel Bed Scrubbers installed at a particle board manufacturing plant.**

## ***Croll-Reynolds' Custom\* & Standard MCBS***

- Single modules range from 500 to 70,000 CFM, but any gas flow requirement and efficiency can be met by C-R.
- Simple, heavy duty, low maintenance design.
- Non-clogging scrubbing bed even with tar fume and other sticky particulate. Continuous self-cleaning since the glass marble bed is in a flooded state, and the marbles are rotated by moving air.
- Maintenance free non-clogging spray nozzles are open, non-atomizing type, allowing performance even with contaminated recycling liquid.
- Clean air passes through a mist eliminator of mechanical or electrostatic design, depending upon customer requirements.
- Scrubber bed overflow height is adjustable, allowing changes in the turbulent layer depth and pressure drop, to insure maximum efficiency.
- Material of construction from mild steel, stainless steel and FRPs for severe corrosive applications.
- Trouble shooting of existing scrubbing systems and 24 hour emergency response available.
- Small to medium size MCBS units are delivered fully assembled and skid mounted.

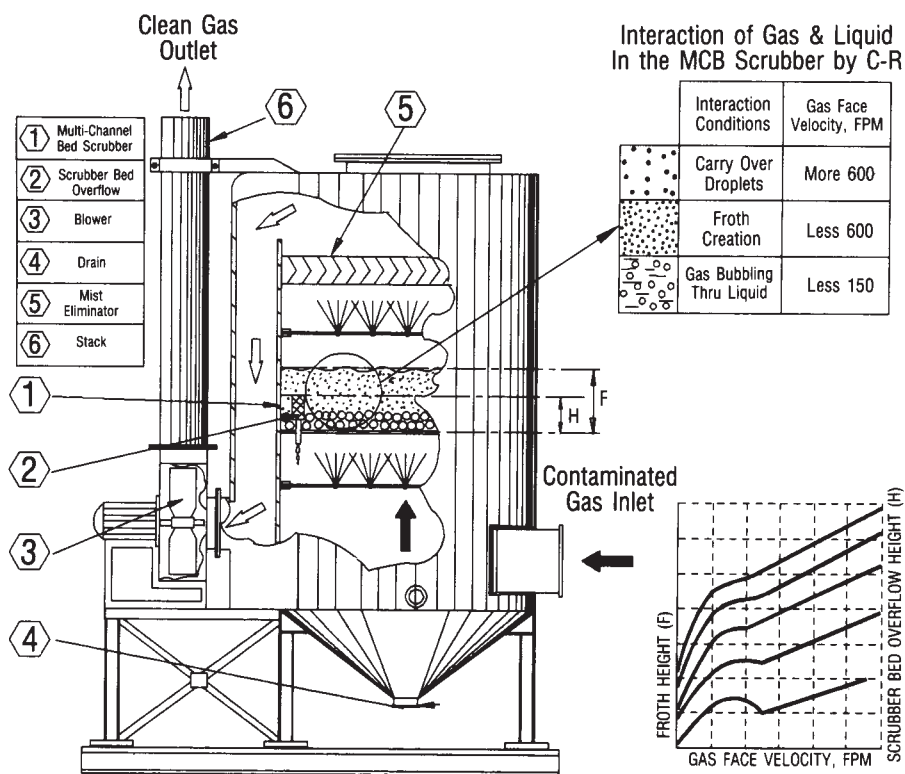
**\*For custom design applications, contact: Dr. Isaac Ray at Croll-Reynolds.**

# Croll-Reynolds' turnkey systems approach

Croll-Reynolds utilizes the systems approach to provide you with the best engineered equipment...from a simple unit to a complex system, custom designed specifically for your application and requirements. With over 30 years experience in Air Pollution control, C-R can provide the most efficient and economical

combination of equipment that can be guaranteed to meet all Federal, State and Local Clean Air requirements. From state-of-the-art dry or wet electrostatic precipitators, to MCBS particulate and gas scrubbers that act as air pre-cleaners for ESPs, to Jet-Venturis, High-Energy Venturi scrubbers, Packed Towers, NOx

scrubbers, and EtO/PO scrubbers, or a combination of units, C-R will meet your requirements exactly. When you choose Croll-Reynolds you get a quality built system that solves your environmental problems. C-R also provides application expertise, support and customer service unsurpassed in the industry.



## OPERATING CHARACTERISTICS

- \* Particulate Removal Efficiency for particles above 2 microns in size.....99%
- \* Gas Absorption Efficiency.....up to 99%
- \* Inlet particulate loading (max.).....50 gr/cf
- \* Inlet Temperature.....350° F.
- \* Pressure drop.....4 in. W.C.
- \* Liquid to Gas ratio.....5-15 GPM/1000 CFM

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## APPLICATIONS

- \* Fly ash/SO<sub>2</sub>/NO<sub>x</sub> removal
- \* Incineration
- \* Foundry
- \* Sewage Processing
- \* Phosphate Rock
- \* Odor Control
- \* Pigments
- \* Sinter plant exhaust
- \* Coke oven emissions
- \* Food drying operations
- \* Tire/rubber curing

## INDUSTRIES

- \* Chemical
- \* Food
- \* Power
- \* Metallurgical
- \* Pulp & paper
- \* Textile & rubber
- \* Wood/particle board manufacturing
- \* Waste incineration—Municipal, Medical
- \* Fertilizer Mfg.
- \* And many others

**CR**

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