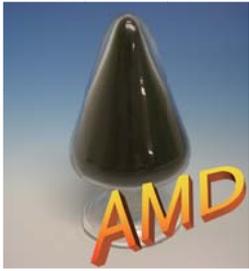


HIGH FUNCTIONAL MnO₂ CATALYST AMD

Activated Manganese Dioxide



What is AMD?

AMD is a MnO₂ catalyst. The porous particles have a large specific surface area produced by our special technique.

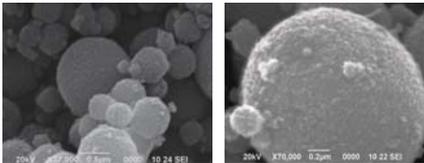
As an alternative catalyst to Platinum, Titanium, and activated carbon, it can be used for removal of offensive odors, HCHO (Formaldehyde), and O₃, as well as effluent purification.

The large surface area of JMC AMD allows chemisorption of a large amount of gases.

BET value : 150m²/g, 200m²/g, 250m²/g

Gases adsorbed by AMD are chemically dissolved and rendered harmless. AMD has a long-lasting beneficial effect when used in filters and cartridges of complex filtering equipment.

Shape and forms



The standard shape is a porous sphere with average grain size of 1μm. Other forms can also be provided.



Honeycomb

Pellet

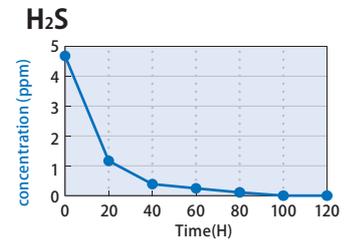
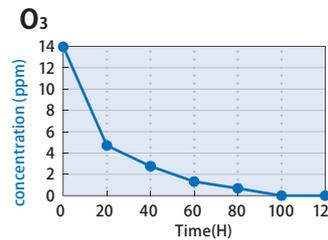
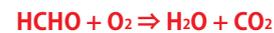
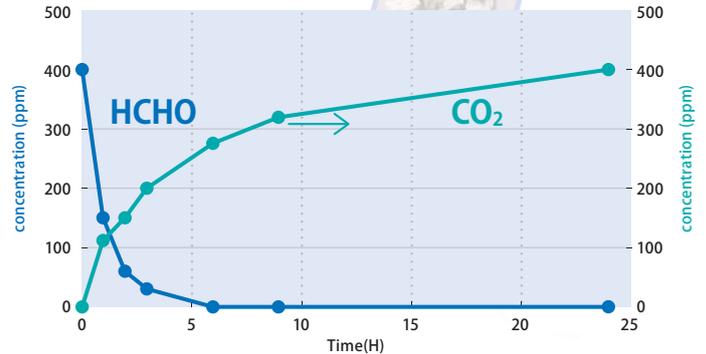
Non woven filter

Intended Purpose

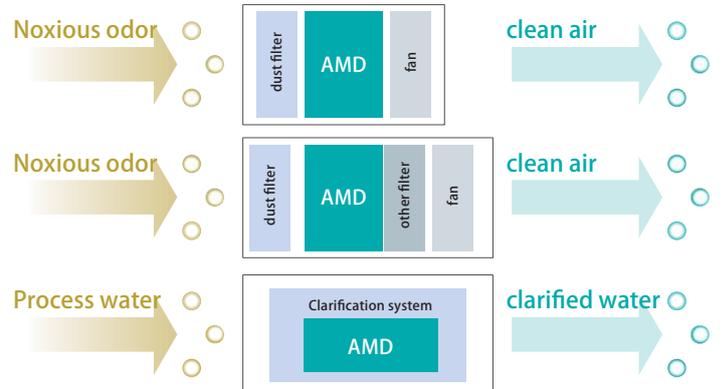
Air cleaning	Removal of HCHO, H ₂ S, etc.
O ₃	Removal of O ₃
Denitration	Removal of NO _x in low temperature
Adsorption of toxic or precious metals	Hg, Pb, Cr(VI), Au, etc.
Other features	Can be used in place of rare metal catalyst such as Pt, Ti etc.

Performance Data

HCHO (Formaldehyde)



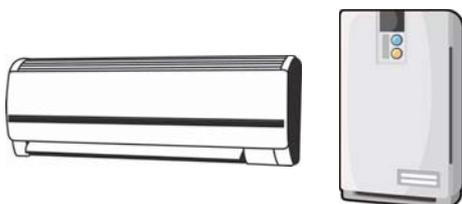
Systems



AMD based filtration systems can purify gases or water streams by removing many noxious (often harmful) compounds. AMD catalyst can be used at both low and high-temperature ranges (at higher temperature, the AMD becomes more active).

Potential Applications.

A/C, Air cleaner, Copying machine, Treatment of exhaust gas, Effluent purification systems etc.



Interior wall materials made by NIKKO Co.



Indoor wall materials can be made using JMC AMD. These materials can be used to remove odors and other unwanted compounds from interior spaces.

AMD provides cost advantages compared to other catalysts such as Pt, Ti, etc. AMD also has advantage of high activation level at both high and low temperatures.