

## Purchasing Terms & Conditions, Attachment E

### Accountable Tooling, Production Equipment and Software

#### Definitions

- Account able tools are manufacturing aids created for and limited to the production of a particular Systema product. They sometimes are created specifically under contract, included as a line item on the contract and considered Systema property. These tools are typically produced by a subcontractor but may also be provided by Systema. They include, but are not limited to, templates, dies, stamps, jigs, fixtures, patterns, gages, special checking tools, special test equipment, certain documents and software programs. Systema may supply government owned tooling supplied by government agency or a prime. These too shall be considered accountable tooling.
- Production equipment refers to equipment (supplier-owned) required for producing tooling and parts per contract. This includes machine centers, process centers, inspection equipment, auxiliary support equipment, (i.e. air compressors computers), and transportation equipment (i.e. forklift, delivery vehicles). Suppliers are required to furnish all equipment necessary to comply with contract agreements.
- Software used in the design, manufacture, inspection, test acceptance or calibration that has a direct effect on a deliverable product. This can include, but is not limited to Computer Numerical Control (CNC), Numerical Control (NC), Computer Aided Design (CAD), Coordinate Measuring Machine (CMM) and Statistical Process Control (SPC).

#### 1.0 Equipment:

- Equipment required to manufacture contracted product shall be suitable to the process of product realization.
- Equipment requirements shall be determined and in place prior to acceptance of contract unless a plan has been submitted and approved by Systema.
- Production, inspection and test equipment shall be maintained regularly and records kept on file. Subcontractors may be asked to provide proof of a maintenance schedule at any time before, during or after the performance of a contract. This includes calibration of inspection and test equipment. Subcontractor's calibration system shall be compliant to ANSI Z-540-1 and/or ISO 17025.
- Changes affecting production equipment shall be controlled and documented.
- Production equipment shall be stored in a environment that will not adversely affect the preservation or condition of the equipment when not in use. Equipment condition shall be verified prior to use when removed from storage.

#### 2.0 Accountable Tooling

- Subcontractors shall have a system that documents, controls and maintains accountable tooling supplied by or built for Systema. Systema flows down these requirements, when applicable, to Systema subcontractors via the PO notes when applicable to the product they are supplying.

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The revision in effect at the time the purchase order was placed applies.

- **Certified Tool list** - Systema subcontractors shall prepare and maintain a certified tool list (CTL) incorporating the information listed below when in possession of accountable tooling. The list shall contain the following information at a minimum.
  - a. Purchase order number issued for tool fabrication
  - b. Tool code and tool number (example, Mill fixture to make a XXXXX-101 would be MFXXXXX-101)
  - c. Serial number(s) for multiple tooling of the same configuration
  - d. Nomenclature and description (tool name and usage)
  - e. Location of tooling
  - f. Unit price
  - i. Rework status and/or Systema disposition authority (document number) for tools no longer in the subcontractor's possession, or other pertinent information.
- **Tool Identification** - Tooling shall be identified to include part number (per b. above), a revision control code, a serial number (required for multiple tooling of the same configuration) and Property of Systema.
  - a. If a tool requires modifications as a result of purchase order change, then the tool identification should reflect a new revision (example A, B, etc.), as applicable.
- **Identification Methods** - Whenever practical, tools shall be identified by means of a metal tool identification tag, steel stamp or engraving.
  - Wood and plastic tools shall be identified by impressing, stenciling, or ink stamping.
  - Tools too small for any of the above methods shall be boxed and/or chained to a tool tag to ensure their proper identity.
- **Record Requirements** - Subcontractors shall maintain adequate records by:
  - Ownership and contract (purchase order number) under which the tools are fabricated.
  - Rework and/or SYSTIMA disposition authority for tools no longer in the subcontractor's possession.
  - Subcontractors shall also maintain adequate tool design drawings for future references and/or revisions.
  - Receivers, pack slips, shippers, communication media such as letters and e-mails, authorization forms, etc.
- **Tool Storage** - All government/customer and Systema-owned tooling shall be stored at subcontractor facility in accordance with good commercial practices to preclude any damages or deterioration until formal disposition instructions are received from Systema.
- **Tool Disposition**
  - a. Damaged, lost or worn tools shall be reported to Systema in a timely manner by subcontractor. Any replacement tooling shall be identified in the same method as the original, except that the serial number will be changed to reflect the next in a series (e.g., if the scrapped unit was S/N 001, the new unit should be identified S/N 002).
  - b. Surplus tools, upon program completion, shall be disposed of in accordance with directions received from Systema. Under no circumstances may tooling be scrapped or otherwise disposed of without prior authorization from Systema.
  - c. Upon written notification from Systema, account able tooling shall be adequately packaged and returned to Systema.

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- **Inventories** - Depending on the quantity of special tooling and special test equipment involved, Systema may request an oral confirmation of the inventory or request confirmation in writing.
- **Utilization of Accountable Tooling** - Use of Systema/government-owned special tooling/special test equipment is authorized only as specified by the Systema purchase orders or Systema customer purchase orders.

### **3.0 Software**

Systema subcontracts CNC machining and CMM inspection to approved suppliers.

- **Identification** - Software required for achievement of product conformity shall be determined, provided and maintained by subcontractors. Software shall be suitable to carry out production, inspection and test under controlled conditions.
- **Configuration Control** - Software used in the design, manufacture, inspection, test acceptance or calibration shall be revision controlled. There shall be provisions in place that insure that only the most relevant revision is released. Software programs shall be protected from unauthorized changes or deletion.
- **Control of Software** - Software programs shall be validated prior to release and maintained. CNC programs by first part inspection prior to production build. Storage media shall be adequate to the intended use and shall protect software programs from unauthorized editing.

Revision	Date	Revised by	Changes
-	5/4/2011	Peter Hayden	New Release

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