

STATIONARY SOURCE EMISSIONS CONTROL



Johnson Matthey

CATALYSTS AND SYSTEMS FOR
INDUSTRIAL ENGINES AND PROCESSES

EMISSION CONTROL TECHNOLOGIES



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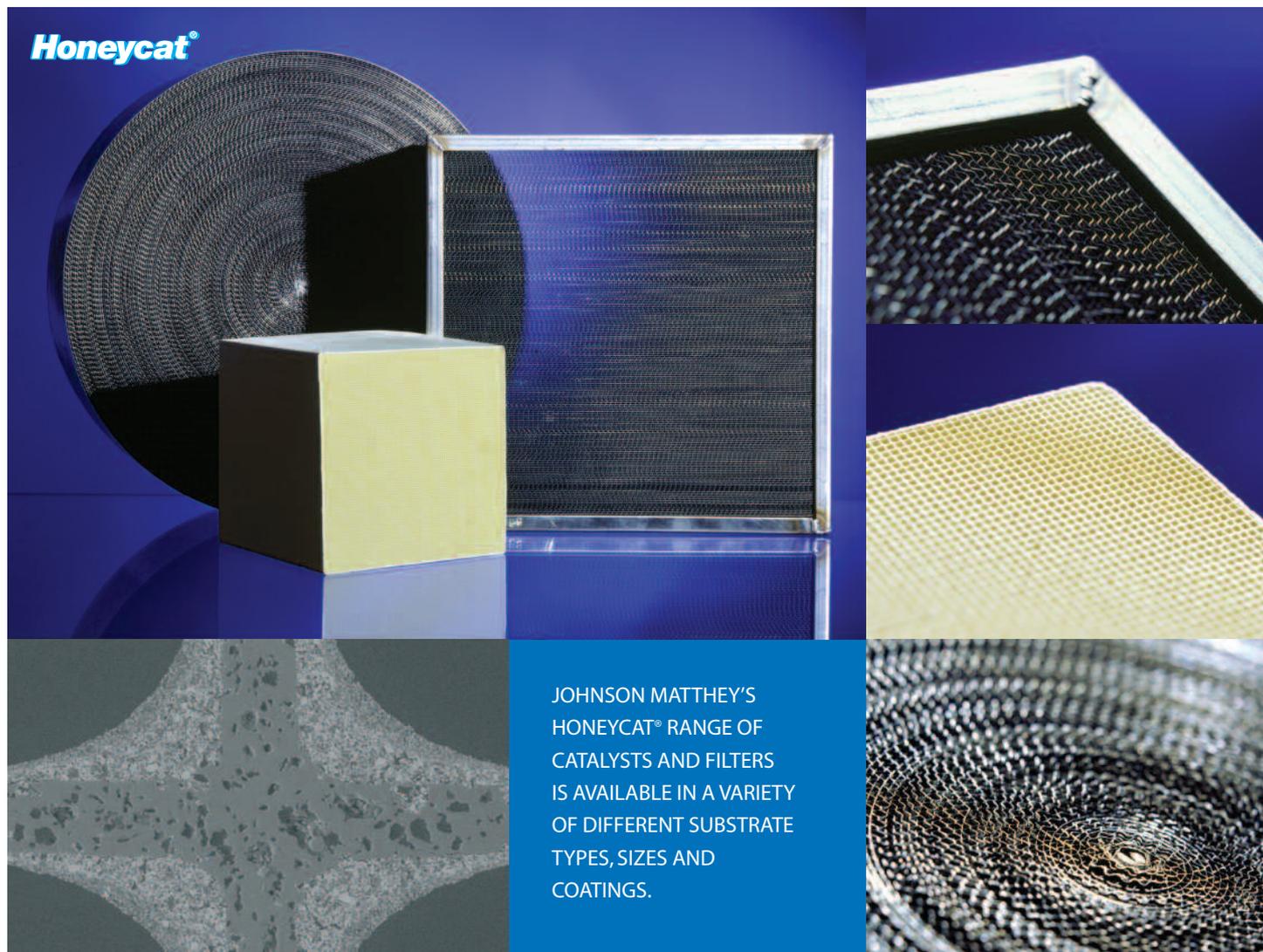
Ever tightening legislative controls on transport emissions mean that the relative impact of air pollution from stationary sources such as chemical plants, industrial processes and heat and power generation applications, is now more significant than ever.

With over forty years' experience in the stationary emissions control market and thousands of successful installations worldwide, Johnson Matthey possesses the skills and know-how to deliver optimum catalytic solutions for new and replacement applications across a wide range of stationary engines and industrial processes.

Johnson Matthey's Stationary Source Emissions Control (SSEC) business offers a complete range of Honeycat® precious metal and base metal oxidation and reduction catalysts and filter technologies. These are available on metallic and ceramic honeycomb substrate monoliths and in a variety of configurations, types and sizes depending on the application.

Honeycat® products are manufactured in the same plants and to the same exacting quality standards as those produced for the automotive industry and can be supplied as stand-alone elements, housed units, or designed to your specific requirements.

Honeycat® catalyst technology can be purchased either directly from Johnson Matthey or through specialised plant engineering and equipment suppliers working in partnership with Johnson Matthey, who will incorporate the catalyst in a system tailored to your needs.



TAILORED SOLUTIONS

Emissions from industrial processes and stationary engines can contain a cocktail of harmful gaseous pollutants including carbon monoxide (CO), oxides of nitrogen (NO_x) and hydrocarbons (HC) as well as specific categories of air toxics such as volatile organic compounds (VOC) and hazardous air pollutants (HAP). Together with particulate matter (PM) emissions they can, if uncontrolled, lead to major health problems and contribute significantly to climate change and environmental pollution.

Whether you are responsible for the emissions in a chemical plant, an industrial or commercial process, or simply need to control the exhaust from a stationary power plant, Johnson Matthey can tailor the catalytic solution to suit your application.

VOC Oxidation Catalysts: Developed to control a wide range of VOC, less reactive hydrocarbons and CO emitted from chemical, manufacturing and combined heat and power plants.

HVOC Oxidation Catalysts: Halocat[®] oxidation catalysts developed for use on halogenated VOC (HVOC) process streams to control chlorinated and brominated VOC and CO emitted during the production of chemical intermediates such as PTA. Halocat[®] technology is also used in the remediation of soil from contaminated land.

NSCR Catalysts: Three-way non-selective catalytic reduction (NSCR) technology developed to control CO, HC and NO_x emissions from rich-burning engines typically used in gas compression, irrigation, pumping and power generation.

NSCR NO_x abatement catalyst (NAC) technology is also used to control tail-gas emissions from nitric acid manufacturing plants.

SCR Catalysts: Selective catalytic reduction (SCR) technology developed to control NO_x emissions from chemical plant and power generation applications operating under lean conditions. Used in conjunction with an ammonia-based reductant and often combined with CO oxidation catalyst technology, applications include diesel and natural gas engines, gas turbines and industrial boilers.

PM Control Systems: Diesel particulate filter (DPF) systems such as Johnson Matthey's Continuously Regenerating Trap (CRT[®]) technology developed for the removal of particulate from stationary diesel engines operating on low sulphur fuel. CRT[®] technology is also used in combination with exhaust gas recirculation (EGR), or SCR, to provide four-way control of CO, HC, NO_x and PM.



HONEYCAT[®] OXIDATION AND REDUCTION CATALYSTS ARE USED EXTENSIVELY TO CONTROL EMISSIONS FROM STATIONARY ENGINES AND INDUSTRIAL HEAT AND POWER PLANTS.



CATALYTIC OXIDISER UNITS INCORPORATING HONEYCAT[®] CATALYST TECHNOLOGY HAVE A PROVEN TRACK RECORD IN CHEMICAL AND PROCESS INDUSTRY APPLICATIONS.



JOHNSON MATTHEY

Johnson Matthey plc is a speciality chemicals company focused on catalysts, precious metals, pharmaceutical materials and speciality chemicals.

A British company with worldwide operations, Johnson Matthey's principal activities include the manufacture of catalysts and pollution control systems, catalysts and components for fuel cells, pharmaceutical compounds, process catalysts and speciality chemicals; the refining, fabrication and marketing of precious metals; and the manufacture of colours and coatings for the glass and ceramics industries.

Rigorous in its own environmental policies, many of Johnson Matthey's products have a major beneficial impact on the environment and enhance the quality of life for millions around the world.

Environmental Technologies is the company's largest operating division, incorporating its Fuel Cells, Process Technologies and Emission Control Technologies (ECT) businesses.

Emission Control Technologies is an industry leader in the development and supply of catalyst and particulate filter technologies used to control air pollution from the world's automotive, truck and bus, non-road mobile machinery and stationary source sectors.

For more information on Johnson Matthey products and services, or for details of your nearest Johnson Matthey office, please visit our website:

www.jmcatalysts.com/ect

Alternatively, you can contact us at:

Johnson Matthey

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