SIPCON

M3 SERIES

VIDEO MEASURING SYSTEMS

You think

We measure

SOFTWARE CONTROLLED ILLUMINATION

PRECISE METAL BASE & COLOUMN

THREADLESS WORKSTAGE

PROBE FOR 3D MEASUREMENTS

VISION MEASURING SYSTEM
SVI-IMG M3 SERIES

SIPCON SVI IMG M3

SIPCON

SOFTWARE

M3/M3 FOV

MEASURING RANGE

Standard : 150mm X 100mm X 100mm
Optional : X-Axis upto 500mm, Y-Axis upto 400mm,
Z-Axis upto 300mm

RESOLUTION

0.001 / 0.0005 / 0.0001mm

LINEAR ACCURACY

(3+L/200) micron

REPEATABILITY

+/- (0.002mm)

VISION

5MP High Resolution HD Camera

MAGNIFICATION

Optical Magnification 0.7X - 4.5X & Magnification on
Monitor 35X - 225X

VIDEO EDGE DETECTION

STANDARD

ILLUMINATION

Surface : Fibre Optic / LED
Contour : Halogen Lamp / LED

OPERATION

Manual with Quick Release Knob

BASE PLATFORM

Metal Base
Option : Granite Base

PLATFORM LOAD CAPACITY

15-20 KGs

POWER SUPPLY

220-240 V ±5%, 50/60 HZ

OPTIONALS

Motion Control through Joystick
Programmable Light Control
Touch Probe

VISION MEASURING SYSTEM

SVI-IMG M3 SERIES

MULTI SENSOR CNC INSPECTION SYSTEM

SOFTWARE
CNC M3

MEASURING RANGE
Standard: 250mm X 150mm X 200mm

Optional: X-Axis upto 500mm, Y-Axis upto 400mm, Z-Axis upto 300mm

RESOLUTION
0.005 / 0.001 / 0.0005 / 0.0001mm

LINEAR ACCURACY
(3+L/200) micron

REPEATABILITY
± (0.002mm)

VISION
5MP High Resolution HD Camera

MAGNIFICATION
Optical Magnification 0.7X - 4.5X & Magnification on Monitor 35X - 225X

VIDEO EDGE DETECTION
Standard

ILLUMINATION
Surface : Fibre Optic / LED
Contour : Halogen Lamp / LED

OPERATION
Manual with Quick Release Knob

BASE PLATFORM
Granite Base

PLATFORM LOAD CAPACITY
30 KGs

MOTION CONTROL THROUGH JOYSTICK
Standard

POWER SUPPLY
220-240 V ±5%, 50/60 HZ

OPTIONALS
Programmable Light Control
Touch Probe

ONE CLICK
FOV
INSPECTION
SYSTEM

SOFTWARE
M3 FOV

MODELS
16MM, 24MM , 36MM, 48MM, 64MM, 80MM, 96MM, 120MM, 144MM

RESOLUTION
0.001mm

LINEAR ACCURACY
(3+L/200) micron

REPEATABILITY
± (0.002mm)

VISION
5MP High Resolution HD Camera

VIDEO EDGE DETECTION
Standard

ILLUMINATION
Surface : Fibre Optic / LED
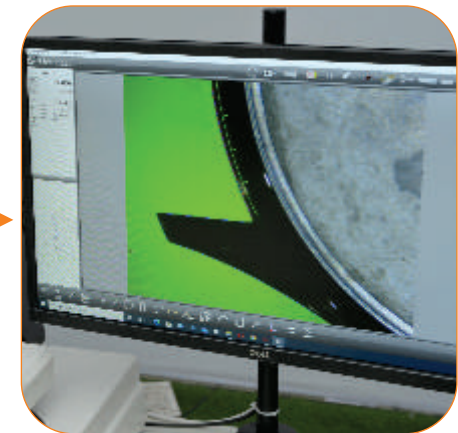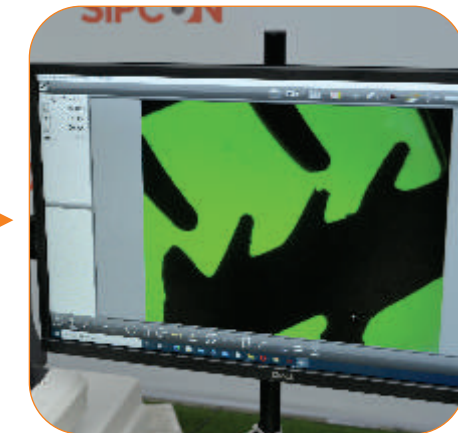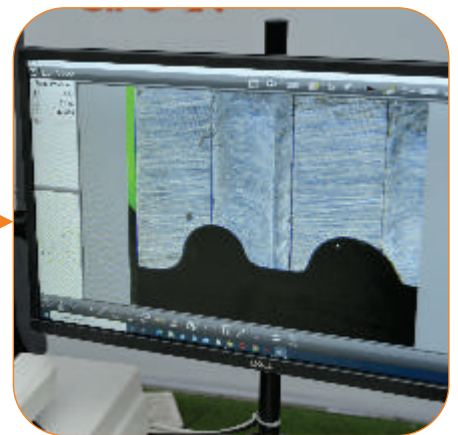Contour : Halogen Lamp / LED

PLATFORM LOAD CAPACITY
5-10 KGs

POWER SUPPLY
220-240 V ±5%, 50/60 HZ

VISION MEASURING SYSTEM
APPLICATIONS

SIPCON
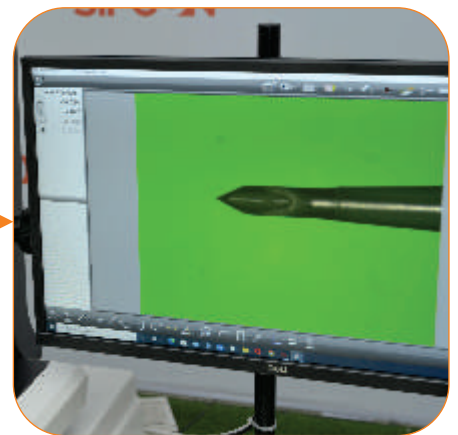
DICE MANUFACTURERS

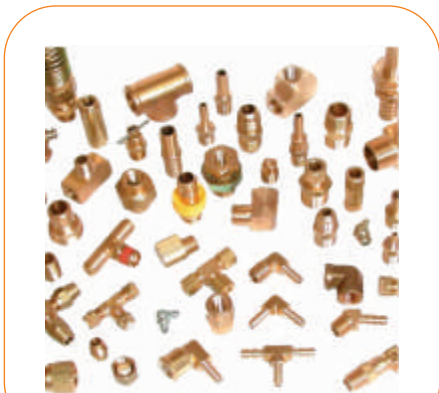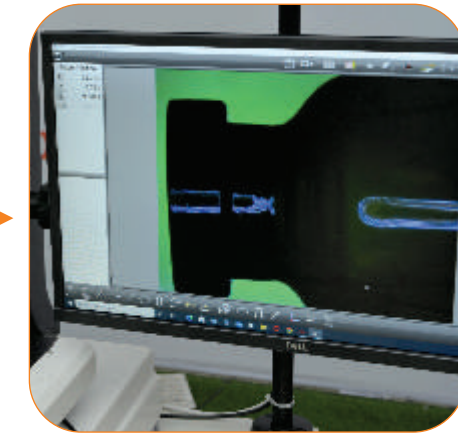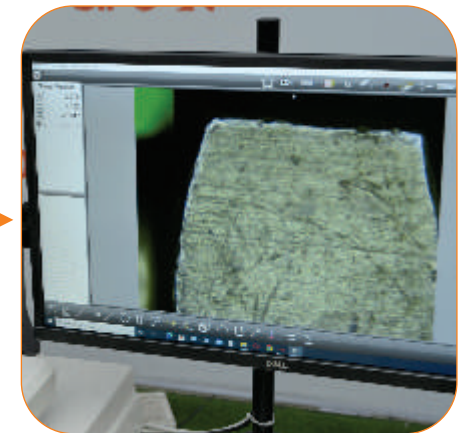RUBBER INDUSTRIES

GLASS MANUFACTURERS

VISION MEASURING SYSTEM APPLICATIONS
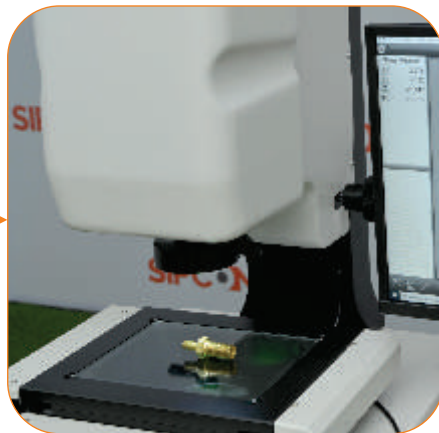
SIPC●N

MEDICAL MANUFACTURERS

GLASS MANUFACTURERS

BRASS MANUFACTURERS

VISION MEASURING SYSTEM
APPLICATIONS

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FASTNER MANUFACTURERS

ELECTRICAL MANUFACTURERS

GEAR INDUSTRIES
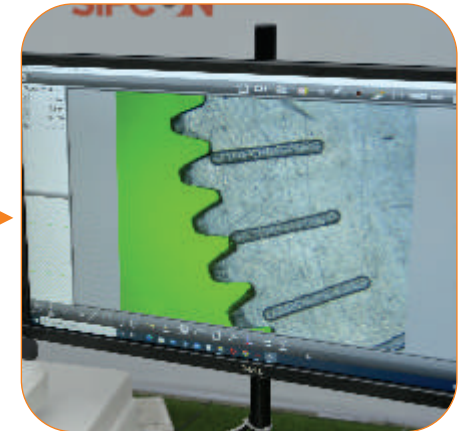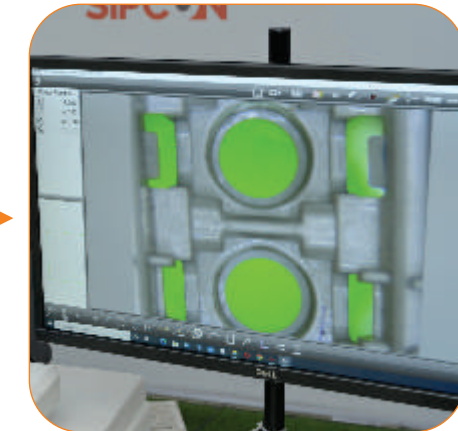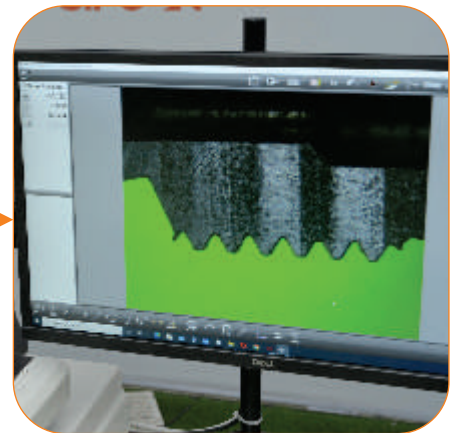
M3 MEASURING SOLUTION FEATURES

FEATURE MEASUREMENT

2D- Point, Lines, Circles, Arcs
Slots, Rectangles, Blobs
Distances, Angles, planes
Patterns & Profiles
3D- Planes, Cylinders, Spheres, Cones

REPORTING FORMATS

CSV, European, Tolerance, European 2
User Defined Fully customized
Single Part or Multiple Part reports
Statistical Reports

CALIBRATIONS

LEC, SLEC, NLEC, Orthogonality
Pixel Size, Camera skew, FOV
Shape Cal, Cross Calibration
Bright Frame Calibration

APPLICATIONS

Reverse engineering
In line production
Quality Inspection

CONSTRUCTION CAPABILITES

2D- Point, Lines, Circles, Arcs
Midpoints, Mid Lines, PCD, Intrsections
Bisectors, Offset
Distances, Angles
3D- Planes, Cylinders, Spheres, Cones

TOLERANCES

Size, Form, Orientation, Position, Runout
Profile - Full GD&T Control
Direct import nominals from DXF file
Place Value & Auto Round Tolerancing

PROGRAMMING

Measure & program
DXF auto programming
Part pallet programming (Grid & Polar)
PDF Programming, Add user messages

MEASUREMENT MODES

Polar/Cartesian
DMS/ DD
MM/ INCH

DATUMMING FEATURES

Primary Planes
Skew Alignment
Datum (Origin) Points
Reference Axis Rotation & Skew
Multiple reference Frames & Feature lock

EXPORTS

PDF, DXF, IGES, STL, Excel, CSV, TSV(Tab)
TXT, Cloud .CSV, Cloud .DXF
Image (BMP, JPEG, PNG or TIFF)
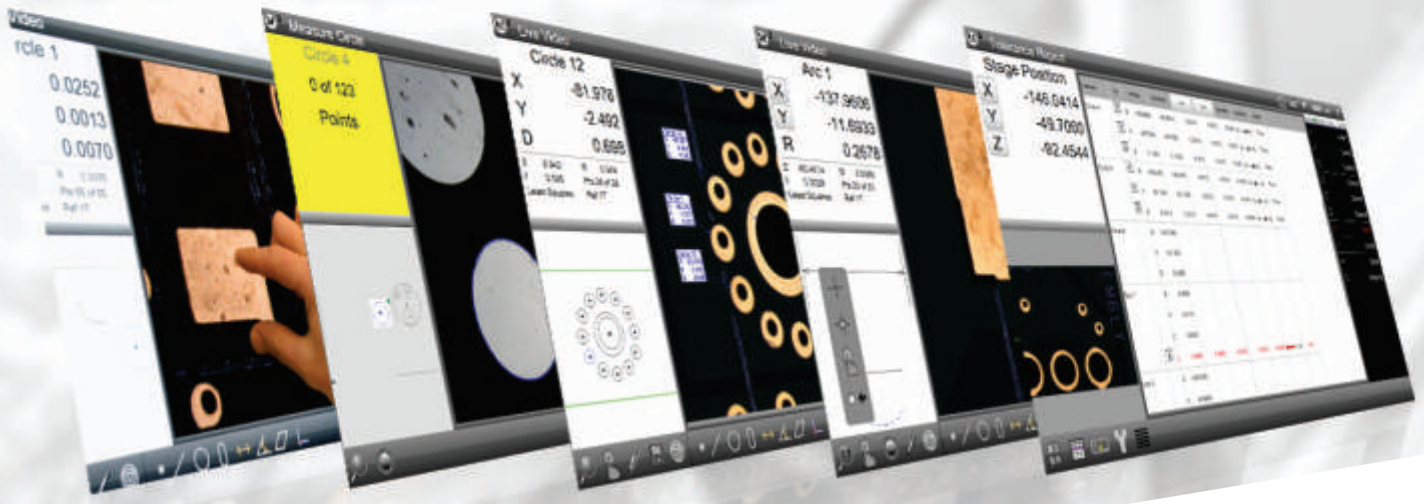Data trasmit to RS 232 port

CNC FEATURES

Collision avoidance, Software fencing
Machine Zero / Auto Home
Probe Path data customization
Go to Steps & Default Clearance Moves

FOCUS OPTIONS

Auto Focus - CNC
Focus Assist - Manual

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PART PROGRAMMING AND PLAYBACK

FULLY CUSTOMIZABLE REPORTING

Reports can be fully customized to suit user requirements. The following customizations are possible:

- Data format
- Header information (Company Name)
- Header and footer graphics (Logo and Page no)
- Add Part view graphics in report
- Add time and date stamps,
- Add operator or part information

FEATURE DETAIL GRAPHICS
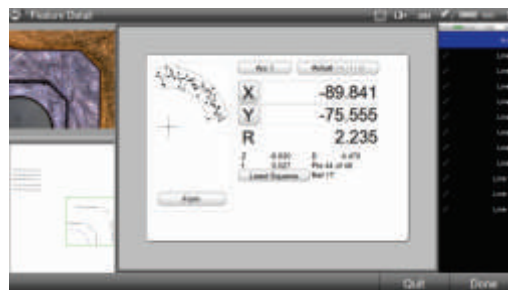
Individual feature views provide you with informative drawings displaying point cloud distributions, as well as nominal deviations, and tolerance results. Scroll through your measured features list from this view for a feature by feature display of Actual, Nominal, Tolerance, Deviation, and Data Fit Type information

Part program files, when loaded, will prepare the M3 software to repeat a sequence of recorded steps including measuring features, printing reports, and exporting measurement data. Playback guidance graphics provides helpful on-screen assistance for successful playback of your part programs.

GEOMETRIC TOLERANCING

Measure features, set nominals, apply tolerances and view deviation results with only a few quick clicks. Feature-to-Feature block tolerance style call out both possible

Size : X/Y/Z Positional / Diameter / Radius / Length / Width Size / Theta (Angle)
Form: Straightness, Roundness, Flatness
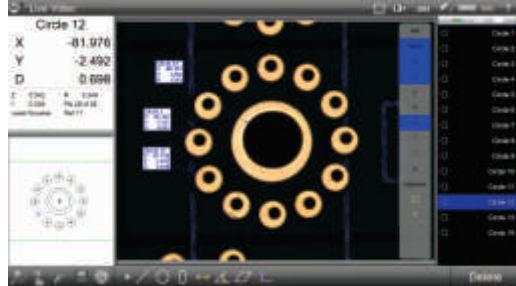**Orientation :** Parallelism Perpendicularity Angularity
Position: True Position (LMC/MMC Modifiers) Concentricity, Symmetry Runout

DXF OVERLAY
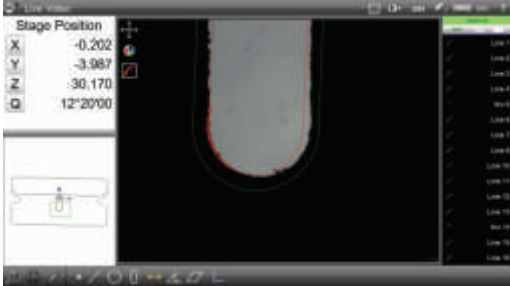
CAD overlays (DXF Files) can be easily imported for "comparative style" Go/No-Go feature and part inspection. This includes a live error whisker display for violations of the original DXF tolerance zones. CAD constructions: Create onscreen overlays: Circle, Rectangle, Slot, Angle, Line

DESIGNED FOR MULTI-TOUCH SOFTWARE CONTROL

In addition to the conventional mouse interface, expanded Multi Touch logic allows for one-touch feature measurements as well as versatile swipe panning and pinch zooming and double clicking of the live video image and the active part view.

RESULTS ON IMAGE & IMAGE CAPTURE

Gain access to instant feature markup tools using the part view "Gesture Menu". Add customized feature data to your live video image or part view displaying only the desired coefficients. You may annotate one or several features simultaneously with the smart marquee feature selection.

ADVANCED EDGE TEACH

Improve edge detection performance under a variety of image and lighting conditions. Features with poor edge contrast, or difficult spacing can be captured in a snap using the M3's manual teach function. Press and hold on an edge in any video image to specify a teach region

MULTIPLE VIDEO EDGE DETECTION PROBES

EyeMeasure™ probe captures complex edges according to the finger path drawn on your touch screen enabled system. **The MeasureLogic**™ probe's provides an instant feature determination and measurement with a single click or press. **The Vtouch**™ probe provides industry first video touch probe functionality, with simple acquisition of individual points on a feature's edge, just a single press or click away. **The Simple DXF Crosshair tool** is always available for manual crosshair

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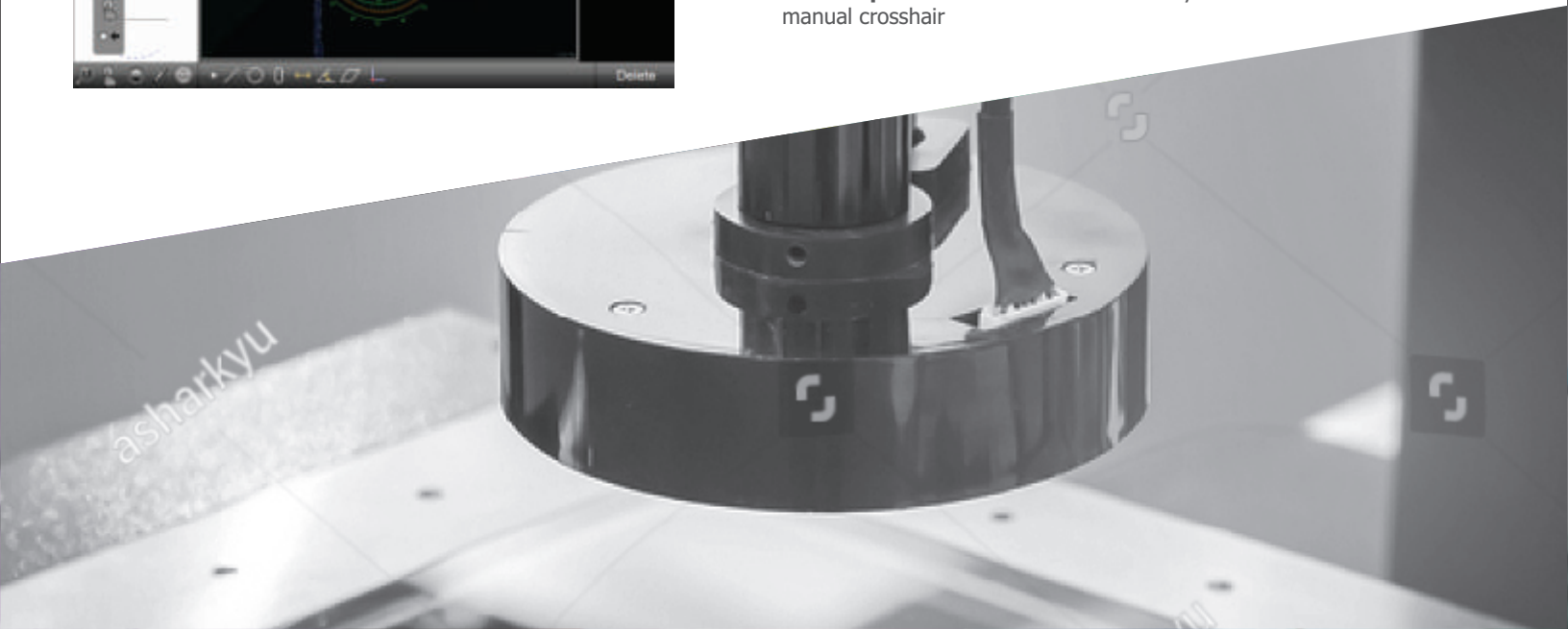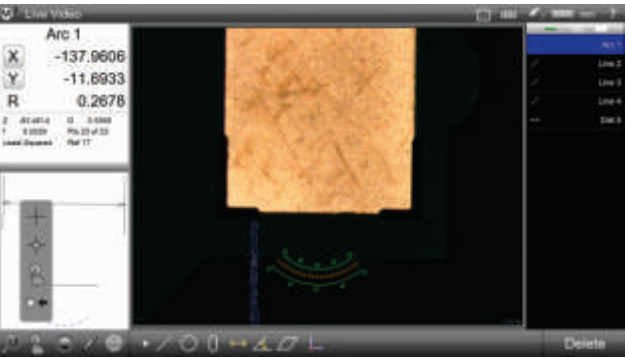
TOUCH PROBE SUPPORT
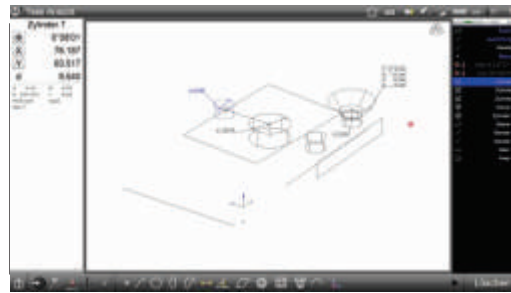
Measure planes, cones, cylinders and spheres in 3-D part space (in the XY, YZ and ZX planes) and then view results in the 3-D part view . 3D part views can be annotated by the user to include measurement results and rotated to the desired perspective. Touch probe support is optional.

GRAPHICS-BASE "PART VIEW" CONSTRUCTIONS


Supported construction types include:

- **Points:** Average , Mid/Center Point(s) , End Point(s), Intersections
- **Distances :** Shortest , Centre to center, point to point, Farthest Distance
- **Lines :** Tangent Line(s), Mid lines, O set Skew Lines, Perpendicular/Parallel Line(s), Bisector lines, Gage lines.
- **Circles:** Bolt Circle, Gage Circle(s), P.C.D Angle Compliments

SUPPORT UP TO 8 CHANNELS OF PROGRAMMABLE LIGHT CONTROL

On-screen controls let you adjust Coaxial, Substage, and Quadrant Ring light outputs accommodating a wide range of measuring requirements. Your light levels are also stored as program steps and are recalled during program playback.
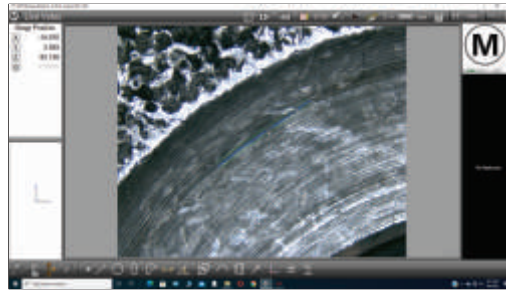
DXF AUTO PROGRAMMING
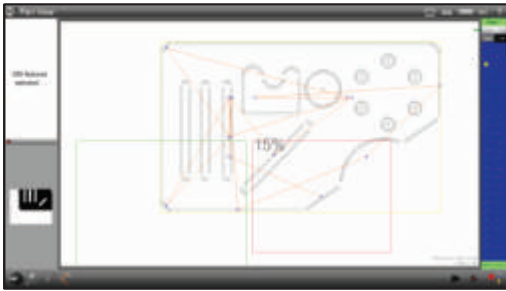
You can easily convert .dxf drawing files into part programs using the DXF import and Auto Program modules. Its fast and easy:
- Trim out any unwanted .dxf features or elements
- Perform you datum operations on the .dxf features
- Press play
- Your program is generated

CNC AUTO FOCUS AND FOCUS MEASUREMENTS

Build an Auto Focus region of interest, by setting the size and position of the standard Auto Focus probe, or utilize the EyeMeasure™ capability to focus on a specific edge region. Hardware frame latching and a digital camera interface provide extremely accurate and repeatable auto focus results.

IMAGE STICHING & SOFT FIXTURING
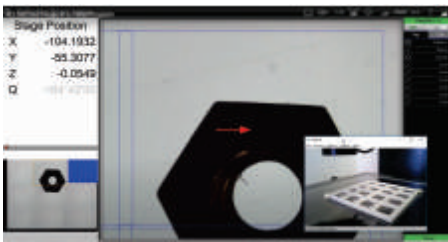
The SuperImage function collects and stitches individual camera frames together to scale large images into the field of view on manual and CNC systems. Preset multiple stage areas to color coded Quick Stitch buttons to create "soft fixture" image locations. Load one or more parts into "soft fixture" locations for field of view-like execution of your part program.

STATISTICAL REPORTS
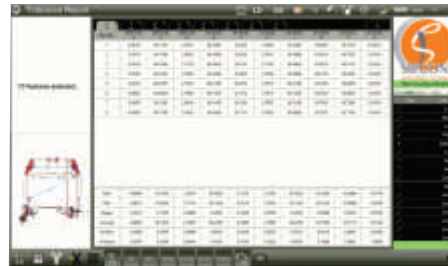
Add quick statistical feedback including min, max, range, average, and 6sigma to your data for more detailed analyses of result trends and measurement repeatability. Support for program playback of the "Stat" feature to enhance GR&R analysis and demonstration

PALLETISE PROGRAM MODE
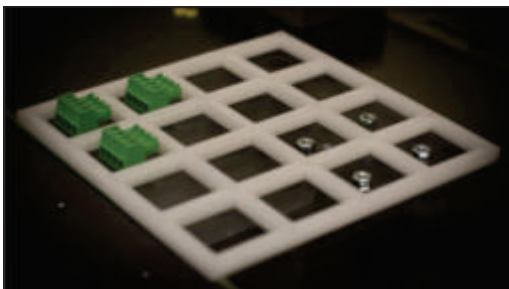
Take advantage of being able to quickly duplicate part programs for CNC playback within our palletised fixture. Pallet program generation is achieved quickly and simply using a pallet grid setup window. Specify & Select the row and column spacing and create your pallet program with a single click.

PROFILE MEASUREMENT AND ANALYSIS

- Compares measured part data to nominal part contours and tolerance limits specified in a DXF file or M3 profile construction.
- Easily analyze profile fit results using intuitive tools for quickly identifying the worst point, the best point, or a specified number of points relative to the profile tolerance.
- Export the profile measurement data cloud to either a CSV or DXF file

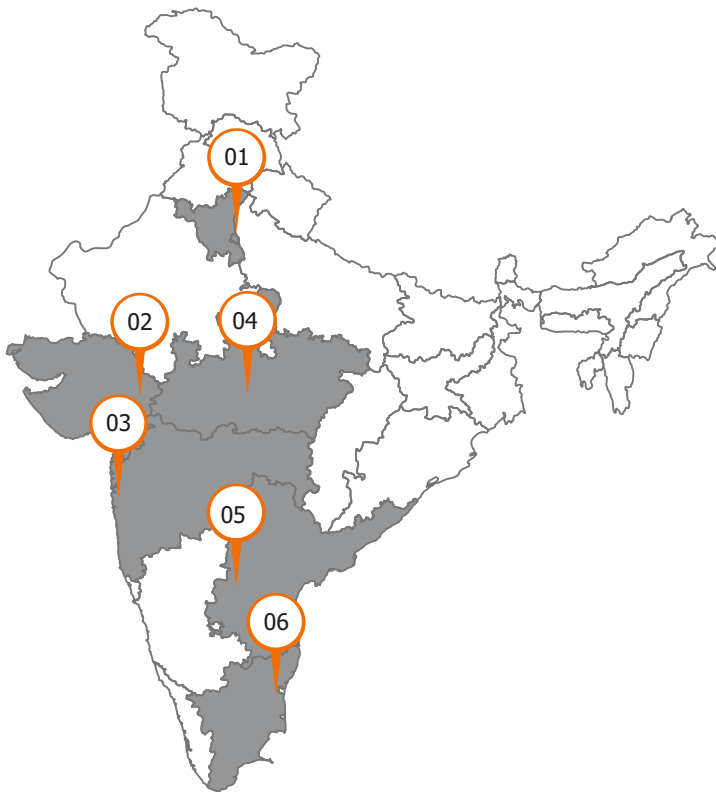# Some of **Prominent** **User** Lists of **Vision** Measuring **Machine**

SIPCON

5000 SATISFIED CUSTOMERS ACROSS THE GLOBE

इसरो **isro**

UNO MINDA
N K MINDA GROUP

ROOP
Roop Polymers Ltd.

OFA ओफाए
सदैव अग्रणी • Always in Frontline
Ordnance Factory
Ambajhari

SCHOTT
KAISHA

POLYMED

KOHLER.

DRDO
DEFENCE R&D ORGANISATION
MINISTRY OF DEFENCE
DRDO

⚓ ANCHOR
by Panasonic

Balark®
A tradition of excellence
A commitment to quality

You think
We measure

45 YEARS SIPCON

ISO 9001 · CE

SERVICE CENTERS

01 Delhi
Sector-23, Dwarika Pochanpur New Delhi
Contact Person: Ashish Rajput - 92156 99673

02 Rajkot
304 Diwali Chambers, dhebar Road, Rajkort, Gujarrat-360002
Contact Person: Arun Kumar - 89500 99611

03 Mumbai
M/s Technical Resources C-19/20, Dahisar (W) Mumbai
Contact Person: Gaurav - 89500 99633

04 Indore
403, City Centre, 570 M.G. Road, Indore – 452003 Madhya Pradesh
Contact Person: Shekhar Kumar - 89500 99633

05 Bangalore
#328, Third Main Road, Domlur Layout,Bangalore- 560071 Karnataka
Contact Person: Sunil Sehgal- 9008006149

06 Chennai
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