Centra DPD/MBD, CMS and Plotter Checklist

Supplier Name:	
Supplier Representative:	
Date:	

A.	Digital Product Definition (DPD):	Y	N	N/A	Supplier Supporting	Comment / Finding
A1	Are there DPD documented processes or procedures that address all sections of D6-51991?					
A2	Is there a flow diagram of the complete documented DPD processes?					
A3	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.					
A4	Are documented DPD processes implemented with defined authority for change control & maintenance?					
A5	Is there a process to ensure integrity and security of data-sets from receipt throughout the manufacturing and acceptance processes?					
A6	Does the supplier have a process to control configuration of dataset derivative media?					
A7	Are dataset derivatives traceable back to the current authority dataset?					
A8	Does the planning package identify traceability to the current authority dataset?					
A9	Does the supplier have a change control process for dataset derivative media?					
A10	Does the supplier have a process that includes control of non-current (obsolete) authority datasets and dataset derivatives?					
A11	If providing Type Design or Tool Design to Centra, does the supplier have a documented process for design and development?					
A12	Does internal quality audits procedure include auditing or reviewing all internal and sub-tier operations for DPD data and related documentation?					

QA-050 -Rev. A

A13	Does the supplier's documented procedure for corrective action include reporting, tracking and resolving hardware, software and dataset integrity (Including Centra provided datasets)?				
A14	Does the supplier have a process to assess, monitor and control sub-tier compliance with DPD requirements?				
A15	Does supplier QA organization have responsibility for approval of all inspection media?				
A16	Does the supplier have a documented process to create inspection media from a 3D model in addition to the 2D drawing?				
A17	Is there a process in place to document FAI's for product produced from authority datasets?				
A18	Does the supplier document the current level of hardware configuration, software, software revisions and other digital system information (e.g. PTF(s), project files) required to maintain compatibility with Centra supplied datasets and/or data exchange formats per applicable Centra system(s) requirement documents?				
A19	Does the supplier verify dataset translations when a supplier translates Centra authority datasets from their as received format into their manufacturing or inspection software?				
A20	Does the supplier ensure that when Tool Design responsibility is flowed down to sub tier suppliers that the sub-tier supplier is approved by the supplier?				
A21	Does the supplier have a documented process to ensure release, acceptance, identification, security, access and change control for: • Tool design datasets • Tool Inspection datasets				
A22	Are digitally defined special tools and physical inspection media (check fixtures, templates, etc.) identified and traceable to the authority tool design dataset?				

QA-050 -Rev. A

		Y	N	N/A	Supplier Supporting Documents	Comment / Finding SER/ANCAR#
A23	Are special tools and tooling media accepted and periodically validated to the authority design at a frequency determined to ensure accuracy and repeatability?					
A24	Does the supplier define training requirements that: • 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?					
B.	**Model Based Definition (MBD):** Contact DPD focal of site sending MBD data for assistance.	Y	N	N/A	**Supplier Supporting Documents**	**Comment / Finding** **SER/ANCAR#**
B1	Does the supplier's CAD system have the ability to view annotation based on Centra site-specific requirements?					
B2	Does the supplier have a documented process to create inspection media from a 3D MBD model?					
B3	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)					
B4	Is there a process in place to document FAI's for product produced from MBD datasets?					
B5	Does the supplier have a process to assure sub-tier suppliers' ability to work with MBD information?					
B6	Has the supplier identified specific training requirements for all functions associated with use and control of MBD datasets? (e.g. planning, purchasing, contract review and Mfg?					

QA-050 -Rev. A

Centra DPD/MBD, CMS and Plotter Checklist

C.	Coordinate Measuring Systems (CMS):	Y	N	N/A	Supplier Supporting Documents	Comment / Finding SER/ANCAR#
C1	Does the supplier use CMS equipment for Tooling and/or Product acceptance? (Check all that apply):					
C1.1	Articulating Arm - Portable Coordinate Measuring Machine					
C1.2	Digital Theodolite					
C1.3	Fixed Coordinate Measurement Machine					
C1.4	Fixed Scanning Coordinate Measurement Machine					
C1.5	Indoor Global Positioning System					
C1.6	Laser Projectors - Optical Layout Template					
C1.7	Laser Radar					
C1.8	Laser Scanner					
C1.9	Laser Tracker					
C1.10	Numerical Control Machine Inspection using probes or scanners.					
C1.11	Photo or Video-grammetry					
C1.12	Other					
C2	Does the supplier have a process to control critical functions of the CMS?					

QA-050 -Rev. A

C3	Does the supplier maintain certification/calibration for equipment used for inspection, including: • 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.)				
C4	Is there a process in place to validate Product Acceptance Software (PAS) independent of the software developer?				
C5	Does the supplier develop software for inspection and acceptance of product? • Is there a documented process to require creation of plans and instructions for the building, configuration management, loading and testing of "Supplier developed" product acceptance software?				
C6	Does the supplier define training requirements that: •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?				

Centra DPD/MBD, CMS and Plotter Checklist

D.	Plotter:	Y	N	N/A	Supplier Supporting Documents	Comment / Finding SER/ANCAR#
D1	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: • Plotter Calibration • Verification of engineering definition • Verification of plot accuracy • Quality Acceptance Stamping • Verify accuracy prior to use					
D2	Does the supplier define training requirements that: • 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?					

Sign Here

_____   _____
Rep signature   **Date:**