

Digital Product Definition / Model Based Definition Checklist (Appendix F)

INCLUDE DPD/MBD MANUAL AND ALL SUPPORTING DOCUMENTS

INCLUDE CURRENT CALIBRATION CERTIFICATION FOR ALL CMS EQUIPMENT I.E. CMM, ARM

INCLUDE EVIDENCE OF CURRENT CAD/CAM/CMS REVISION LEVELS

SUPPLIER: _____ **REPRESENTATIVE:** _____ **DATE:** _____

Assessment Question				Supplier Supporting Documents	Comment / Finding
A.	Digital Product Definition (DPD):	Y	N	N/A	
1.	Are there DPD documented processes or procedures that address all sections of Boeing D6-51991, Spirit MAA1-10009, and Triumph SQR-004?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.	Is there a flow diagram of the complete documented DPD processes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Is there a requirement in the suppliers documented processes to notify customer within 30 days of any changes or at a minimum annually if no changes occur.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Are documented DPD processes implemented with defined authority for change control & maintenance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Is there a process to ensure integrity and security of data-sets from receipt throughout the manufacturing and acceptance processes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Does the supplier have a process to control configuration of dataset derivative media?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Are dataset derivatives traceable back to the current authority dataset?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8.	Does the planning package identify traceability to the current authority dataset?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9.	Does the supplier have a change control process for dataset derivative media?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10.	Does the supplier have a process that includes control of non-current (obsolete) authority datasets and dataset derivatives?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11.	Does the internal quality audits procedure include auditing or reviewing all internal and sub-tier operations for DPD data and related documentation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12.	Does the documented procedure for corrective action include reporting, tracking and resolving hardware, software and dataset integrity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13.	Does the supplier have a process to assess, monitor and control sub-tier compliance with DPD requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14.	Does supplier QA organization have responsibility for approval of all inspection media?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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15.	Does the supplier have a documented process to create inspection media from a 3D model in addition to the 2D drawing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
16.	Is there a process in place to document FAI's for product produced from authority datasets?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
17.	Does the supplier document the current level of hardware configuration, software, software revisions and other digital system information required to maintain compatibility with Trinity supplied datasets?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
18.	Does the supplier verify dataset translations when a supplier translates Trinity datasets from their as received format into their manufacturing or inspection software?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
19.	Does the supplier define training requirements that: <ul style="list-style-type: none"> • Assure competence and maintain employee training records, including on-the-job-training, for all DPD system users. • Respond to changes to the DPD process, equipment, or software? 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
B.	Model Based Definition (MBD): Contact DPD focal of site sending MBD data for assistance.	Y	N	N/A	Supplier Supporting Documents	Comment / Finding
1.	Does the supplier's CAD system have the ability to view embedded CATIA annotation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
2.	Does the supplier have a documented process to create inspection media from a 3D MBD model?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
3.	Does the supplier have a process to ensure verification of all design requirements of the authority dataset? (e.g., all defined by feature control frames, annotation, specifications, notes and other specified requirements in the authority DPD dataset and associated parts list including dimensional and other properties)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
4.	Is there a process in place to document FAI's for product produced from MBD datasets?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
5.	Does the supplier have a process to assure sub-tier suppliers' ability to work with MBD information?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
6.	Has the supplier identified specific training requirements for all functions associated with use and control of MBD datasets? (e.g. planning, purchasing, contract review, Mfg, and inspection?)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
C.	Coordinate Measuring Systems (CMS):	Y	N	N/A	Supplier Supporting Documents	Comment / Finding
1.	Does the supplier use CMS equipment for Tooling and/or Product acceptance? (Check all that apply):	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	Articulating Arm - Portable Coordinate Measuring Machine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

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	Digital Theodolite	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	Fixed Coordinate Measurement Machine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	Fixed Scanning Coordinate Measurement Machine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	Indoor Global Positioning System	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	Laser Projectors - Optical Layout Template	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	Laser Radar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	Laser Scanner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	Laser Tracker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	Numerical Control Machine Inspection using probes or scanners.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	Photo or Video-grammetry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
2.	Does the supplier have a process to control critical functions of the CMS?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
3.	Does the supplier maintain certification/calibration for equipment used for inspection, including: <ul style="list-style-type: none"> • CMS equipment (Fixed and Portable): • NC equipment with inspection probe capability used for product acceptance • OLT's • Ply Cutters • Other equipment used to accept part attributes (Scale bar, adaptive tooling, ball bars, etc.) 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Please include current calibration certificate.
4.	Is there a process in place to validate Product Acceptance Software (PAS) independent of the software developer?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
5.	Does the supplier develop software for inspection and acceptance of product? <ul style="list-style-type: none"> • Is there a documented process to require creation of plans and instructions for the building, configuration management, loading and 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

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	testing of "Supplier developed" product acceptance software?					
6.	Does the supplier define training requirements that: <ul style="list-style-type: none"> • Assure competence and maintain employee training records, including on-the-job-training, for all CMS system users. • Respond to changes to the CMS process, equipment, or software? 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Please include current training record of inspection personnel for CMS requirements i.e. John Doe was trained on Romer Arm with PC-DMIS 2015 on 9/25/2015.
D.	Plotter:	Y	N	N/A	Supplier Supporting Documents	Comment / Finding
1.	Are there documented processes for the control of Mylar plots used as a media of inspection? Those procedures shall include at a minimum the following: <ul style="list-style-type: none"> • Plotter Calibration • Verification of engineering definition • Verification of plot accuracy • Quality Acceptance Stamping • Verify Acceptance Stamping • Verify accuracy prior to use • Verify Mylar Handling • Verify Mylar Storage 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
2.	Does the supplier define training requirements that: <ul style="list-style-type: none"> • Assure competence and maintain employee training records, including on-the-job-training, for all system users. • Respond to changes to the Plotter process, equipment, or software? 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
General Notes: (process limitations, findings, conclusions, etc.)						

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