Development of a real time PLC-SCADA communication for the vacuum control system

Project code	73
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Department	TE

Title

Development of a real time PLC-SCADA communication for the vacuum control system

Description

The Vacuum, Surfaces and Coatings (VSC) group is in charge of the design, construction, operation, maintenance and upgrade of high & ultra-high vacuum systems for accelerators and detectors as well as coatings, surfaces treatments, surface and chemical analysis for Accelerators and Detectors.
The Interlock, Controls and Monitoring Section (ICM), which is part of the VSC group, is in charge of the monitoring, maintenance & consolidation of the vacuum control systems of all accelerators and detectors.
Within the ICM section, this project consists in the development of a real time PLC-SCADA communication for the vacuum control system:
Consolidate PLC software architecture to be compatible with real time acquisition system.
Evaluate and develop a real time PLC-SCADA communication protocol.
Upgrade the SCADA (WinCC OA) application to be compatible with a real time acquisition system.
Test, validate and deploy the system.

Functions and Training Value

Learn PLC architecture and PLC structured text programing language, PLC-SCADA communication protocols.
Learn Industrial Controls SCADA applications and frameworks.
Develop teamwork skills.

Qualifications/Skills

Automation Engineer.
PLC architecture, PLC structured text programing language, PLC-SCADA communication protocols.