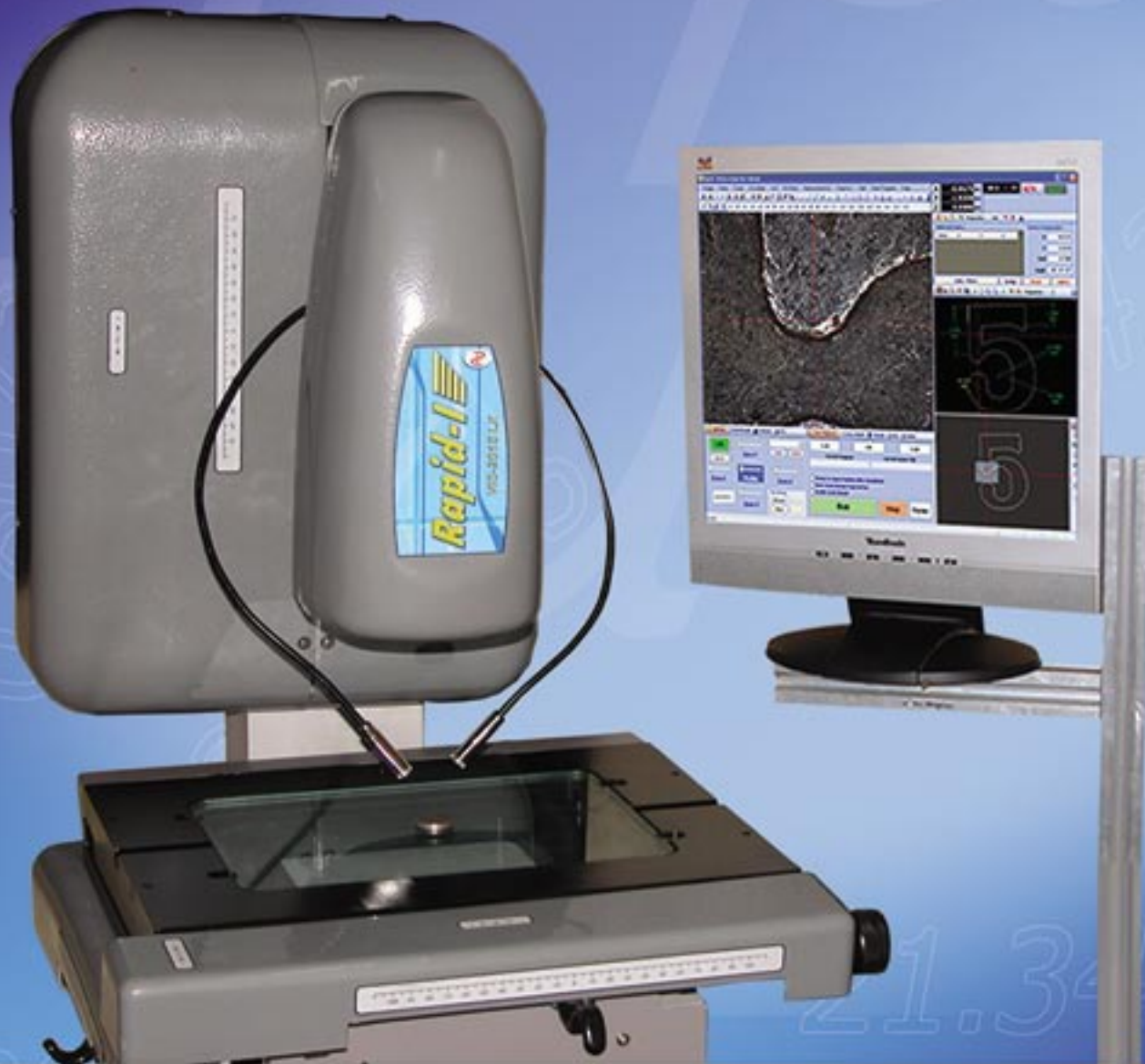


Rapid-1

Vision Inspection Systems



Future of Metrology

High Resolution Non-contact Inspections

**Visual Inspections
Precision Measurements
CNC Machining Offsets**

**Reverse Engineering
Automated Reports
Seamless CAD integration**



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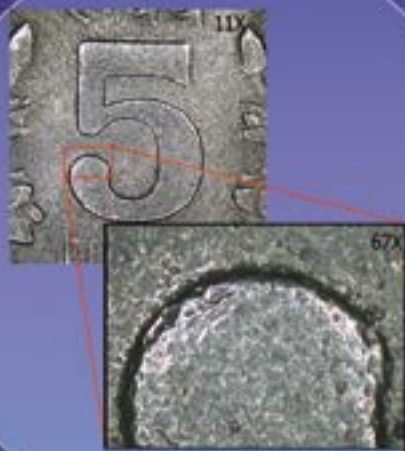
Creating Multi-Engineering Technology Solutions

Digital Camera & Optics

- Take Snapshots in multiple formats with optional graphics overlay!
- Optional 2X objective to double magnifications (22-134X)
- Camera Settings Programmable through software
- 2X Digital Zoom (attain upto 268 X mag.)

See your components better with High Resolution Digital Camera, Precision Optics & Superior Lighting

- Advanced Telecentric, motorised Zoom assembly
- High-fidelity imaging at various magnifications (11-67X)
- High Resolution Digital Camera (upto 1600x1200 pixel video)

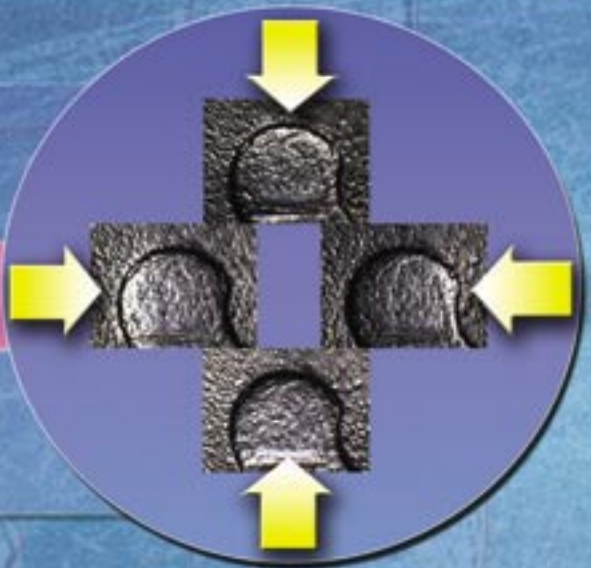


Lighting

- Programmable controls through software
- Collimated Profile Lighting

Cool LED Lighting for 24/7 operation

- Quadra-zone surface illumination
- Optional Auxiliary/Coaxial Lighting



Cross-Hairs

- Live Scan - Automated detection and highlighting when edge is within box
- Scan Mode (both fixed and flexible) - Just bring the edge within the box and click on Select Point for automated point selection
- Stable, Fine, software-generated Cross-Hair (~3.7 μ m at 67 X)

Cut down measurement times with intuitive, easy and accurate point-picking tools

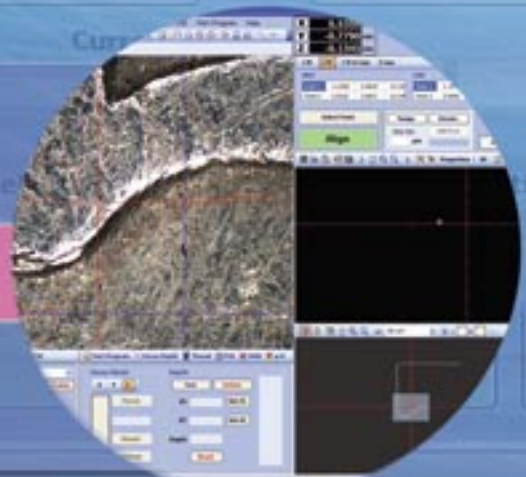
- Flexible (mobile) Cross-Hair - Save time and effort with this facile mouse-based point selection tool!
- Automated Edge Detection/Framegrab - Select many points for an entity in one shot for accurate measurements

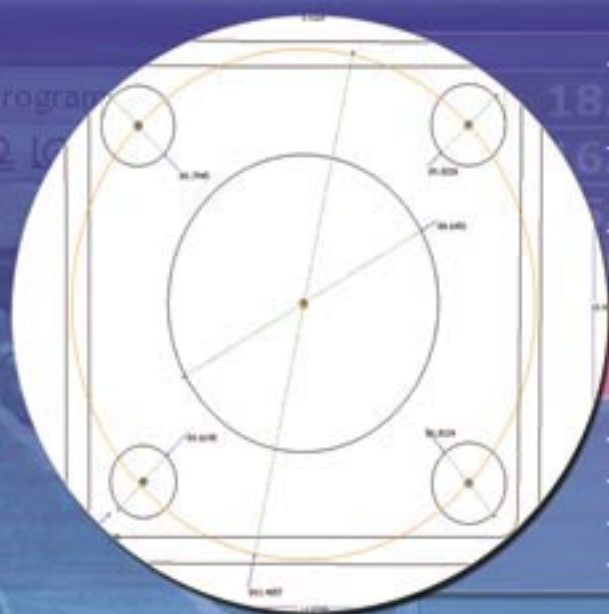
CAD Integration

- Import and overlay DXF-format CAD drawings (1:1) on the component
- Alignment tools (multiple tools) for alignment of drawings to components
- Nudge/Rotate (with pivot) drawings for fine alignments.

Seamless Integration of Design, Manufacturing & Inspection

- Edit CAD drawings with frame-grab etc. Add new features after overlay & alignment!
- Export workspace into CAD drawing (DXF format) in a single click!





- Measurements are intuitive and graphical - Just choose the entities between which you want to get the measurements.
- User Coordinate Systems are built-in. Don't waste your time aligning the component.
- Digital Micrometer allows you to measure deviations from (for e.g.) CAD drawings on-screen.

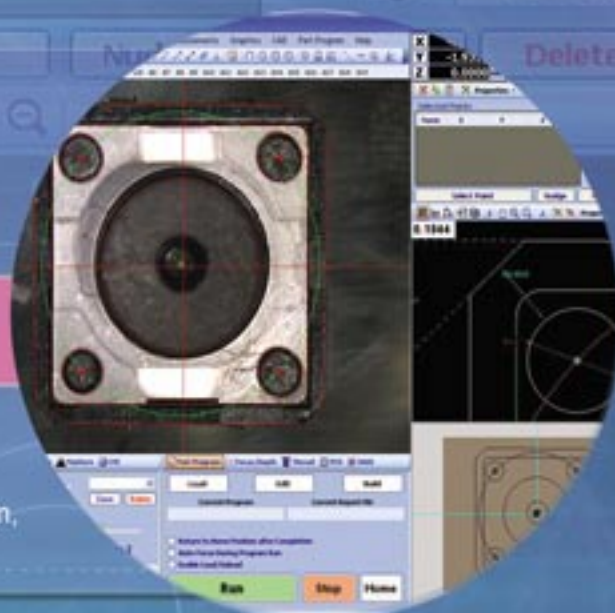
Do measurements quickly with a user-friendly graphical interface.

- Thread and PCD tools developed
- Focus-based Depth Measurements
- Projectional measurements in XZ and YZ planes
- 3-D cloud-point generation possible

- Overlay Graphics on the video traces the component exactly
- Drawing is generated in the process of measurement itself!
- Draft lines, circles etc on the video!
- Draw parallel/perpendicular lines, concentric circles etc with ease

Reverse Engineer your components with simple but powerful graphical tools.

- Use the FasTrace tool to rapidly trace a component
- Single click to export to CAD (1:1 .dxf) drawing
- Fixed graphics for Digital Fixtures, Digital Protractor, Text Annotation, Excel formulae etc.



- Teach Program is always on! Just do your measurements and click on Build to make a new part program!
- Change names of entities/measurements prior to Build, and the names will be automatically transferred to Excel!
- Part Programs recall correct lighting, camera and cross-hair settings

Carry out repeated Measurements Consistently & Automatically with part programs

- Program Guide directs you to the correct position to travel for taking points
- Fully-automated CNC will carry out measurements automatically.
- CNC-Assisted program run is also available.

- Automated Rich Reports are generated in MS Excel®
- Graphical reports in JPEG/BMP/TIFF/GIF formats
- Include Nominal and Tolerance values before building programs to

Data Transfer to Excel is only a click away!

generate automated conditional formatting (green shading for pass & red for out-of-tolerance)

- Row-wise and column-wise reports, including user-defined formats for rich reports!

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EVALUATION REPORT									
Component	Square Button	Date: 2/10/2008							
No.	Width	Height	Perpendicularity	Chamfer	Hole Dia	PCD	Drill Dia	R.T.T.	
11-071	12.000	10.10	0.01	0.25	1.700	11.400	1.000	0.100	
11-084	12.000	10.10	0.01	0.25	1.700	11.400	1.000	0.100	
11-085	11.000	10.10	0.01	0.25	1.700	11.400	1.000	0.100	
11-086	11.000	10.10	0.01	0.25	1.700	11.400	1.000	0.100	

Technical Specifications*

Form Factor & Aesthetics	CX (Classic) LX (Light & Compact)		
Video Source	RapidCam-MD (800 x 600) RapidCam-HD (1024 x 768)	Magnification (On a std 17" Monitor) 11-67X (default); 22-134X (with 2X Lens) 55-350X (with 10X Lens) 2X Digital magnification available	Working Distance ~90 mm ~36 mm ~33 mm - NA -
Lighting	Cool solid-state LEDs Quadra-zone Surface + Collimated Profile Lighting Variable Intensity/Programmability through software Coaxial Lighting Auxiliary flexible lighting		
Motion Control	Continuously variable analog joystick for 3 + 1 (free) axis control Manual Operations Fully-automated CNC with Auto-Focus		
Linear Scales	1 µm resolution glass encoders 0.5 µm non-contact tape encoders Higher Resolutions on order		
Accuracy	With in (3 + L/100) µm (L in mm)		
Fixture Holding	T-Slot CNC - Drilled / Tapped hole on workstage		
Software	Fixed, Flexible, Live-Scan, FrameGrab (automated Edge Detection), Multi-Scan with Focus.		
Geometric Tools	Standard shapes – Point, Line, Circle Arc, Plane, Sphere, Constructed Shapes – Mid-point, Parallel/perpendicular lines, angle bisectors, tangents, circle with centre, PCD, Thread etc		
DRO	Standard on-screen with Reset & UCS (user-defined)		
Graphics	Real-time overlay, CAD (import/edit/export.dxf), markings, Digital Micrometer (on-screen), FasTrace, Digital Protractor, Fixed.		
Reports	Direct Reports in MS Excel with conditional formatting. Teach Program. Graphical Reports; Point-Clouds.		

Service Support

- Mechanics, electronics and Software designed in-house
- Unmatched component and code level support
- Designed for simple, rapid trouble-shooting while minimising machine down time
- Scalable design permits future technology upgrades
- Highly efficient and committed support staff for immediate customer support

Model	VIS-0505	VIS-2015	VIS-4020
Work Stage	146 x 120 mm	370 x 275 mm	544 x 362 mm
XY- Travels	50 x 50 mm	200 x 150 mm	400 x 200 mm
Vertical Travels	90 mm	150 mm	150 mm
Max Job Weight	2 kg	5 kg	5 kg

Customised Technologies specialises in custom designing and manufacturing multi-engineering speciality products and solutions. Our products are based on innovative design and manufactured with utmost care. Strong emphasis on creative thinking and R&D enable us to develop new products and upgrade existing ones to meet customer requirements at a rapid pace. Please note that the specifications provided in this brochure are only indicative and our speed of innovation results in constant improvements in the features available.



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