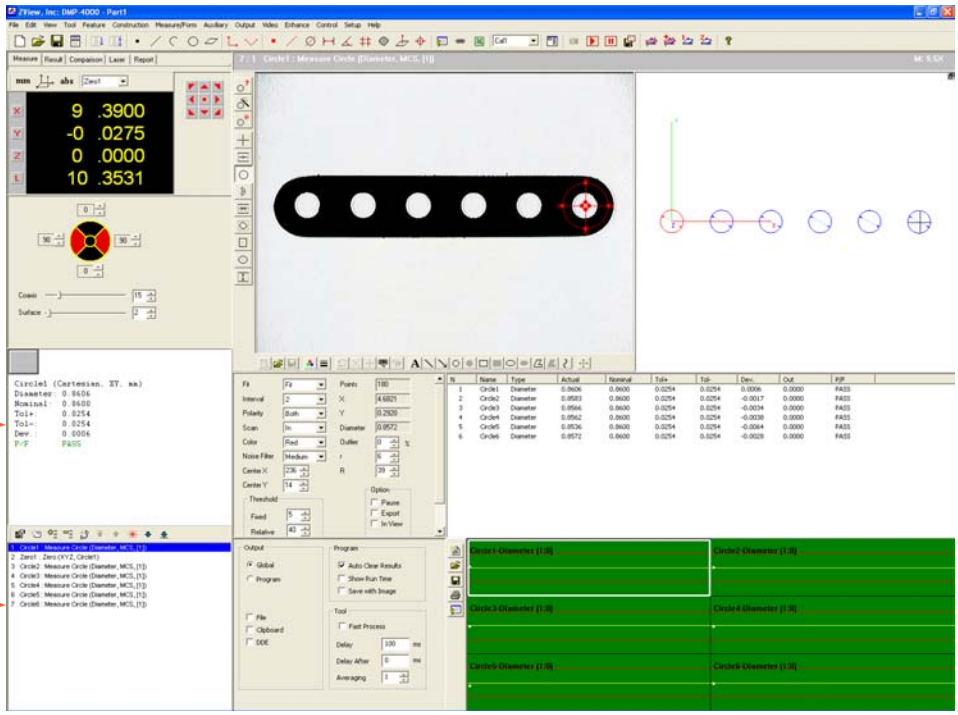
DMP-4000 Dimensional Measurement Software



Get instant results in DRO view.

Light Control in Light view.

Show step results in Step view.

List part program in Program view.

Display status in Feature view.

Show CAD-like graphics in Part

Results in Result view.

Stat Plot in Stat view.

Quick setting in Control view.

Setup tool parameters in Tool View

Show live or bitmap image in Image view.

The DMP-4000 software is a PC-based, dimensional measurement software, for motorized Coordinate Measuring Machines (CMM). The software uses the latest digital image processing technology to capture and analyze video images for dimensional measurement. It then compares the measurement to nominal values and tolerances to identify conditions of non-conformance. The DMP-4000 tolerance functions conform to ASME Y14.5M 1994.

The software works with Windows2000/XP. It takes the advantage of the latest operating systems and provides a familiar, graphical environment to complete your measurements. The software can be easily linked to other Windows applications, such as spreadsheets, SPC and best-fit packages.

The software is designed for image documentation, product inspection and quality control. The software reads the stage locations from linear scales and extends the measurement range to the size of the stage. The software is easy to use and it will deliver reliable and repeatable precision measurement results on the hardware of your choice.

Main DMP-4000 Features

- Support FireWire, CameraLink, USB and other interface digital camera or frame grabber for live image display, measurement and annotation.
- Three-axes and optional laser for high precision Z measurement and profiling.
- Support major motion controllers for stepper, servo and linear motors.
- Advanced edge detection for sub-pixel accuracy measurement.
- CAD import and export.
- Programming zoom, lighting and stag mapping.
- Supports inch, millimeter, mil and micron units, Cartesian and Polar coordinates.
- Datum reference frame for alignment and tolerance.
- User-defined measurement calculations.
- Up to 32000 points per feature.
- Save, open, run and edit part program capability.
- Group editing.
- Real-time linked to other applications, such as spreadsheets, SPC and best-fit.
- Flexible data format for post processing.
- Color or monochrome images acquisition, archiving and retrieval.

Features and Functions

File
- New
- Open
- Save
- Save As
- Header
- Run
- Run Step
- Run Repeat
- Import
- Set Origin
- Export
- Recent Files
- Exit

View
- Zoom In
- Zoom Out
- Zoom Window
- Zoom All
- Zoom Viev
- Shift
- Rotate
- 3D Graphics

Tool
- Find
- Teach
- Copy
- Test
- Update
- Edit
- Crosshair Tool
- Edge Tool
- Circle Tool
- Arc Tool
- Linewidth Tool
- Slot Tool
- Ellipse Tool
- Area Tool
- Focus Tool
- Cross Target
- Rectangle Target
- Circle Target

Output
- Format
- DDE Link
- Save Results
- Print Results
- Send Results
- Edge Points
- Result Buffers

Measure
- Edit
- Distance
- Circle
- Linewidth
- Angle
- Area
- Slot
- Ellipse
- Position
- Circularity
- Concentricity
- Straightness
- Angularity
- Parallelism
- Perpendicularity
- Size
- Statistics
- User Measure
- Create Result Buffer
- Add Result Buffer

Help
- Help
- About

Video
- Freeze
- Live Image
- Stored Image
- Import Image
- Draw Text
- Show Edges
- Histogram
- Enlarge
- Maximize
- Select Image
- Overlay
- Subtract
- Switch
- Compare
- Copy Image

Setup
- System Setup
- Lock Tool X
- Lock Tool Y
- Calibration
- Home
- Move Abs
- Move Inc
- Password
- Stage Mapping

Construction
- Zero
- Frame
- Offset
- Project
- Mirror
- Rotate
- Parallel
- Intersect
- Bisect
- Perpendicular
- Create Variable
- Math

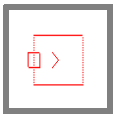
Feature
- Tool
- Relative Tool
- Point
- Line
- Arc
- Circle
- Define Feature
- User Feature
- Gauge Ball
- Gauge Diameter

Edit
- Setup
- Modify
- Insert
- Delete
- Select All
- Remove Last
- Rename
- Print
- Cancel
- Duplication
- Set Break Point
- Clear Break Point

Auxiliary
- Comment
- Prompt
- Calibrate X
- Calibrate Y
- Set Calibration
- Camera
- FormFit C.
- Send User C.
- Get User C.
- In Port
- Out Port

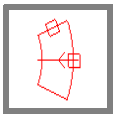
Image Tools

Crosshair Too: Manual define a single point.

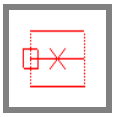


Edge Tool: Automatically find all points on an edge.

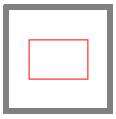
Circle Tool: Automatically find all points on a circle.



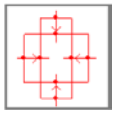
Arc Tool: Automatically find all points on a radius.



Linewidth Tool: Automatically find all points on two parallel edges.



Area Tool: Automatically find the area and centroid of an area.

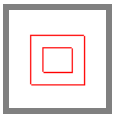


Slot Tool: Automatically find all points on four sides.

Ellipse Tool: Automatically find all points on an ellipse.

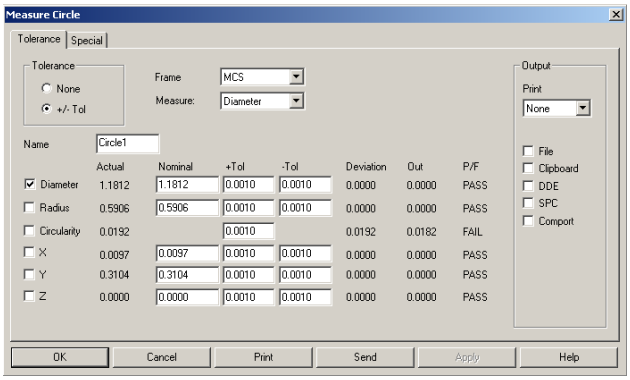
Cross Target: Automatically find a cross pattern.

Circle Target: Automatically find a circle pattern.

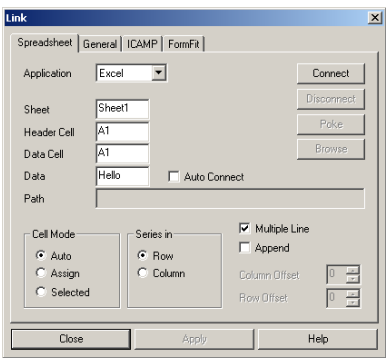


Rectangle Target: Automatically find a rectangle pattern.

Results



Output selection and tolerancing



Seamless and real-time link to third party software.