ROBUST
Systematization of Quality Engineering and Development of Software for Its Application
IMS Project No. 97009

- Development or transfer of technology made easier because of systematization and standardization for Quality Engineering method as general technology.
- Contributes to the efficiency of extended   technology development by utilizing Quality Engineering software.
- Allows for production development that improves Customer satisfaction (CS)

The ROBUST project achieved, among others, the following:

(1) Effectiveness of Quality Engineering was verified by applying it to a number of elemental technologies.

(2) It was established that application of Quality Engineering at an early phase of development will facilitate speedier technological development. Data from case studies were accumulated in a data-base that is available for a wide range of users including inexperienced engineers and technicians.

(3) A Quality Engineering management system was established for different elements of production technology, including product development, management of manufacturing know-how, manufacturing itself and quality assurance. The management system was found to offer an effective means to develop advanced technologies, and expand their scope of application, and shorten the production lead-time.

(4) A Quality Engineering software was created incorporated with such attributes and functions as database compatibility, experiment design, data analysis, optimization assessment, and report creation. This software is expected to accelerate the promotion of Quality Engineering, as it facilitates not only the introduction, use and application of Quality Engineering, but education and training for the same, and transfer of technologies in general.

Therefore, along with creating a revolutionary production system, the project was able to contribute to the promotion and development of advanced processing technology. The major deliverables from ROBUST project are as follows:

    (1) Case Studies Database
    (2) Quality Engineering Manual
    (3) Robust Design Toolbox
    (4) I-CAMPS Quality Engineering Software (International Version)
    (5) I-CAMPS Quality Engineering Software's Manual (International Version)

There were 31 partners from the European Union, Japan, and the USA including Mitsubishi Heavy Industries, Fuji Xerox, Tohoku Ricoh, AIST (JPN), Boeing, Rockwell Collins, Caterpillar. Ford, MIT, Volvo Trucks, Carl Zeiss, and Boston Scientific.