

Research and Development Activities

The Foundation of Our Research and Development Activities

Hikohachi Sato, the founder of TAIYO YUDEN, was a researcher in ceramic materials. Since its establishment, TAIYO YUDEN has believed that product commercialization should start from the development of materials. This has been one of the strengths of TAIYO YUDEN, and has resulted in us creating many products that have been the “world’s first.”

The TAIYO YUDEN Group’s research and development continues its focus on activities that are driven by one of the Company’s main objectives, which is to develop products that are rated highly by our customers, by means of enhancing the Company’s many elemental technologies that have been built up since its foundation. In particular, we are focusing on the development of super high-end products.

Research and Development Principles

Become a world leader in technology

Promote technological development ahead of product development and become a global leader in technology

Devise general-purpose technologies

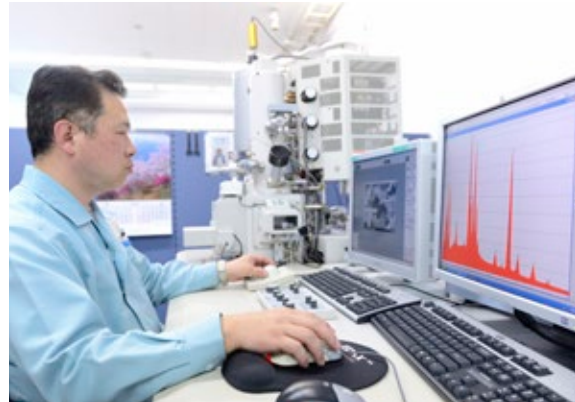
Devise technologies which can be applied not only to specific products but also to other areas useful to the markets we serve

Develop economic and environment-compatible technologies

Develop technologies which can be economically applicable to our manufacturing process and meet critical environmental standards

Create No. 1 technologies

Persist to create the world’s best and first technologies



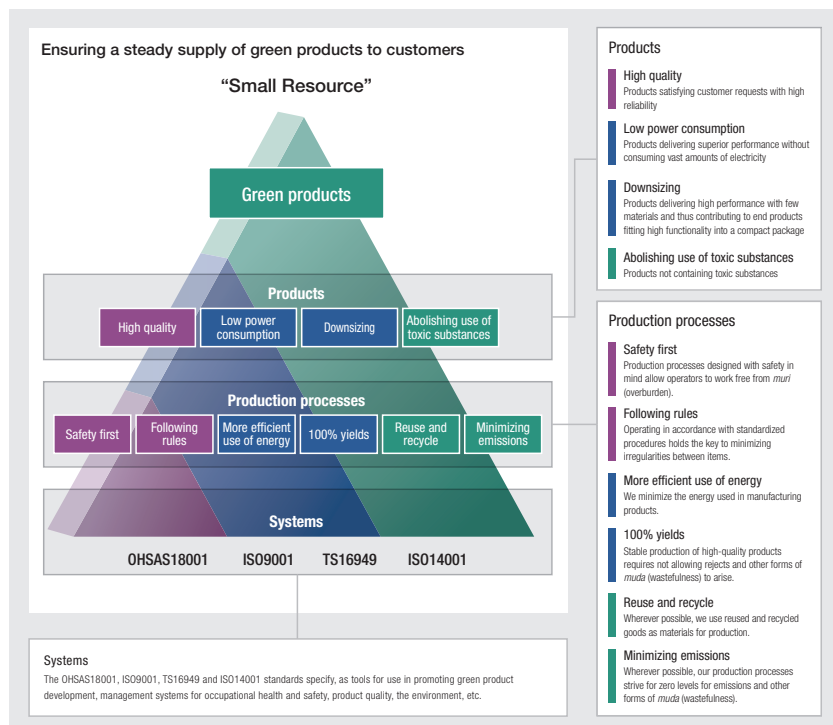
Development of “Green Products”

The TAIYO YUDEN Group has effective methods available that resolve the dilemma of how to both respond to customer demands for more advanced electronic devices and also to reduce environmental burdens. The objectives of these methods are to make electronic components that are incorporated inside a final product possess higher and higher performance levels.

Electronic components with high performance levels manifest improvements such as compactness (leading to reduction in the parts and materials used) and enhanced power efficiency (leading to lower energy consumed). Consequently, the TAIYO YUDEN Group continues to support the implementation of higher performance in all devices, and to achieve reductions in the environmental burden. Moreover, we consider our products as being beneficial for society as they are useful for a wide variety of producers that use electric power and enhance the quality of life of our customers.

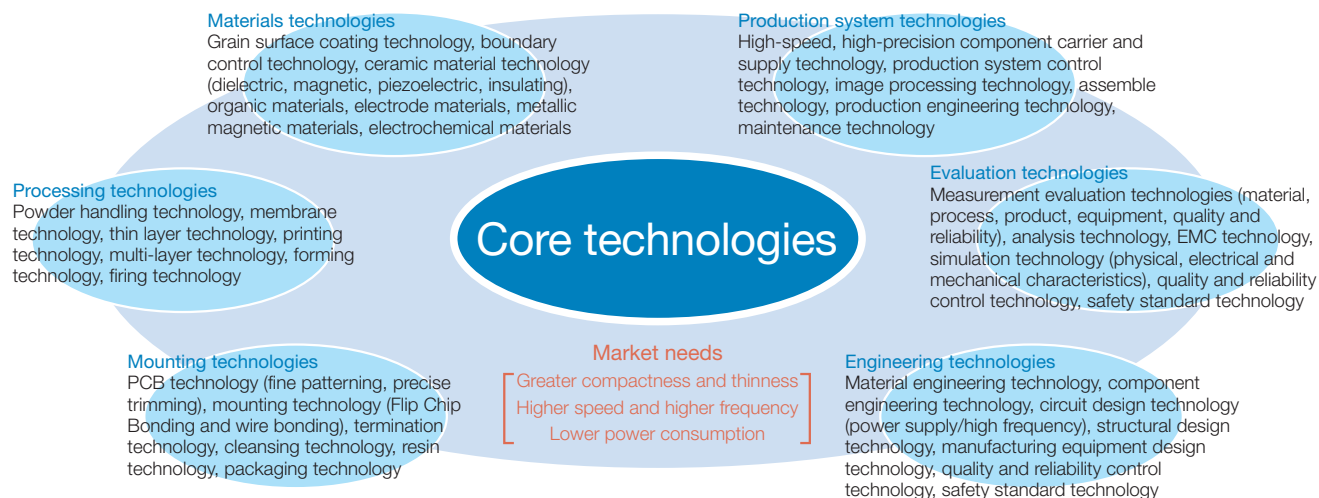
The TAIYO YUDEN Group strives to make a positive contribution to reducing the Company’s burden on the environment by pursuing “green products” and working to provide a stable supply of these items.

The green products that the Group has on its development horizon reflect the environmental considerations applied throughout the product life cycle, not only at the products’ end use, but also at all stages from design through production, sales, and incorporation into the final product right up to final disposal. This means eliminating what in Japanese are called the three M’s—*muda* (wastefulness), *mura* (unevenness), and *muri* (overburden)—over the entire life cycle of products to give them value for the customer, the local community, and our employees.



TAIYO YUDEN's Elemental Technologies

The TAIYO YUDEN Group is continuing to develop products that are rated highly by our customers, by using the various elemental technologies that the Company has built up since its foundation.



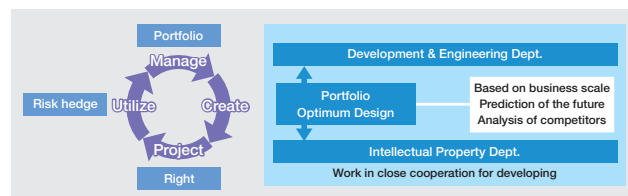
Activities on Intellectual Property Rights

Basic Policy

We, the TAIYO YUDEN Group, endeavor to obtain, maintain and protect intellectual property rights for proper use, and also to respect the intellectual property rights of third parties, in accordance with our CSR Code of Conduct.

Protection of Intellectual Property Rights

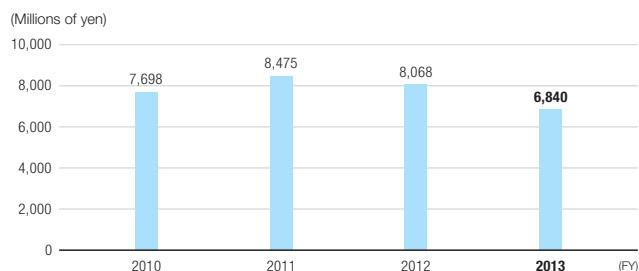
At TAIYO YUDEN, the Intellectual Property Department and the Developing and Engineering Department work in close cooperation with each other from the early stages of developing new technologies and obtaining intellectual property rights. We have our own management system to create, protect and utilize the intellectual property rights that are suitable for each of our businesses.



R&D Expenses

We recognize that continuing innovations and advancement in our technologies through R&D are the foundation of the strength of the Group. Accordingly, we will continue to invest in R&D activities and the future development of our products.

R&D expenses



R&D Center, TAIYO YUDEN's Research Facility (Takasaki City, Gunma Prefecture)

As we were committed to continuing to create the world's best products and uphold our claim to be "the TAIYO YUDEN of technology and the TAIYO YUDEN of development," we opened the R&D Center in 1998. In 2003, we established an Anechoic Chamber Test Facility in the same complex, and accelerated our proactive R&D activities in the field of radio communication. Currently, the R&D Center has become a foundation of the developmental and technological capabilities of the TAIYO YUDEN Group.

