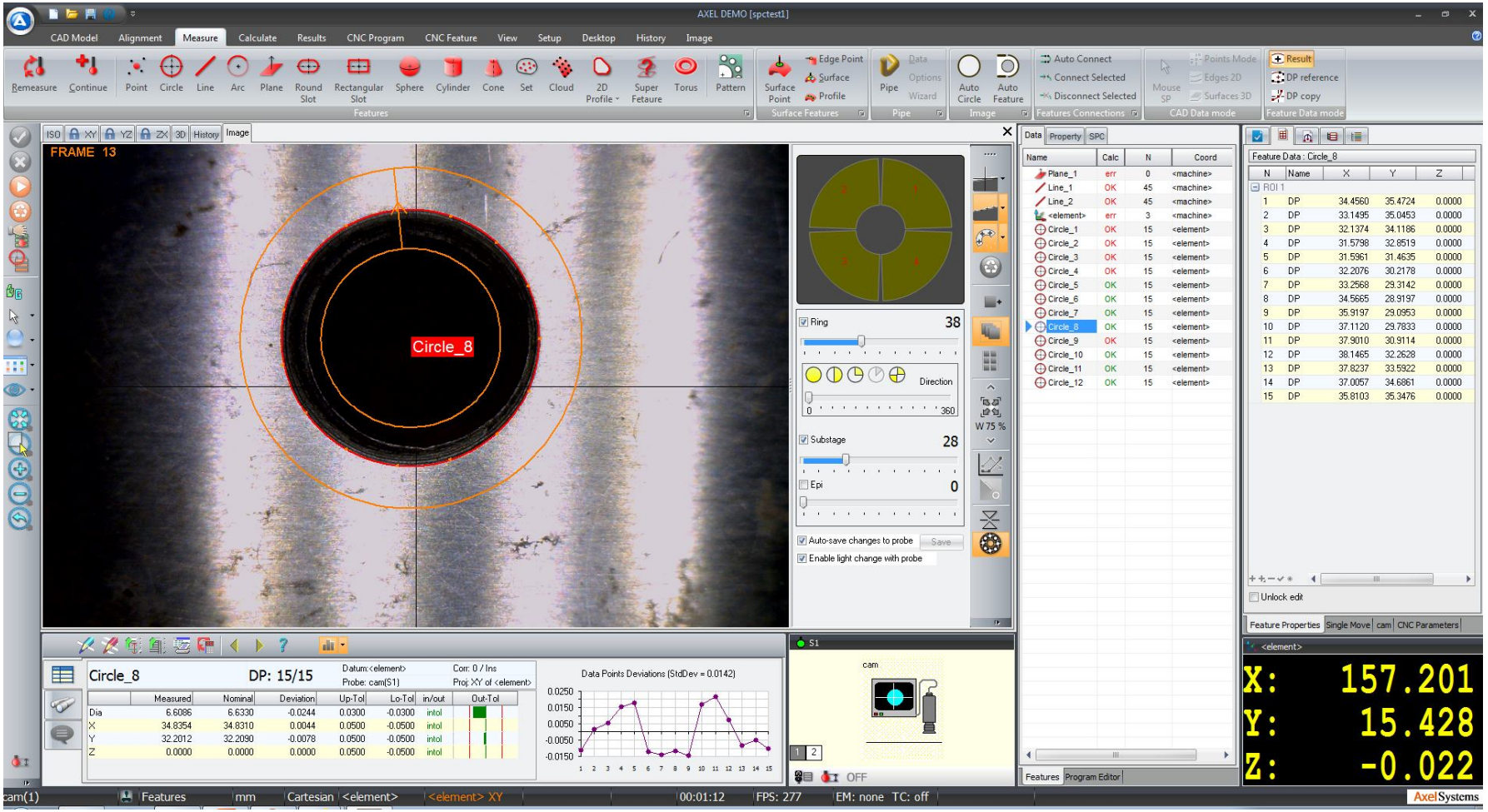
Software Additions for Camera

AxelSystems

- Video module is available as stand alone package for Video only measuring machine or as addition to Touch Probe software to be used on hybrid CNC machines.
- Interfaces to majority of frames grabbers and USB cameras
- Complete system solution for manual and CNC machines offered
- Extensive Video calibration routines
- Adaptive edge detection techniques
- Auto Feature detection
- AutoFocus for manual and CNC machines
- Off-Line CAD programming
- Profile comparission
- '***Go mode***' for running manual measurement sequences
- '***Dry Run***' for testing CNC sequences
- History/SPC

NEW Software Additions for Camera

AxelSystems



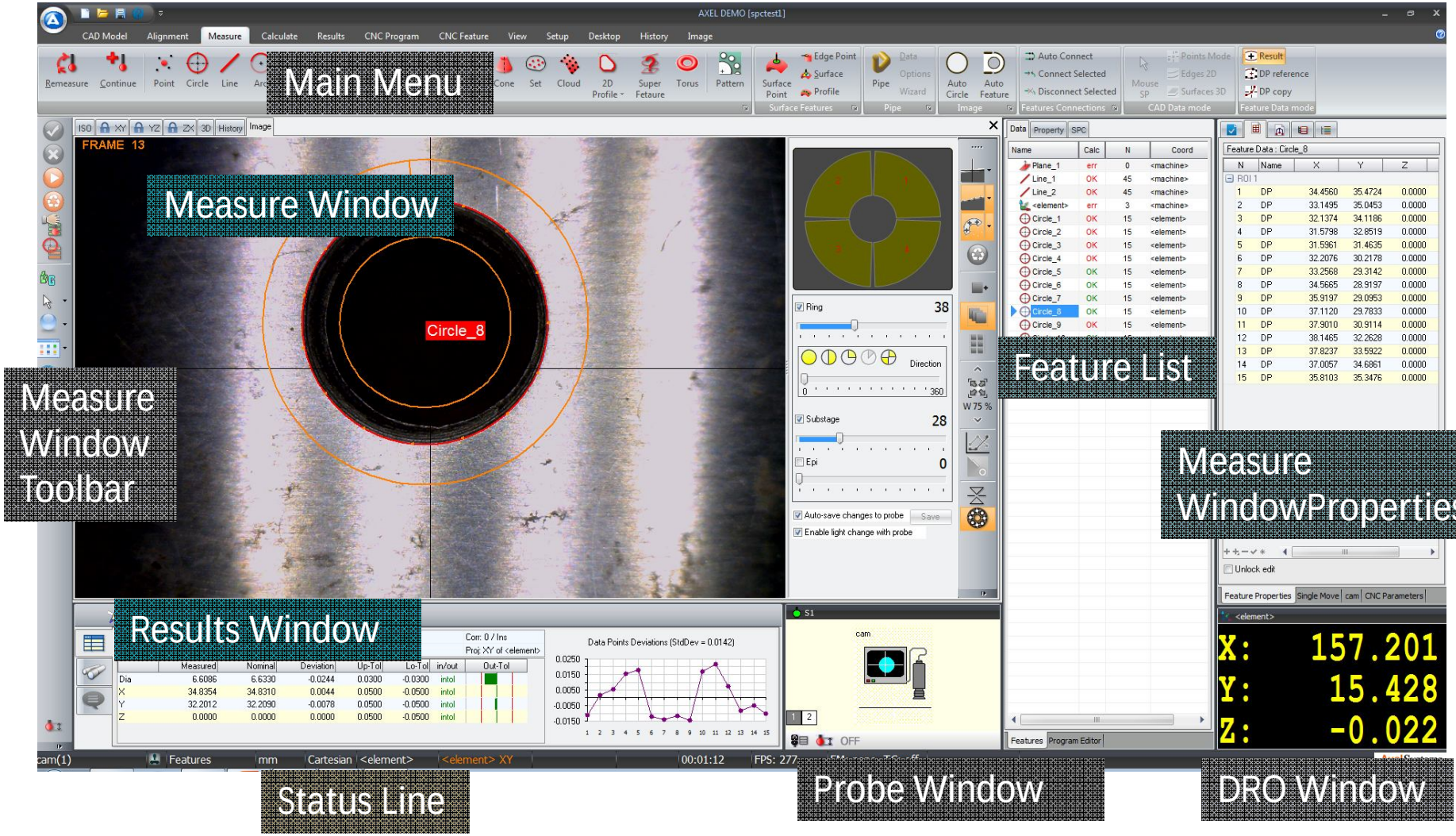
Light Control Unit
Extended Camera Probe
Extensive Video Calibration

Two Screen Operation
AutoZoom control
Axel Config Utility

Joystick for Video

NEW Software Additions for Camera

AxelSystems



Camera and Lighting Interface

AxelSystems

Camera Device Drivers	Comments
Windows Direct Show drivers	Standard USB cameras USB analog Composite/Svideo capture devices OCI analog Composite/Svideo and digital capture cards HD webcams and cameras USB Microscopes
Proprietary device drivers	Deva028 camera

Lighting Device Drivers	Comments
USB and Serial interfaces	Interfaces are currently available to various commercially available LED Ring illumination

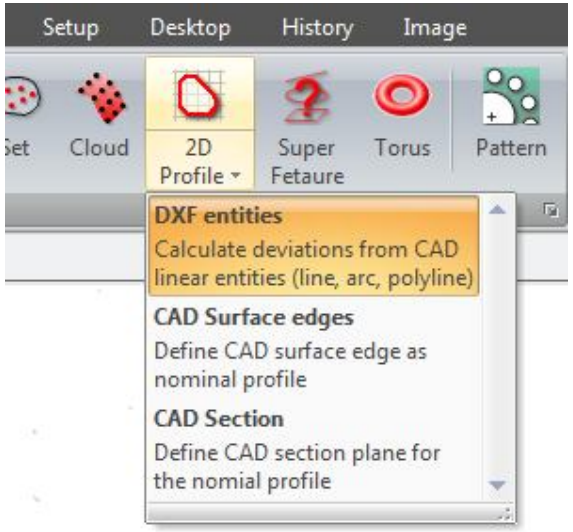
Typical Control Hardware Configurations

AxelSystems

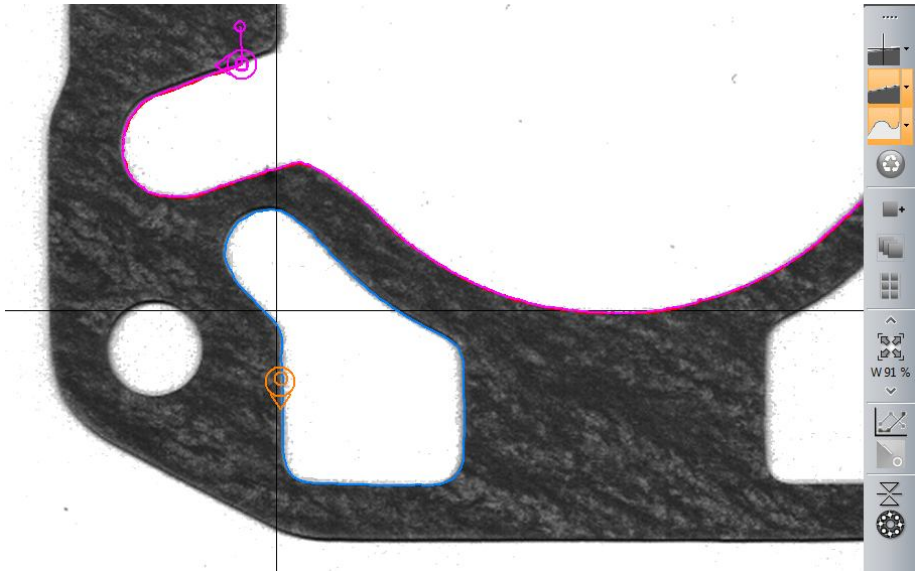
Device	Measuring Technologies	Hardware	Comments
MANUAL SYSTEMS			
Optical Projector	Crosshairs	ENC7480	X, Y and Z Encoder and optional foot switch inputs
Manual TP CMM	Manual touch probe	Deva001	X, Y and Z Encoder, touch probe and optional foot switch
Manual Video CMM	Camera	Deva001	X, Y, Z Encoder
AUTOMATIC SYSTEMS			
CNC TP CMM	Touch Probe	Deva004TP	Controller only or CMM System pack with Drivers and Joystick
CNC Video CMM	Camera	Deva004	
CNC TP and Video CMM	Camera and Touch Probe	Deva004TP	CMM System Pack recommended

New 2D Profiles and AutoFeature Detection

AxelSystems



- Quick Sub-Pixel accuracy profile detection.
- Best Profile Fit of measured profile to its CAD model
- AutoFeature detection to quickly measure parts features such as lines, arcs and circles.



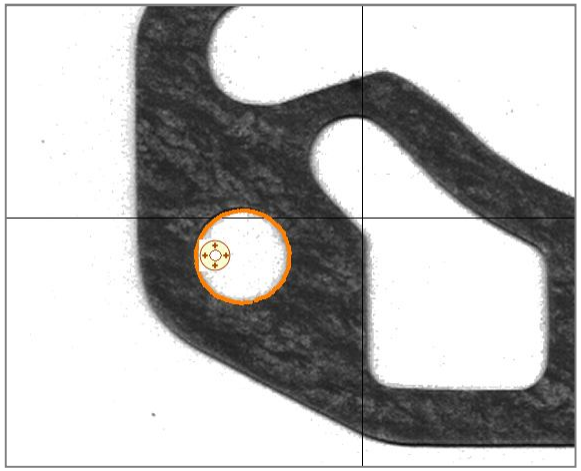


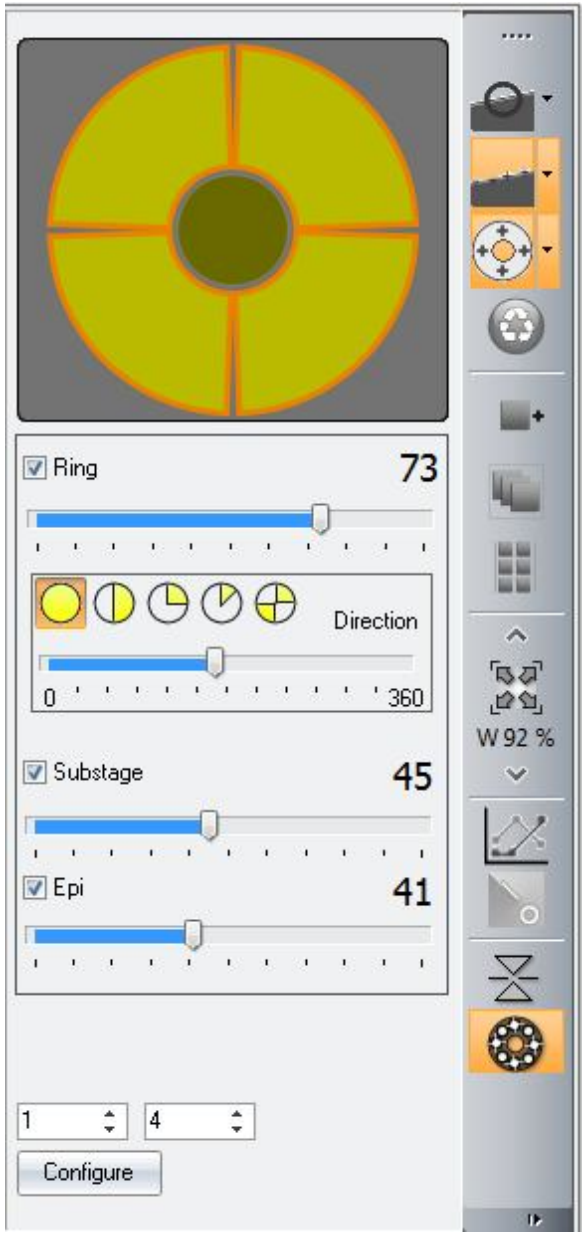
Image Auto Focus

AxelSystems

- Manual and CNC operation
- Height Inspection
- Pre-focusing while inspecting 2D features improves accuracy
- Algorithm selection for various surfaces

Auto Focus Button opens the dialog

AxelSystems

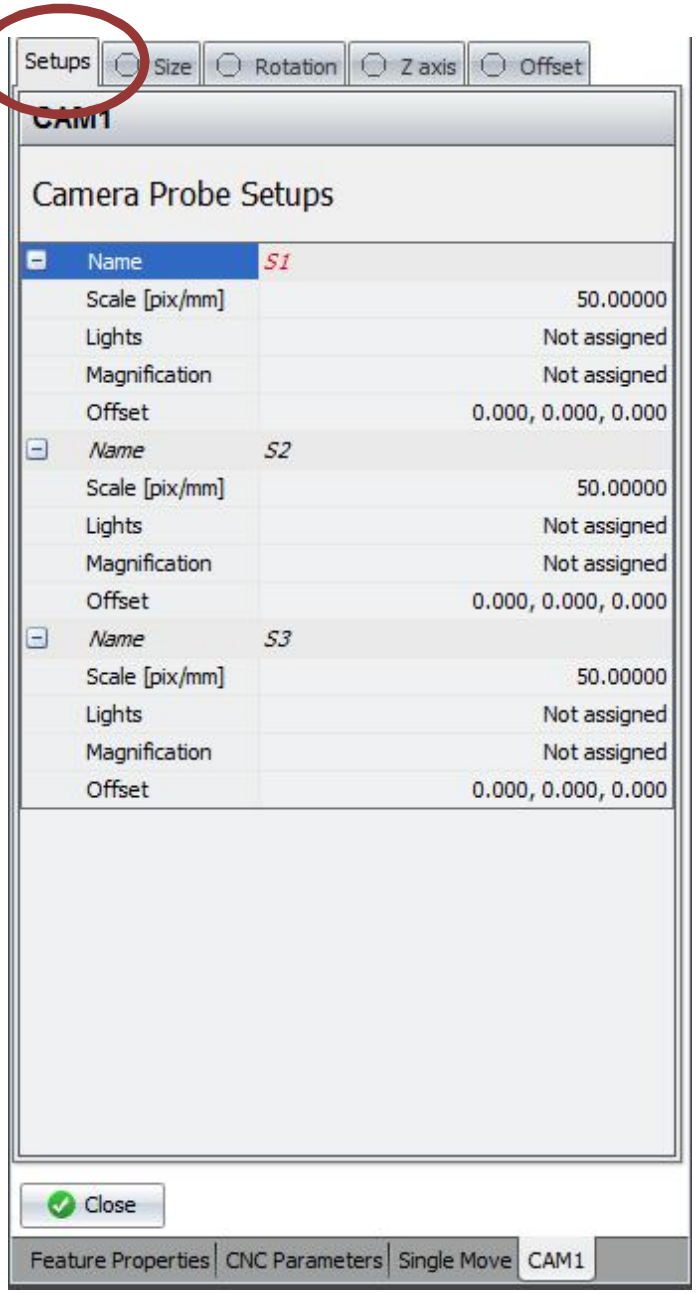


New Light Control Dialog

- Configurable number of rows and segments
- Supports Ring, Sub-stage and EPI light
- Interfaces available to various light controllers
- New interfaces under way

Lights Control Button opens the dialog

AxelSystems

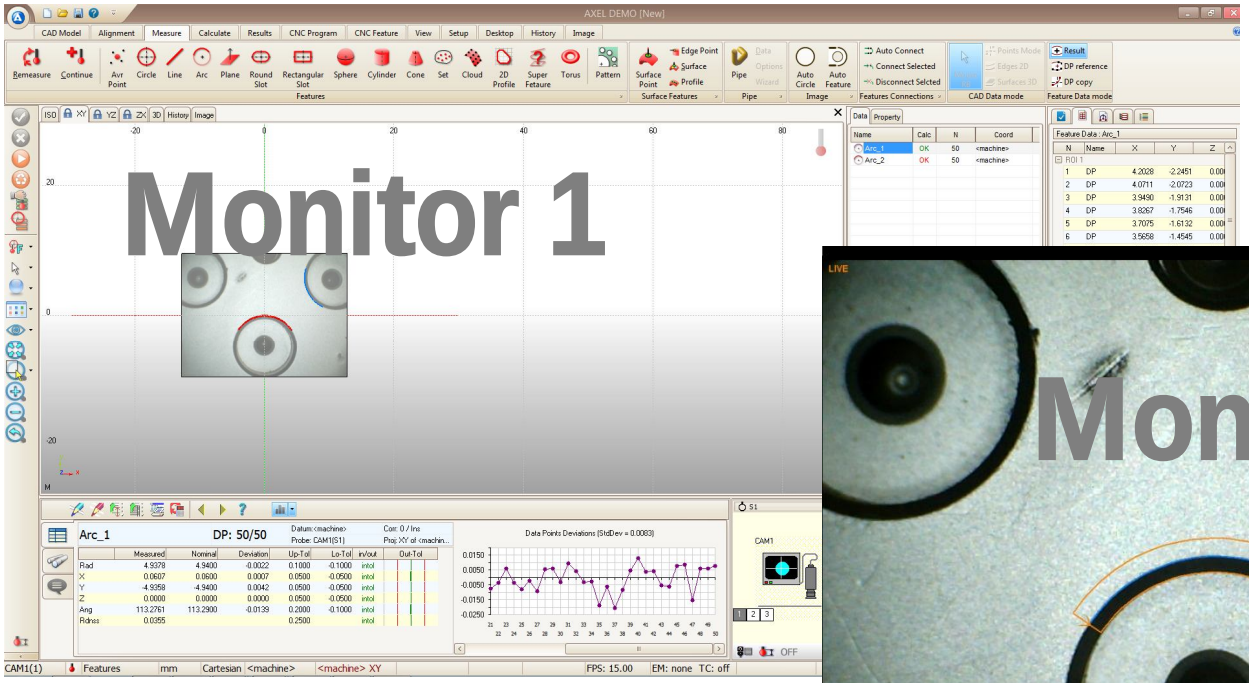


New List of defined camera setups

The Setups tab lists all available camera setups

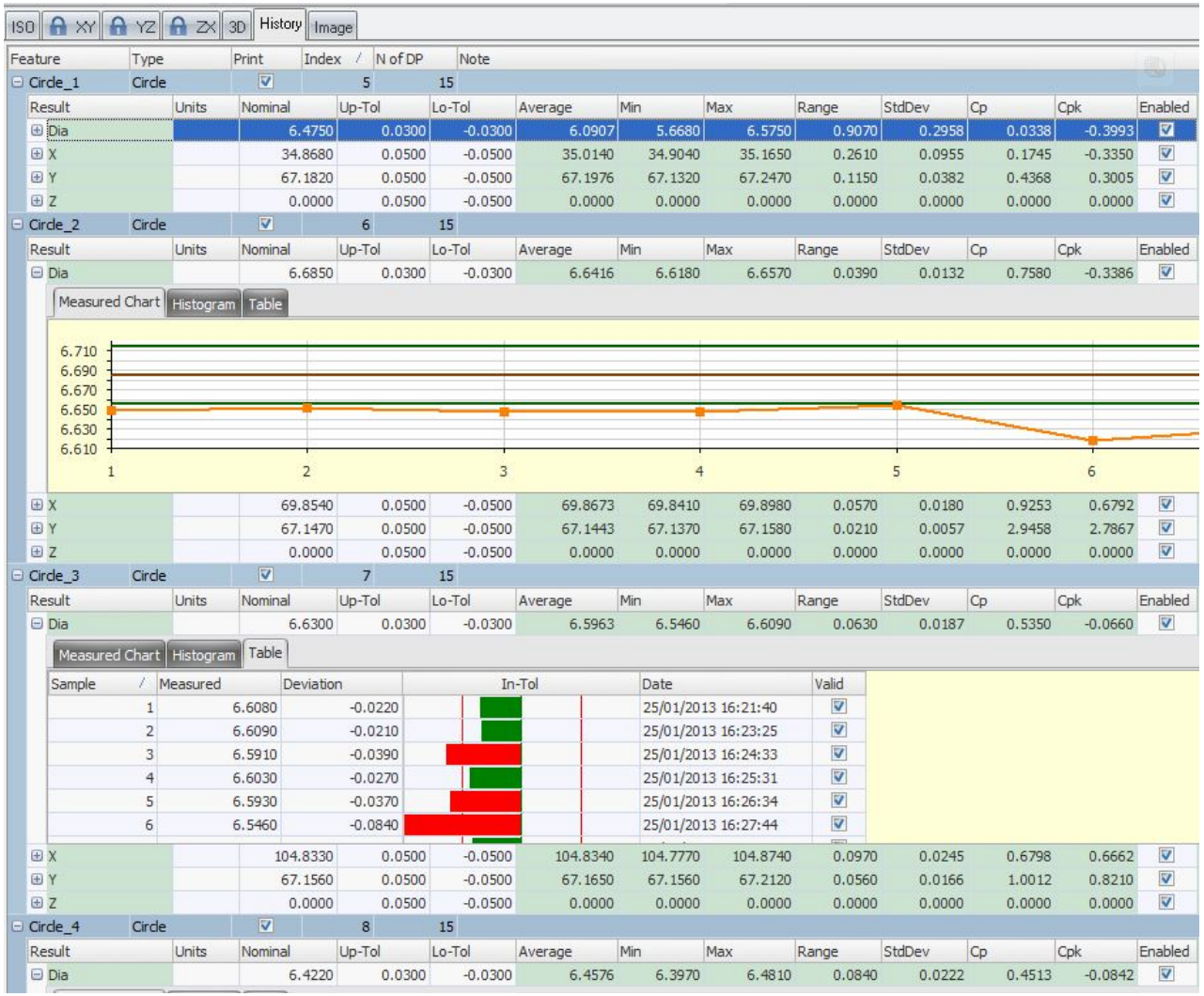
AxelSystems

New Two Monitor Operation



New Inspection History

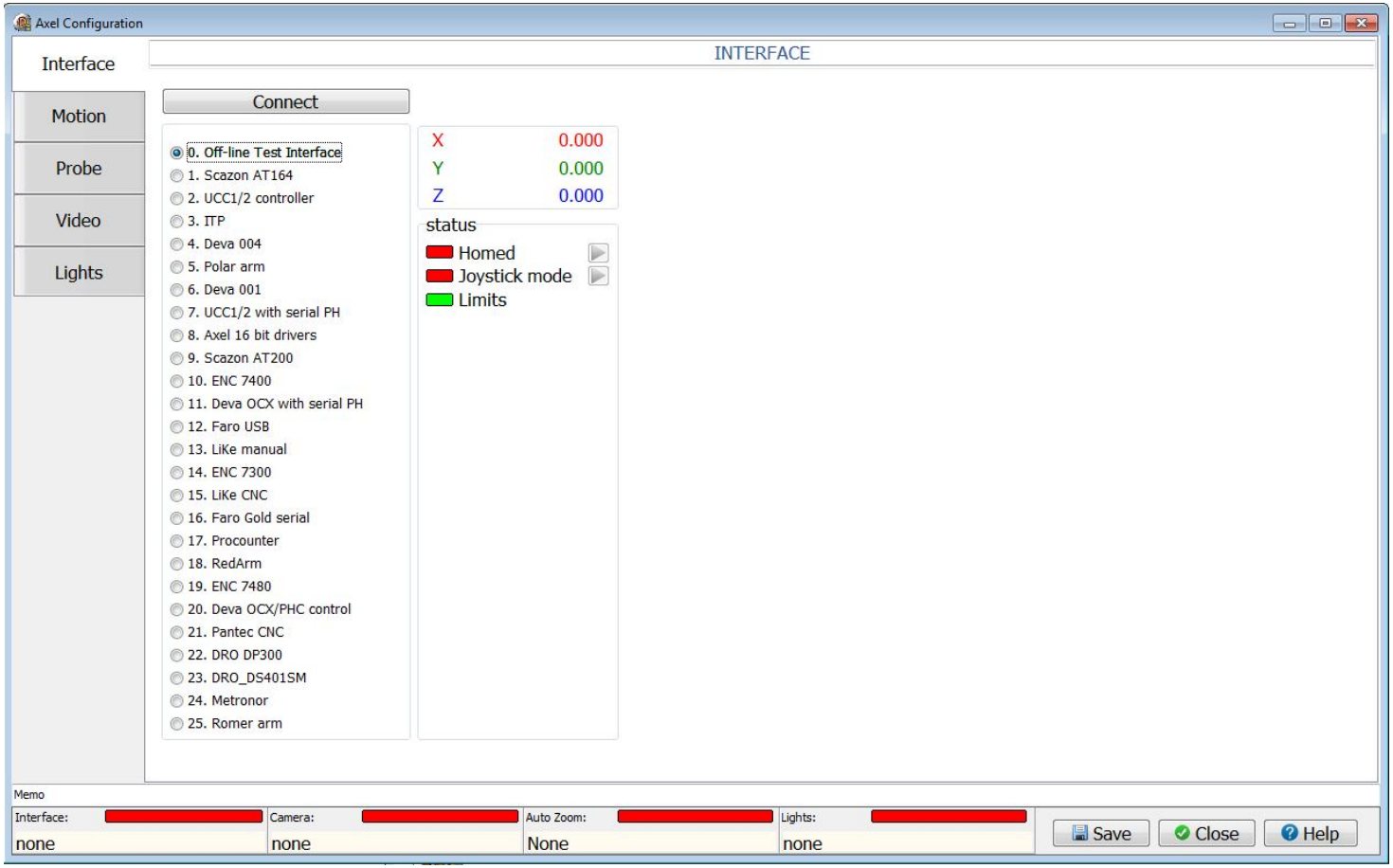
AxelSystems



- Inspection History results
- Charts, histograms and results tables
- History , Single and Chart views

New Axel Configuration Utility

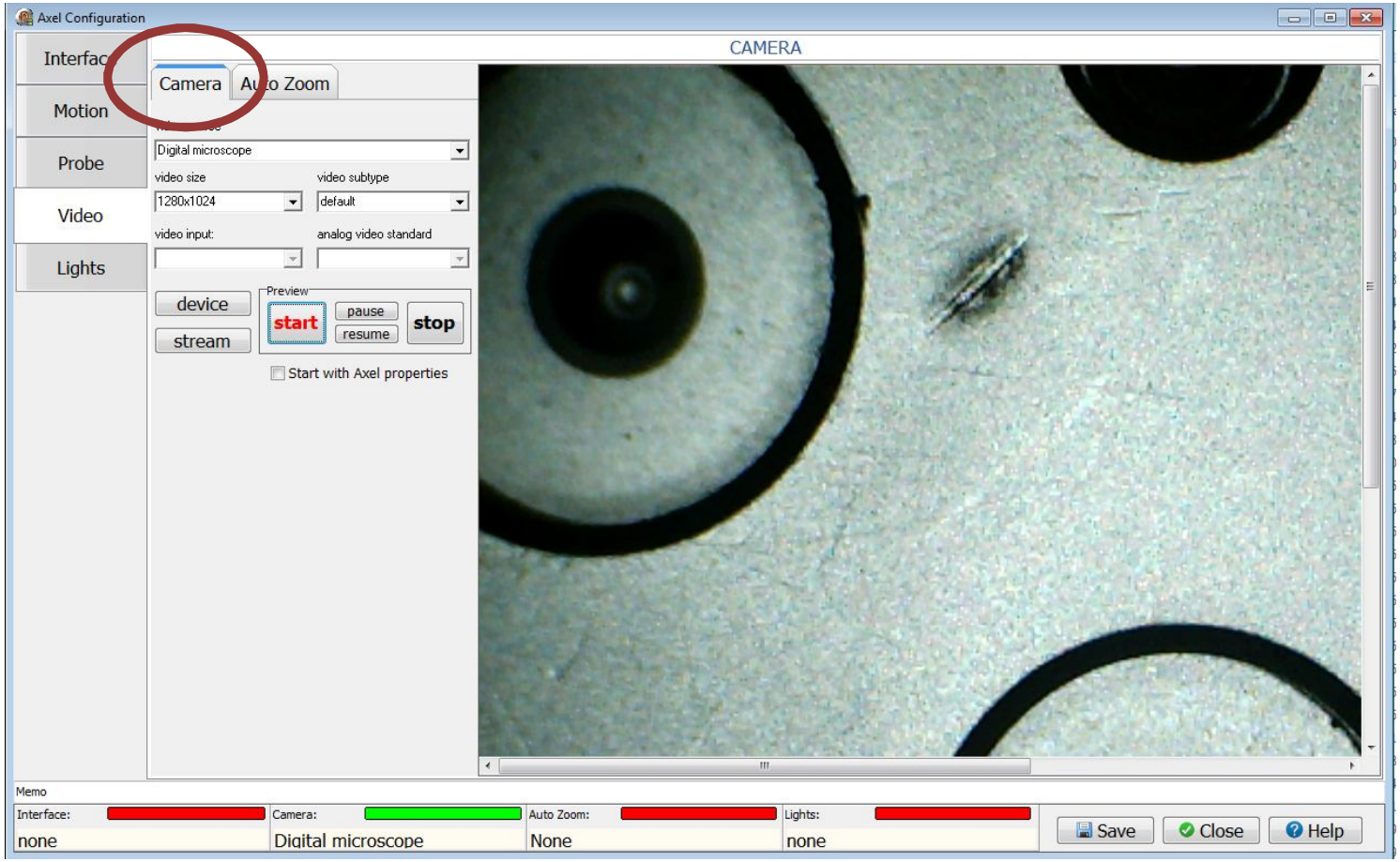
AxelSystems



New Axel Configuration utility is used for setting up the video system components such as camera configuration, autozoom, lighting unit.

New Camera Setup

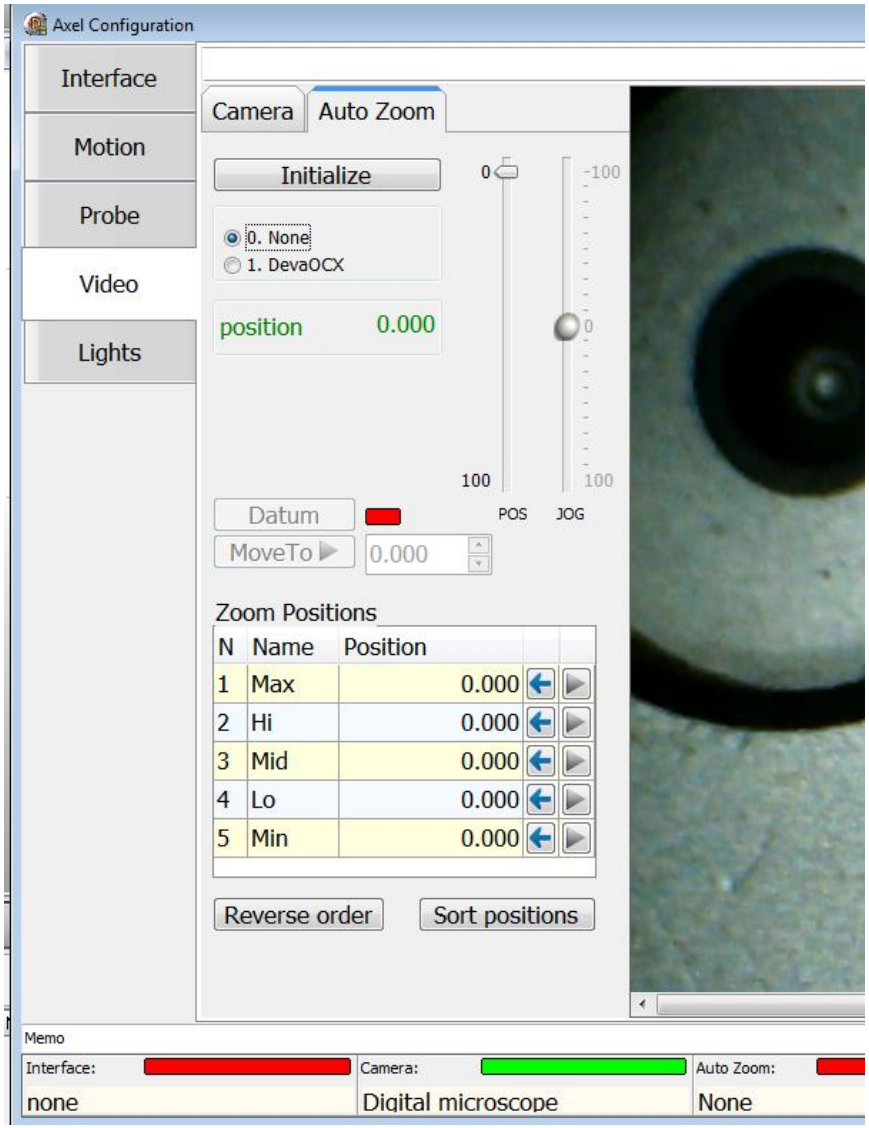
AxelSystems



Select camera type and setup. Test it.

AxelSystems

New AutoZoom Utility



Define AutoZoom position to be used in Axel program
Camera Home
Move to selected home positions
Configuration is used by Axel program