

10 MeV RF LINAC Simulator

A 10 MeV Industrial RF Electron Linac that can operate in Electron Beam mode or X-Ray mode is installed at Electron Beam Centre, Kharghar, India for Industrial applications. The accelerator is being regularly operated at 3kW average beam power for industrial and experimental irradiation applications. The simulator developed will be utilized for training of personnel for operation of 10 MeV RF LINAC. The simulator is built on the same platform as the actual control system in use for this accelerator. It uses SCADA interface developed in Movicon by Progea. The field variables in the accelerator are simulated with memory locations of PLC (Schneider make). The trainer PC works on runtime Labview 8.5 platform. The trainer PC is capable of creating various known error conditions for the accelerator and its sub-systems. This system has been designed and developed using in-house available resources making it economically viable.

