



**GOLD CARE
PLUS**



CRYSTA-Apex V

Mitutoyo



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Mitutoyo

9106



9106





CRYSTA-APEX V CNC SERIES

Gold Care Plus Program*

- A "Second Year" Extended Warranty
- Two-year Standard Calibration Agreement
- Five-year Software Technical Phone Support
- MeasurLink® Pro Edition Quality Data Management Software
- MITUTOYO Eco-Fix® Fixture System
- Status Monitor Machine Data Visualization Software**
- Quick Launcher EZ User Interface Software**
- Fixture Builder Software**
- MITUTOYO Starter Stylus Kit

*Complete program details are available upon request. ** New addition to Gold Care.

A "SECOND YEAR" EXTENDED WARRANTY*

Mitutoyo built products are among the finest in the industry. With significant uptime and low failure rates, you can have confidence in your capital equipment investment. To reinforce our commitment to our customers, we are offering a total of 24 months parts and labor warranty on selected CMM/Vision units.



*Refer to warranty terms and conditions



TWO-YEAR STANDARD CALIBRATION AGREEMENT

Mitutoyo Service Agreements are designed to provide responsive and reliable service. Our service engineers are fully trained in the operation and servicing of Mitutoyo CMM/Vision products, so as to provide the very best service to our customers. Not only does Mitutoyo offer A2LA accredited service on all capital equipment, Mitutoyo is one of the only companies in the United States whose field service and calibration labs offer ISO 17025 accredited services.

Field Service Agreements cover the following:

- One Annual recalibration/Check-up per year for the duration of the agreement
- A2LA Accredited Calibration and Certification
- All travel related expenses are included with this agreement, such as hotel, meals, and local travel (airfare is not included)
- A Field Service Calibration includes machine cleaning and inspection of all critical mechanics; along with linear, volumetric and repeatability tests
- Standard calibration includes machine cleaning, inspection of all critical mechanics, along with linear, volumetric tests, repeatability tests and after calibration data only (does not include before calibration data)
- Standard Calibration does not include before calibration data, a two-year calibration agreement with before and after calibration data is available at a discounted price in place of the two-year standard calibration agreement listed above.





FIVE-YEAR SOFTWARE TECHNICAL PHONE SUPPORT

If your machine goes down, you need answers fast. Mitutoyo leads the industry with responsive and knowledgeable technical phone support for every Gold Care CMM/Vision purchase. Customers and distributors alike can call our software application support professionals. Our staff of highly-skilled engineers and technicians possess a wealth of knowledge on all Mitutoyo products and can provide detailed product information, answer your specific technical request and offer many types of application guidance. Often they will connect with you to gain a bigger picture and answer your specific programming or operational issue.

Many questions can be answered at our Knowledgebase for capital equipment by visiting and registering for our end user portal, My.Mitutoyo.com.

Call our technical support staff at **888-648-8869/630-820-9785**. Or email our support staff at software.support@mitutoyo.com.

Of course, comprehensive introductory training is supplied with your Mitutoyo CMM/Vision purchase. Additionally, our staff can help you tailor specific training through our nationwide set of Product Instructors or in conjunction with the comprehensive courses developed by our Mitutoyo Institute of Metrology.

Mitutoyo software technical support is NOT contingent upon the purchase of any Software Maintenance Agreements (SMA). Measurement equipment software (i.e. MCOSSMOS), is updated on demand.



MEASURLINK® REAL-TIME PROFESSIONAL EDITION

MeasurLink® Real-Time is designed for customers who want to acquire and analyze data in real-time and check variable and attribute inspection to maximize production and minimize defects. It has views to allow the user to create Parts, Characteristics with nominal and tolerance and Traceability lists.

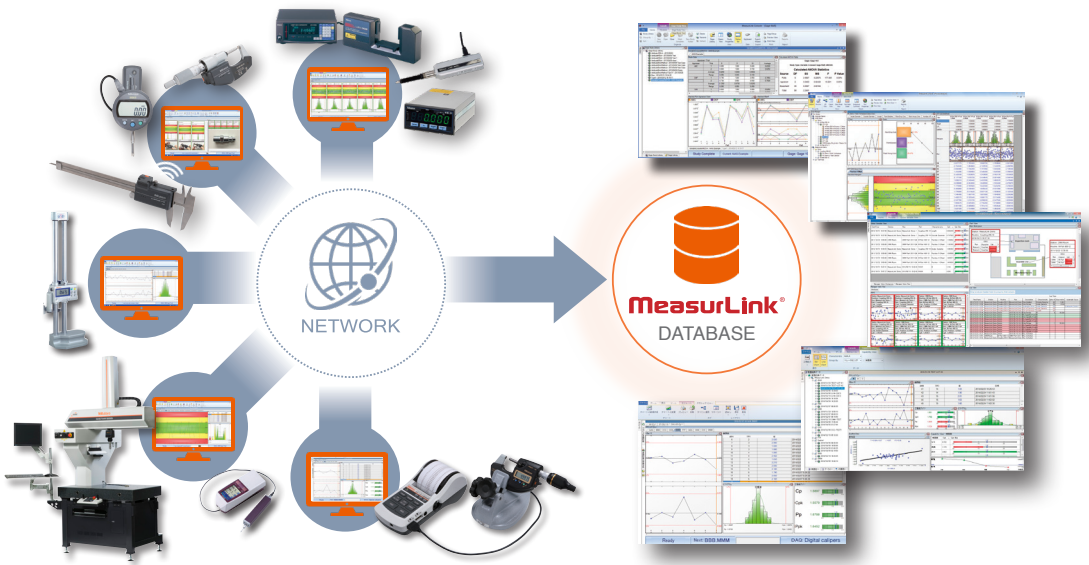
Designed to collect data at the point of manufacture, operators can be alerted of trends, cycles, and nonconformance as soon as they occur. A customizable user interface allows the user nearly infinite ways to view information specific to that process.

Real-Time Professional Edition enables customers to connect and acquire data from Mitutoyo Coordinate Measuring Machines, Vision and Form Measuring Systems via native integration (DDE).

MeasurLink® is an integral part of Six Sigma activities. Unlike other software, MeasurLink® calculates and monitors statistical metrics as each part is measured. This Real-Time monitoring allows users to control the quality of the product during production and prevent costly defects:

- Live statistical data testing
- Email alerts and alarms for out-of-control processes
- Real time Cp, Cpk, Pp and Ppk calculations
- Immediate pre-control, X-Bar R and IMR charting
- Assignable cause and corrective action data entry

MeasurLink® allows companies to control the quality of their processes by identifying and reducing process variation.



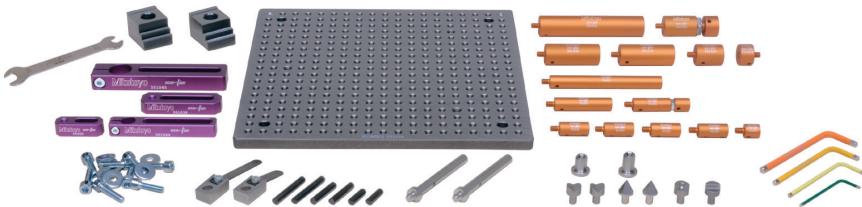
MeasurLink®
An Integrated Solution for Quality Data Management

www.measurlink.com

MITUTOYO ECO-FIX KIT FIXTURE SYSTEMS

The Mitutoyo Eco-Fix Clamping System brings a new concept in time-saving and lower cost solutions for your modular CMM and Vision product workholding setups. These systems work well across several different part sizes/ types and environments. The design combines operational modularity advances with lower cost solutions for your workholding requirements. This can be found both in the reduction or elimination of hard fixturing costs and labor-saving setup time. This system is comprised of well-marked, color-coded components that are designed to simplify your part measurement requirements. Magnetic or threaded fastening points deliver fast, plug-and-play connectivity. First-time fixturing of jobs can be established and reconfigured in just a matter of minutes for quick turnaround for future part measurement. Or, as needed, a few fixtures can be built and stored to meet all of your common part measurement requirements. Base plates are hard-coated and other components are machined from the toughest of materials, adding durability to the mix of user benefits of this system for years to come.

Our entry-level Mitutoyo Eco-Fix Kit S version is comprised of a 250mm x 250mm base plate footprint and 59 total components in the system. The Eco-Fix Kit L is a larger version and built for more complex part fixturing applications (measuring 500mm x 400mm in base plate footprint and a total of 98 total components in the system).



MITUTOYO ECO-FIX KIT L		
PART #	QTY	PART NAME
551024	2	LOCATION PIN Ø 12 MM X 13 MM
551025	2	LOCATION PIN Ø 12 MM X 25 MM
551026	2	LOCATION PIN Ø 12 MM X 50 MM
551027	2	LOCATION PIN Ø 12 MM X 100 MM
551028	2	LOCATION PIN Ø 20 MM X 13 MM
551029	2	LOCATION PIN Ø 20 MM X 25 MM
551030	2	LOCATION PIN Ø 20 MM X 50 MM
551031	2	LOCATION PIN Ø 20 MM X 100 MM
551032	3	CLAMPING CLAW ECO-FIX
551033	1	BASE PLATE 500 MM X 400 MM
551035	2	RECEIVER BRACKET SMALL
551036	1	RECEIVER BRACKET LARGE
551040	2	ADJUSTABLE LOCATION PIN Ø 20 MM
551041	2	ADJUSTABLE LOCATION PIN Ø 12 MM
551042	3	LOCATION PIN Ø 12 MM WITH BORE 6 MM
551043	3	LOCATION PIN Ø 20 MM WITH BORE 8 MM
551044	1	RECEIVER BRACKET L = 90 MM, Ø 12 MM
551045	2	RECEIVER BRACKET L = 120 MM, Ø 20 MM
550716	3	STRAIGHT PIN WITH THREAD
550279	2	SPRING CLIP, Ø 8 MM, L = 60 MM
550554	1	SPRING CLIP, Ø 8 MM, L = 40 MM
550262	2	V-BLOCK MINI
550261	2	CONE RECEIVER MINI
550250	1	STOPPER ELEMENT MINI
550247	1	BACK SQUARE MINI
550058	2	V-BLOCK
550365	2	CONE RECEIVER
550982	1	STOPPER ELEMENT
550248	1	BACK SQUARE
550888	2	STRAIGHT PIN Ø 6 MM X 20 MM
550889	2	STRAIGHT PIN Ø 6 MM X 30 MM
550890	2	STRAIGHT PIN Ø 6 MM X 40 MM
550000	2	STRAIGHT PIN Ø 8 MM X 30 MM
550001	2	STRAIGHT PIN Ø 8 MM X 50 MM
550002	2	STRAIGHT PIN Ø 8 MM X 65 MM
551046	1	SLOTTED NUT FOR RECEIVER BRACKET H = 12 MM
551047	2	SLOTTED NUT FOR RECEIVER BRACKET H = 15 MM
551050	1	ALLEN KEY 2 MM
551051	1	ALLEN KEY 3 MM
551052	1	ALLEN KEY 4 MM
551053	1	ALLEN KEY 5 MM
551504	1	DOUBLE OPEN-ENDED SPANNER SW10
550591	12	WASHER D = 6,4 MM / D = 17 MM
550110	6	CYLINDER HEAD SCREW M6 X 20 MM
550563	6	CYLINDER HEAD SCREW M6 X 25 MM

MITUTOYO ECO-FIX KIT S		
PART #	QTY	PART NAME
551024	1	LOCATION PIN Ø 12 MM X 13 MM
551025	1	LOCATION PIN Ø 12 MM X 25 MM
551026	1	LOCATION PIN Ø 12 MM X 50 MM
551027	1	LOCATION PIN Ø 12 MM X 100 MM
551028	1	LOCATION PIN Ø 20 MM X 13 MM
551029	1	LOCATION PIN Ø 20 MM X 25 MM
551030	1	LOCATION PIN Ø 20 MM X 50 MM
551031	1	LOCATION PIN Ø 20 MM X 100 MM
551032	2	CLAMPING CLAW ECO-FIX
551034	1	BASE PLATE 250 MM X 250 MM
551035	1	RECEIVER BRACKET SMALL
551036	1	RECEIVER BRACKET LARGE
551040	1	ADJUSTABLE LOCATION PIN Ø 20 MM
551041	1	ADJUSTABLE LOCATION PIN Ø 12 MM
551042	3	LOCATION PIN Ø 12 MM W/ BORE 6 MM
551044	1	RECEIVER BRACKET L = 90; Ø 12 MM
551045	1	RECEIVER BRACKET L = 120; Ø 20 MM
550716	2	STRAIGHT PIN WITH THREAD
550279	1	SPRING CLIP, Ø 8 MM, L = 60 MM
550554	1	SPRING CLIP, Ø 8 MM, L = 40 MM
550262	2	V-BLOCK MINI
550261	2	CONE RECEIVER MINI
550250	1	STOPPER ELEMENT MINI
550247	1	BACK SQUARE MINI
550888	2	STRAIGHT PIN Ø 6 MM X 20 MM
550889	2	STRAIGHT PIN Ø 6 MM X 30 MM
550890	2	STRAIGHT PIN Ø 6 MM X 40 MM
551046	1	SLOTTED NUT FOR RECEIVER BRACKET H = 12 MM
551047	1	SLOTTED NUT FOR RECEIVER BRACKET H = 15 MM
551050	1	ALLEN KEY 2 MM
551051	1	ALLEN KEY 3 MM
551052	1	ALLEN KEY 4 MM
551053	1	ALLEN KEY 5 MM
551504	1	DOUBLE OPEN-ENDED SPANNER SW10
550591	8	WASHER Ø 6,4 MM X Ø 17 MM
550110	6	CYLINDER HEAD SCREW M6 X 20
550563	2	CYLINDER HEAD SCREW M6 X 25





MITUTOYO STARTER STYLUS KIT

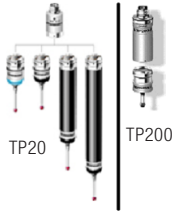
The Mitutoyo Starter Stylus Kits specified for the Gold Care Program enable you to develop probing solutions for applications on your CMM or Vision system. Mitutoyo ruby-tipped probes can offer the combination of performance and versatility for your hardest measurement applications due to its overall hardness/low density design (helps keep the probe tip as small as possible for application diversity) and ability to eliminate false triggers caused by CMM movement/vibration. *(Additional probe styles and configurations are also available. Please contact your factory representative.)*

TWO GROUP DESIGNS ARE OFFERED*

- M2** Mitutoyo M2 Starter Stylus Kit - Total of four ruby tipped/steel shafted probes (various ball dimensions and shaft lengths), two probe extensions and a pin spanner
- M3** Mitutoyo M3 Starter Stylus Kit- Total of five ruby tipped/steel shafted probes (various ball dimensions and shaft lengths), two probe extensions and a pin spanner

*Machine and/or probe dependent.

M2



K651376 - MITUTOYO M2 STARTER STYLUS KIT

PART #	QTY	DESCRIPTION	Ø(MM)	L(MM)	ML(MM)	WT.(G)
K651012	1	STYLUS STEEL-RUBY M2	1	10	4.5	0.23
K651019	1	STYLUS STEEL-RUBY M2	2	20	14	0.43
K651021	1	STYLUS STEEL-RUBY M2	3	20	17.5	0.51
K651022	1	STYLUS STEEL-RUBY M2	4	20	20	0.51
K651038	1	EXTENSION STEEL M2	-	10	-	0.41
K651039	1	EXTENSION STEEL M2	-	20	-	0.96
K651223	2	PIN SPANNER	1.2	23	-	0.51



TP20 and TP200 Probes are not included with the M2 Stylus Kit.

M3



K651380 - MITUTOYO M3 STARTER STYLUS KIT

PART #	QTY	DESCRIPTION	Ø(MM)	L(MM)	ML(MM)	WT.(G)
K651146	1	STYLUS STEEL-RUBY M3	1	21	4	1.05
K651147	1	STYLUS STEEL-RUBY M3	2	21	8	1.06
K651148	1	STYLUS STEEL-RUBY M3	3	21	12	0.96
K651151	1	STYLUS STEEL-RUBY M3	4	31	27	1.78
K651152	1	STYLUS STEEL-RUBY M3	5	33.5	33.5	2.61
K651157	1	EXTENSION STEEL M3	-	20	-	1.58
K651159	1	EXTENSION STEEL M3	-	25	-	3.16
K651223	2	PIN SPANNER	1.2	23	-	0.51

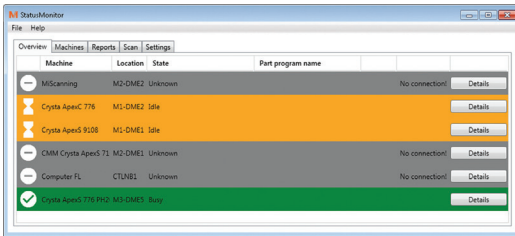


SP25 Probe is not included with the M3 Stylus Kit.

PLUS—STATUS MONITOR VISUALIZATION SOFTWARE

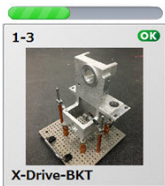
Status Monitor records all changes to the CMM state for data visualization to display current and past CMM status using the MTConnect standard. Each status change is logged in the Status Monitor database for in-depth analysis and reporting for analog and graphical visualization of one or more CMM's utilization. Visualizing the workload of one or several machines and the duration of the different available states, Status Monitor lets you visualize the amount of Idle time available for maximizing the CMM's operation while increasing overall productivity. Status changes recorded include:

- Idle
- Busy
- Stopped
- Waiting (Operator Input)
- Scheduled Maintenance
- Un-scheduled Maintenance
- Offline: Setup

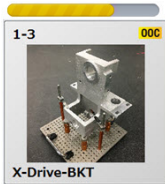


PLUS—QUICK LAUNCHER EZ USER INTERFACE

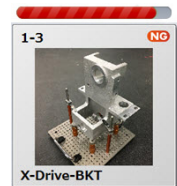
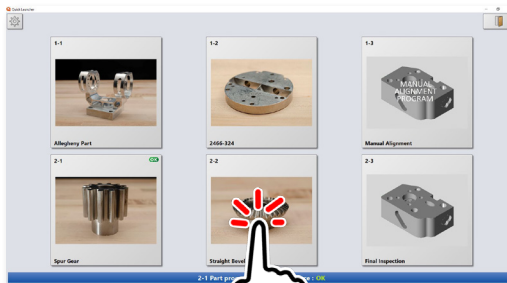
Quick Launcher is an icon based EZ User Interface to execute part programs. Quick Launcher is the ideal tool for walk-up inspection in an inspection lab or on the shop floor. The operator simply loads the part and presses the icon with the associated picture of the part to be measured. Requires a touch-screen monitor (OPTION). The result of the last execution is displayed for each measurement program icon.



- Measurement OK



- Out of Control Limit



- Measurement NG



- Error Display

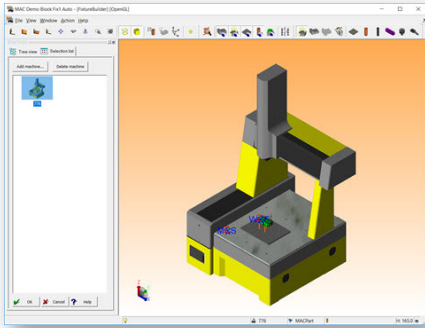
PLUS—MITUTOYO FIXTURE BUILDER

Fixture Builder provides an easy and graphical method to configure a 3D model of a complete fixture system for CMMs using the Eco-fix components manufactured by Mitutoyo. A model of the clamping system (fixture) can be configured, built, and displayed. This allows for easy import of the part CAD model; and, in Auto Generation mode, components for that snap to the part with a click and are displayed on the CMM model when configured with MCOSMOS System Manager. The fixture system generated is then saved as a project that includes the workpiece and CMM associated with the generated fixture system as a 3D model. All the items configured in Fixture Builder are displayed in a tree view for easy selection and manipulation. Colors for appearance are user configurable for background and selected items and can be configured for each project.

Fixture Builder configurable toolbars include:

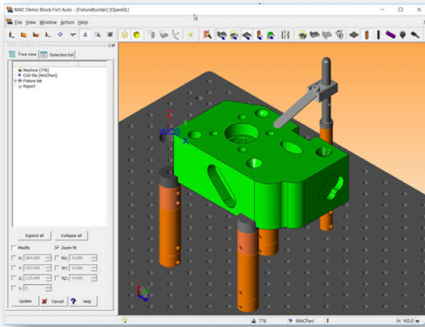
- **Status** – shows current workpiece, CMM, currently selected component, and position related to the CMM work table
- **CAD View** – includes standard CAD view functions, pan, zoom, rotate, turn on/off edge, turn on/off surface, pick fixture component, pick position on CAD part and reset
- **Display** – allows the workpiece CAD model, CMM, fixture base plate, fixture, and machine volume to be toggled on or off for clarity and printing
- **Action** – contains all the buttons for selection of fixture components, CMM model, and report generation

Fixture Builder also generates a component list with assembly instructions and can be output to HTML, CSV or PDF (the PDF has interactive 3D viewer of the fixture and part).



CMM Configuration: 776		CAD Part: MCA1_Part	
Fixture: EU Demo Block BOM		Date: June 26, 2020	
Part Number	Quantity	Weight (g)	Description
351033	1	7645	Base plate 500mm x 400mm
351031	4	238	Location Pin 20 mm x 100 mm
351043	4	76	Loc Pin D20 mm with bore D8 mm
350248	1	27	Back Square
350982	2	48	Stopper Element
351070	1	14	Flat Top
351024	1	4	Location Pin 12 mm x 13 mm
351025	1	7	Location Pin 13 mm x 25 mm
351027	1	29	Location Pin 12 mm x 100 mm
350716	1	22	Straight Pin D8mm D8Tmm (Thread)
350279	1	38	Spring Clip D8 mm L60 mm
Total weight (g):		8356	

A screenshot of the Mitutoyo Fixture Builder software interface showing a 3D model of a CMM fixture system. The workpiece is highlighted in green. The fixture is shown in a grey and orange color scheme. The model is displayed on a grid background. A toolbar at the bottom shows various view and manipulation options.



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