

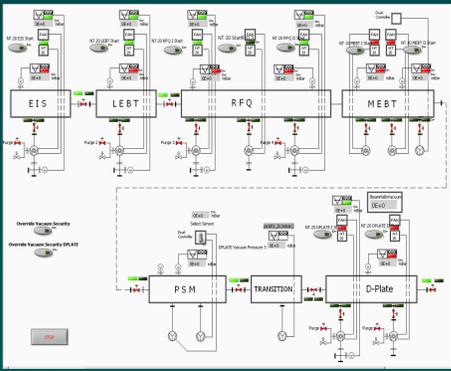
SARAF Beam Lines Control Systems

E. Reinfeld, I Gertz, I Eliyahu, A Grin, L Weissman, A Perry, Soreq NRC, Yavne 81800, Israel

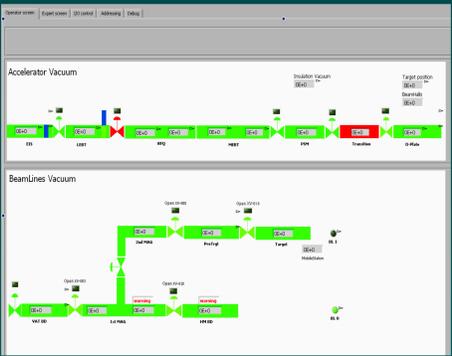
Beam lines vacuum control system redesign

Accelerator and beam lines vacuum control systems redesigned and rebuilt. The new solution provides full control over all of SARAF vacuum elements.

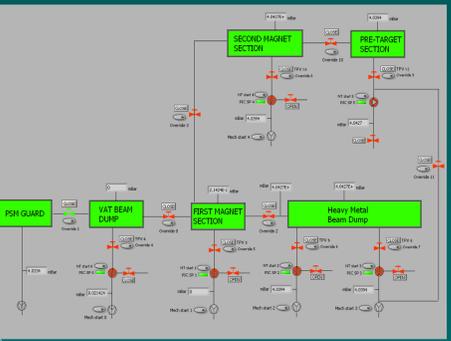
Old Accelerator vacuum control system



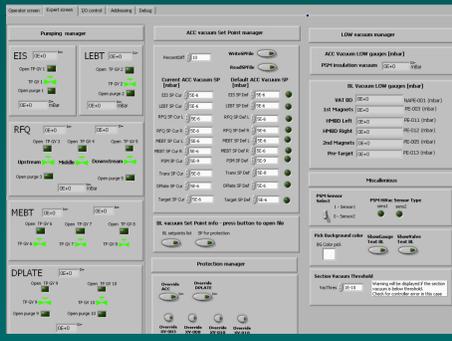
Full redesigned vacuum control system operator screen



Beam lines vacuum control system



Full redesigned vacuum control system expert screen

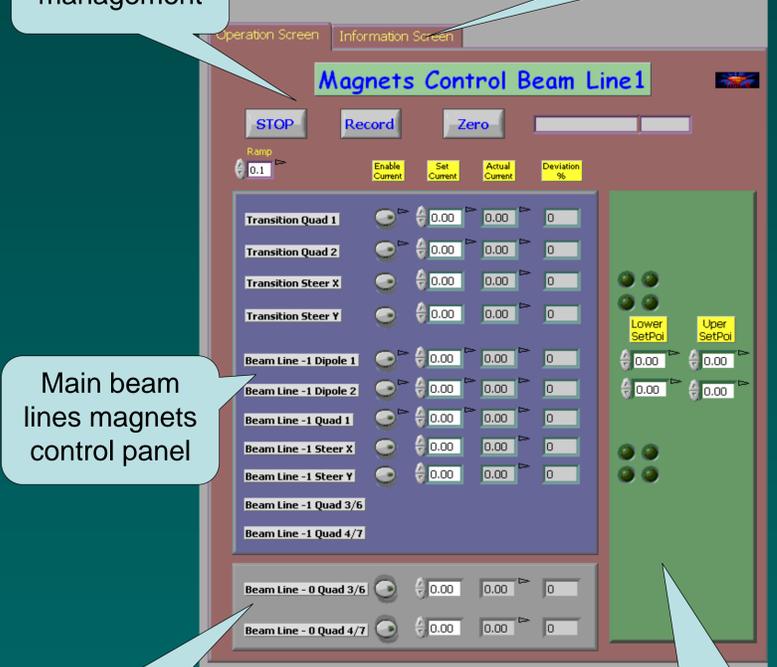


Control of beam optics elements

This control system provides full control of the beam lines magnetic optical elements. The system is fully entwined with the SARAF machine safety systems.

Configuration management

Expert level information screen



Main beam lines magnets control panel

Mode control beam lines 0 and 1

Safety thresholds manager

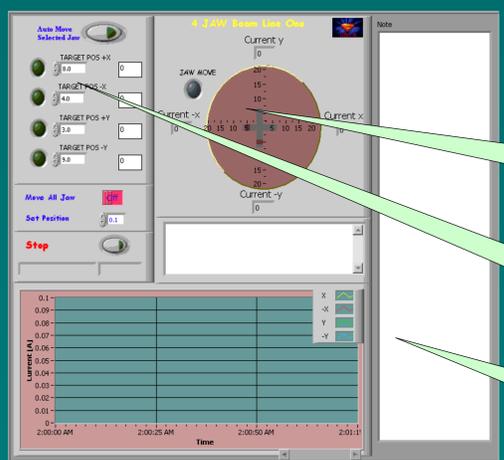
Beam diagnostics control

The "4Jaw Collimator" determines the beam shape and size for current and future targets.

Real time "4Jaw" position and current

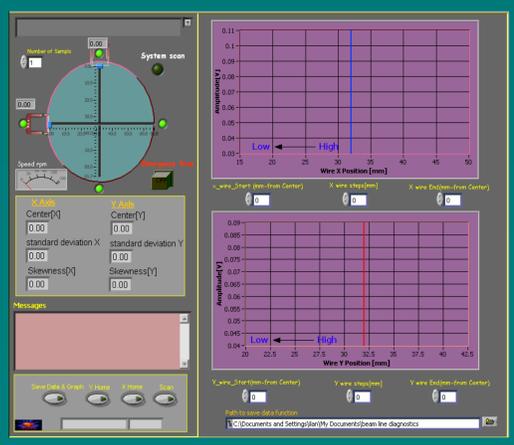
Main control panel

Full logging capabilities



The new beam lines wire scanners control system consists of more reliable hardware.

The control application includes more information (wire position, beam statistics ETC) and a better interface for the operators.



Beam lines wire scanners HMI

System Architecture

