

Technological Research and Development

Main Research Themes Pursued by the Technical Development Group

Materials Research Laboratory

MRL's contribution is to enhance the competitive edge of the company's business sectors. In the material sector our contributions are found in new product development and optimization of the manufacturing process based on application of our advanced metal microstructure control technology. In the machinery sector our contributions are found in creation of distinctive products using our material technology. In addition we are developing new materials for new businesses.



- Materials Processing
- Mechanical Working
- Materials Design
- Surface Control

Mechanical Engineering Research Laboratory

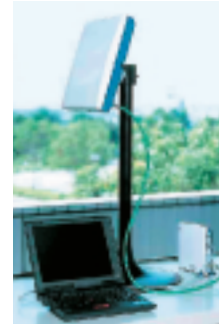
MERL is actively involved in the development of novel technologies and new products as well as in the improvement of product performance, design and manufacturing processes. These activities are based on its advanced technologies in the field of structural analysis, metal working, vibration and sound analysis, fluid and heat transfer, combustion and chemistry.



- Strength & Structural Engineering Technologies
- Dynamic & Acoustics Technologies
- Fluid, Thermal & Combustion Technologies
- Chemical Technologies

Production System Research Laboratory

PRL is contributing to the enhancement of competitiveness in Kobe Steel's existing business domain utilizing its advanced electronics and system control technologies. PRL is also concentrating its efforts in developing new technologies and products in order to penetrate growing markets such as the information & communication sectors.



- Instrumentation & Control
- System Engineering
- Information & Communication

Electronics Research Laboratory

ERL is developing new products and new technologies for future business in prospective areas, including electronics and information technology, nano-technology, bio-technology, and environmental technology. These activities are based on a number of our core technologies such as thin films and deposition, microfabrication, optical measurements, and superconductors. These technologies are also applied to production processes, strengthening the technological competitiveness of the divisions. ERL also supports the divisions both technologically and strategically.



- Thin Films
- Applied Electronics
- Superconductor