

SOLIDWORKS INSPECTION

Q&As



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CAN I SCAN IN A PRINT THAT IS ALREADY BALLOONED AND WORK WITH THAT?

A: Yes. But you will have to manually recreate the balloons as we currently have no way to do this automatically. However, as you saw in the demo, box selecting characteristics to balloon an existing PDF is quite fast.

IS THE BALLOONED DRAWING CREATED INSIDE OF THE DRAWING FILE OR IS IT SAVED AS A SEPARATE INSPECTION FILE THAT CAN ONLY BE OPENED IN SOLIDWORKS?

A: If you are working on a SOLIDWORKS drawing, then ALL the information is saved inside the SOLIDWORKS drawing BUT you can – and most people will – export a PDF with all the balloons. This PDF can be open on any computer with Adobe Reader. If you wish to open the SOLIDWORKS Drawing, you will need SOLIDWORKS. Usually people create a Ballooned PDF and Excel reports that they send or print for the quality inspector.

CAN A SINGLE LICENSE BE USED ON THE SOLIDWORKS AND STAND-ALONE AT THE SAME TIME?

A: Yes, as long as it's on the same machine.

ASIDE FROM CCM & DIGITAL CALIPER, WHAT TYPE OF MEASUREMENT EQUIPMENT OUTPUT IS REQUIRED FOR DIRECT INPUT?

A: As long as your measurement equipment software can export the result to a neutral file format – such as *.txt – you can set up the CMM import options to read things like the nominal value, tolerance, results, etc... If you have an example we can take a look at it.

ARE THERE MORE OPTIONS FOR BALLOON AND BALLOON TEXT SIZING? (INSPECTION XPERT WAS VERY LIMITED WITH THIS AND ONLY HAD 2-3 PRESETS.)

A: You can change the size, color, and shape of the balloons. As well as add prefix to them.

IS THERE ANY TRAINING AVAILABLE FOR NON-EXPERIENCED EMPLOYEES TO TEACH THEM HOW TO USE?

Example: I have a group of employees that have no cad experience but are responsible for quality reports and creating documents.

A: A getting started guide is included as well as a comprehensive Help. In addition, your reseller can definitely assist you with any training needs your company might have.

ARE THE FORMS IN SOLIDWORKS INSPECTION CUSTOMIZABLE OR DOES USER HAVE TO USE THE STANDARD TEMPLATES?

A: The forms are completely customizable. A template editor is included with the software to make this process easy!

ARE INSPECTION REPORTS SAVED INSIDE OF THE DRAWING FILE OR DOES IT CREATE ITS OWN FILE? ALSO AFTER THE REPORT HAS BEEN CAN ANYONE OPEN THAT FILE EVEN IF THEY DON'T HAVE SOLIDWORKS INSTALLED AT THEIR WORKSTATION?

A: The inspection reports are saved externally as a Microsoft Excel spreadsheet. Anyone can open that Excel spreadsheet to include more information or type inspection results directly. All they need is Excel installed on their machine.

CAN SOLIDWORKS INSPECTION BE USED AS A STANDALONE SOFTWARE, OR DOES IT REQUIRE TO BE INSTALLED WITH A LICENSE OF SOLIDWORKS 3D CAD SOFTWARE? CAN THE STANDALONE SOFTWARE IMPORT DATA AUTOMATICALLY LIKE THE SOLIDWORKS ADD-IN DOES? OR DOES THE STAND ALONE SOFTWARE ONLY DO IMAGE BASED FILES (TIF, PDF, ETC.)?

A: Yes. Inspection can be used only as a standalone software and does not require SOLIDWORKS 3D CAD. However, the standalone software only works with image based files (tif, PDFs).

CAN IT BE USED WITH PDF'S NOT GENERATED BY SOLIDWORKS?

A: Absolutely. It can be used with PDFs generated by any CAD system.

CAN SOLIDWORKS INSPECTION GENERATE .PDF FAI REPORT WITH THE INSPECTION DATA COLOR CODED?

A: Absolutely. You can generate a ballooned PDF of the drawings color coded based on the inspection results. You can also generate an FAI report as an Excel spreadsheet with all the results (color coded) and save this Excel report as a PDF directly within Excel.

CAN THE ESTABLISHMENT OF KEY MEASUREMENTS BE BASED ON TOLERANCE?

A: It is done manually at this point. You would have to select manually each characteristics that need to be "key" and check a box.

WHAT CMM OUTPUT FORMATS ARE SUPPORTED (I.E .SAT)?

A: SOLIDWORKS Inspection supports results from the following CMM software (and other can be added): Calypso, Camio, Faro, Geomeasure, MCosmos, OpenDMIS, PS-DMIS, Virtual DMIS, CMM Manager.

CAN THIS SOFTWARE INTEGRATE OTHER DOCUMENTATION TO BE ATTACHED TO THE REPORT, SUCH AS MTR'S AND OTHER TRACKING INFORMATION?

A: You create custom field and add any information (such as a tracking number) but you can't attach other documents.

DOES CMM DATA IMPORT FUNCTION WORK WITH LASER TRACKING SYSTEMS? WHAT DOES MEASUREMENT INPUT AND AUTO VERIFY REALLY MEAN?

A: To completely answer this question I would need to know exactly what software you are using and how the results can be exported. Measurement input means that you can manually enter measured results for each characteristic (or using a digital caliper) and the software will automatically highlight & color code all the results and balloons based on a Pass/Fail/Marginal status.

WHAT IS THE COST OF EACH VERSION? WILL THERE BE ANY HANDS-ON TRAINING SCHEDULED FOR BUYERS?

A: The cost is \$1995 for the Standard version and \$3,495 for the Professional. Standalone or floating license have the same price. A training can be organized by your reseller.

WHAT IS THE PRICING DATA? IS IS A PER/USER LICENSE SETUP?

A: It's \$1,995 for the Standard package and \$3,495 for the Professional package. It's per license. Multiple licenses can be floated on a network to accommodate multiple users.

CAN WE DO STATISTICAL CALCULATIONS ON MULTIPLE SAMPLES (N=3 OR N=10)?

A: No. Not at this point.

CAN WE PUT THE DATA INTO CONTROL CHARTS (XBAR R FOR EXAMPLE)?

A: Not directly. You would have to export the results in Excel and create the control charts in Excel

ESTIMATED COST PER USER??

A: \$1,995 for the Standard package, \$3,495 for the Professional. They licenses can be floated across the network.

IF I MEASURE A 5-PIECE SAMPLE, HOW IS THE DATA REPORTED? FOR EXAMPLE, I HAVE MEASUREMENTS ON 5 WELDMENTS, WITH TWO BENDS ON EACH WELDMENT. I WANT TO COMPARE THE DATA FOR BEND RADIUS #1 TO THE DATA FOR BEND RADIUS #2, TO SEE IF THE BEND FIXTURE FOR BEND #1 GIVES DIFFERENT RESULTS THAT THE BEND FIXTURE FOR BEND #2.. WHAT KIND OF DATA MANIPULATION NEEDS TO BE DONE TO MAKE THIS COMPARISON?

A: You can add a column for each part you measure. In your example, for each characteristic that you inspection, you will have 5 columns and the ability to enter the results in all 5 column.

For data manipulation, you can export all this to an Excel report and since you can completely customize the templates it might even be possible to set up automatically what you want to do directly IN the template.

WHEN IMPORTING FROM CMM HOW DOES THE DATA MATCH TO THE INSPECTION ITEMS?

A: There are multiple ways to do that. When starting the auto-assign process you can ask the software to match the information based on the item number. You can also ask the software to match exactly things like the tolerance, nominal value etc... As long as the CMM software is properly programmed it's pretty much click and done on the SOLIDWORKS Inspection side. Finally, you can do it completely manually. Please note that in any case, you only have to do this once.

3500 FOR A FLOATING SEAT?

A: Yes, for a floating seat of the Professional version. The Standard is \$1995.

WILL THE SOFTWARE COMMUNICATE WITH MITO40 GEOPACK

A: We can import CMM results from MCosmos so SOLIDWORKS Inspection should be able to import results from Geopak just fine. There might be some setup to do with the template.

WILL THIS PULL FROM A SCANNED .PDF?

A: Yes, as long as the quality is descent.

WE ARE A NEWER INSPECTIONXPERT CUSTOMER. HOW DO WE GET TRANSFERRED OVER TO A SOLIDWORKS INSPECTION LICENSE?

A: Your reseller can arrange this for you. In most cases, there is no cost.

DOES A PDF HAVE TO BE CREATED AS "SEARCHABLE" FOR THE OCR TO WORK?

A: Not at all. You can use the OCR on any PDF.

THIS SEEMS FINE FOR ONE MEASUREMENT OF FEATURES, WHAT IF YOU HAVE TO MEASURE FEATURES 50 TIMES

A: You can simply add more columns.

DOES THE INSPECTION SOFTWARE INTEGRATE WITH OUR FARO ARM CMM?

A: You can import, inside SOLIDWORKS Inspection Professional, results from FaroCAM2.

OUR COMPANY RUNS JOBS WITH TWO OPERATIONS, CAN YOU CREATE DOCUMENTS FOR EACH OPERATION? IE. TURNING OPERATION AS WELL AS A MILLING OPERATION

A: In the standalone, you can apply filters and create multiple reports (not ballooned PDF) based on the operation. So you could have ballooned PDF and two reports one for each operation.

IS THERE ANY WAY TO AUTOMATE BRINGING IN TOLERANCES BASED ON DECIMAL PLACES. MOST OF OUR CUSTOMER PROVIDES PRINTS THAT HAVE JUST A NOMINAL VALUE WITH "X" AMOUNT OF DECIMAL PLACES ON THE PRINT. EX: IN THE NOTE SECTION IT IS STATED XX=+/-0.02, OR XXX IS +/-0.005

A: Yes, this can be set up in the default options.

IF YOU CHANGE A DIMENSION ON THE ORIGINAL DESIGN, DOES THE INSPECTION REPORT AUTOMATICALLY UPDATE ITSELF?

A: Not automatically. You will have to re-generate a report.

IF AN INSPECTION PACKAGE IS CREATED IN SOLIDWORKS, CAN SOMEONE IN OUR INSPECTION DEPARTMENT OPEN THAT SAME PROJECT AND JUST ADD INSPECTION METHODS?

A: Not currently. But this is something we are working on for the 2015 release.

HOW DOES THE SOFTWARE HANDLE DRAWING REV CHANGES? IF DIMS ARE ADDED, OR PREVIOUS BALLOONED DIMS ARE DELETED, DOES IT SHOW ERRORS?

A: If you are in the add-in, then it's easy and the software can tell what was added and what was removed. The user can either accept all the changes OR manually decide what to accept/refuse.

If you are working on a PDF then the software can't tell automatically. However, SOLIDWORKS Inspection includes a nifty drawing compare tool that allows you to quickly compare two PDFs and see what changes. Then, it's either for the quality inspector to make the changes.

HOW DOES THE DIGITAL CALIPER MEASUREMENT ENTRY WORK?

A: You simply plug in your USB caliper, measure something with it and press the button on it. The value is automatically entered in the cell selected and the software goes directly to the next cell.

HOW DOES SOLIDWORKS RECOGNIZE "TYPICAL" DIMENSIONS?

A: In the add-in it will be recognized as a "typical" dimension. In the standalone, the user will have to manually specify it since there is no way to know when working on an image/pdf.

HOW ARE CMM RESULTS ENTERED?

A: You import the CMM results from your CMM software directly into SOLIDWORKS Inspection. Then they are mapped to the characteristics in your current project.

DOES THIS WORK INSIDE EPDM ENVIRONMENT

A: Yes, but it will be entirely a manual process. We are planning obviously on completely integration Inspection with ePDM.

DOES THIS UPDATING APPLY TO BOTH ADD-IN AND STANDALONE VERSIONS?

Only in the add-in. In the standalone, since we are working with a PDF there is no way to know what's new. However, you have a nifty compare drawing feature that helps identify changes.

DOES THE PROGRAM AUTOMATICALLY UPDATE FEATURE TOLERANCES, WITH GD&T MODIFIERS, SUCH AS MMC?

A: Same as previous answer.

WHEN A PRINT IS UPDATED IN SOLIDWORKS DOES IT AUTOMATICALLY UPDATE THE CHANGED DIMENSIONS IN SOLIDWORKS INSPECTION?

A: No.

DOES THIS SOFTWARE INTERACT DIRECTLY WITH FARO DEVICES?

A: Not directly. But you can import CMM results from you Faro software FaroCAM2.

CAN THE SOFTWARE PERFORM ANY ANALYSIS OF THE DATA, LIKE SPC?

A: We currently don't have a function for that. However, you can export all the data – including multiple measurements for multiple samples of a part – to Excel and create SPC there.

CAN YOU EXPORT DATA TO A DATABASE CUMULATIVELY FOR TRENDING ANALYSIS

A: Unfortunately we currently do not have a way to do this automatically. You can export your project as an XML file however, so with some programming it might be possible to do exactly what you want.

HAS SOLIDWORKS ADDED ANY NEW FEATURES OR CAPABILITIES SINCE THIS PRODUCT WAS INSPECTIONXPRT? IF AN INSPECTION REPORT IS CREATED IN THE ADD-IN PRODUCT, CAN A USER IN THE QC DEPT. USE THE STAND-ALONE PRODUCT TO FILL IN THE INSPECTION DATA, SIMILAR TO WHAT YOU SHOWED IN THE ADD-IN VERSION?

A: Apart from making it available on SOLIDWORKS SNL, nothing else yet but we have a lot of new things planned for 2015. What you are asking in your second question is something we are working on and hope to have ready for 2015.

DOES IT WORK WITH SCANNED DRAWING?

A: Yes, as long as the quality is descent.

CAN YOU DISTINGUISH BETWEEN CRITICAL AND MAJOR DIMENSIONS? MAYBE WITH DIFFERENT SYMBOLS ON THE SAME PAGE?

A: you can but it will be a manual process (i.e. selecting multiple balloons and changing the shape) and only in the standalone. In the add-in you could change the color of the balloons.

CAN THE PRODUCT CALCULATE CP AND CPK VALUES FOR INSPECTION DATA?

A: This is currently not possible.

CUSTOMIZE HEADER AND FOOTER FOR REPORTS WITH COMPANY LOGO AND FORMATS?

A: Yes. You can completely customize the Export templates.

CAN YOU CREATE MULTIPLE BALLOON LAYERS WITH DIFFERENT DIMENSIONS? IS THE DATA ALWAYS STORED / EXPORTED AS AN EXCEL FILE? WILL A PARTICULAR PRINT REMEMBER THE PREVIOUS EXCEL FILE (FOR USE AS A FOLLOW UP MEASUREMENT SERIES).

A: You can have multiple balloon layers with different dimensions but it will need to be done manually (meaning manually selecting multiple balloons and changing their layer). The data is stored in the drawing. If you re-export to Excel you can overwrite (or not) the previously created excel file that's in the same folder.

CAN WE USE INSPECTION TO CREATE A QA REPORT THAT GOES TO CUSTOMER ALONG WITH PART FOR CRITICAL TIGHT TOLERANCE PARTS?

A: I will need to see an example to give you a definitive answer but since you can completely customize the reports, I would say Yes.

CAN FILES BE UPDATED FROM DIFFERENT INPUTS, LIKE OPERATOR ON THE FLOOR THEN INSPECTORS IN QUALITY?

A: If the projects are stored in a central location like a server, then no problem.

CAN WE DO STATISTICAL CALCULATIONS ON MULTIPLE SAMPLES (N=3 OR N=10)?

A: No. Not at this point.

CAN WE PUT THE DATA INTO CONTROL CHARTS (XBAR R FOR EXAMPLE)?

A: Not directly. You would have to export the results in Excel and create the control charts in Excel.