

BEAM HANDLING IN KEKB LINAC COMMISSIONING

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Abstract

In the commissioning of KEKB e- 8GeV / e+ 3.5GeV linac the beam handling system was much improved since the TRISTAN project. In the control system database for accelerator equipment was improved and several support commands were added to ease on-line calculations. Basic data files for TRANSPORT and SAD simulation codes are generated automatically. While the calculation with TRANSPORT is done in batch mode, SAD can operate in real time using its SAD-script language and X-window widgets. Using these environments many pieces of operation software are developed; energy feedback system, adaptive orbit correction system, isochronous and achromatic arc tuning system, etc. The same environment will be used in the KEKB ring commissioning and future JHF project.