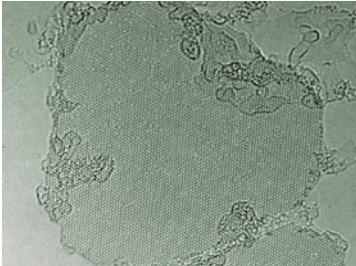


Our commitment to catalysis

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Catalysis from nano to mega

A market player in catalysis

Through half a century's dedication to heterogeneous catalysis, the Topsøe Group has developed and strengthened its position as a leading market player in catalysts, catalytic reactions and catalytic process technologies.

Our markets include oil refineries, chemical plants and the energy sector, where Topsøe's catalysts and technologies ensure smooth-running and cost-efficient operations with optimal production results.

The Topsøe Group

The Topsøe Group's headquarters, central research laboratories and engineering offices are located in Lyngby, Denmark. Our catalyst production is placed in Frederikssund, Denmark and Houston, Texas, USA.

In order to ensure worldwide representation and client contacts, representative offices are located in Moscow, Beijing, Tokyo and Bahrain. The Topsøe Group also counts a number of subsidiaries in Houston, New Delhi and most recently in Argentina, all of which focus on the sale of catalysts and catalytic technologies. Topsøe Fuel Cell is a subsidiary dedicated to the development and commercialisation of fuel cells.

The Topsøe Group has 2,100 employees generating an annual turnover of 572 million Euro in 2009.

The Topsøe way

In 1940 Dr. Haldor Topsøe founded the company on the belief that only through applied fundamental research would we build and retain our position as second to none in catalysis. This notion still governs the company's business activities:

Synergies

The synergy between research and development, process design, engineering, catalyst production and sales forms the basis of the continuous optimisation of our catalysts and technologies. Our catalysts and processes are developed in close collaboration between research, engineering and production, ensuring catalysts and processes which meet and exceed clients' expectations.

Advising our clients

The Topsøe business model integrates all aspects from fundamental knowledge to practical implementation to achieve optimum industrial efficiency. This ensures an ideal platform for advising clients and promotes state-of-the-art plants with excellent performance.

Topsøe's commitment to catalysis has created a multi-faceted business with a product portfolio spanning from catalysts to proprietary equipment, process design, engineering and service.

A cleaner world

Topsøe's technologies and catalysts are used around the world creating a better environment – in the power industry for removing sulphur and NOx from flue gases, in the transportation sector for reducing emission from heavy duty vehicles, and in the chemical industry for treatment of waste products. In the refining industry Topsøe's catalysts remove sulphur and other pollutants in the refining of crude oil to diesel and other products. Optimisation of energy resources through catalytic processes in chemical plants makes production processes highly energy efficient.

Our process design goes hand in hand with awareness of environmental standards, and in the latter years Topsøe has been on the cutting edge developing and securing clean energy solutions.

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In business

Through a commitment to catalysis and extensive exploration of catalytic principles and possibilities, Topsøe's portfolio has grown to meet industry needs, in the past decades also with an increased focus on environmental processes.

Ammonia

Topsøe is a leading catalyst and technology supplier in the ammonia industry, supplying solutions for almost 50% of the new ammonia plants built within the last decade.

Automotive diesel exhaust

Topsøe offers a complete range of catalytic products for the automotive industry complying with the most stringent legislation on automotive diesel exhaust emissions.

Dimethylether

The flexibility of Topsøe's technology and catalysts for dimethylether (DME) production from methanol offers the possibility to use raw methanol as feedstock.

Gasification-based technologies

Synthesis gas can be generated from a variety of feedstocks including biomass, petcoke, coal, and heavy oil through gasification. Based on synthesis gas Topsøe offers a wide range of processes and technologies for the production of ammonia, methanol, hydrogen and substitute natural gas.

Flue gas cleaning

Topsøe's catalytic purification of flue gases and other off-gases from industrial power plants ensures the protection of the environment. The processes all comply with the most stringent requirements for environmental protection and feature high energy efficiency, no secondary pollution and no solid wastes for depositing.

Hydrogen

Topsøe supplies catalysts and technologies for hydrogen production based on reforming of eg natural gas. The basic steam reforming technologies include heat exchange based reforming technologies, in particular for small and medium sized plants.

Methanol

Topsøe's technology and catalysts for synthesis gas production are widely used in the methanol industry. Topsøe's methanol technology is based on autothermal reforming and on Topsøe's high-active methanol synthesis catalyst, which permits the construction of very large plants.

Refining

Topsøe's portfolio of catalysts and technologies for hydrotreating and hydrocracking contribute to production of cleaner fuels in the oil refineries. Topsøe has been particularly successful in sales of technologies and catalysts for the production of ultra-low sulphur diesel.

Sulphuric acid

Topsøe's development of catalysts for the production of sulphuric acid has resulted in major product breakthroughs, providing the industry with new options for energy-efficient operation with still lower sulphur emissions. The Topsøe VK catalyst series is presently used in more than one third of the world's sulphuric acid production capacity.

Sulphur management

Topsøe's wet gas sulphuric acid (WSA) technology recovers sulphur from off-gases in the form of commercial-grade concentrated sulphuric acid, thus converting waste gas into a commercial product.

Synthesis gas

Topsøe provides a range of technologies and catalysts for the synthesis gas needs of a range of industries.