Italian oil lubricant manufacturer improves production line control using Movicon.NExT™ SCADA software

RESULTS

- Simplified control of production process
- Cost-effective data collection, aggregation and analysis
- Easy detection of problems causing production losses and downtime
- Elimination of time-consuming paperwork

APPLICATION

Supervising the productivity and efficiency of lubricating oil production line.

CUSTOMER

A leading manufacturer, distributor and supplier of oil lubricants for a multinational oil company – Cornaredo, Milan, Italy.

CHALLENGE

Oil lubricants for motor vehicles are produced for a multinational oil company at the Cornaredo manufacturing plant in the Milan region. The manufacturer needed a new SCADA system to supervise the production line and improve productivity and efficiency. The filling line consists of several different machines, each managed by a PLC. These include a depalletizer, palletizer, labelling, filling, capper, wrapper and sealer machines.

SOLUTION

The manufacturer assigned the software project to Softec Srl, a Parma-based company that develops software for managing automated systems. The solution involved connecting Emerson's Movicon.NExT industrial software platform to all the assembly line machines, to collect data from each machine. This data is used by Movicon.NExT to calculate availability, performance and quality indexes (OEE, KPI and downtime) and perform downtime statistics for the time range specified.

Collected data is stored on a PLC data concentrator that communicates with all partner devices in the plant system. Devices are connected throughout the plant, where possible, with Ethernet or existing bus connections. Movicon.NExT displays the real-time operating status of each machine, durations of various states on histograms and productivity flow trends using charts. The status and levels of silos in the product supply department are also displayed and

"From a development perspective, Movicon.NExT has proved to be easy to configure and use. Furthermore, the VB.net scripts allowed Softec to save more time by being able to recover and use parts of previously written code for other applications. Movicon.NExT has a lot of ready-to-use tools that have helped us save time in writing code as well."

Vittorio Pappani
Engineer and general manager, Softec

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logged. The SCADA is in continuous communication with the PLC data concentrator and historically logs a major part of the data on a SQL database using data loggers.

The recorded data includes produced container count, machine status (stockpile, rejects, downtimes, etc.), and alarms causing machine downtime. All this information is processed in real-time and displayed in reports created on request by the operator using predefined filters. A data analysis feature allows managers to quickly identify critical areas of the productivity process that need improving to obtain better system efficiency and productivity.

The fact that the software system is centralized and connected to all machines makes it easy to control the whole production process from one workstation. Within a few months of using Movicon.NExT, the manufacturer could pinpoint the major problems causing production losses on the assembly line, and the production phases during which downtime occurred most frequently. The operator is also saved the tiresome task of paperwork that was previously needed to document problems. Greatly satisfied with the results, the company decided to expand the project.

RESOURCES
Emerson industrial automation and controls
www.Emerson.com/PACSystems

Movicon
www.Emerson.com/Automation-Software

> *"The training courses and highly qualified technical support services make Emerson a strong point of reference that has helped contribute to reducing installation and setting-up costs."*
> **Vittorio Pappani**
> Engineer and general manager, Softec

OEE display and key performance indicator (KPI) dashboard

For more information:
Emerson.com
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