

# Screws - Small Giants of the World

**Without any one of those unnoticeable screws or nuts, seemingly irrelevant components could not function smoothly.**

For half a century, MIRDC has been inseparable from the screw and nut industry in Taiwan. During the early stage from 1944 to 1969, MIRDC introduced steel, mold & die designs, heat treatment and measurement technology to manufacturers by means of educational training. A solid foundation of the industry was thus established. During the development stage from 1970 to 1980, export inspection and QC grading systems for screws and nuts were implemented in Taiwan. MIRDC was commissioned by the Bureau of Commodity Inspection & Quarantine (BCIQ) to be responsible for quality inspection. At the same time, MIRDC also delivered scientific and systematic quality control to manufacturers, resulting in Taiwan being acclaimed the “Kingdom of Fasteners.”

Since the 1980s, MIRDC has introduced international certification standards, including ISO 9001 quality management systems, ISO 14001 environmental management systems, ISO/IEC 17025 general requirements for the competence of testing and calibration laboratories, ISO/TS 16949 quality management systems particular requirements for the application of ISO 9001: 2008 for automotive production and relevant service part organizations. MIRDC has helped manufacturers get certifications so as to conform to international standards. In

1991, some manufacturers started to relocate overseas. Taiwan manufacturers faced challenges of transformation and upgrading. With the support of the government, MIRDC and CSC formed the “Automotive Fastener Industry R&D Alliance” and assisted manufacturers in solving the bottleneck of key technologies. Since 2005, automotive fasteners have successfully been transformed and scored in the high-priced market. Following the same pattern, more R&D alliances, such as micro fasteners, aerospace fasteners, and automotive fastener heat treatment have also been formed. In accordance with the government’s policy for the service-oriented manufacturing industry, MIRDC has proactively helped manufacturers to develop innovative service models in recent years, including rapid development services for customized products, and inspection services for globally high-valued fasteners. Furthermore, MIRDC has also cooperated with fastener providers in Kaohsiung’s Gangshan area to build the “Supply Chain Inventory Service Mechanism” in order to carry out demand forecast analysis, which is applied in production planning and scheduling to reduce inventory pressure. Hundreds of fastener manufacturers have received assistance from MIRDC. In the future, MIRDC will team up with them and keep promoting the vertical integration of related industries. Meanwhile, MIRDC will work with the Taiwan Industrial Fasteners Institute to promote the “Taiwan International Fastener Show” and push the MIT brand to the top of the world.