

CATALYST FOR SULFURIC ACID CESIUM-PROMOTED



HEXA-LOBED RINGS
GR-310
GR-330
GR-Cs



RIBBED RINGS
XCs-120
SCX-2000

XLP-110



RINGS
Cs-110

LP-110
LP-310



PELLETS
T-11



NEW • IMPROVED

NEW – IMPROVED SUPER CESIUM SCX-2000 BY MECS HAS THE INDUSTRY'S HIGHEST CONVERSION RATE

The SCX-2000 Super Cesium catalyst by MECS, Inc. (MECS) is designed for superior conversion in lower pass converter applications, with or without interpass absorption. Super Cesium catalyst is significantly more active than conventional potassium-promoted vanadium catalyst and can operate at temperatures as low as 385 degrees C (725 degrees F). By taking advantage of the low temperature properties of this catalyst, plant SO₂ emissions can be significantly reduced while maintaining the desired acid production rate. SCX-2000 is ideally suited for reducing SO₂ emissions in volume-limited passes. Alternately, by utilizing SCX-2000 catalyst, sulfuric acid production can be increased by raising converter gas strength and/or gas flow rate, while SO₂ emissions are maintained or reduced.

FEATURES AND BENEFITS

ENVIRONMENTAL AND PRODUCTION GAINS

- Lower sulfuric acid plant stack SO₂ emissions
- High plant production rates from cesium-enhanced formulation

OPERATIONAL UPGRADES

- Low ignition temperature of 320 degrees C (610 degrees F) results in faster start-ups, higher conversion
- Greater operating flexibility for plants with highly variable process conditions
- Tempers pass outlet temperature by utilizing lower inlet temperature
- Operating temperature as low as 385 degrees C (725 degrees F)

CESIUM-PROMOTED XCs-120

- Designed for low pressure drop in all converter passes
- Extended surface area promotes effective dust management

CESIUM-PROMOTED Cs-110

- Designed for all passes of low velocity converters

NEW – IMPROVED SUPER CESIUM SCX-2000

- Facilitates ultra-low SO₂ emissions

APPLICATIONS

XCs-120: All converter passes

Cs-110: All converter passes

SCX-2000: Passes 4 or 5

S275 2702 772103
(771-102)
Cl. El. 4-2-14

MECS[®]
CATALYST

www.mecsglobal.com

CATALYST FOR SULFURIC ACID CESIUM-PROMOTED

VALUABLE BENEFITS FROM MECS® CESIUM CATALYST

XC_s-120 and Cs-110 catalysts are designed for both upper and lower pass applications where optimal conversion with conventional catalyst is problematic. The low temperature activation feature of these catalysts is invaluable for plants with fluctuating gas conditions or heat exchanger limitations where bed inlet temperatures are periodically or consistently too low for conventional catalyst to light off effectively. Installation of XC_s-120 or Cs-110 catalyst offers faster plant start-ups due to lower ignition temperatures. Bed outlet temperature can be moderated by utilizing a lower inlet temperature in conjunction with cesium catalyst. Additionally, XC_s-120 or Cs-110 can reduce the overall SO₂ emissions or increase sulfuric acid production compared to conventional potassium-promoted vanadium catalyst.

XC_s-120 is designed for the harsh environment in upper beds while providing the versatility of a cesium-promoted formulation. The ribbed ring shape provides optimal dust management leading to long operating periods and minimum bed pressure drop.

For low velocity converters, MECS® Cs-110 Catalyst delivers the high performance of a cesium promoted catalyst with a suitable pressure drop for the converter application. This versatile catalyst has been used for conversion improvement since the late 1980's.

Our catalyst and process specialists will tailor the optimal MECS® Catalyst combination for your converter design and sulfuric acid plant operating requirements. Cesium catalyst is a value added design element that can elevate your sulfuric acid plant to the next level.



www.mecsglobal.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
europe-africa@mecsglobal.com

Moscow, Russia
Tel: +7-495-797 2200
moscow@mecsglobal.com

Dubai, United Arab Emirates
Tel: +971-4-428 5615
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: +91-22-6774 9500
india@mecsglobal.com

South America

Alphaville, Sao Paulo, Brazil
Tel: +55-11-4166 8535
brazil@mecsglobal.com

MECS® CESIUM CATALYST ADVANTAGE IN CONVERTER OPERATION

