

History of the NGK Group

Using Unique Technological Strengths Cultivated in Insulator Manufacturing to Build a Diverse Portfolio of Industries

NGK was founded in 1919 as a manufacturer of porcelain insulators, a key component in the modernization of Japan. Now, 99 years later, our insulators are helping support the electrical power infrastructure of the entire world. Not only that, we have capitalized on—and continue to capitalize on—the ceramics technology, which we cultivated over many years of insulator manufacturing, adapting it to the production of a vast array of products that have made NGK a prominent contributor in a diverse range of industries.

1919 High-voltage insulators

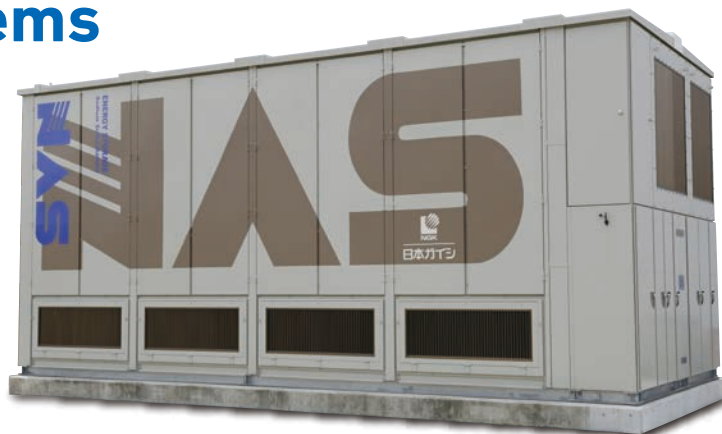
Electrification gradually began to gain traction at the end of the 19th century. At the time, Japan relied on imports for high-voltage insulators. “To make a contribution to the country, and not merely for our own profit, we must provide Japan with its own, domestically manufactured insulators.” (Kazuchika Okura, founding president of NGK) With this sense of mission, NGK managed to get hold of a piece of an American-made insulator, which it began studying in order to develop its own high-voltage insulators. The desire to contribute to people’s lives and the development of industry was integral to our founding and continues to be the cornerstone of our corporate philosophy.



Electric energy storage system

NAS[®] battery systems

A product of NGK's proprietary advanced ceramic technologies, the NAS battery was the world's first commercialized battery system capable of megawatt-level electric power storage. It is increasingly being utilized in stabilizing output from wind and solar power generators while proving useful to the spread of renewable energies and the establishment of smart grids.



2018



Ceramic substrates for automotive catalytic converters

HONEYCERAM[®]

Ceramic catalyst carriers neutralize the harmful substances in automotive exhaust. For maximum exhaust cleaning efficiency, HONEYCERAM was designed with minimum weight and wall thickness: the 0.05 mm walls minimize loss of engine power.

World's first vehicle-mounted

NOx sensors

This sensor is able to measure the concentration of NOx (nitrogen oxide) contained in automotive exhaust at the ppm (parts per million) level. Measuring real-time NOx concentrations and feeding back that information to the engine controls enables precise control of the exhaust purification system to reduce NOx emissions.



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Preserving the Founding Principles of NGK Business Diversification, Global Business Development, Quality Improvement

Since its founding, NGK has offered products boasting the highest quality and reliability thanks to the incorporation of exceptionally refined ceramics technology. At the same time, NGK has actively sought opportunities for business diversification and global development. This tradition of exploring new fields and seeking new challenges remains alive and well at NGK as we continue to pursue sustainable business growth.

