

This document establishes responsibilities of suppliers for procuring, manufacturing and handling of heritage McDonnell Douglas (MD) Product special tooling. It further establishes requirements for records and reports related to the maintenance and disposition of these tools.

1.0 DEFINITIONS

1.1 Special Tooling

All jigs, dies, fixtures, molds, patterns, taps, gauges, other equipment and manufacturing aids, all components of these items, and replacement of these items, that are of such a specialized nature that without substantial modification or alteration their use is limited to the development or production of particular supplies or parts thereof, or performing of particular services. The term does not include:

- a. material.
- b. special test equipment.
- c. facilities (except foundations and similar improvements necessary for installing of special tooling), general or special machine tools, or similar capital items.
- d. any item acquired by the supplier before the effective date of this Purchase Order/Contract or replacement of such items, whether or not altered or adapted for use in performing this Purchase Order/Contract, or items specifically excluded by the terms of this Purchase Order/Contract.

1.2 Exceptions

1.2.1 Items of such equipment not considered special tooling and, therefore, are not to be included in tooling quotations are:

- a. **Perishable Tools** – These consist of catalog items readily available on the open market, which because of their size and nature, are considered expendable. Drills, reamers, taps, snap gages, and all types of cutting tools are considered perishable tools even though they are altered for production purposes and may be special in nature, unless they are otherwise determined to be accountable. The supplier is expected to provide all universal shop equipment; these articles are not to be included in tooling quotations.
- b. **Shop Equipment and Durable Tools** – This class consists of plant equipment required for producing tools and parts, such as machines, motors, cranes, utility dollies, hoists, adapters and furniture. It will also include all equipment, instruments, and tools used in manufacturing, operating, constructing, and testing activities that are not classified as "special tooling." The supplier is expected to provide all shop equipment; these articles are not to be included in tooling quotations.
- c. **Use Only Tooling** – This class includes forging and extrusion dies where practice within the industry dictates that the possession shall remain with the supplier. Use only tooling shall be noted separately on tooling quotations even though by reason of supplier retention they do not fall within the definition of accountable tooling. This report, however, is not otherwise concerned with such tooling.

2.0 OWNERSHIP OF SPECIAL TOOLING

2.1 Special tooling either produced hereunder or supplied by Boeing is Boeing property and will be used only for the fabrication of MD heritage parts or assemblies unless otherwise specified by Boeing.

3.0 LIABILITY

3.1 Except to the extent that the supplier may be expressly relieved of liability elsewhere in the Purchase Order/Contract, the supplier assumes all risk of loss or damage to special tooling while in supplier's possession, custody or control, or in the possession, custody or control of his subcontractors. The requirements for these accountability instructions apply equally to all special tools for which the supplier is responsible, regardless of their location. The supplier shall promptly report all cases of loss, damage or destruction of special tooling in his possession or his subcontractors. This provision is in addition to any requirements appearing on Boeing's Purchase Order/Contract.

4.0 SERVICE REQUIREMENTS

- 4.1 The supplier will, upon request, recommend disposition, determine scrap value, credit Boeing with scrap value of special tooling, execute necessary forms related to disposition or movement of special tooling, ship special tooling in accordance with Boeing instructions, provide copies of shipping documents, and rework information.
- 4.2 The supplier will, upon request, promptly review, update, sign, and return copies of any Boeing tool accountability reports submitted to it for processing.

5.0 COMPLIANCE

- 5.1 In event this document is incorporated by Purchase Order Change Advice to an existing Purchase Order/Contract, the supplier shall conform to these requirements within thirty (30) days from the issuance of the Purchase Order Change Advice unless otherwise specified.

6.0 IDENTIFICATION OF SPECIAL TOOLING

- 6.1 Special tooling will be identified according to the Boeing tool identification criteria described herein.
- 6.2 All identifying markings are subject to examination as Boeing deems necessary.
- 6.3 Boeing tool code identification letters and part numbers shall be shown on all inventories, shipping documents, receiving reports, and other records relating to the tool.
- 6.4 Suppliers having an established system of tool identification may use their system as well as the Boeing system as long as the markings of the supplier's system are identified as such. In this event a cross reference must be kept of supplier's numbers and Boeing tool code letters and part numbers.
- 6.5 Special tooling shall be identified as defined in the following Boeing procedures unless otherwise instructed in writing by Boeing:
 - a. D33931-3 "74916 TDS 1, Tool Data Sheet Tool Identification and Control - Supplier"
 - b. D33931-4 "10000 TDS 1 Protective Finish and Contract Colors for Tools"
 - c. C652-10002-TDS1 "Tool Storage Boxes"
 - d. C652-10052-TMD1 "Retainer Installation – Loose Tooling Parts"
- 6.6 All tool rework required by engineering change will be recorded on the tool record at time of rework by indicating the engineering order, drawing revision, or other engineering authorization number or code to which the tool is reworked.
- 6.7 Rework of special tooling due to engineering design changes must be authorized by Boeing Purchase Order or Purchase Order Change Advice.

7.0 TOOL COMPLETION AND ACCEPTANCE

- 7.1 After acceptance by Boeing Quality Control of first production articles produced from each tool (or approval of preproduction casting parts, as applicable), all special tooling under this Purchase Order/Contract is then subject to inspection and acceptance by the Boeing Tooling Representative for verification that tool completion or rework and tool identification are in accordance with Boeing requirements.
- 7.2 Unless instructed otherwise by Boeing, the supplier will submit the tooling invoice as follows rather than submitting the invoice to Boeing Accounts Payable Department:

Submit invoice to Boeing Material Management (Work Transfer Management/Tooling – Tool Engineer), accompanied by:

 - (1) Evidence of conformance on the first acceptable part(s) made by the tooling, except for Major Procurement item tooling.
 - (2) Description of the tool, including the Tool Number and Tool Name as noted on the PO, the PO number, the PO item number, and the unit cost of the tooling.
 - (3) Photograph of the tooling. Exception: A photograph is not required if the Boeing Tooling Representative performs on site inspection of the tooling.

7.3 A Tool Completion Report, Form DAC 26-611, will be completed and approved by the Boeing Tooling Representative, and if requested will be signed by an officer of the supplier, prior to payment of tooling invoice.

8.0 RECORD REQUIREMENTS

- 8.1 The supplier is required to maintain adequate control records of all special tooling including the following:
- a. Control Records listing the tool identification number and ownership code per Boeing Procedure C652-74916-TDS1, the related item part number, tool completion date, last usage date, quantity, unit cost, Boeing Purchase Order/Contract number, and location.
 - b. Accountability transfer from one Purchase Order to another.
 - c. Disposition authority for tools no longer in his possession.
 - d. Boeing packing sheet on which tool was received.
 - e. Manufacturing operational sheets.
- 8.2 For all special tooling recalled to Boeing or transferred to another supplier, the supplier shall furnish, upon request, three (3) copies of complete up-to-date manufacturing operational sheets containing information as follows:
- a. Operations required to fabricate detail part of assembly.
 - b. Special tooling used, identified by MD heritage part numbers and tool code letters.
 - c. Machine identification used with or on which each tool is used.

9.0 HANDLING AND MAINTENANCE

- 9.1 Boeing approval must be obtained prior to producing parts from Boeing special tooling for any party other than Boeing.
- 9.2 All special tooling tools will be maintained in good repair while in the supplier's possession. Major jigs will be given a protective finish to guard against rust. All critical surfaces or edges will be masked and will be treated with an approved rust preventive compound prior to shipping or storage.

10.0 INVENTORY VERIFICATION

- 10.1 Boeing will furnish supplier biennially, two (2) copies of an inventory listing of special tooling, by plant location, as shown in Boeing records. Supplier is required to conduct a physical inventory and verify the listed inventory and return one (1) signed copy to Boeing attaching a statement, when necessary, indicating differences or discrepancies between the Boeing-furnished inventory listing and the supplier's physical inventory.

11.0 DISPOSITION OF SPECIAL TOOLING

- 11.1 All special tooling, either supplied by Boeing, produced or acquired by the supplier, shall be retained or disposed of in accordance with the procedure set forth in the Boeing Purchase Order/Contract under authority of which the tools were furnished, purchased, produced, or otherwise accountable.
- 11.2 All special tooling will be maintained and stored by the supplier until formal disposition instructions are received from Boeing. Under no circumstances shall special tooling be scrapped without prior written authorization from Boeing.
- 11.3 If an engineering change results in a requirement for tool rework, the supplier shall review the tool to determine appropriate action. If the tool cannot be reworked to satisfy both the old and the new configurations, the original tool configuration must be retained if any of the following conditions apply:
- a. The tool is necessary to control a critical dimension that cannot otherwise be maintained.
 - b. The tool is necessary to guarantee interchangeability or replaceability.
 - c. The tool is necessary to produce a part without the use of special machines that are not available.



SUPPLIER ACCOUNTABILITY REQUIREMENTS FOR SPECIAL TOOLING

- 11.4 Whenever possible, the tool should be reworked to produce the new part and retain the capability to produce the replaced part as well. Rework of special tooling furnished by Boeing shall not proceed until authorized by the Boeing Buyer.
- 11.5 When special tooling in the supplier's possession is no longer required, the supplier will submit to Boeing Buyer, formal letter requesting disposition instructions. Special tooling will be dispositioned in accordance with Boeing instructions (i.e., conduct sale, scrap or ship to another facility).
- 11.6 When authorization to scrap special tooling has been received, the supplier will proceed to dispose of same through his approved scrap procedures.
- 11.7 The supplier shall transfer special tooling to another firm or to Boeing only when authorized by the Boeing Buyer. The supplier will list special tooling in accordance with identification criteria described herein, on all shipping documents.