

MECS® DYNAWAVE® REVERSE JET SCRUBBER

FEATURES AND BENEFITS:

VIRTUALLY UNPLUGGABLE:

- Large, open bore reverse jet nozzles
- Non-restrictive, open vessels

ONLY WET SCRUBBING PROCESS THAT CAN USE A VARIETY OF REAGENTS:

- Sodium Hydroxide, NaOH (caustic)
- Calcium Hydroxide, Ca(OH)₂ (lime)
- Calcium Carbonate, CaCO₃ (limestone)
- Magnesium Hydroxide, Mg(OH)₂
- Others specific to the process

ACCOMPLISH MULTIPLE FUNCTIONS IN ONE SCRUBBER:

- High removal efficiency for SO₂, H₂S, HCl and other acid gases
- Particulate removal
- Hot gas quenching
- In-situ oxidation

HIGH ON-STREAM RELIABILITY:

- Simple operation with minimal control instrumentation
- Minimal use of high alloy materials reduces costs
- Small footprint
- Designed to handle inlet temperatures up to 2,200° F (1,200° C)
- Versatility: can be integrated with other air pollution control equipment

DYNAWAVE® IS THE ONLY WET SCRUBBING PROCESS THAT CAN USE A VARIETY OF REAGENTS AND ACCOMPLISH MULTIPLE FUNCTIONS ALL IN ONE SCRUBBER.

MECS®
DYNAWAVE®

www.mecs.dupont.com

MECS® DYNAWAVE® REVERSE JET SCRUBBER

HOW A REVERSE JET WET GAS SCRUBBER WORKS

The DynaWave® Reverse Jet Scrubber is an open duct in which scrubbing liquid is injected, through a non-restrictive reverse jet nozzle, counter current to the dirty inlet gas. Liquid collides with down flowing gas to create the “Froth Zone,” a region of extreme turbulence with a high rate of mass transfer. The clean, water saturated gas continues through the scrubber vessel to mist removal devices. The liquid reverses direction and returns to the vessel sump for recycle back to the reverse jet nozzle.

NUMEROUS APPLICATIONS:

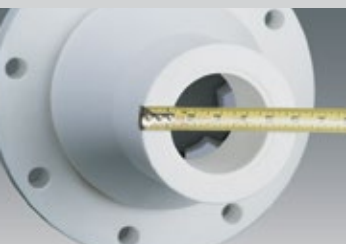
- Sulfuric acid plants
- Metal smelters & converters
- Sulfur recovery unit off gas
- Boilers/flue-gas desulfurization
- Cement kilns
- Titanium dioxide
- Incineration
- Phosphoric acid recovery
- Magnesium production
- Many others

PROVEN PERFORMANCE

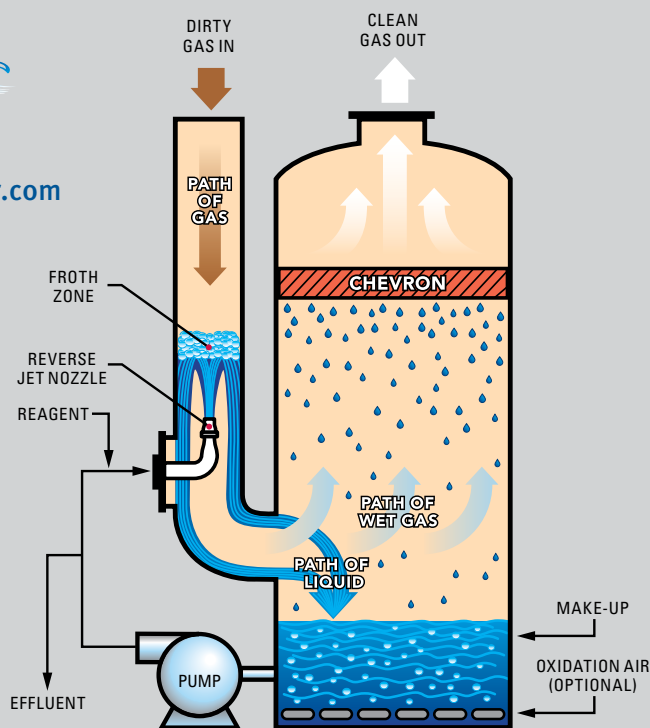
- Over 400 wet scrubbing systems installed worldwide
- Flow rates from 700 to over 1,200,000 SCFM (1,200 to over 2,000,000 Nm³/hr)
- SO₂ levels up to 200,000 ppm
- Can handle inlet temperatures up to 2,200° F (1,200° C)

TYPICAL MECS® DYNAWAVE® REVERSE JET SCRUBBER

SEE HOW IT WORKS AT:
www.dynawavescrubber.com



REVERSE JET NOZZLE



www.mecs.dupont.com

North America

MECS Headquarters

Chesterfield, Missouri, USA

Tel: +1 314 275 5700

northamerica@mecsglobal.com

Europe/Middle East/Africa

Brussels, Belgium

Tel: +32 2 658 2620

europafrica@mecsglobal.com

Moscow, Russia

Tel: +7 495 797 22 00

moscow@mecsglobal.com

Dubai, United Arab Emirates

Tel: +9714 428 5699

dubai@mecsglobal.com

Johannesburg, South Africa

Tel: +27 11 218 8618

southafrica@mecsglobal.com

Asia Pacific North

Shanghai, China

MECS Chemical Plants

Equipment (Shanghai) Co., Ltd

Tel: +86 21 3862 2888

shanghai@mecsglobal.com

Asia Pacific South

Mumbai, India

MECS India Private Ltd.

Tel: +91 22 4071 6000

india@mecsglobal.com

South America

Alphaville, Sao Paulo, Brazil

Tel: +55 11 4166 8935

brazil@mecsglobal.com