



P&W Supplier Tooling Photograph Guidelines (Submitting a Manifest)

Revised 9/12/2011

This document is the property of United Technologies Corporation (UTC). You may not possess, use, copy or disclose this document or any information in it, for any purpose, including without limitation to design, manufacture, or repair parts, or obtain FAA or other government approval to do so, without UTC's express written permission. Neither receipt nor possession of this document alone, from any source, constitutes such permission. Possession, use, copying or disclosure by anyone without UTC's express written permission is not authorized and may result in criminal and/or civil liability."

This document contains no technical data.

For all Tooling, Fixtures, and Gages to be invoiced:

Photographs are required for all tooling packages and shall be sent or emailed to the Procurement Analyst and/or Supply Chain Coordinator (address below) with P&W Tooling Manifest Form (F7815) and Invoice.

Tooling manifest shall include Durable Tooling such as: Inspection Fixtures, Heat Treat Fixtures, Airflow Fixtures, Airflow Masters, Casting Dies, Forging Dies, Specific Gages, and in general all such devices that are used (but not limited) to hold, position, form, or cast a particular part. Durable Tooling is not consumed in the manufacturing process nor does it become part of the end product. The manifest shall include items that are unique or specific to manufacturing process of a deliverable part. In this document, the use of the word “tool(s)” is (are) synonymous to all above mentioned items.

Photographs, Manifest, and Invoice shall be submitted as one package to:

Procurement Analyst and/or Supply Chain Coordinator, InfoTech Aerospace Services, Inc., 699 Industrial Avenue, Isabela, Puerto Rico 00662.

Note:

- 1) Rework and Modification charges require only an Invoice. No Manifest or Photographs, unless requested. Invoice shall indicate that the charges are for “Rework” or “Modification” and include Tool Number and Tool Name/Description.
- 2) File transfer only by: **WinZip w/ AES, file level encryption tool with password protection. Do not send password in same e-mail or store it on the USB device.**

Purpose:

To define the basic guidelines for suppliers to follow during invoicing when providing UTC – Pratt & Whitney with tooling photographs of each tool listed on P&W Tooling Manifest Form, as required, based on the above criteria and in accordance with the Tool Narrative of the Purchase Order (PO) or Scheduling Agreement (SA).

Photographs:

In an effort to effectively manage the volume and storage of photographs, the following guidelines are preferred:

- Photograph size 6”H x 6.5”W for the Tool (no thumbnails) and 2.5”H x 6.5”W for the Tool Identification Markings. Color photos only, no photocopies.
- JPEG files preferable to Word, Excel or PowerPoint.
- Picture density between 70 to 120 pixels.

Photographs may either be emailed (no faxes) or send on **encrypted CD** by mail to the appropriate Procurement Analyst and/or Supply Chain Coordinator.

Photograph Submittals:

Submit a single photograph if entire tool lends itself to be photographed simultaneously with clearly visible tool markings. Otherwise, submit at least two pictures per “Tool Item”: (1) Full-view, wide angle shot of complete Tool with Information Placard; and (2) Close-up view of permanent Tool Identification Markings. Both of these images may be included within one page as shown on Pages 5 and 6. **Submit all photos by: WinZip w/ AES, file level encryption tool with password protection.**

- (1) **First Photograph** shall be a full-view, wide angle shot of complete Tool with Information Placard as shown in the attached photo examples.

All full-view tool photographs shall:

- A. Present an instantly recognizable distinct image (preferably 6”H x 6.5”W) for each Tool Item listed on the P&W Tooling Manifest Form (F7815). *All Tool Items listed (by Unit or Set) on the Manifest shall be individually priced. With an intricate or expensive tool (\$100K and over) include multiple, three dimensional exposures as necessary. Photo emphasis shall be on the tool, not the Placard. Images submitted shall express or convey an appreciation of tool value.*
- B. Include an Information Placard (see Notes below and attached Photos). Placard data, preferably in the following order, shall consist of:
1. Supplier Name (same name as on the Manifest - not needed on tool);
 2. Photograph Date (mm/dd/yyyy - not needed on tool);
 3. Supplier Tool Number (and Serial Number if two or more identical tools);
 4. Property of: “PW”, “PW-TYPE I”, “USG”, or “USG-RTT” (see PO/SA Tool Narrative for Title Code);
 5. P&W Part Number (Detail, Sub-Assy, or Assy P/N(s) that subject tool is used to fabricate or inspect);
 6. Government Contract Number (if applicable);
 7. Tool Name/Description;
 8. Overall Dimensions (not needed on tool); and
 9. Weight – approximate per tool.
- C. Display as many working parts of total tool as possible. Wax Dies, Pattern Dies, Core Dies, Injection Molds, etc. shall be open to illustrate intricacies of tooling patterns, part locators, inserts, etc. *If certain areas of an open Die or Mold are considered proprietary, then those areas may be partially blurred or blocked at the discretion of the parts/tooling supplier.*
- D. Show original and all spare & rate tooling within one picture or snapshot (take a group photo of all identical or duplicate tools). *If all identical or duplicate tools are excessively numerous and cannot be viewed or displayed within one picture or group photo, then indicate the “Tool Qty” the photograph represents on Information Placard. Each identical or duplicate tool, in addition to the recurring Supplier Tool Number, shall be identified by a Serial Number.*
- E. Be focused and clear to allow visualization of entire finished tool. *Unless requested, NO parts, machines, or other tools shall be included in the photograph with subject tool. A scale, ruler, or writing instrument is acceptable.*

Notes - Information Placard:

- i. Markings may be hand printed with any legible marker on cardboard or paper. The hand-printed placard shall be positioned next to tool for the full-view photo and shall be visible in the photograph to ensure correlation with the manifest; or
- ii. Added on the tool photo using any software capable of incorporating text to a photograph without blocking any important tool features.

(2) **Second Photograph** shall be a close-up view of permanent Tool Identification Markings, such as: Data Plate, Tool Stamp, Supplier’s Tool Identification Tag (i.e.: Asset Tag), or Cable Attached Tag.

All close-up photographs shall:

- A. Present an image (preferably 2.5”H x 6.5”W) of tool markings only, as well as those of duplicate or spare tools listed on the P&W Tooling Manifest Form.

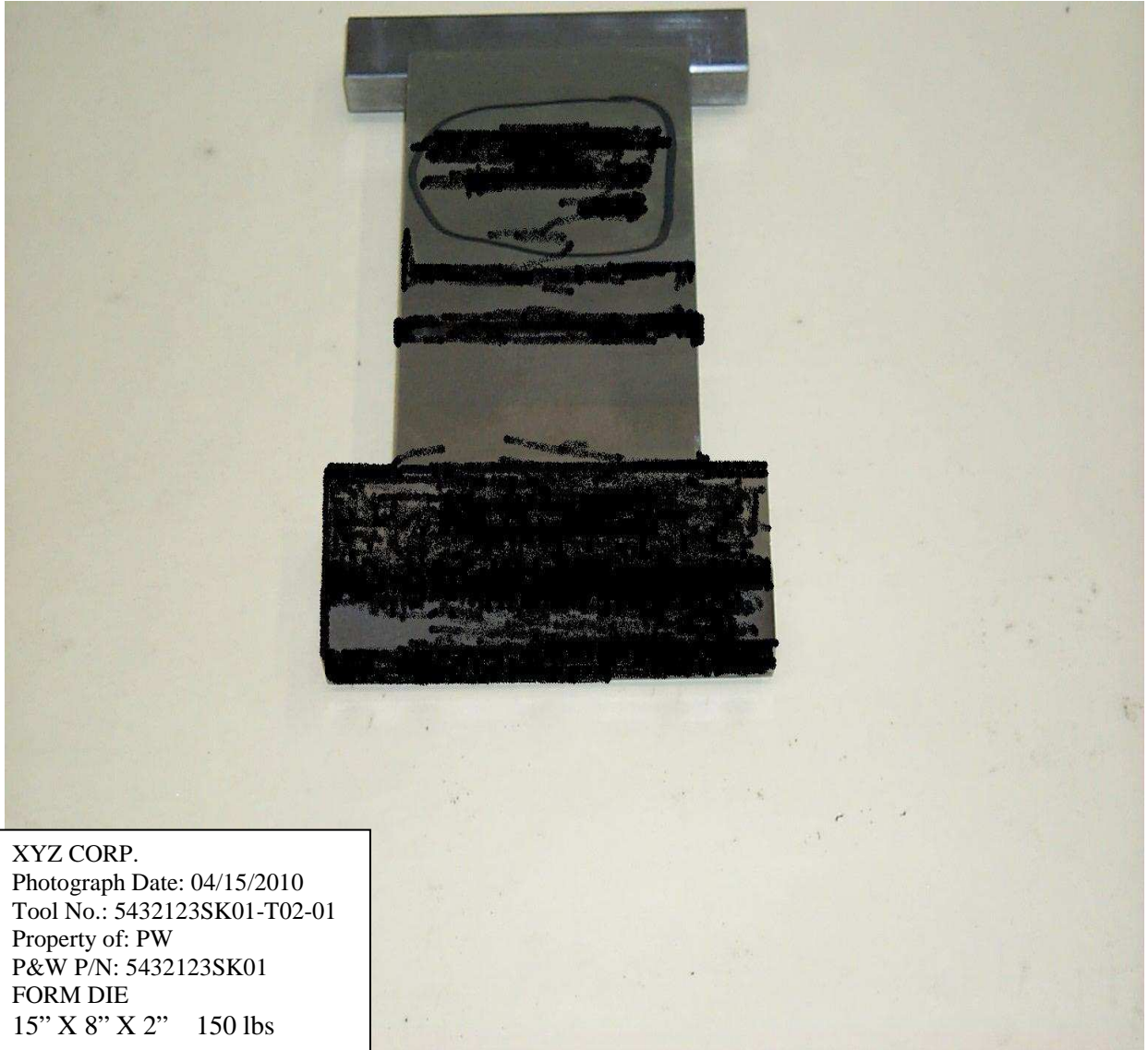
Tool Identification Markings (see *Note i*) on the tool shall include:

- *1. Supplier Tool Number (and Serial # if applicable);
 - *2. Property of (Title Code): “PW”, “PW-TYPE I”, “USG”, or “USG-RTT”;
 - *3. P&W Part Number (Detail, Sub-Assy, or Assy P/N(s) that subject tool is used to fabricate or inspect);
 - 4. Government Contract Number (if applicable);
 - 5. Date of Manufacture (month and year only, see *Note ii*); and
 - 6. Weight - approximate (not necessary if 7 lbs or 3 kg or less, see *Note iii*).
- B. Be focused and clear to ensure finished tool is permanently marked and accurately identified for use and future auditing. An *Information Placard is not required with Tool Identification Markings’ photo (see Note iv).*

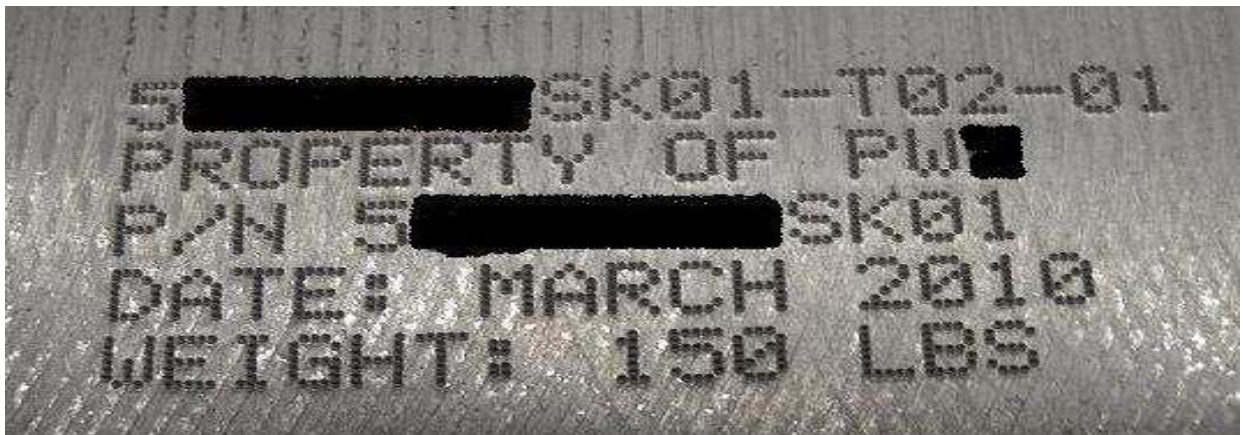
Notes – Tool Identification Markings:

- i. All markings on the tool shall at least consist of the first *three identifications listed above. If space allows, include all identifications listed above and any additional markings considered relevant. Conversely, if space is limited, fit-in on subject tool as many of the listed identifications as possible and/or consider utilizing a “Cable Attached Tag” (see Page 6 photo).
- ii. The “Photograph Date” (not needed on tool) on the placard and “Date of Manufacture” on the tool is not necessarily the same date.
- iii. Weight indication on tool (pounds or kilograms) is not necessary if under seven (7) pounds or three (3) kilograms; and
- iv. An Information Placard is not necessary with 2nd photograph or close-up view of Tool Identification Markings. *The markings on tool shall be sufficient identification.*
- v. All markings shall be permanent and applied in a manner not detrimental to function of tool, and ensuring maximum legibility and durability throughout entire service life of tool; and
- vi. Provide sufficient marking information to clearly identify a tool regardless of size, form, fit, or function. *For small or unusual tools that cannot be directly marked, Cable Attached Tags with all the relevant markings shall be considered. The cable may be detachable for ease of item use.*
- vii. All identical or duplicate tools shall be identified by a unique Serial Number in addition to the recurring Supplier Tool Number.

Example of Two Photos - (1) Tool with Information Placard and (2) Identification Tool Stamp.



XYZ CORP.
Photograph Date: 04/15/2010
Tool No.: 5432123SK01-T02-01
Property of: PW
P&W P/N: 5432123SK01
FORM DIE
15" X 8" X 2" 150 lbs

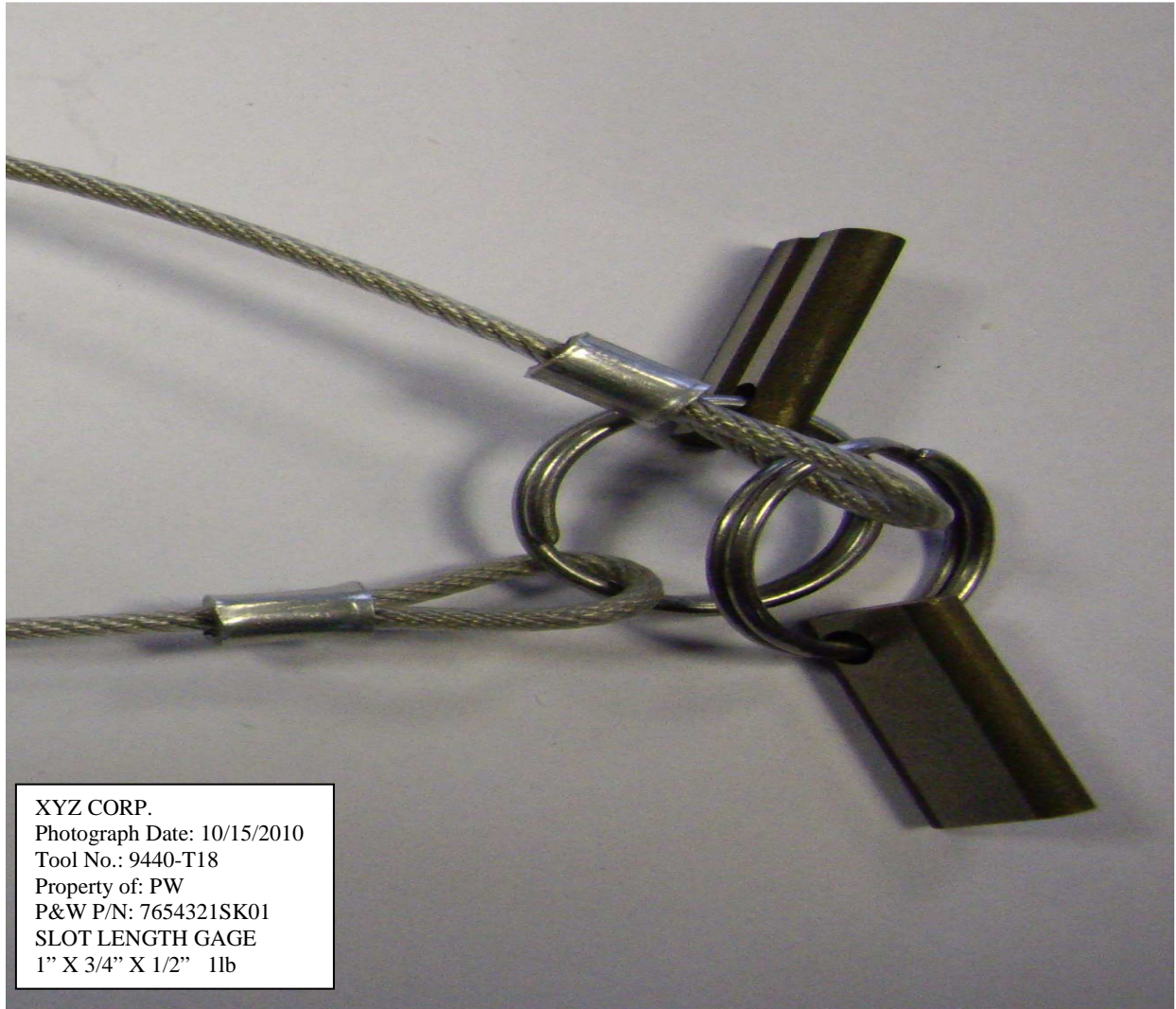


Tool Stamp – Laser-Dot Matrix

These photos are for reference only.

P&W PROPRIETARY
This page contains no technical data.

Example of Two Photos – (1) Tool with Information Placard and (2) Cable Attached Identification Tags.



These photos are for reference only. For marking format see Page 4, 2A.

P&W PROPRIETARY
This page contains no technical data.