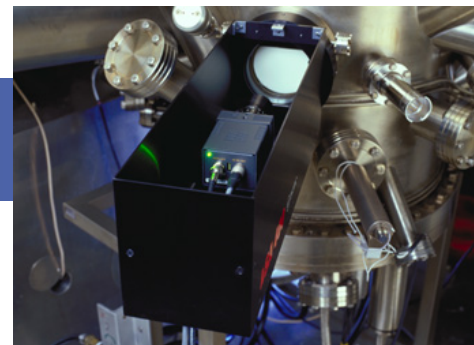




k-Space Associates, Inc.



kSA 400 Phase

Locked Epitaxy (PLE) Plug-In

Multi-layer MBE Growth Control via RHEED Analysis and Shutter Control

The kSA 400 PLE plug-in option automatically controls layer-by-layer growth by using real-time monitoring of Reflection High Energy Electron Diffraction (RHEED) oscillations to automate shutter open and close times. This yields atomic-level accuracy and reproducible results for thin films. The PLE plug-in option combines a highly sophisticated PLE algorithm, programmable Process Table, and digital I/O board, all seamlessly integrated into the kSA 400 environment.

Features

Highly sophisticated PLE algorithm continuously monitors 1st derivative of real-time intensity data; eliminates noise and transients

Peaks, valleys, or both peaks and valleys can be phase-locked

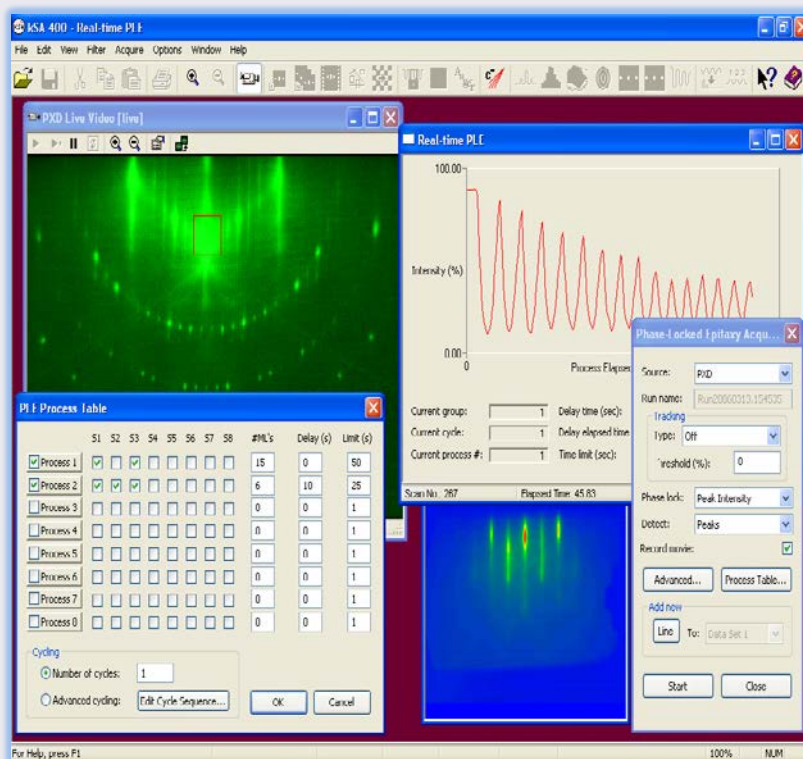
Timed growth control is available when intensity oscillations are absent

Programmable process table: up to 8 processes, 1000 cycles, and delay/recovery timing for complete growth recipes with advanced processes

8-channel digital I/O board and cabling enables software-controlled shutters (open/close)

External triggering allows for synchronized PLE with high speed substrate rotation

Simple Software and User Interface



Your partner in thin film metrology

k-Space Associates, Inc., is a leading supplier to the surface science and thin-film technology industries. Since 1992, we've delivered the most advanced thin-film metrology tools and software thanks to close collaboration with our worldwide customer base.