

TOOLING AND GAGING REQUIREMENTS/IDENTIFICATION – Section 20

The following summarizes Powers and Sons LLC processes with respect to any tooling or gaging and Powers and Sons LLC authorized engineering changes to such tooling. It is the responsibility of the tier 1 suppliers to ensure its sub-suppliers comply with these guidelines. All references to tooling apply to gages as well.

- Powers and Sons LLC will buy the first set of perishable tooling designed and considered specific to a Powers and Sons LLC part dimension(s), non-catalog, (i.e., step drills and reamers). However, the supplier will maintain a complete set throughout the program via maintenance and/or replacement by the supplier as a part of the supplier's piece price burden. Any exceptions must be quoted up front and noted on Quote.
- Unique computer software required directly for the production tooling or gaging of the part is considered part of tooling and shall become the property of Powers and Sons LLC. Computer hardware is considered supplier-owned equipment.
- In some cases, tooling may need to be relocated from one supplier to another. During any such tool move, the original supplier is required to keep the tooling in PPAP approved condition. Any changes to the tooling after PPAP, requires an approved Change Request Form from Powers and Sons LLC.
- Parts produced with tooling that have inserts subject to a high rate of wear (i.e., aluminum die castings) that will not provide the program volume, will require a request to Powers and Sons LLC by the parts supplier, for the funds to replace the inserts. This would have to be identified during the quote process.
- Where a part supplier designs, develops or manufactures production tooling or prototype tooling in-house, and the engineering center/tool room is budgeted as a separate profit center, a reasonable profit margin on the cost of design, development, and manufacture of the tools will be allowed. All overhead costs and profit associated with the design and manufacture of special tooling should be included in fully accounted tooling labor rates.
- A Detail Cost Worksheet, on the Tooling Tab, must be filled out prior to a Purchase Order be given to the supplier.
- Powers and Sons LLC does not permit a parts supplier to make a profit on production or prototype tooling designed and manufactured by a tool supplier. Additionally, incremental costs associated with procurement, follow up, etc. are considered to be part of the parts supplier's overhead costs and likewise recovered in the production piece price. Powers and Sons LLC expects that supplier charges actual cost and supplier can supply invoice for outside purchased tools.
- If not used for production, all tooling shall be maintained until request for disposition is submitted and then approved by Powers and Sons LLC in writing. No tooling, under any circumstance, may be disposed of without written authorization from Powers and Sons LLC. Should this occur, then supplier will be responsible to replace the tooling at their expense.

- Tooling PO's are subject to audit. In the event Powers and Sons LLC audits the supplier's tooling cost, it will be necessary to make available supporting documents supporting the costs.
- A tooling audit of all tools at your facility or facilities may be requested at any time. You may be required to send pictures of all Powers and Sons LLC and, or our customer owned tooling at any time. We require you to keep an active list of all of Powers and Sons LLC tools and location.
- We are required as a Tier one supplier to support program and at least 15 years of service, some programs longer. You must agree to maintain the tooling for the program and at least 15 years of service.
- A supplier is not permitted to use Powers and Sons LLC tooling for the manufacture of parts for other customers without the prior written approval by the Powers and Sons LLC Purchasing Manager. A tooling usage agreement must be obtained to authorize such use.

Tooling Cost Breakdown						
Part Number						
Print Revision						
Date						
Prepared by						
Operation Number	# of Stations	Tooling Type	Proposed Build Source	Number of Tools	Dimensions of tools	Weight of tools
Design Costs (A)	Out Side Costs (B)	Material Cost ©	Labor Hours	Hourly Rate	Labor Hours x Hourly Rates (D)	Total Cost (A) + (B) +(C) + (D)
Tooling Capacity						
Net Tooling Capacity						
Based on hours per shift						
Shifts per day						
Days per year						
Tooling Life						
Detailed Tooling Description						

TOOLING & GAGING IDENTIFICATION – Section 20

Supplier Tool/Gaging Tagging / Marking Requirements And Payment Approval Process

Scope: Tooling at Powers And Sons LLC Suppliers' manufacturing sites.

Purpose: Powers and Sons LLC deals with many different customers, each have varying requirements. To address this issue the purchase order for tooling needs to clearly define the marking requirements. If there is any question please contact your buyer for clarification.

The purpose of this document is to concisely comply with the customer requirements to enable payment to Powers and Sons LLC from customer resulting in payments to suppliers. Production/Prototype Tooling owned by Powers and Sons LLC and or Powers and Sons LLC customers and located on the premises our supplier or its vendors must be, and remain, permanently tagged or marked to reflect ownership. Suppliers will have to submit photographic evidence of compliance with the tagging/marking requirements when PPAP is submitted to Powers and Sons LLC. Failure to submit acceptable labels, pictures or information will result in a delay in tooling payment by our customer and therefore to supplier. The exact marking will be on the Purchase Order to buy the described tooling. You may be asked to move forward on tooling prior to the Tooling Number availability on Purchase Order – this must be supplied and added prior to PPAP submission to allow for tooling payment.

Existing Tool Tagging / Marking Requirements

During the operational life of the tool, which includes the production of past-model service parts, the physical tag/marketing must:

- Remain permanently affixed to the tool
- Remain legible
- Be durable in its manufacturing environment
- Not impair the operation of the tool

Any markings by or referring to any person or entity other than our tagging must be limited to the name of the maker of the tool; no additional information, such as the toolmaker's serial number or address, may be shown on the tool.

Specific Requirements

The permanently affixed tag/marketing on the tool must show the following information:

First line: Property of “ ” (Supplied on Purchase Order)

Second line: Tool Order Number - Amendment Number - Line Item Number (Supplied on Purchase Order)

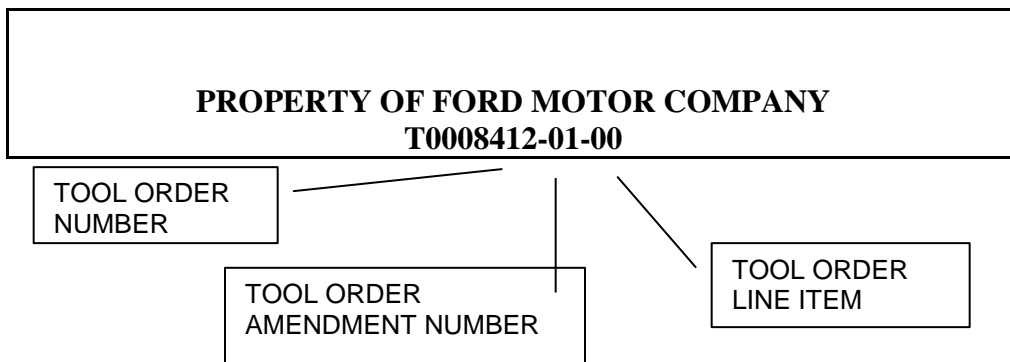
Example of Proper Tool Tag for Ford Motor Company:

Ford Tool Serial Number (Supplied on Purchase Order) – which consists of the following:

Tool Order Number

Tool Order Amendment Number

Tool Order Line Item Number



Note: Only by complying with the above tool tagging/marking requirements and ensuring that there are no prohibited markings on the tool will a Supplier/Powers and Sons be able to answer "yes" to the question on the PSW (Part Submission Warrant), which asks: "Is each Customer Tool properly tagged and numbered?" Example of [Part Submission Warrant](#) attached.

Tooling Photographic Verification Requirement for Payment

Digital photographs:

- 1 – photograph of the entire tool
- 2 – photograph of the tag/marking that clearly and legibly shows all the required Information
- 3 – photograph of equipment tool will be run on
 - Photographs should be in **jpeg** format. Neither photograph should exceed 100 KB (Kilobytes) in file size.

- The file name for each photograph must use the following format:

TOOL ORDER NUMBER-AMENDMENT NUMBER- LINE ITEM
NUMBER_DATE_SUPPLIER MANUFACTURING GSDB SITE CODE_SUPPLIER
SITE NAME_Tag/Tool

For example:

T0008412-01-00_15Jan08_GB861_Acme_Tool.jpg

T0008412-01-00_15Jan08_GB861_Acme_Tag.jpg

The site code and name refer to the location of the tool and the Supplier name associated with the site code.

The date should be shown in the DDMonthYY format used in the example above.

(The month name may be abbreviated or spelled out fully, but must not be replaced by a number.)

The subject line of the email should contain the title of the photograph files, minus the "Tool" or "Tag" suffix. Pictures should be sent, via e-mail to the Program Engineer who requested the tooling. The Engineer's name will be referenced on the Purchase Order. The email must also include the name, email address, and phone number of the Supplier contact person and an alternate with whom Accounting can communicate to resolve any discrepancies or answer any questions about the photographs.

Accounting must verify that the information on the photographs meets the requirements and matches the information on the invoice before it may approve payment of the invoice. In the event a photograph is insufficiently clear or the tag/marking does not meet the requirements, Accounting will notify the Supplier contact identified in the email and/or the Buyer for any additional information.

- **If the tool order is an amendment and the tool order contains a modified tool, there is no requirement to re-tag the tool or re-submit pictures with the invoice for the modified tool.**
- If the tool order is an amendment and contains a new tool that will require a PSW submission, the new tool will require a tag per these enhanced requirements and the submission of pictures with the invoice.

Certain types of tools cannot be separately tagged or marked due to small size, material, interference with the manufacturing process, or similar constraints. Tools that cannot be individually tagged or marked may be grouped on a single line on the Tool Order, though each tool must be photographed separately. In certain circumstances, when many identical tools are ordered, they may be grouped on a single line, but must be tagged or marked individually. Provided that the Supplier has tagged or marked each of these tools in an identical manner, photographs of only one tool will be sufficient, showing the whole tool in one photograph and the tag/markings on the other. The Supplier should contact its buyer if guidance is needed to determine whether grouping with or without individual tagging or marking is appropriate. In either situation, each tool will be tagged/marked with the same "serial number" as the other tools with which it is grouped.

Other information Required – Please submit the dimensions (width, length and height), weight and type of materials used in the construction of the tooling.

Part Name _____ Cust. Part Number _____
 Shown on Drawing Number _____ Organization Part Number _____
 Engineering Change Level _____ Date _____
 Additional Engineering Changes _____ Date _____
 Safety and/or Government Regulation Yes No Purchase Order No. _____ Weight (kg) _____
 Checking Aid Number _____ Checking Aid Change Level _____ Dated _____

ORGANIZATION MANUFACTURING INFORMATION

CUSTOMER SUBMITTAL INFORMATION

Organization Code _____
 Supplier Name _____
 Street Address _____
 City _____ State _____ Zip _____ Country _____

Customer Name / Division _____
 Buyer/Buyer Code _____
 Application _____

MATERIALS REPORTING

Has customer-required Substances of Concern information been reported? Yes No n/a
 Submitted by IMDS or other customer format: _____

Are polymeric parts identified with appropriate ISO marking codes? Yes No n/a

REASON FOR SUBMISSION (check at least one)

- Initial submission
- Engineering Change(s)
- Tooling: Transfer, Replacement, Refurbishment, or additional
- Correction of Discrepancy
- Tooling Inactive > than 1 year
- Change to Optional Construction or Material
- Sub-Supplier or Material Source Change
- Change in Part Processing
- Parts produced at Additional Location
- Other - please specify

REQUESTED SUBMISSION LEVEL (Check one)

- Level 1 - Warrant only (and for designated appearance items, an Appearance Approval Report) submitted to customer.
- Level 2 - Warrant with product samples and limited supporting data submitted to customer.
- Level 3 - Warrant with product samples and complete supporting data submitted to customer.
- Level 4 - Warrant and other requirements as defined by customer.
- Level 5 - Warrant with product samples and complete supporting data reviewed at supplier's manufacturing location.

SUBMISSION RESULTS

The results for dimensional measurements material and functional tests appearance criteria statistical process package
 These results meet all drawing and specification requirements: YES NO (If "NO" - Explanation Required)
 Mold / Cavity / Production Process _____

DECLARATION

I affirm that the samples represented by this warrant are representative of our parts which were made by a process that meets all Production Part Approval Process Manual 4th edition requirements. I further affirm that these samples were at the production rate of _____ / _____ hours. I also certify that documented evidence of such compliance is on file and available for review
 I have noted any deviations from this declaration below.

EXPLANATION/COMMENTS: _____

Is each Customer Tool properly tagged and numbered? Yes No
 Organization Authorized Signature _____ Date _____
 Print Name _____ Phone No. _____ Fax No. _____
 Title _____ Email _____

FOR CUSTOMER USE ONLY (IF APPLICABLE)

PPAP Warrant Disposition: Approved Rejected Other _____
 Customer Signature _____ Date _____
 Print Name: _____ Customer Tracking No. (optional) _____
 07-36-01-03 A

