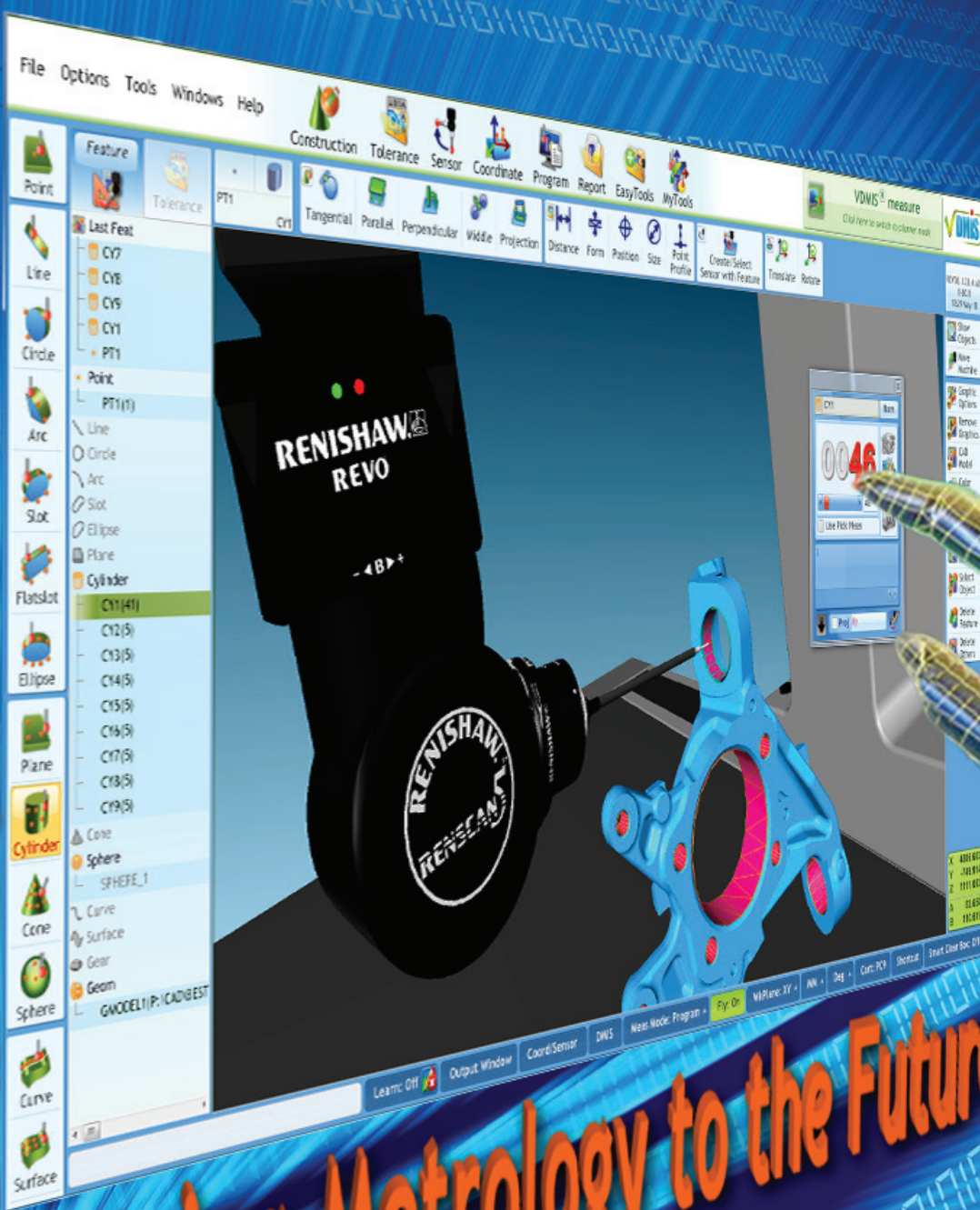




# VDMIS<sup>®</sup> Metrology Software

Powered by Intelligent Innovation



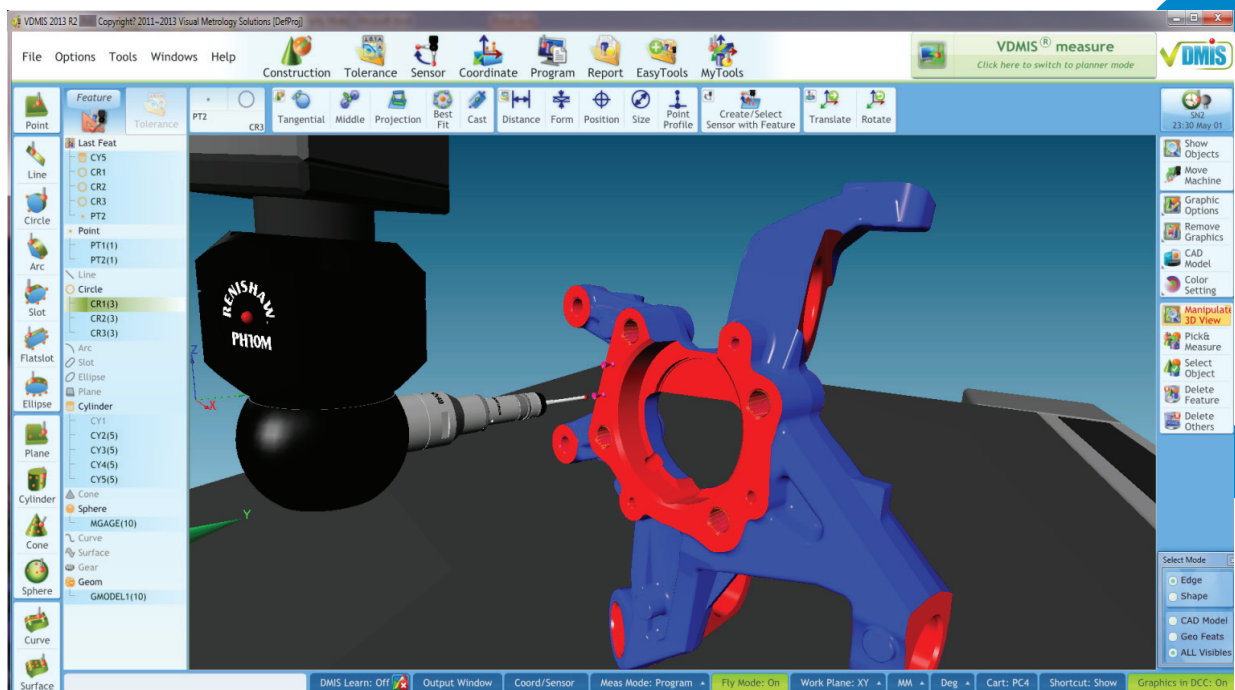
**Moving Metrology to the Future**



VDMIS® fully links CAD component data with the CMM programming and inspection process providing both precision and productivity. Standard international CAD data exchange protocols are utilized throughout namely IGES, STEP, VRML, etc.

VDMIS® is built with the latest generation solid modeling engine which displays the CAD model in a true solids format providing the ultimate in accuracy and enabling surface nominal data and corresponding vectors to be selected directly from the part model.

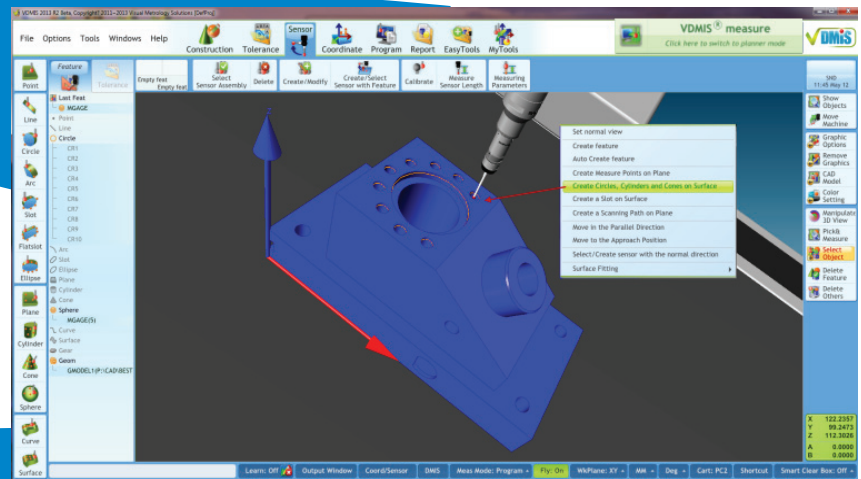
Full prismatic part geometry is available with automatic feature recognition and measurement simply by selecting the feature to be inspected with a single mouse click.



- Direct CAD data import of standard format: IGES, STEP, DXF, VDA (Included).
- Direct CAD Data Import of Native format (optional) like CATIA4, CATIA5, Parasolid, ProE, Solidworks and Unigraphics ...etc
- 3D solid model component representation.
- IGES export of measured features
- Multiple CAD model import
- Surfaces & geometry recognition
- CAD Model Layering and Coloring

## One Click to select multiple prismatic entities.

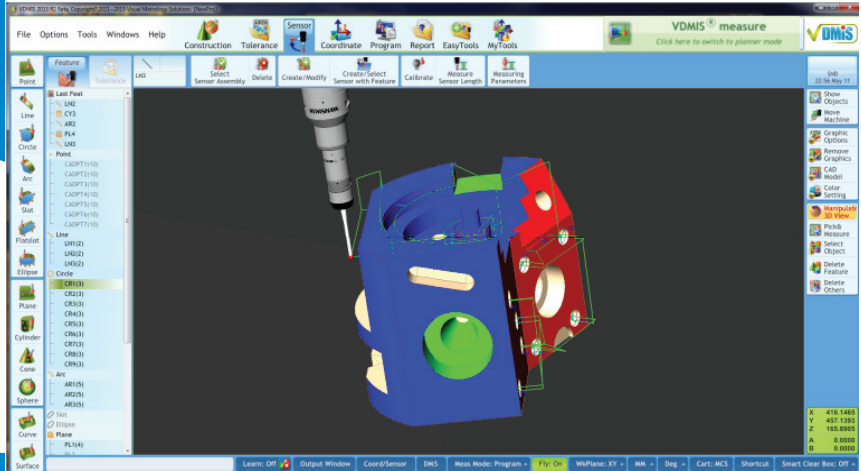
With just 1 click on any surface you can read all the prismatic entities parallel to that surface, another click to measure them all and write the DMIS part program.



## Automatic Collision Detection and Avoidance.

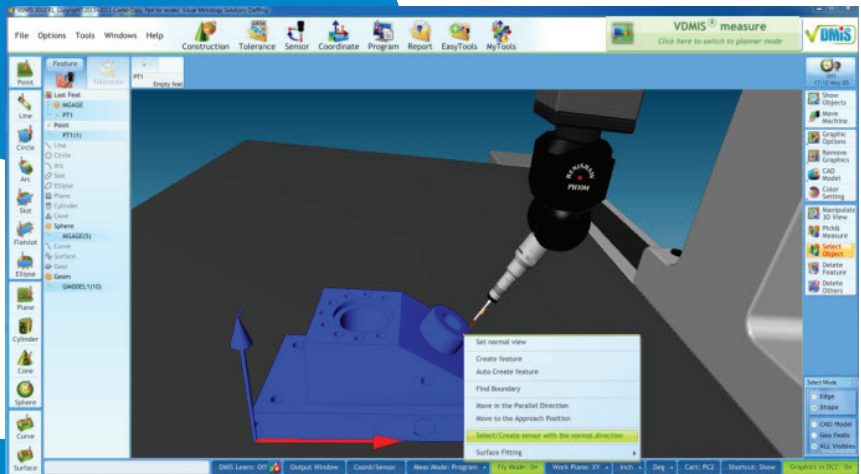
VDMIS® intelligently calculate, create the probe path to avoid any collision and guarantee collision-free inspection path.

All the “goto” code is written in DMIS program automatically.



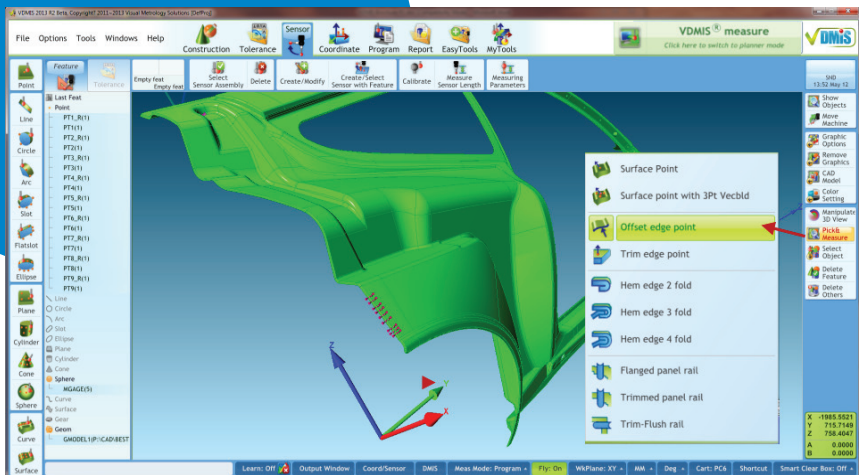
## Automatic Probe Calculation and Selection.

VDMIS® will define and select the best probing angle to any feature or entity which will save significant amount of time for the CMM operator.



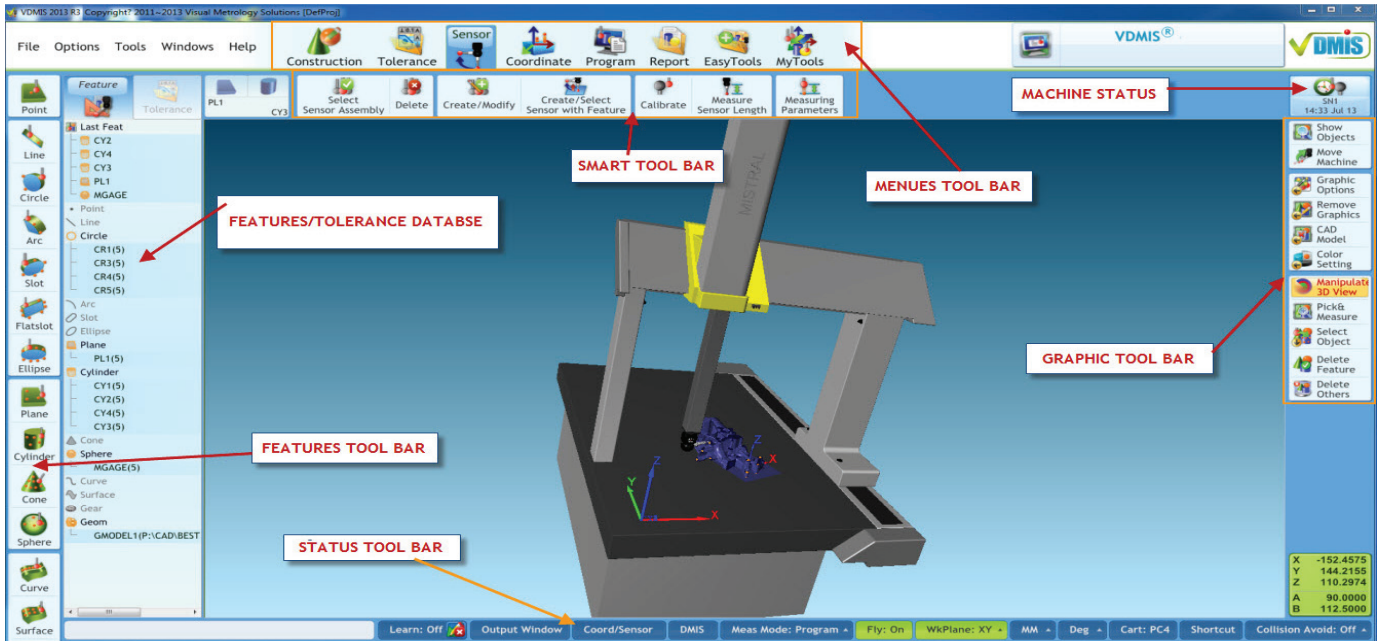
## Complete set of IAI Sheet Metal Inspection Functions including Relative Measurement.

Allowing thin wall component features to be inspected under full CNC execution without CMM hesitation. In addition individual features can be measured relative to other features to accommodate for pattern deviation within stamped or molded parts.



VDMIS® is the first Metrology Software to make the dream of every CMM user a reality

## USABILITY WITHOUT COMPROMISING FUNCTIONALITY



- Single page software, no cascading windows
- Drag and drop capability.
- Any function is reachable with short mouse move and just 1 click.
- Intuitive and Actionable Large size icons with text title so any function could found rapidly to minimize learning curve and aid speed of use.
- Completely designed in Windows 7 and Windows 8
- First Metrology software to use “Text to speech” Windows 7 technology to guarantee the highest level of User-Software interaction.
- High level of intelligence and diagnostic capability Built-in the VDMIS® to help the user completing the inspection process in the most efficient and smooth way possible.
- Multimedia help -voice &Video available for every function with just right mouse click.

VDMIS® is setting the new bench mark for the Metrology software USER INTERFACE.



## Easy Tools:

Quick start, just 1 click and start measuring.

These tools allow any user with no training to start aligning the part quickly, measure geometric features and generate inspection report.

Just click on the alignment easy tool that describe the alignment situation you have and **VDMIS®** will guide you step by step to complete the task successfully.

1 click on the distance function that describe the type of distance or angle you want to calculate and **VDMIS®** will guide step by step to complete the task successfully.

Report is generated automatically and ready to be printed or saved in file.



## Measuring window:

The size of a smart phone but it is a lot smarter.

The Measuring in any software is your interface to the machine. **VDMIS®** feature the most efficient, dynamic and intelligent measuring window in the metrology market.

From within the measuring window you can input and edit nominal, change feature, set number of point, set measurement strategy, use relative measurement, change sensor angle, set projection plane and switch to smart feature determination technique where you can start taking Point on the part and the **VDMIS®** will figure out what feature you are measuring.



## Simplified User Interface:

The ultimate touch to maximize the usability of the CMM by untrained users.

This interface enable the CMM to be used as flexible gage on the manufacturing floor by production operators.

Once the part programs have been developed, anyone can run the program easily without any previous knowledge about software or the CMM.

Each Icon can display a unique bitmap graphic with attached DMIS program and title bar.

Unlimited pages can be accessed by programming an icon as the entry point to next level.

Operator prompt, voice and video instructions impeded into DMIS program are shown on top of the simplified User Interface.

This interface is compatible with standard touch screen monitor and very soon with IPAD and smart tablet which is the ultimate move the future.



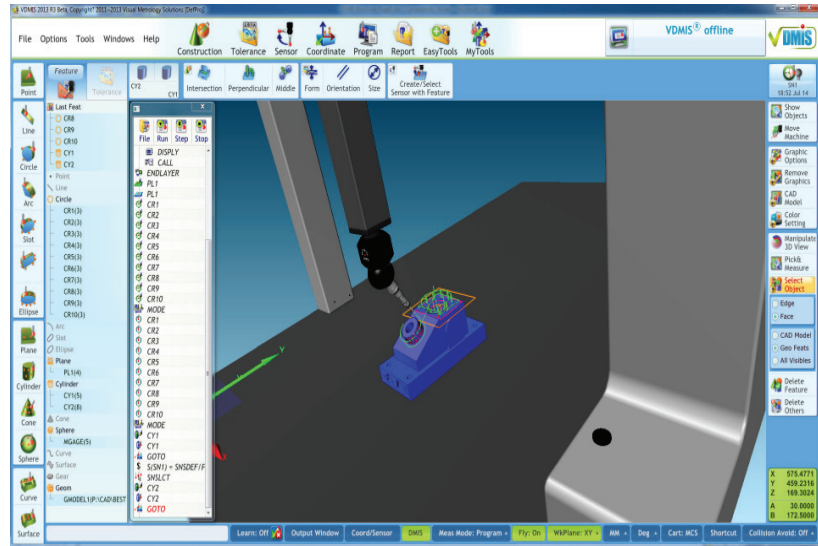


# VDMIS® Part Programming

## DMIS Programming Language:

VDMIS® has been developed with the Dimensional Measurement Interface Standard (DMIS) as its foundation utilizing DMIS true native format negating the incumbency of translators and provides a real time seamless two way Data exchange of DMIS between CAD/CAM and CMM measuring system.

DMIS program could be displayed with icon representations which are easy to browse and understand or full lines DMIS code.



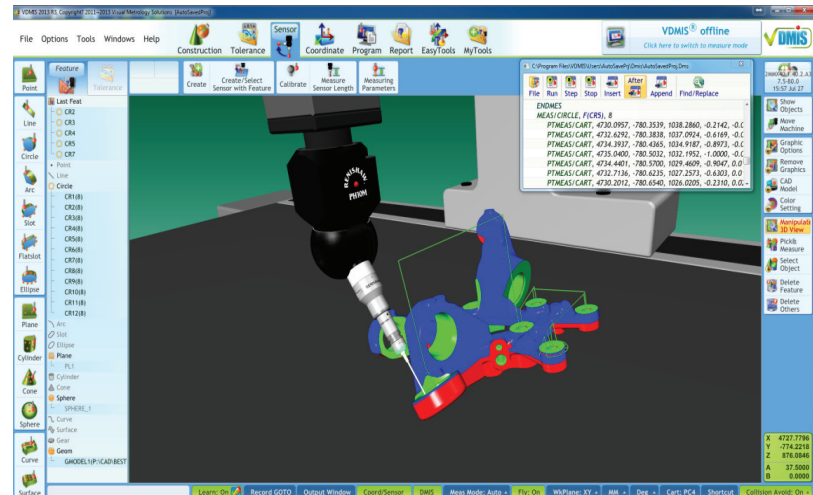
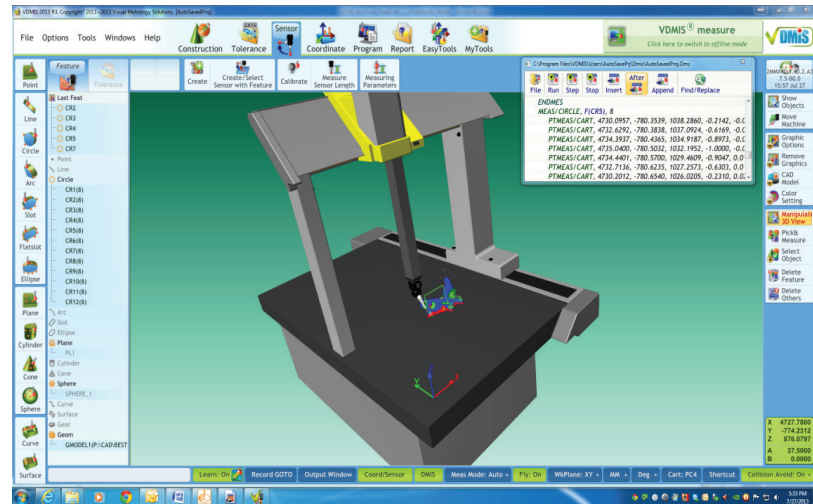
## Graphical Programming:

VDMIS® allows inspection programs to be generated in a virtual digital manufacturing environment enabling full CMM and program kinematic simulation and program verification and optimization in advance of part inspection demand; thereby reducing lead-times and increasing CMM productive utilization.

Full 3D scaled dynamic representation of the CMM and Renishaw true probes library provides real world simulation and programming tools.

VDMIS® runs both as an Off-Line or On-Line application enabling CMM inspection programs to be generated and verified at a location that best serves the measurement task.

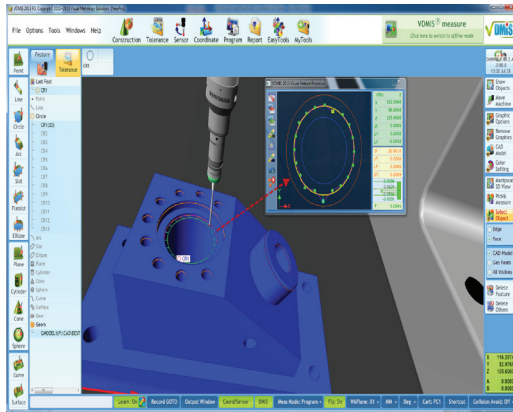
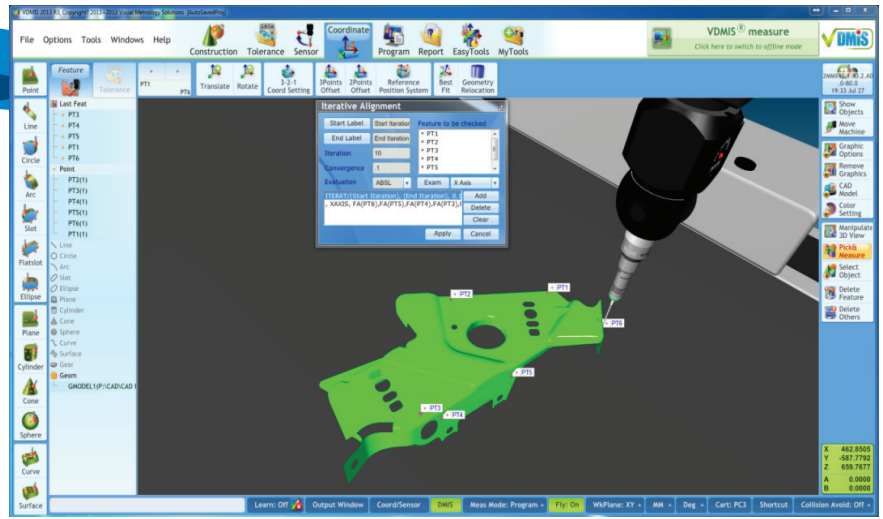
VDMIS® could be switched from On-Line to Off-Line and vice-versa enabling quick editing and verification to occur without risk CMM structure crashes.





# VDMIS® Iterative Alignment

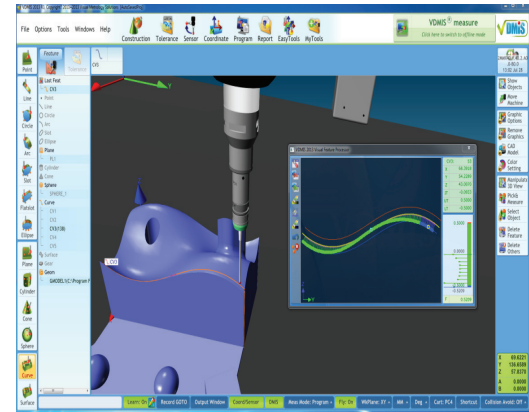
Iterative alignment routines allow the physical part to be aligned accurately off the CAD model without the need of dedicated hard fixtures which will reduce the inspection cost.



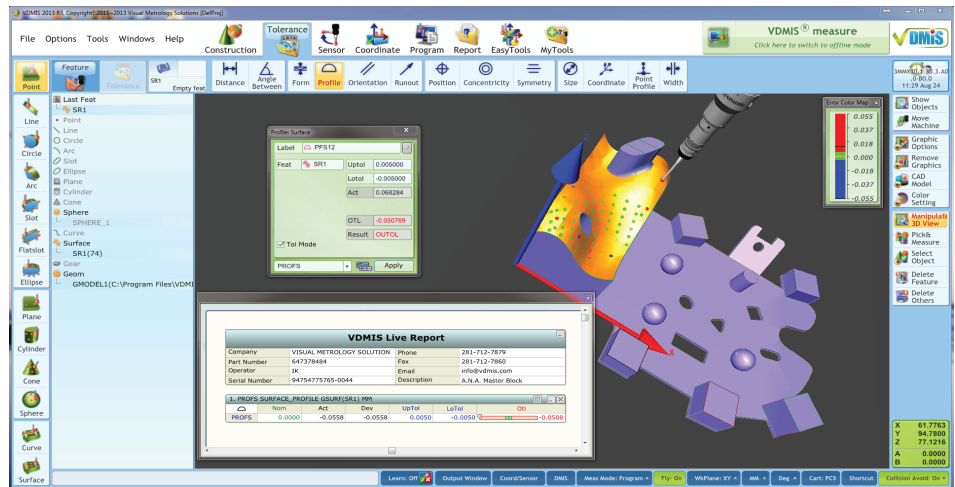
## Visual Feature Processor

Graphical analysis tool that allows the user to analyze the feature graphically and pin point the defective spot.

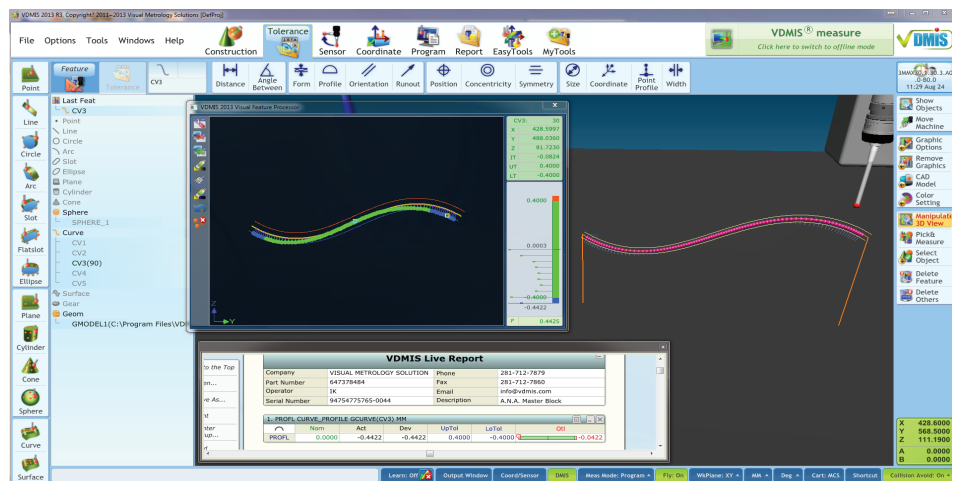
It is built with Sigma filtering to remove noise.



3D Surface Profile analysis with uni- or bi-directional tolerancing and color mapping.



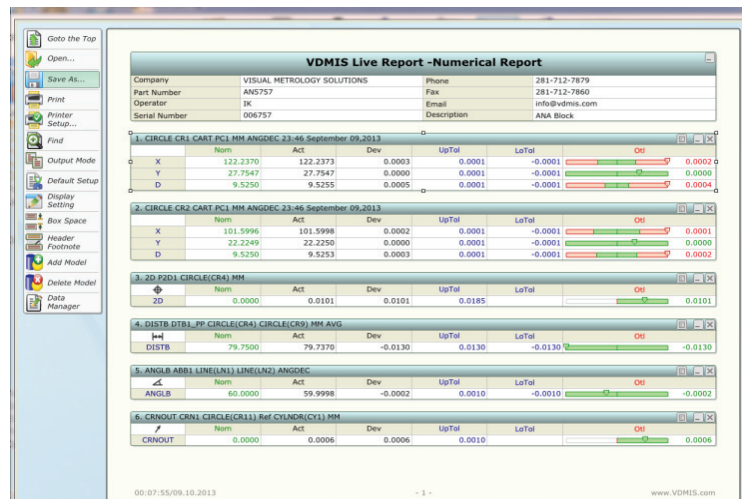
2D Curve Profile analysis with uni- or bi-directional tolerancing, color mapping and whiskers color chart.



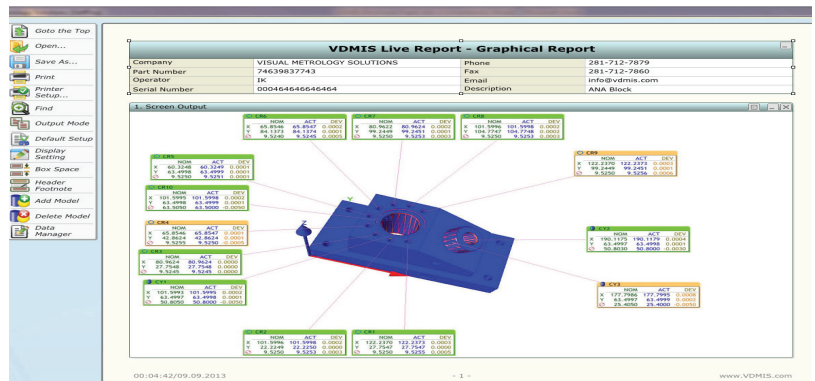
VDMIS® Live Report has introduced completely a new way of creating, analyzing and sharing the inspection report that increase by several folds the efficiency, productivity and the understating of the inspection result generated by the CMM software.

VDMIS® Live Report allows the CMM Programmer to focus completely on the Inspection/Part programming process without worrying about the Inspection report, later when the inspection/part programming is completed the CMM programmer can create the inspection report inside the VDMIS® Report where he can set nominal and tolerances, select output mode, decide what features and dimensions to output, create graphical report, SPC analysis, output analysis to filter and display out of tolerance features.

- Numerical Report will be created automatically.
- Customizable Report Header.
- Company Logo could inserted at the top of the report.
- Any Windows picture format could be inserted in the report where it needed.
- If nominal or tolerances are edited inside the report then deviation and out of tolerance will update automatically.
- Change measuring unit or report format with 1 click.

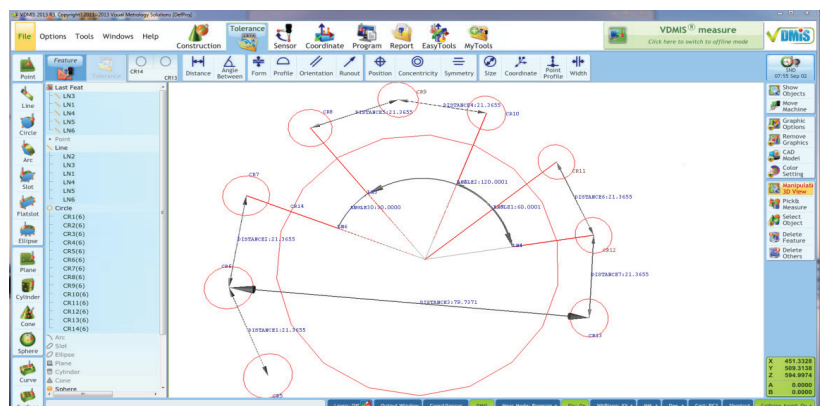


- Drag & drop graphical report creation: Highlight the features you want to report, drop them in the graphic area and the graphical report is created immediately.
- Color-coded balloons to indicate if the feature in or out of tolerance
- Full control over the graphical view and displayed parameters so the report could be easily customized to comply with any requirements.



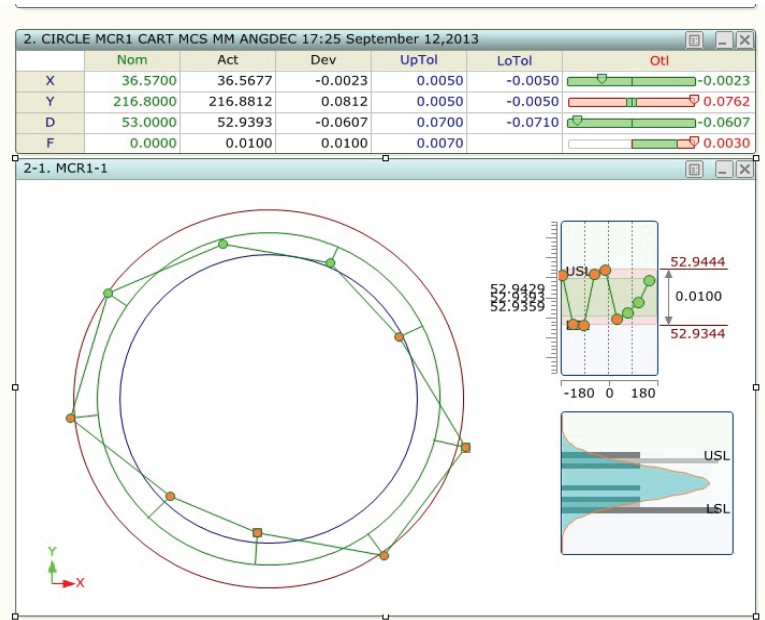
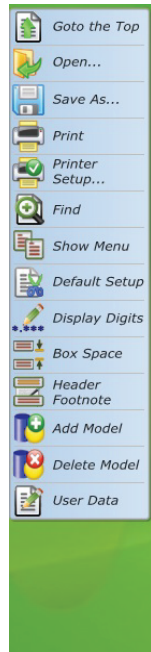
## Graphical Dimensioning & tolerancing

2D graphical view could be easily created to report real dimensions and tolerances.





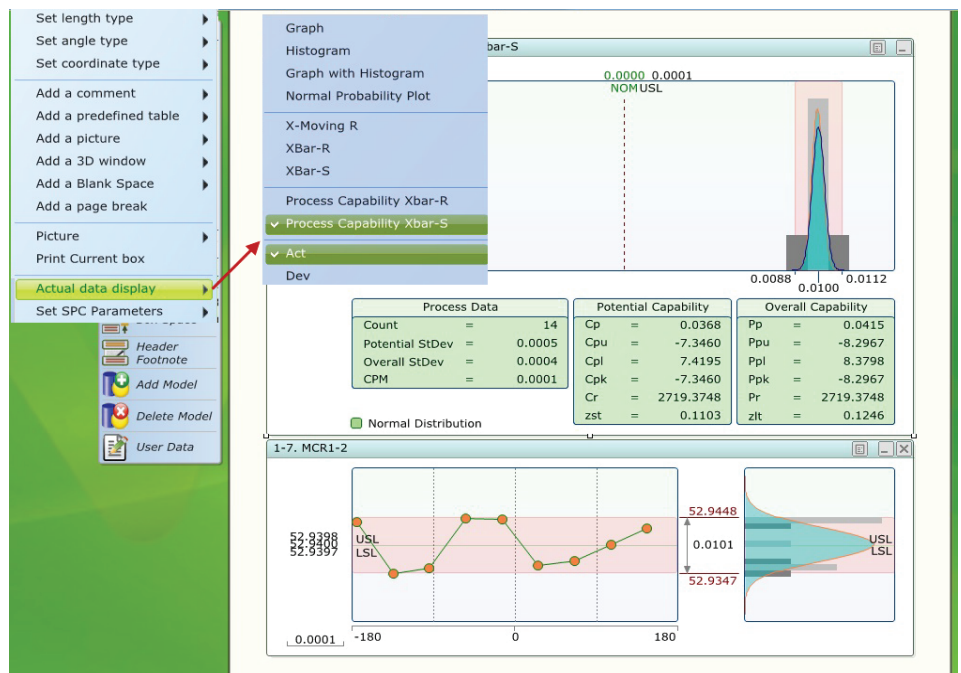
## Graphical and SPC analysis of any feature inside the VDMIS® Live Report



Full SPC package built inside VDMIS® Live Report.

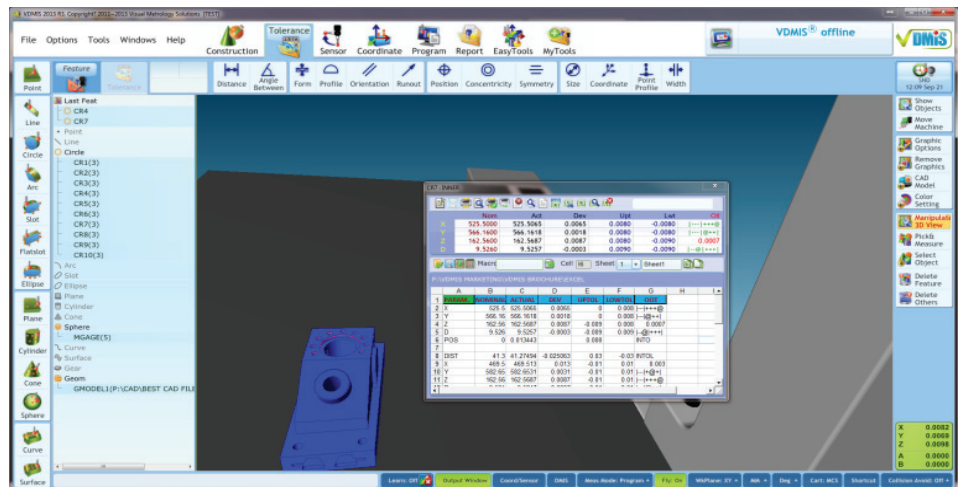
One click on any feature to get full SPC report on it.

VDMIS® Live Report Viewer is available for free and it allows the entire inspection report to be shared with anybody without compromising the integrity of the report.



## VDMIS® Excel

- Output directly to Microsoft Excel file.
- Create new Excel file or output to existing Excel template which is great for PPAP.





# VDMIS® Retrofit Solutions

## Give new life to your existing CMM

VDMIS® provide the most complete and long term retrofit solutions in the market by replacing the entire electronic motion control system, PC and the software.

VDMIS® can be retrofitted to upgrade any existing DCC or Manual CMM into a “state of the art” measuring system.

VDMIS® retrofit kit includes:

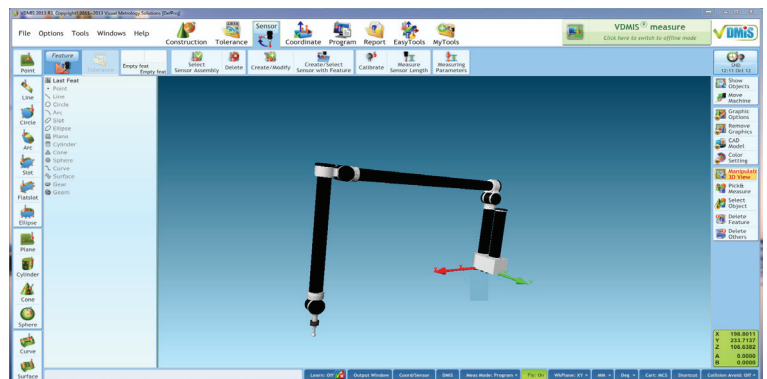
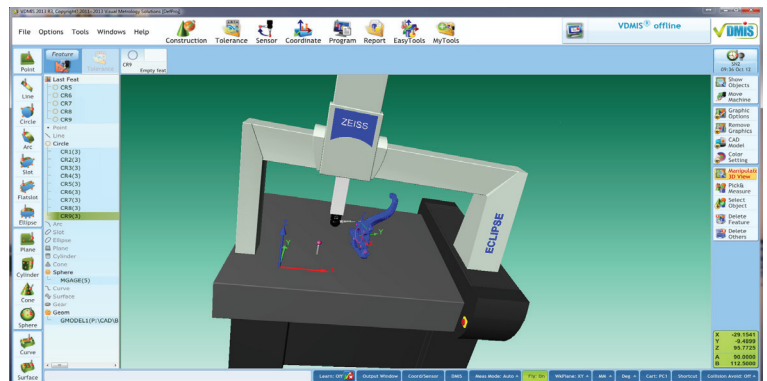
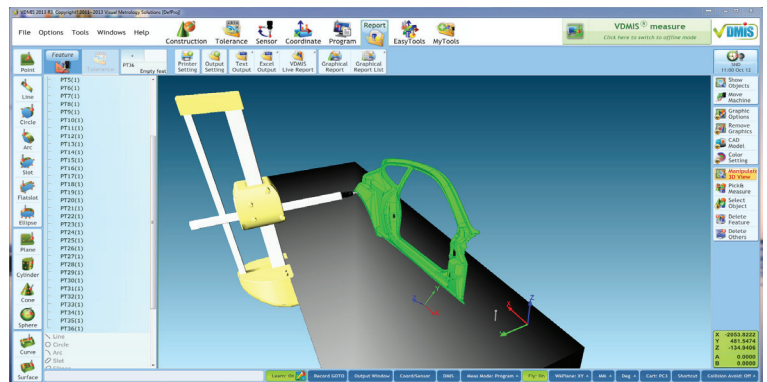
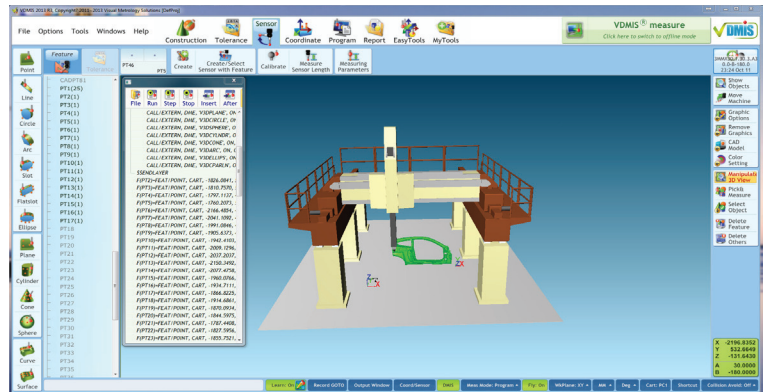
- VDMIS® Latest software release
- New PC with Windows 7 or 8, 64 bit
- Latest generation, 64 bit, digital motion control system.

VDMIS® Retrofit Solution is by far the most cost-effective Retrofit solutions in the market because it Bring the existing CMM to the conditions of new CMM by replacing all the obsolete, inefficient and highly expensive to maintain controller and software with state of art latest generation digital universal controller combined with VDMIS® revolutionary software.

VDMIS® Retrofit solution will give new life to the existing CMM by improving accuracy and big increase in productivity, performance and capabilities.

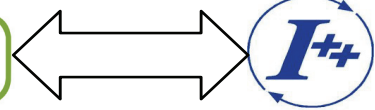
Unlike competitors software who interface to existing old legacy controller of the CMM then to come back later and blame the controller if any problem arise and for the unsatisfied expectation; VDMIS® combined with the state of arte latest generation controller will take full control and responsibility of the machine and fulfill all the expectations.

Furthermore, the service and maintenance of the legacy controller is at least 3 times more expensive than the brand new universal digital controller.





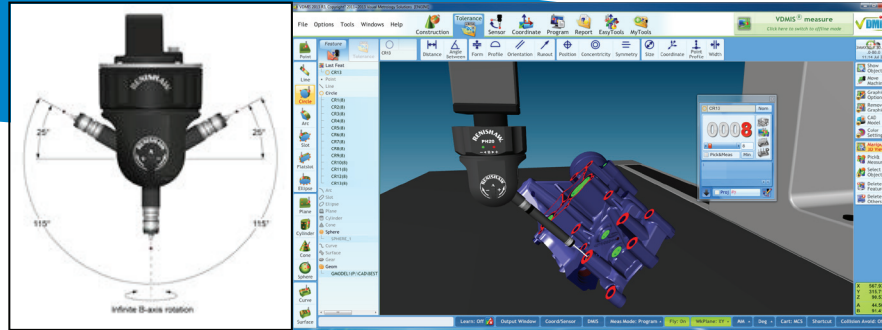
# VDMIS® I++ Interface



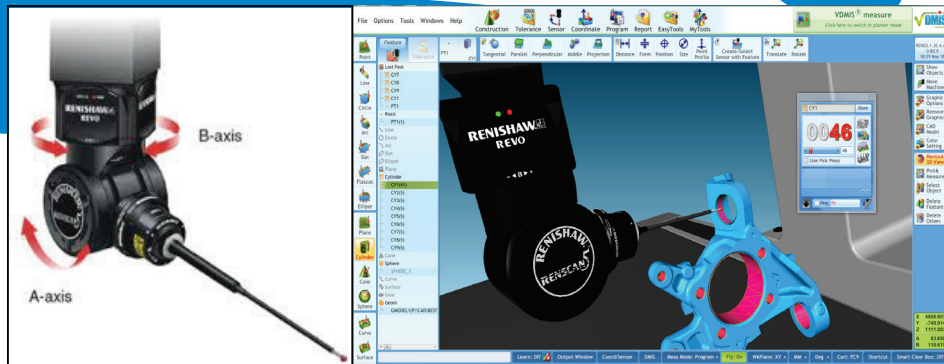
VDMIS® is I++ DME compliant and interface with Renishaw UCC using the I++ DME protocol which provide common language for metrology commands.

VDMIS® /I++ is fully compatible with the latest Renishaw probe heads technology like:

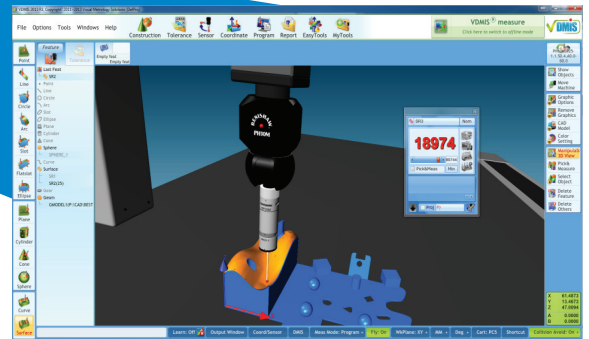
## PH20



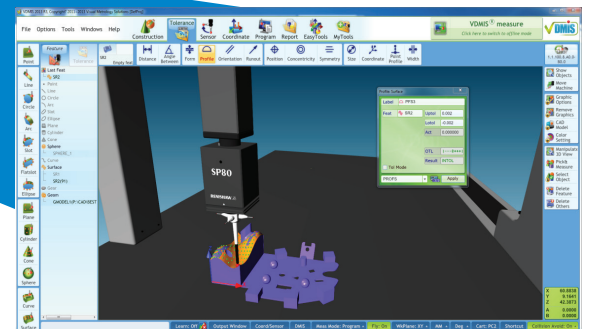
## REVO



## SP25 SCANNING PROBE



## SP80 SCANNING PROBE





# VISUAL METROLOGY SOLUTIONS

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Web Page: [www.vdmis.com](http://www.vdmis.com)  
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Email: [info@vdmis.com](mailto:info@vdmis.com)