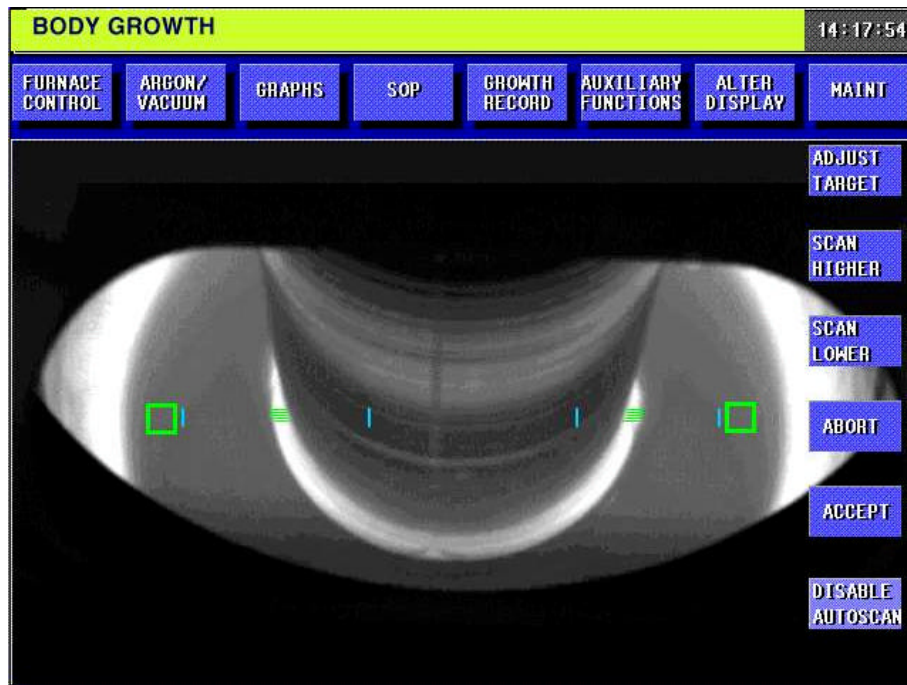


### KrystalVision™ Diameter Control System

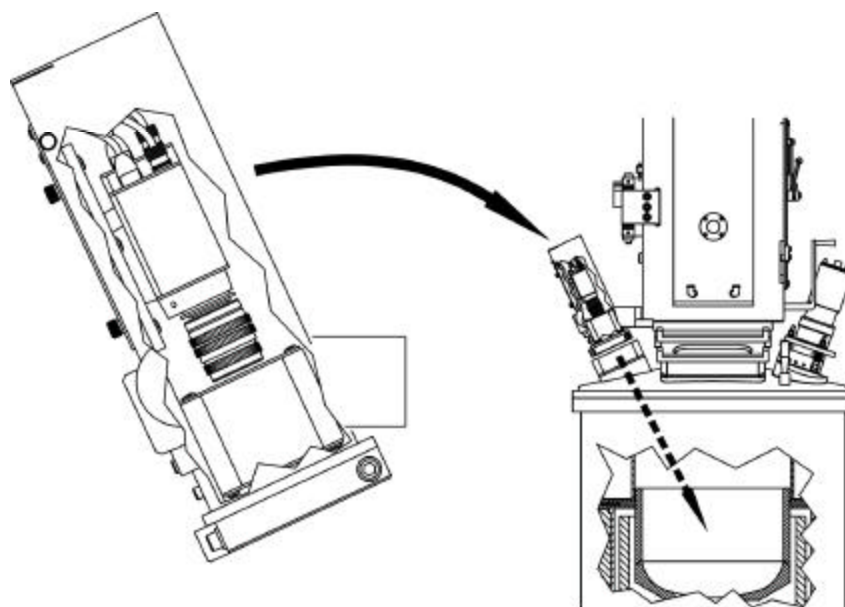
Automate Your Growing Process



- *KrystalVision™* is a fully integrated diameter measurement system for Kayex automated crystal growing furnaces.
- The front end consists of two CCD cameras mounted on the furnace tank cover. A longer focal length lens for neck mode provides enhanced resolution for superior diameter control.
- The system is impervious to the high magnetic fields applied to furnaces with the MCZ process.
- The camera image is routed to the control computer where a specialized image processor and custom software extract diameter information
- Highly specialized vision processing and a high-level control integration provide many advantages over add-on or less sophisticated systems.

# K rystaI V ision Overview

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The K rystaI V ision System includes:

- High resolution CCD camera
- 768 (H) X 493 (V) pixel array
- Dual cameras - 6:1 lens ratio for neck and body detection
- High performance frame grabber board provides image acquisition and analysis
- Highly flexible software control over sampling area, error rejection, and signal processing techniques
- On-screen display of crystal image
- Automatic adjustment for varying crystal diameters and melt levels
- Neck diameter acquisition performed 15 time per second

Improve Your Grower's Productivity Now!