Metal Trade Comax a.s.
Velvary, Czech Republic

View of the Coating Line
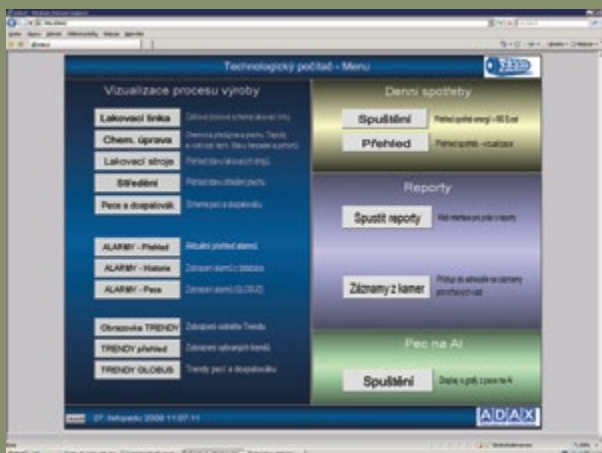
Main Menu at Metal Trade Comax

> *"ICONICS has been a very powerful and effective solution for Metal Trade Comax's data mining and data aggregation needs. "*

Petr Hornof
Programming Engineer,
ADAX s.r.o.

About Metal Trade Comax a.s.

Metal Trade Comax a.s., located about 30 kilometers from Prague in the Czech Republic, is a producer of non-ferrous casting alloys and surface treated metal sheets and bands. Using coil coating technology, Metal Trade Comax applies organic coatings and embossing to aluminum, aluminum alloys, cold rolled steel and hot dip galvanized steel.

Coated metals have a wide breadth of functions, for both interior and exterior needs. Roofing, sheet metal, parapets, interior facings, windows, automobile superstructures, trailers, cladding of buildings, cold storage and swimming pools can be constructed of coated metal.

ICONICS Software Deployed

ICONICS GENESIS32™ with GraphWorX™32 provides visualization for all parts of Metal Trade Comax's coating line, where metal strips are painted or treated depending on their function. WebHMI enables remote Internet connectivity. ReportWorX™32 and TrendWorX™32 work together as the data logging, charting, reporting and analysis system, while AlarmWorX™32 delivers alarm information.

ICONICS software exchanges production data with Microsoft Dynamics NAV Enterprise Resource Planning software, for the complete integration of Metal Trade Comax's data and processes.

Project Summary

System Integrator ADAX s.r.o. implemented GENESIS32 for Metal Trade Comax after several successful projects in the Czech Republic. Following an 8 month implementation cycle, Metal Trade Comax enjoys a complete monitoring and control solution from ICONICS for their production processes.

ICONICS' open communication standards have helped

Metal Trade Comax to gain interoperability with their devices from different vendors. ICONICS interfaces with a Siemens SIMOTION PLC, which controls the main drives or motors of the production line, and a Siemens Simatic S7-300, connected with industrial ethernet.

DataWorX32 provides OPC Data Aggregation from various OPC sources. Monitoring is enhanced with SNMP communication to devices for measuring energy consumption with variables including gas, water and electricity.

Through TrendWorX, Metal Trade Comax is able to save large volumes of trend data from their production to a Microsoft SQL 2005 Server.

Benefits of the System

ICONICS enables an advanced process for ensuring the coated metal exits the production line without defects. Metal Trade Comax has a system in place to automatically evaluate surface defect in coils. Three fast industrial cameras are installed on the line, which can detect surface defects on the metal plates. Camera results are reported through ReportWorX, where data is visualized and saved to the server.
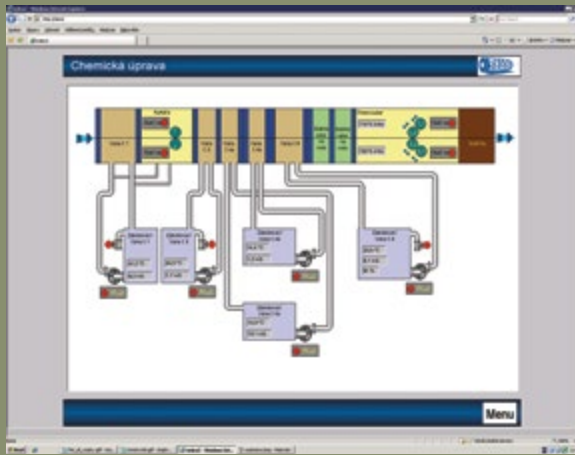
Chemical Treatment View

Coating View

ReportWorX provides Metal Trade Comax with "Technological Reports" and "Customer Reports." Technological reports include information about conditions and events during production, such as defects on the surface of the strip coil or alarms triggered during the coating of the strip coil. Customer reports contain business information from Microsoft Dynamics NAV and a short description of the product including strip length, weight, material, and laboratory results.

Conclusion

With a successful ICONICS implementation running on the production line, ADAX programmers are working on the extension of Metal Trade Comax's existing system. Programmers are developing a SCADA system for Metal Trade Comax's 12 ton aluminum furnace. Metal Trade Comax will see further enhancements to their productivity.