

BDS Terms and Conditions

Clause Number: Q033

Effective: 02/03/2022

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BDS BAC5114 NC PROGRAMMING AND MACHINE CONTROLS SPECIFICATIONS - CONTRACTUAL AND PROCESS CONTROL REQUIREMENTS

The product/parts on this Contract must comply with all BAC5114 process control requirements.

Prior to contract award:

- Tier 1 Seller/Processor must have completed a technical and process control capability assessment with Buyer's Supplier Management, Engineering and Supplier Quality using the BAC5114 Capability Assessment Checklist before the contract award. If the assessment was not completed contact Buyer's Authorized Procurement Representative to have the assessment scheduled before the start of part production planning.

During part production planning and prior to the start of manufacturing activities:

- Tier 1 Seller/Processor must validate BAC5114 process control requirements by using the BAC5114 Execution Checklist during initial part production planning.
 - The completed checklist and all quality records/documentation (e.g., procedures, evidence of technical conformance, dimensional evidence of compliance or an industry recognized inspection plan, etc.) must be available for Buyer review.
 - Any gaps in acceptable quality records/documentation must be corrected and closed prior to the start of manufacturing activities. Any exceptions must be identified and coordinated with Buyer's Supplier Quality and Authorized Procurement Representatives.
- Tier 1 Seller/Processor must have a Statistical Product Acceptance Plan per the following:

Seller shall perform 100% inspection for in-process and final inspection, or Seller shall conform to requirements of document AS9138 "Aerospace Series – Quality Management Systems Statistical Product Acceptance Requirements" as may be amended from time to time. With the exception noted herein Seller's statistical sampling procedure/plan conformance to AS9138 with minimum protection levels meeting SAE AS9138 Table A1 and C=0 will constitute Boeing Quality approval subject to restrictions noted in AS9138, Section 4.3 Safety/Critical Characteristics, and part/product Design Data sampling requirements and/or prohibitions.

- The verification plan (e.g. an inspection/witness plan) must be available for Buyer review.

During manufacturing activity:

- For product/parts that specify masking in accordance with PS20722 - HOLE MASKING FOR ENHANCED PROCESS CONTROLLED METALLIC PARTS on the Product Definition Data (PDD), Tier 1 Seller/Processor must do the following:

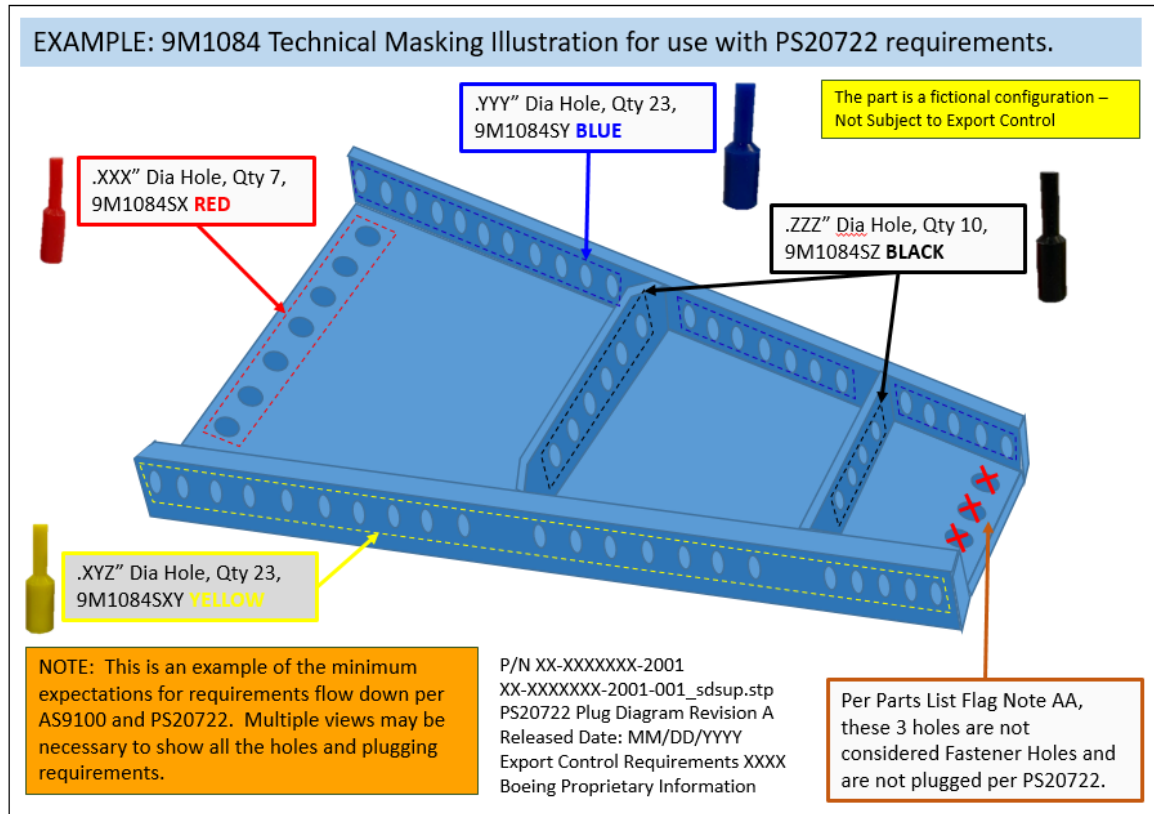
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- Use a Processor/Sub-Tier Chemical Processor (Sub-Tier CP) who is listed on the latest revision of the PS20722QPL (Qualified Producer List).
 - NOTE: The PS20722QPL can be accessed from the supplier portal (i.e. the same Boeing system the PS20722 specification is accessed, scroll down to the QPL).
- Tier 1 Seller/Processor must make a part-specific detailed 9M1084 technical masking illustration, such as a plug-color-coded-part-illustration, road-map, derivative data drawing/illustration, or similar (see the example technical-illustration below). The 9M1084 technical masking illustration must have at a minimum the following information (supports AS9100 Sec 8.4 and similar internationally recognized Quality Management System standard):
 - The hole diameters and their locations on the part
 - The quantities of each hole size
 - The 9M1084 plug to be used for the hole diameters
 - Other necessary plugging requirements and/or exclusions from the Product Data Definition (PDD)
 - The Buyer's part-model number, revision, and Tier 1 Seller/Processor's revision control number and release date
 - Appropriate export control requirements
 - "Boeing Proprietary Information"
- When using a Sub-Tier CP, the Seller/Processor must give to the Sub-Tier CP the 9M1084 technical masking illustration before the start of any PS20722 plugging operations.
- The 9M1084 technical masking illustration must be available for review by Buyer upon request.
- Tier 1 Seller/Processor must do at a minimum an in-process desk-top inspection and approval of the PS20722 photograph(s) for compliance to the requirements before the part continues the Non-Destructive Test (NDT) and/or chemical process operation(s).
 - In the Tier 1 Seller/Processor manufacturing planning (e.g. work-order or in-process inspection plan) there must be a buy-off for the desk-top inspection of the PS20722 photograph(s).



End item verification activities:

Tier 1 Seller/Processor must use and complete the manufacturing and verification planning specified per this quality clause to meet the BAC5114 process control requirements.

Tier 1 Seller/Processor supplying product/parts in conformance with the BAC5114 Specification will be assessed by the Buyer to confirm continued compliance to the requirements at intervals selected by the Buyer. All manufacturing and quality records/documentation must be available for Buyer review.