

Overview



Author: *Hideyasu Nonaka**

Manufacturing companies are increasingly being required to raise the added value of their manufacturing plants to win the fierce global competition. The companies must overcome all challenges such as high productivity targets to meet expanding product demand in the market and shorter delivery times requested by clients; reduction of total system cost including development, start-up, operation, and maintenance of manufacturing facilities as well as man-hour management; and improved quality by establishing a system that neither produces nor delivers defective products. To meet these requirements, manufacturers must develop and implement new manufacturing systems that go beyond the extent of conventional systems. This will require a group of factory automation (FA) components to reduce the tact time of facilities with superior high-speed, high-precision control function; improved working efficiency with greater operability in the engineering environment; and a data management system for high-speed sharing between facilities of huge volumes of production-line and quality control data.

As a general supplier of FA systems, Mitsubishi Electric Corporation supplies various types of control devices and also has proposed e-F@ctory to link all related information for improved management. We have looked at the component devices of e-F@ctory from the systems perspective and have developed an integrated platform of controllers to enhance the performance of the entire system, improve ease of use, and reduce the total cost. This paper describes the concept and the device groups of the integrated platform. We will continue to develop e-F@ctory to meet the needs of our customers.