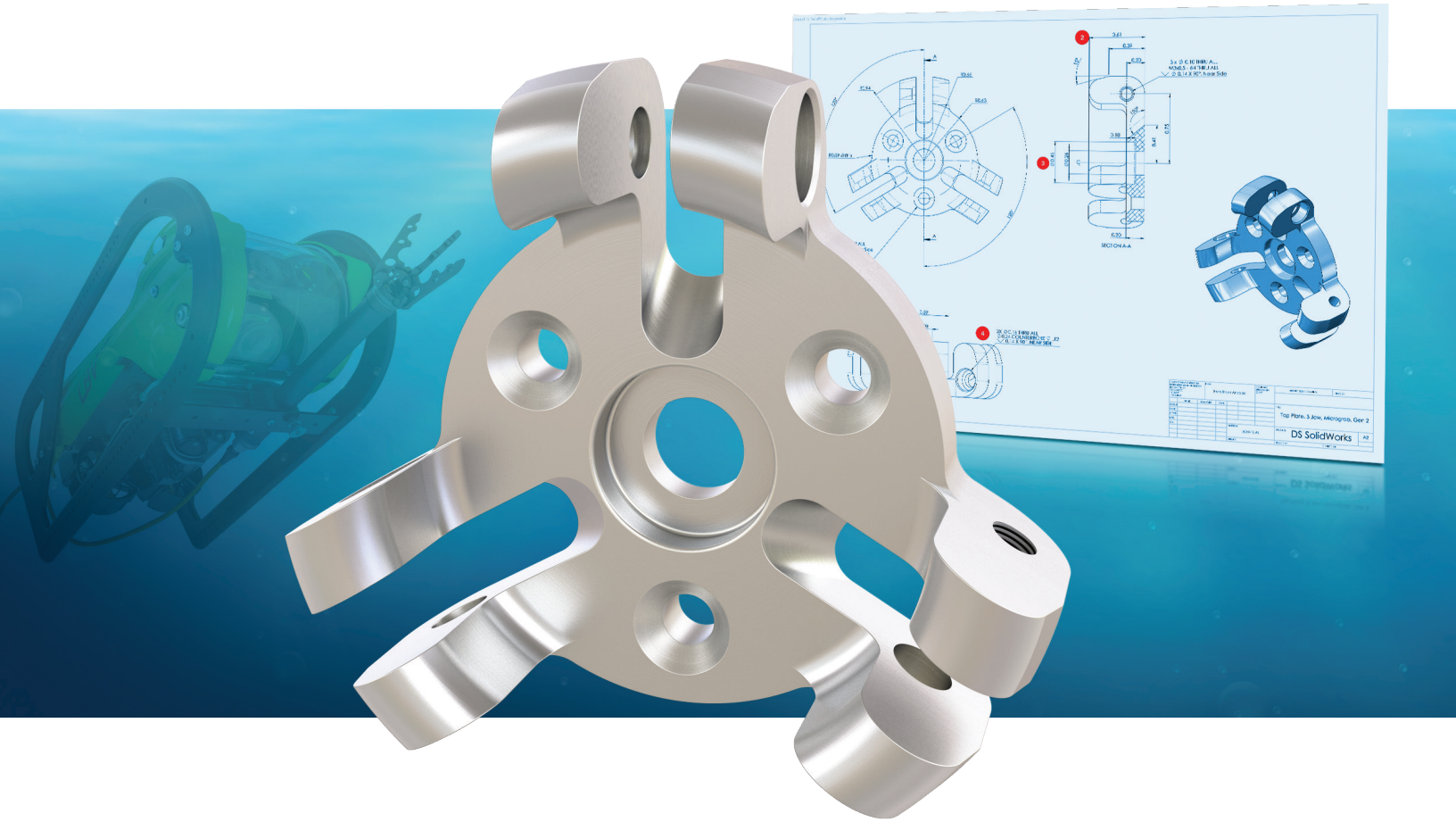
DASSAULT SYSTEMES

SOLIDSOLUTIONS
SUPPORTING EXCELLENCE

SOLIDWORKS

SOLIDWORKS INSPECTION

AUTOMATED CREATION OF INSPECTION DRAWINGS AND REPORTS



SIMPLIFY DOCUMENT CREATION TO HELP STREAMLINE PART INSPECTION AND IMPROVE QUALITY

Your commitment to quality should not negatively impact your business. You could waste hours every day manually creating documentation for quality inspection. SOLIDWORKS® Inspection helps simplify the process of creating inspection documents and performing in-process or receiving inspection.

Intuitive and easy-to-use, SOLIDWORKS Inspection helps streamline the creation of documents with balloon callouts and specifications by leveraging existing 2D legacy data regardless of file type—SOLIDWORKS files, PDFs, or TIFFs—and automating a manual and tedious process. Measured inspection values can be entered directly, either manually or automatically, using a digital measuring instrument (such as a USB caliper). SOLIDWORKS Inspection helps designers and quality inspectors virtually eliminate errors, improve time-to-market, and ensure parts are within specifications for improved quality and optimized fit and function.

STREAMLINE YOUR QUALITY INSPECTION PROCESSES

Company quality departments are tasked with carrying out the quality inspection process. This often involves the creation of documents such as drawings with balloon callouts, reports for use during inspection, or additional deliverables required with parts.

This time consuming task is usually the responsibility of designers, engineers, and quality inspectors who can spend hours every day manually creating all these documents. Hundreds of characteristics, dimensions, tolerances, and notes have to be manually entered into a Microsoft® Excel® spreadsheet.

In addition, this redundant process is prone to human transcription error that can be costly over time or even jeopardize your quality commitments and certifications.

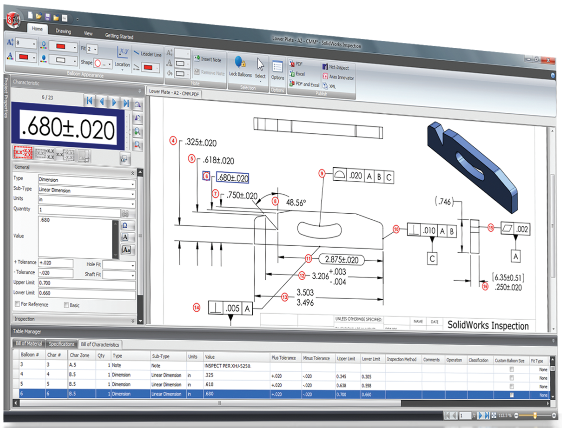
Any changes to the model by an engineer or customer can cause drawing revisions that require quality inspectors to redo the work and input all the characteristics again.

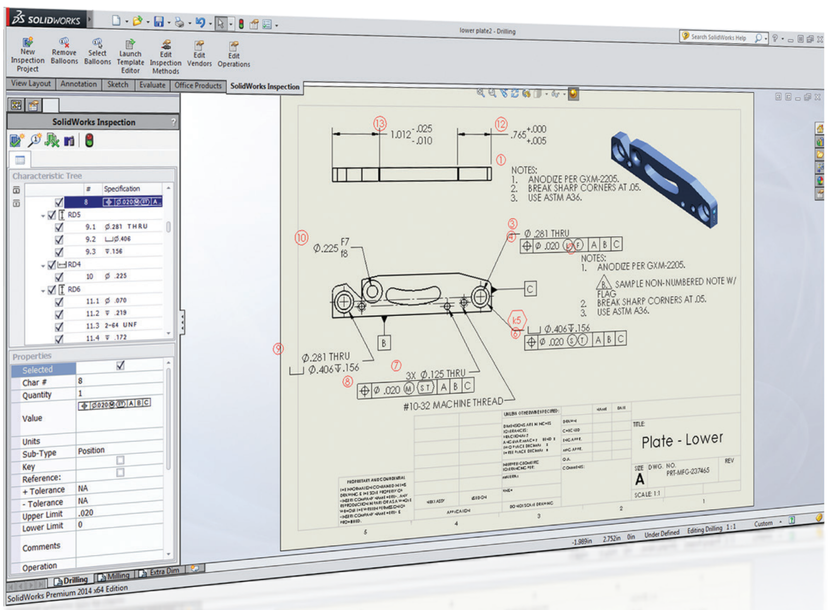
SOLIDWORKS Inspection streamlines your inspection processes by automating the creation of balloons on engineering drawings, and the creation of inspection data sheets and reports. Sequentially numbered balloons are applied automatically to help you keep track of the dimensions and characteristics to inspect. Accurate bubbled prints and inspection sheets are generated in just minutes. With SOLIDWORKS Inspection, companies have reduced the time to create First Article Inspection packages by up to 90 percent.

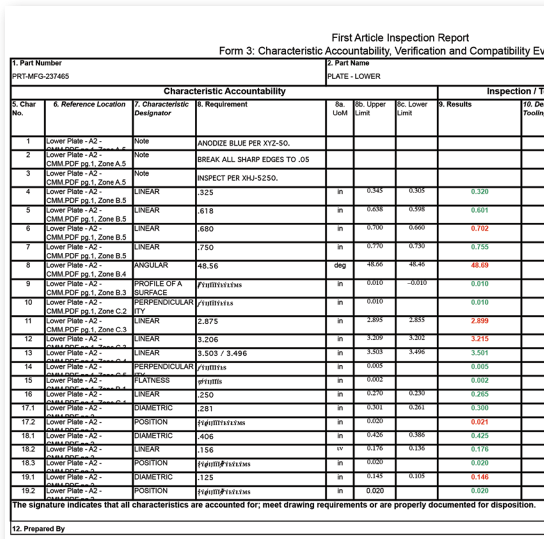
OPTICAL CHARACTER RECOGNITION (OCR)

In many companies, engineering drawings arrive in PDF or TIFF formats. In these cases SOLIDWORKS Inspection uses optical character recognition (OCR) to read and identify the nominal dimension, plus and minus tolerances, and the type of dimension (such as diametric or linear), helping to virtually eliminate manual input and reduce errors. It works with horizontal and vertical dimensions, split dimensions, notes, hole callouts, finish symbols, and geometric dimensioning and tolerancing (GD&T) symbols.

This means you can create your inspection documents regardless of your existing CAD system using the included standalone version of SOLIDWORKS Inspection.







First Article Inspection Report

Form 3: Characteristic Accountability, Verification and Compatibility Ev

1. Part Number	2. Part Name
PRT-MFG-237465	PLATE - LOWER

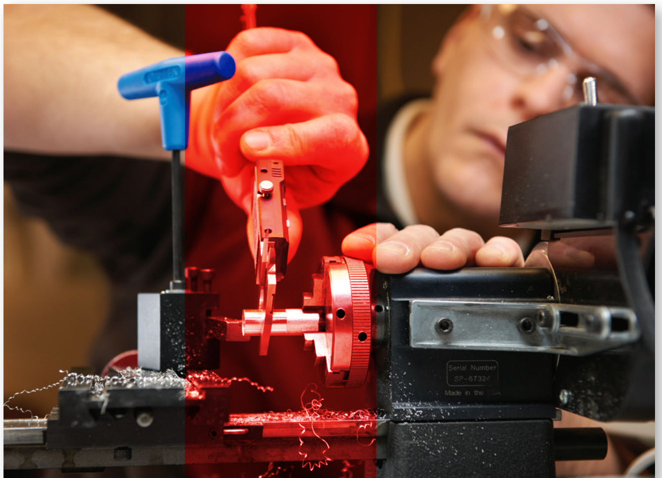
Characteristic Accountability							Inspection / T	
5. Char No.	6. Reference Location	7. Characteristic Designator	8. Requirement	8a. UoM	8b. Upper Limit	8c. Lower Limit	9. Results	10. De Toolin
1	Lower Plate - A2 -	Note	ANODIZE BLUE PER XYZ-50.					
2	Lower Plate - A2 - CMM.PDF pg.1, Zone A.5	Note	BREAK ALL SHARP EDGES TO .05					
3	Lower Plate - A2 - CMM.PDF pg.1, Zone A.5	Note	INSPECT PER XHJ-5250.					
4	Lower Plate - A2 - CMM.PDF pg.1, Zone B.5	LINEAR	.325	in	0.345	0.305	0.320	
5	Lower Plate - A2 - CMM.PDF pg.1, Zone B.5	LINEAR	.618	in	0.638	0.598	0.601	
6	Lower Plate - A2 - CMM.PDF pg.1, Zone B.5	LINEAR	.680	in	0.700	0.660	0.702	
7	Lower Plate - A2 - CMM.PDF pg.1, Zone B.5	LINEAR	.750	in	0.770	0.730	0.755	
8	Lower Plate - A2 - CMM.PDF pg.1, Zone B.4	ANGULAR	48.56	deg	48.66	48.46	48.69	
9	Lower Plate - A2 - CMM.PDF pg.1, Zone B.3	PROFILE OF A SURFACE	[illegible]	in	0.010	-0.010	0.010	
10	Lower Plate - A2 - CMM.PDF pg.1, Zone C.2	PERPENDICULARITY	[illegible]	in	0.010		0.010	
11	Lower Plate - A2 - CMM.PDF pg.1, Zone C.3	LINEAR	2.875	in	2.895	2.855	2.899	
12	Lower Plate - A2 -	LINEAR	3.206	in	3.209	3.202	3.215	
13	Lower Plate - A2 -	LINEAR	3.503 / 3.496	in	3.503	3.496	3.501	
14	Lower Plate - A2 -	PERPENDICULAR	[illegible]	in	0.005		0.005	
15	Lower Plate - A2 -	FLATNESS	[illegible]	in	0.002		0.002	
16	Lower Plate - A2 -	LINEAR	.250	in	0.270	0.230	0.265	
17.1	Lower Plate - A2 -	DIAMETRIC	.281	in	0.301	0.261	0.300	
17.2	Lower Plate - A2 -	POSITION	[illegible]	in	0.020		0.021	
18.1	Lower Plate - A2 -	DIAMETRIC	.406	in	0.426	0.386	0.425	
18.2	Lower Plate - A2 -	LINEAR	.156	ιν	0.176	0.136	0.176	
18.3	Lower Plate - A2 -	POSITION	[illegible]	in	0.020		0.020	
19.1	Lower Plate - A2 -	DIAMETRIC	.125	in	0.145	0.105	0.146	
19.2	Lower Plate - A2 -	POSITION	[illegible]	in	0.020		0.020	

The signature indicates that all characteristics are accounted for; meet drawing requirements or are properly documented for disposition.

12. Prepared By

“With SOLIDWORKS Inspection at the most it would take us five minutes to create an inspection sheet. Without the software, it would have taken a technician one day to create that same inspection sheet.”

— PBC Linear



SOLIDWORKS Inspection provides flexibility by allowing quality engineers and inspectors to directly type in measured values, use a digital caliper, or import results from a coordinate measuring machine (CMM).

REDUCE TIME-TO-MARKET

SOLIDWORKS Inspection helps drastically reduce the time needed to generate inspection reports. In just a few clicks, you can create industry-compliant inspection reports (such as AS9102, PPAP, ISO 13485) or use the powerful template editor to develop a report that matches your company’s needs.

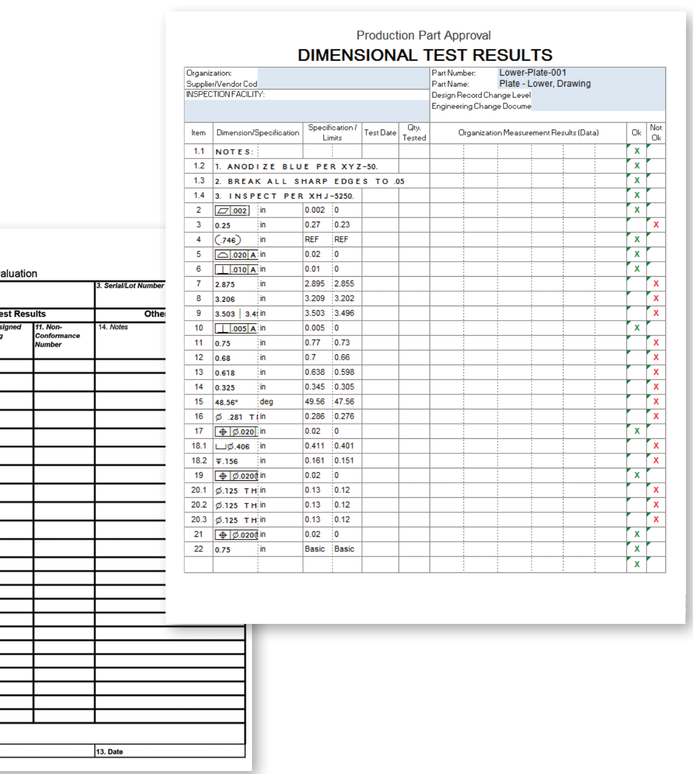
In addition, SOLIDWORKS Inspection helps avoid errors and inconsistencies traditionally associated with manual data input.

You can save time, lower costs, and win more business by eliminating the bottlenecks in quality inspection and increasing throughput in manufacturing.

HELP IMPROVE PRODUCT QUALITY AND SAVE MONEY

Inspection documents can help your company significantly improve its manufacturing processes, reduce scrap, cut time-to-market, and improve product quality and reliability.

Because SOLIDWORKS Inspection is easy to use, integrated with SOLIDWORKS CAD, and available as a standalone application to work with your existing CAD system, you can easily deploy it, train your quality department, and start to optimize your inspection and quality processes.



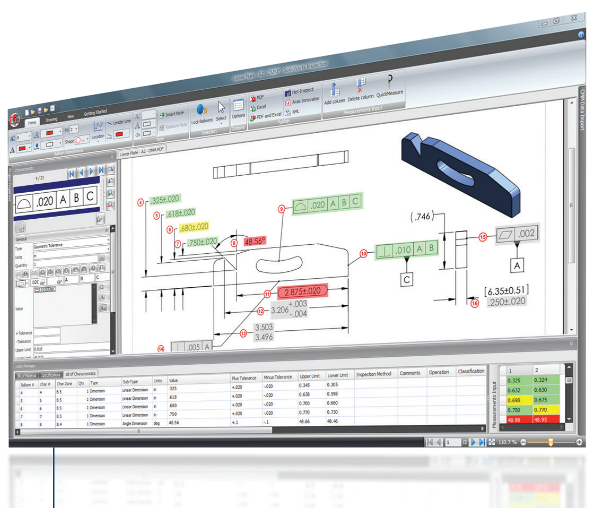
Production Part Approval

DIMENSIONAL TEST RESULTS

Organization:
Supplier/Vendor Cod
INSPECTION FACILITY:

Part Number: Lower-Plate-001
Part Name: Plate - Lower, Drawing
Design Record Change Level
Engineering Change Docume

Item	Dimension/Specification		Specification / Limits		Test Date	Qty. Tested	Organization Measurement Results (Data)	Ok	Not Ok
1.1	NOTES:							X	
1.2	1. ANODIZE BLUE PER XYZ-50.							X	
1.3	2. BREAK ALL SHARP EDGES TO .05							X	
1.4	3. INSPECT PER XHJ-5250.							X	
2	⏥ .002	in	0.002	0				X	
3	0.25	in	0.27	0.23					X
4	(.746)	in	REF	REF				X	
5	⌓ .020 A	in	0.02	0				X	
6	⊥ .010 A	in	0.01	0				X	
7	2.875	in	2.895	2.855					X
8	3.206	in	3.209	3.202					X
9	3.503 | 3.4	in	3.503	3.496					X
10	⊥ .005 A	in	0.005	0				X	
11	0.75	in	0.77	0.73					X
12	0.68	in	0.7	0.66					X
13	0.618	in	0.638	0.598					X
14	0.325	in	0.345	0.305					X
15	48.56°	deg	49.56	47.56					X
16	⌀ .281 T	in	0.286	0.276					X
17	⌖ ⌀.020	in	0.02	0				X	
18.1	⌴⌀.406	in	0.411	0.401					X
18.2	↧.156	in	0.161	0.151					X
19	⌖ ⌀.020	in	0.02	0				X	
20.1	⌀.125 TH	in	0.13	0.12					X
20.2	⌀.125 TH	in	0.13	0.12					X
20.3	⌀.125 TH	in	0.13	0.12					X
21	⌖ ⌀.020	in	0.02	0				X	
22	0.75	in	Basic	Basic				X	
								X	



Characteristics are automatically highlighted in green, red, or yellow to instantly show which are in tolerance, out of tolerance, or marginally within tolerance.

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SOLIDWORKS INSPECTION MATRIX

	SOLIDWORKS INSPECTION STANDARD	SOLIDWORKS INSPECTION PROFESSIONAL
SOLIDWORKS INSPECTION ADD-IN		
SOLIDWORKS Embedded Add-in	■	■
SOLIDWORKS Drawing Native File Support	■	■
Automatic Balloon Creation	■	■
Balloon Creation of Inspection Dimension Only	■	■
Advanced Filtering Capabilities	■	■
Balloon Formating	■	■
Drawing Revisions	■	■
User Defined Inspection Methods and Processes	■	■
Quality Sampling Plans	■	■
SOLIDWORKS INSPECTION STANDALONE APPLICATION		
Standalone Application	■	■
PDF and TIFF Files Support (.pdf, .tif, .tiff)	■	■
Searchable Text Recognition	■	■
Optical Character Recognition (OCR)	■	■
Customisable Recognition Engine	■	■
Selective Recapture	■	■
Nominal Value and Plus/Minus Tolerances	■	■
Vertical and Rotated Dimensions	■	■
Bilateral Default Tolerances	■	■
Plus/Plus and Minus/Minus Tolerance	■	■
Upper and Lower Limits Calculation	■	■
Note, GD&T, and Finish Symbols	■	■
Automatic Balloon Creation of Captured Characteristics	■	■
Multi-page Drawing Support	■	■
Multiple Drawings per Project	■	■
Compare Drawing Revisions	■	■
Customisable Grid	■	■
QUALITY SYSTEMS INTEGRATION		
Export to XML	■	■

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SOLIDWORKS INSPECTION MATRIX

	SOLIDWORKS INSPECTION STANDARD	SOLIDWORKS INSPECTION PROFESSIONAL
REPORT GENERATION		
Export Ballooned Drawing to PDF	■	■
Export Inspection Report to Microsoft® Excel®	■	■
Template Editor	■	■
Pre-defined Industry Standard Templates (AS9102, PPAP, etc.)	■	■
RESULTS INPUT		
Characteristics Measurements Input		■
Digital Measuring Tools Support (Digital Caliper, etc.)		■
CMM Data Import (PC-DMIS, Calypso, Faro CAM2, etc.)		■
CMM Template Editor		■
Color-Coded Characteristics (Pass, Marginal, Fail)		■
Export Measurements		■

SOLIDWORKS PRODUCT DEVELOPMENT SOLUTION

SOLIDWORKS software provides users with an intuitive 3D development environment that helps maximize the productivity of your design and engineering resources to create better products faster, and more cost-effectively. See the full range of SOLIDWORKS solutions for design, simulation, technical communication, and data management at **www.solidworks.com/products2015**.

SYSTEM REQUIREMENTS

- Windows® 7 (preferably x64) or Windows 8
- 2 GB RAM minimum (8 to 16 GB RAM recommended)
- 50 GB disk space free (minimum)
- SOLIDWORKS-Certified graphics card
- Intel® or AMD® processor (4 to 8 cores recommended)
- Broadband Internet connection
- Microsoft Excel and Word (for reporting and exporting)

For additional details, visit www.solidworks.com/systemrequirements.

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London | Kent | Dublin | Belfast
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