Job Title 2

Controls Engineer for the Vacuum control system of the NA62 Experiment

Introduction

The NA62 experiment is going through a complete refurbishment with the introduction of new detectors filed with gas. Their operation requires a vacuum system, which will be based on primary pumps for the roughing, turbomolecular and cryo-pumps to achieve the high vacuum required during the operation.

Functions

In collaboration with CERN experts, the candidate will define, implement and commission:

- The new control system for NA62 vacuum;
- The upgrade of the control system for the vacuum of SPS NA62 transfer lines;

For standardization purposes, the new system should reuse as much as possible the existing software and hardware components:

- The software applications are based on Siemens PLCs and PVSS SCADA, and conforming to the framework currently used in the CERN accelerators;
- The hardware will be built on electrical and electronic modules currently used in the CERN accelerators.

Qualification required

Engineer in Automation, Computing or Electronics or equivalent

Experience and competencies

Knowledge and preferably work experience, with control systems hardware [FieldBuses, Remote_IO, PLC (Siemens)] and software [PLC programming in SCL, SCADA (PVSS)].

Basic knowledge on design of electrical cabinets for control systems: integration of industrial front-end electronics (analog and digital); procurement, assembling, testing, installation, and commissioning.

Familiar and experienced with Windows, Linux, C/C++, SQL

Language competencies

Good knowledge of English or French; working knowledge of the other language.

Job location

The selected candidate will be working at CERN during the entire period of his (her) contract, attached to the Technology Department (TE), in the Vacuum, Surfaces and Coatings (VSC) Group and in close collaboration with the Industrial Controls & Engineering (ICE) Group of the Engineering Department (EN) and with the NA62 Collaboration.