



2003 R&D 100 Awards Winner PowerFactoRE— A Suite of Reliability Engineering Tools for Optimizing the Manufacturing Process

PowerFactoRE is a comprehensive methodology and an integrated suite (toolkit) of reliability engineering tools that introduces a new way of thinking about the manufacturing process. The result of an effective collaboration between the Laboratory and Procter & Gamble, it comprises a unique set of proven methods, statistical and analytical tools, simulation software, procedures, and training that enable manufacturing line managers to understand reliability losses and to correct seemingly isolated defects in the manufacturing process. PowerFactoRE gathers and analyzes production data; fits the data with accurate statistical distributions to build a simulation of the system; and validates the system model. It allows a manufacturer to improve the current system or to evaluate a completely new configuration. It can be applied across a wide range of businesses to increase productivity, guide capital investments, and increase production. It is currently being used in more than 200 plants worldwide.

Applications

- Predicting, reducing and preventing manufacturing equipment failures
- Improving product quality and increasing throughput
- Improving bottom-line results through higher reliability
- Reducing operating and capital expenses