MES system solution

Introduction

With energy, raw materials, labor costs rising, China's industrial manufacturing are heavily crowded the space of the production and business operation. According to official data, the total profit margin of 30 manufacturing industry is only 4.3%, the cost is as high as 85.7%. The overall upgrade of China's manufacturing industry is imperative and urgent. Improve the production efficiency, quality control, shorten product delivery in time integration, the lean production mode arises at the historic moment. Construction of manufacturing execution system (MES) for the core of production management platform is undoubtedly the most optimal solution. In the 1980 s, Baosteel first to import the MES system, and now the iron and steel, tobacco, chemical industry, automobile manufacturing and other fields have relatively mature MES system. And the electronic manufacturing industry which is facing higher Human cost is thirsty for MES system.

MES is in the belly of the whole factory system, is responsible for all system integration and the formation of data platform, through the SOAP protocol to connect the upper ERP/SAP, at the same time with industrial tablets (HMI) as the most important carrier, connect the lower DCS process control system, such as PLC, sensors, RFID, scanners, etc. MES automatically undertake ERP business orders, production scheduling and production instructions, shipment from business side to side fully performed by the ERP/MES/DCS. The mainly usage of industrial tablets (HMI) is data acquisition, communication with PLC, servo, connecting the background database, workshop LED display, fault indicator, barcode printing, KVM switch to track the status of equipment, etc.

The effect of MES brings to the enterprise

- Real-time control the production line, production quantity and quality; Production scheduling management,
- Order tracking management effect shipment in time;
- Data collection computerized, avoid error input and save paper man-power;
- Tamely alarm for error production;
- Provide quick after-sales product traceability function;
- Automatically displaying the corresponding SOP;
- Accurate and fast cost accounting;
- Remote information query;
- On-site presentation management;

Advantages

- Intel Baytrail Quad core 1.8GHzr processor;
- 12.1~19inch highlighted industrial grade display;
- Lifeof touch screen: 35MM hits, hardness: 4H;
- Rich I/O Interface, support Gigabyte Ethernet, Com port x4, USB port x4;
- Rugged metal casing, humanistic industrial design;
- Front case meets IP65 protection grade;
- Support standard VESA, embedded and wall mounting;

| Business Unit | Production Department | Quality Department | Engineering Department | Logistics Department | SPA |

SOAP

Electronic billboards

MES

RFID

RFID

| Feeding station | Material inspection station | Assembly station | Test station | Service Centre | Packing station | Discharge station |