

DATA ITEM DESCRIPTION

Title: PRODUCT DRAWINGS/MODELS AND ASSOCIATED LISTS

Number: DI-SESS-81000C

Approval Date: 10 Sept 04

ASMC Number: A7532

Limitation:

DTIC Applicable:

GIDEP Applicable:

Office of Primary Responsibility: AR

Applicable Forms:

Use/relationship: Product Drawings/Models and Associated Lists provide engineering data to support competitive procurement and maintenance for items interchangeable with the original items. This data represents the highest level of design disclosure.

- a. This Data Item Description (DID) contains the format and content preparation instructions for Product Drawings/Models and Associated Lists resulting from the work task described in 3.6.2.3 of MIL-DTL-31000C.
- b. This DID is applicable to acquisitions of military systems, equipment, and components. It is intended for acquiring drawings/models and Associated Lists at the end of the Engineering and Manufacturing Development Phase and during subsequent phases of the DoD materiel life cycle.
- c. It is not intended that all the requirements contained herein should be applied to every program. This DID should be tailored to the minimum data requirements of the applicable contract or purchase order. This DID supersedes DI-SESS-81000B.
- d. This DID is related to DI-SESS-81001C, DI-SESS-81002C, and DI-SESS-81003C.
- e. A purchased item, as defined by ASME Y14.24, an item which is sold or traded in the course of conducting normal business operations, is used by commercial industry, or is a specialized version of a supplier's general product line which he routinely customizes. Purchased items as used herein have also been referred to as vendor items or vendor-developed items.

Requirements:

1. Reference Documents, The applicable issue of documents cited herein, including their approval dates and the dates of applicable amendments, notices, and revisions, shall be as cited in the contract.
2. General. Product Drawings/Models and Associated Lists shall meet the requirements of MIL-DTL-31000C. Product Drawings/Models and Associated Lists shall provide the design disclosure information necessary to enable a manufacturer of similar products at the same or similar state of the art to produce and maintain quality control of item(s) so that the resulting physical and functional characteristics duplicate those of the specified item. These drawings shall:
 - a. Reflect the end product at its current level of design maturity.

DI-SESS-81000C

- b. Provide the engineering data for Logistics Support products.
 - c. Provide the necessary data to permit competitive acquisition of the original item(s).
3. Format. Product Drawings/Models and Associated Lists shall be in either the contractor's format or the Government's format as specified on the TDP Option Selection Worksheet incorporated into the contract or purchase order.
4. Content. Product Drawings/Models and Associated Lists shall conform to the requirements of ASME Y14.100, or, if applicable, ASME Y14.100 and Appendices B through E, as required, ASME Y14.34 and ASME Y14.41. They shall document directly or by reference the following, as applicable:
- a. Details of unique processes, i.e., not published or generally available to industry, when essential to design and manufacture.
 - b. Performance ratings.
 - c. Dimensional and tolerance data.
 - d. Critical manufacturing processes and assembly sequences.
 - e. Toleranced input and output characteristics.
 - f. Diagrams.
 - g. Mechanical and electrical connections.
 - h. Physical characteristics, including form, finishes, and protective coatings.
 - i. Details of material identification, including material condition, and mandatory treatments and coatings.
 - j. Inspection, test and evaluation criteria.
 - k. Equipment calibration requirements.
 - l. Quality assurance requirements.
 - m. Hardware marking requirements.
 - n. Requirements for reliability, maintainability, environmental conditioning, shock and vibration testing and other operational or functional tests.

DI-SESS-81000C

- o. Vendor substantiation data when required by the contract or purchase order.
 - p. Requirements for programming software into devices or assemblies including a description of the input media and the procedures for validating that the software has been installed correctly.
 - q. Special consideration items and processes.
5. Item definition. All parameters required to define each unit, assembly, subassembly, part or material shall be presented on the applicable drawing/model. This includes data such as:
- a. All necessary mechanical dimensions to fully define fabrication, acceptance, interface or installation of the item depicted.
 - b. All necessary electrical parameters to fully define fabrication, acceptance, interface or installation of the item depicted.
 - c. All other necessary physical parameters to fully define fabrication, acceptance, interface or installation of the item depicted, i.e., weight, pressure, viscosity, etc.
 - d. All necessary environmental conditions which units, assemblies, subassemblies, parts and materials must meet to perform effectively in the end item, such that the end item will meet its specification requirements.
6. CAGE code and document numbers. Product Drawings/Models and Associated Lists shall be identified with the contractor's CAGE code and contractor document numbers or with a Government CAGE code and document numbers as specified in the TDP Option Selection Worksheet incorporated in the contract or purchase order.
7. Selection of drawings. The types of drawings required will vary according to the complexity of the contract end item. The TDP Option Selection Worksheet incorporated in the contract or purchase order will specify whether the contractor or the Government is responsible for selecting the types of drawings/models and Associated Lists.
- 7.1. Vendor Item Control Drawings. Vendor Item Control Drawings shall be used to specify the requirements for purchased items when such items have been approved for use in the design and are used without alteration, selection or source qualification (testing of an item prior to procurement action to ensure that it satisfies the specified requirements).
- 7.2. Source Control Drawings. Source Control Drawings shall be used to specify the requirements for purchased items only when such items have been approved for use in the design and:

DI-SESS-81000C

- a. the item is for a critical application and
- b. the requirements can be met by an item from one or more sources and
- c. the application required source qualification (testing of an item prior to procurement action to ensure that it satisfies the specified requirements).

7.3. Standard Microcircuit Drawings. Standard Microcircuit Drawings (MIL-HDBK-780) shall be used to specify the requirements of microcircuits.