

**Catalysts for Sulphuric  
Acid Production**

Introducing

**MAXSULFOMAXSU  
SULFOMAX®**



# Introducing SULFOMAX<sup>®</sup>



signed to obtain optimum performance under varying conditions. High-vanadium catalyst as well as standard SULFOMAX<sup>®</sup> catalyst are recommended for use in the first two as well as lower passes.

Ribbed rings and ribbed extrusions result in higher void fractions, achieving lower pressure-drop build up and demonstrating increased dust holding capacity. An additional key advantage is that screening losses are at minimum levels. Ribbed rings and ribbed extrusions also offer:

- Higher Mechanical strength
- Higher Activity due to higher geometric surface area
- Better gas distribution



Rings are best used as dust protection layers in catalyst beds. This delays the rapid-pressure drop build up caused by deposition of particulate matter.

## Süd-Chemie creates Performance Technology

Vanadium pentoxide catalysts for sulphuric acid production have been used for many decades now. The challenge is to continuously improve these products in terms of activity, mechanical strength, lifetime and find the optimum composition for the best possible performance in a wide range of sulphuric acid plants.

Süd-Chemie has leveraged its expertise in catalysis formulation and manufacturing to develop SULFOMAX<sup>®</sup> for the sulfuric acid industry. Whether the customer's final aim is to reduce emissions, increase productivity, decrease pressure drop or extend catalyst lifetime, SULFOMAX<sup>®</sup> is the product of choice for sulphuric acid production.

## Form follows function

One size should not have to fit all... SULFOMAX<sup>®</sup> comes in different shapes and sizes in order to meet all different process and operating conditions. All catalyst types are specifically de-

## Product Data Table:

Catalyst type	Size OD x ID mm	Operation Temperature °C	Suitability	Shapes
SulfoMax <sup>®</sup> RR	12x4, 9x3	420 – 630	All passes of a converter	Ribbed Rings*
SulfoMax <sup>®</sup> HV	12x4, 9x3	420 – 600	Suitable for High SO <sub>3</sub> environments	Ribbed Rings*
SulfoMax <sup>®</sup> CS	9x3	380 – 450	Top layer of 1st bed/final bed <sup>  </sup>	Ribbed Rings*
SulfoMax <sup>®</sup> CV	8x3	370 – 450	Bed after IAT in DC/DA plant	Ribbed Rings*

\* Plain Rings and Pellets are also available

# Maximum Value

## Different Compositions for Maximum Value out of your Plant

The different sizes of SULFOMAX<sup>®</sup> are perfectly complemented by the product range. SULFOMAX<sup>®</sup> types can be high-vanadium, cesium-doped or a combination of both. SULFOMAX<sup>®</sup> is supplied to all customers in pre-sulphided forms, and therefore SO<sub>2</sub> pre-treatment is not required. For standard SULFOMAX<sup>®</sup>, normal operating range is from 380 °C to 630 °C.

Standard SULFOMAX<sup>®</sup> RR demonstrates superior SO<sub>2</sub> oxidation activity and its rugged nature provides exceptional resistance on attrition losses during screening, and reduces pressure drop development during operation due to the accumulation of foreign materials.

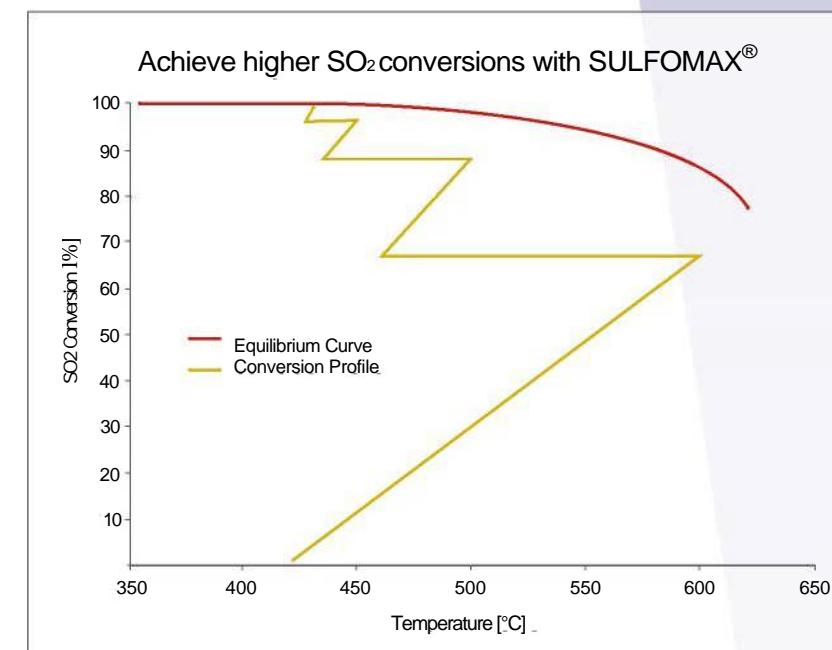
For high SO<sub>3</sub> environments, High Vanadium SULFOMAX<sup>®</sup> HV can be used in the lower converter passes, maximizing overall conversion in your process.

SULFOMAX<sup>®</sup> CS – by adding Cesium as a promoter, the Vanadium activity is enhanced at much lower temperatures. SULFOMAX<sup>®</sup> CS rewards customers with a faster, cleaner and overall more efficient plant during start-up. Its high activity operates at lower temperatures down to 380 °C.

Other benefits include:

- Increased Acid throughput
- Improved overall conversion
- Reduction in SO<sub>2</sub> emissions
- Allows a higher SO<sub>2</sub> content

SULFOMAX<sup>®</sup> CV - consists of high Vanadium as well as high Cesium and it is highly active in the temperature range of 370-450 °C, suited for passes after the IAT where SO<sub>2</sub> concentrations are relatively low. SULFOMAX<sup>®</sup> CV gives lowest possible stack emissions on a sustainable basis.



Disclaimer: The information contained herein is for informational purposes only. This information is not a warranty or guarantee of any kind, nor is it an offer to sell or otherwise supply you product. Your reliance on this information is at your own risk.

SULFOMAX<sup>®</sup>

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