# Vanadium Catalyst

## The CHP75

The CHP75 series vanadium catalyst offers a very high catalytic performance that is comparable with that of imported products. Its high surface area, porosity, and activity provide the product with a unique formulation, and this allows for reduction in loading quantity. Due to this, energy efficiency can also be improved throughout the operating cycle due to low pressure drop. Additionally, the extended service life of the product also enables a stable and longer operating cycle as well as the pollutants emission in conformance with national standards.

It is the unique design of the vanadium catalyst that ensures its good performance under the tough conditions in stage 1 and stage 2 of converter, and the lower pressure drop due to its good dust protection. Its unique micro-structure also enables the new opportunity for reduction in screening loss.

## CHP78

With performance comparable with that of imported products, our CHP78 series vanadium catalyst offers very high activity even under conditions of low temperature, high SO2, and low O2 level. Due to this, it is extensively used in stage 2, 3, 4, and 5 of the converter. Its catalyst performance is good even after the first absorption when SO2 level is low and O2 level is still very high.

The vanadium catalyst supports longer operation cycle because of its unique formulation and manufacturing processes, as well as the balance between activity and hardness. Its screening loss can also be reduced.

## Improved Vanadium Catalyst

# IS101

The IS101 series improved vanadium catalyst is one of our new products achieved based on modified formulation and improved manufacturing process. Although with lower bulk density, it has higher surface area and high porosity. Therefore, improved energy efficiency throughout the operating cycle can be ensured due to the low pressure drop.

As comparison with its counterparts, this range of improved vanadium catalyst product serves as the cost effective one that enables higher activity, lower loading coefficient, better conversion rate, and longer service life. It has found applications in facilities of capacity over 400kt/a.

## Improved Vanadium Catalyst

# IS107

On the basis of modified formulation and improved manufacturing process, we successfully developed the IS107 series improved vanadium catalyst, a new version of low temperature catalyst. It requires less start-up time, and offers higher activity under low temperature conditions. Thanks to its higher surface area and porosities, the product ensures improved conversion rate of sulfur dioxide.

Compared with the products of our domestic competitors, the improved vanadium catalyst has advantages that it offers lower loading coefficient, higher activity and longer service life so as to achieve the cost effective investment.

# Cesium-Promoted Catalyst

## VCs 

The VCs series cesium-promoted catalyst integrates not only the active constituent of vanadium pentoxide and the promoters of cesium and potassium salts, but also the carrier of select diatomaceous earth. Its activity under low and high temperature conditions keeps high due to the unique manufacturing process and optimized formulation.

VCs series of cesium-promoted catalyst enables new opportunities for improvement in start-up time, energy efficiency of electricity throughout the operating cycle and strong reduction in SO2 emission that far lower than national standard. The product is the all-around catalyst suited for all stages in converter due to its low ignition temperature and good heat tolerance under high temperature condition.

VCs series enables the compliance with pollutant emission standards due to its enhanced activity and longer service life.