

HOW DID WE CHOOSE THE CONTROL SYSTEM OF THE TESLA ACCELERATOR INSTALLATION?

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The paper describes the process of selection and integration of main control system of the TESLA Accelerator Installation in terms of our goals, available resources and decision criteria we used. In context of lack of development time and manpower, we selected Honeywell Alcont 3000x - an integrated industrial control system. Well-performing similar control system at JYFL Accelerator Laboratory in Finland, as well as development support obtained from that Laboratory, were decisive and proved to be just criteria for the selection. Experience gained during implementation of control functions for two ion sources confirmed that reliability of this control system and short application development time overcome drawbacks. Disadvantages of this system are slower response time, modest graphics, exclusive orientation to one manufacturer and somewhat higher price paid for it in the beginning.