Introducing Products to the DoD Using Specifications and Standards

DoD AN TCC
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Presentation Outline

- SSQP WIPT Background/Introduction

- How Does DoD Define Products?

- Product Introduction Resources

- Product Introduction for Existing Specifications and Standards

- An Approach to Introducing New Products or Applications Not Covered by Existing Specifications

- Product Authorization

- Questions
Mission:

- Facilitate the implementation of CPC related specifications and standards for both infrastructure and military equipment acquisitions.

- Facilitate a DoD collaborative approach to product evaluations in order to implement the best performing CPC products and technologies more effectively.

- DoD policy is to use commercial specifications and standards for both infrastructure and military equipment when deemed appropriate. When current commercial specifications and standards do not meet requirements, the SSQP WIPT seeks to modify current standards or write new ones. When commercial approaches are not feasible, military specifications and standards will be established and/or applied.
SSQP WIPT Objectives

- Create a framework within which the DoD can effectively manage a standardized, consistent, Department-wide evaluation process to effectively introduce products and technologies into DoD systems.

- Integrate the best industry, association, and DoD specifications, standards, and qualification processes with methods for selecting and applying these documents and processes into the standardized DoD Product Introduction Process.

- Ensure effective, accessible, web-based communication methods and information are available to the SSQP community.

- Address and resolve SSQP issues within the DoD and with other government agencies related to corrosion prevention and control.
Focus Areas:

- **Product Introduction / Evaluation Process**
  - Provide SSQP information and processes via the CorrDefense.org website
  - Improve inter-service communication and coordination.
  - Facilitate product introduction process for manufacturer’s

- **Standards Review and Revision (SRR) Activities**
  - Specification/Standard Assessments
  - Specification/Standards Revisions

- **Communication & Outreach (C&O)**
Introducing new technologies and products.

- Common Focal Point on Product Introduction Information
  - Establish a single point source of information on product introduction and populate with SSQP information and resources
  - Identify, categorize, and assess pertinent corrosion specifications

- Describe the process that DoD utilizes to specify products
  - Develop a resource to explain the current introduction paths for products covered by existing specifications or standards.

- Describe the process that DoD utilizes to evaluate new products/technologies
  - Develop / Define a product evaluation process to facilitate the introduction of new products or product applications that are not covered by existing specifications or standards (5 Step Process).
How Does The Government Specify Products?
DoD 4120.24M – Goals:

- To Improve Military Operational Readiness
  - Interoperability of Systems, Logistics, Reliability, Maintainability, Safety, Modernization and Quality
- Reduce Total Ownership Cost
  - Reduction of Nonstandard Materials, Processes and Components
  - Promote Common Processes, Increased Competition, and Reduced Training Costs
- Reduce Cycle Time
  - Standardized Items, Identify Interchangeability & Interoperability for New Technologies, etc.

DoD 4120.24M – Functions:

- Establishes the Qualification Program
- Defines How Products are Specified

(https://www.dsp.dla.mil)
How Products are covered under DSP

- **Formal Qualification (Qualified Products Database) (SD-6)**
  - Performance (PRF) or Detail (DTL) Specification
    - In General, Most Specifications do not have Qualified Products Lists (QPD)

- **Non Government Standard (NGS) (SD-9)**
  - Can be Adopted if Technically Adequate for DoD Needs
  - In General, Most NGS do not have an associated QPL

- **Commercial Item Description (CID) (SD-2, SD-5)**
  - For Existing Suitable Commercial Products where an appropriate NGS Does Not Exist
  - Not Used to Encourage Development of Product (no QPL Testing)

- **Non Developmental Item (NDI) (FAR, SD-2)**

- **First Article Inspection (Acceptance Testing) (FAR)**

- **Purchase Description (SD-2, SD-5)**
  - When preparation and maintenance of a specification is not cost effective
  - For small dollar purchases under $25,000
  - For one-time buys
Defense Standardization Policy Flow Down

Policy

DoD 4120.24-M

Defense Standardization Program (DSP)

Policies and Procedures

March 2000

Office of the Under Secretary of Defense
(Acquisition, Technology, and Logistics)

Provisions

Provisions Governing Qualification

Qualified Products List
And
Qualified Manufacturers Lists

Defense Standardization Program Office
August 1999

SDMP

Title 10 U.S.C. Sections 2451 – 2457
What is a Qualified Products Database (QPD)?

- A QPD is a list of products (and their manufacturing site) which have been tested and certified to meet the minimum specification requirements.
- A QPD allows the manufacturer to provide and the purchaser to obtain satisfactory pre-contractual evidence that a product meets specification requirements.
- QPD’s simplify the procurement process and reduce acquisition/procurement lead time.
- QPD’s reduce test costs by minimizing redundant, long, and expensive tests.
- QPD’s provide a source for continuous availability of reliable products.
Non Government Standards (NGS’s)

- Can be adopted when technically adequate to meet government agency needs
  - Ex: SAE-AMS, ASTM, etc.

- Through participation the government shall ensure that future revisions, amendments, and changes meet agency needs
  - Ex: SAE Committee Week

- Not necessary to adopt updated NGSs
Commercial Item Descriptions (CID’s)

- When NGS does not meet needs a CID or Fed. Std./Spec. may be developed

- After NGS’s the CID is the document of choice for buying commercial products

- Not used to encourage product development

- For repetitive acquisitions greater than 25k annually

- For small commercial purchases a purchase description could be used
First Article Testing

- What is it?
  - Is the evaluation of a contractor’s initial, preproduction, or sample model or lot to ensure that the product conforms to all contract requirements.

- When is it appropriate?
  - When a manufacturer has not previously furnished the product to the government
  - Product has undergone subsequent changes
  - Production of product is discontinued for an extended period of time
  - Previously procured products have developed problems
Purchase Description

What is it?
- A statement outlining the essential characteristics and functions of an item, service, or material required to meet the minimum needs of the Government

When is it used?
- When a specification is not available or when specific procurement specifications are not required by the DoD
- For small dollar purchases under $25,000
- For one-time buys
Product Introduction Resources
Product Introduction Process Flow Diagram

General Reference Info & Search Specs & Standards

Product Introduction Conforming to Existing Specs

Product Introduction No Existing Specs or Expanded Application
Product Introduction Home Page

Product Introduction Process

This DoD web-based Product Introduction Process (PIP) is designed to assist suppliers in matching their product(s) to specifications and standards currently used by the DoD for corrosion prevention and control (CPC) to facilitate the introduction of these CPC products to DoD agencies. Once you have identified the applicable specification(s) that matches your product, the appropriate steps to proceed forward for that type of specification will be provided (Qualified Products List, Non-Government Standards, Purchase Descripton, etc.). For example, for specifications with formal qualification, you will need to submit a formal request for testing to the appropriate cognizant Agency Point of Contact. CorrDefense membership is required to access this feature of the site which includes: saving of specification searches for later use and submitting information to the DoD for consideration or potential use of products. Information submitted in the Product Information Form (PIF) is considered proprietary and is only available to the submitter and DoD personnel. This website employs government security standards (gov) to protect data and prevent the unauthorized download or changing of information. NOTE: This Product Introduction Process is not designed as a marketing tool. The web based process does not qualify your product to any specification or standard nor does it guarantee procurement of your product by any DoD agency.

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Phase I Info on Selling Products to DoD

DoD: Doing Business with the Department of Defense - DefenseLink offers a list of references to assist the US Department of Defense.

GSA: How to Sell to the Government - US General Services Administration (GSA) is the federal government real estate developer, telecommunications manager, and IT solutions provider.

Specs & Standards Search Tool: Search for specifications and standards used by the DoD.

Product Introduction Process

This DoD web-based Product Introduction Process (PP) is designed to assist suppliers in preparing their specifications and standards for submission to the appropriate DoD agency. The PP process is intended to support the development of DoD specifications and standards.

NOTE: This Product Introduction Process is not designed as a marketing tool to guarantee procurement of your product by any DoD agency.
Specifications and Standards Search Tool
Specifications & Standards Database includes more than 800 Corrosion Prevention and Control (CPC) Products used by the Department of Defense.
• DoD utilizes over 800 specifications to define products used for corrosion prevention and control.

• A taxonomy was developed to group these specs into technology areas.

• Search Specs and Stds allows any manufacturer or supplier to identify applicable specs, potentially interested activities, and cognizant technical authorities.
CorrDefen

Your Search returned 13 results.

Document ID | Document Title
---|---
A-69295 | Corrosion Preventive Compound, Solvent Cutback, Cold-Application
MIL-PRF-46002 | Preservative Oil, Contact and V.C. Inhibited
MIL-C-10382 | Corrosion Preventive, Petroleum Application: For Food Handling/Equipment
MIL-C-11080 | Coating, Corrosion Resistant
MIL-C-11796 | Corrosion Preventive Compound Application
MIL-C-16074 | Corrosion Preventive, Fingerprint
MIL-C-40084 | Corrosion Preventive Compound Oil Type
MIL-PRF-81309 | Corrosion Preventive Compound, Ultrathin Film
MIL-C-82694 | Corrosion Preventive Compound for Nonferrous Metals
MIL-DTL-50504 | Corrosion Preventive Compound
MIL-L-87177 | Lubricants, Corrosion Preventive Displacing, Synthetic
MIL-P-24138 | Passivator Compound, Navy Boiler
MIL-PRF-16173 | Corrosion Preventive Compound, Solvent Cutback, Cold-Application

Amendments to military specifications or specification sheets issued after August 1, 2003 are incorporated in the modified document.

Revision History

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NOTE: It is recommended that you use Adobe Reader v7.0 or higher for optimal download performance. Older versions should continue to work, but downloading large files may appear to take longer, so please be patient in these cases.
Product Introduction Utilizing Existing Specifications
Parts of a Specification

- Section 1: Scope
  - Contains additional information such as Classification, types, classes, etc.
- Section 2: Applicable Documents
- Section 3: Product Requirements
  - This section defines the product performance requirements
- Section 4: Product Verification
  - This section defines the test methods to verify or validate the performance requirements
- Section 5: Packaging
- Section 6: Notes:
  - Contains information such as
    - Intended Use
    - Acquisition Requirements
    - Qualification
      - Contact Info
Product Introduction Process Flow Diagram

- General Reference Info & Search Specs & Standards
- Product Introduction Conforming to Existing Specs
- Product Introduction No Existing Specs or Expanded Application
DoD utilizes over 800 specifications to define products used for corrosion prevention and control.

A taxonomy was developed to group these specs into technology areas.

Search Specs and Stds allows any manufacturer or supplier to identify applicable specs, potentially interested activities, and cognizant technical authorities.
Technical Categories let manufacturers and suppliers narrow down applicable specs from over 800 corrosion related specifications and standards maintained in the database.
Search Spec & Standards Tool
(Advanced Search)

Preparation Activity:
- AFMC LSO - (Battle Creek)
- Air Force Aeronautical Systems Center
- Air Force International Standards Office
- Air Force Petroleum Office
- Air Force Warner Robins Logistics Center
- AMCOM
- Army - Corps of Engineers
- Army Research Lab
- Army Soldier Systems Center
- CECOM

Search By:
- Preparing Activity
- Type:
  - (Mil/Fed or NGS)
- Sub-Type:
  - 1st Article
  - QPL
  - CID
  - Other
- Status
- User & Sub-User

Results can be:
- Displayed in multiple ways (10, 25, or 50 per page or all).
- Exported to Excel
- Printed (w/ Search Criteria)
Search Results for All Specs

CorrDefense - Specs and Standards Search Tool

Your Search returned **861** results.

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<td>A-A-50557</td>
<td>PRIMER, WATER-BORNE, ACRYLIC OR MODIFIED ACRYLIC, FOR METAL SURFACES</td>
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<td>PRIMER, ALKYD, FAST DRY, CORROSION INHIBITING, LEAD AND CHROMATE FREE, VOC COMPLIANT</td>
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<td>PAINT, SHOP, RED OR BROWN ONE-COAT</td>
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<td>Primers - Alkyd</td>
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<td>Primers - CARC</td>
<td>Army Research Lab</td>
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1 2 3 4 5 6 7 8 9 10...
An Approach to Introducing New Products or Applications that Do Not Conform to Existing Specifications
Product Introduction Process Flow Diagram

5 Step Process

1) Product Definition
2) Product Initial Screening
3) Product Lab Characterization and Evaluation
4) Product Demonstration & Validation
5) Product Authorization / Implementation

General Reference Info & Search Specs & Standards

Product Introduction Conforming to Existing Specs

Product Introduction No Existing Specs or Expanded Application

DATA CAPTURE
Step 1 Product Definition

- Supplier Submits Product Information

- Information Sent out to Agency Subject Matter Experts (SMEs) for Particular Technology Area

- SME’s Review product information and Make Initial Determination of Interest/Requirement for New Product/Technology

- Supplier Notified of Agency Determinations:
  - More information is needed to make initial assessment
  - Product/Technology is covered by an existing spec
  - There isn’t a requirement for the particular product/technology
  - There is agency interest in proceeding to Product Screening
What Product Information is Expected?

- Standard Company and Product Information such as company name, product name, product number, company POC
- Product Description
- Intended Product Application
- Product Benefits over existing products in the technology area
- Is the product in development or has it been marketed/sold?
- Product Testing and Results
- Product MSDS/SDS
- Product application process/requirements
- Maintainability and handling requirements

Note: This is a basic data set of information that is expected but not necessarily all that may be requested.
Step 2 Product Screening

- Supplier Submits Samples for Agency Screening Tests
  - Limited Key Tests for Technology Area

- Agency Technical Reps Perform Screening Tests

- Agency SMEs Review Screening Results and Determines Continued Agency Interest

- Supplier Notified of Agency Determinations:
  - Product/Technology Did Not Meet Key Performance Criteria
  - Continued Agency Interest, Proceed to Lab Characterization
Step 3 Lab Characterization

- Supplier Submits Samples for Agency Lab Tests
  - All Performance Tests for Technology Area

- Supplier Submits additional Data

- Agency Technical Reps Perform Lab Evaluation Tests
  - In-house, via contractor lab or through another Agency

- Agency SMEs Review Lab Characterization Results and Determine Continued Agency Interest

- Supplier Notified of Agency Determinations:
  - Product/Technology Didn’t Meet Agency Performance Criteria
  - Continued Agency Interest, Proceed to Dem/Val
Step 4 Product Dem/Val

- Supplier Submits Samples for Agency Dem/Val Tests
  - Product Demonstration on Operational Equipment

- Agency Technical Reps Perform Dem/Val Testing

- Agency SMEs Review Dem/Val Results and Determine Continued Agency Interest for Implementation

- Supplier Notified of Agency Determinations:
  - Product/Technology Didn’t Meet Operational Requirements
  - Continued Agency Interest, Proceed to Product Authorization & Implementation
Step 5 Product Implementation

- Agency Determines Method for Specifying Product
  - MIL/Fed Spec, CID, PD, NGS, etc.

- Product/Technology Authorization
  - Authorization documentation (Engineering Design Change, Approval Letter, Technical Directive/Order,
  - Specific Application/Areas Authorized for Product Use

- Supply/Logistics for Product Determined
  - NSN’s, Order Quantity, etc.

- Where will the new Product/technology be used/implemented?
  - Aerospace, Ground Vehicle, Facilities, Ships, etc.
When it comes to my product, what is the Difference between Qualified and Authorized?
Qualified versus Authorized

- Generally, Qualification and Authorization are Two Different Processes

- Qualification is Legally binding on both Government & Industry and may only be a first step

- All products have to be authorized for use

- Authorization must be obtained on a specific basis if not previously granted

- Implementation path can vary widely based on the criticality, the associated risk factors and the Service/Agency specific requirements
Qualification

- Meets Minimum Specified Requirements (QPD)
- Acceptable for where specification is approved for use in Tech Orders, Manuals, Drawings, etc.
- Does not insure/promise procurement (i.e., Must follow standard GSA, DLA, etc. procurement processes)
- Qualification does not automatically mean Product Authorization

Authorization

- Approves Product’s use for a specific application
- Used for new products or different applications of existing products
- Steps to Authorization
  - Lab testing
  - Field prototype
  - Verification/Validation
  - Data analysis and use envelope definition
- Authorization letter, Local Process Spec, Tech Order or Manual, etc. Issued
From: Senior Official, Government  
To: Distribution  

Subj: Government Implementation Plan for Stuff, Type III Conforming to MIL-STD-XXXX  

Ref: (a) Government Implementation Plan for Your Product  
(b) Engineering Laboratory Report, “Performance Evaluation of Stuff,” LR04_00Z  
(c) Engineering Laboratory Report, “Field Testing and Validation of Stuff,” LR0Y_00X  
(d) Additional Reference Materials  

1. Reference (a) authorized the use of Stuff qualified to Federal Standard FED-STD-YYYY, for government applications.  
2. References (b) and (c) contain the results of laboratory and field testing by the applicable federal and military agencies.  
3. Based on this data, the government extends the authorization in reference (a) to the use and applications described above.  
4. The points of contact for this issue are Mr. Middle Manager, Department of Paperwork.
Generic Authorization/Implementation Requirements

- Implementation Path (generic example)
  - Lab validation of product, process and performance
  - Field validation of product, process and performance
    - In a relevant operational environment
  - Implementation
    - Applicable Engineering Authority Sign-off
      - Ex: Materials, Structures, Subsystems, Systems, Depot/Shipyard
      - Program: Engineering/Logistics/Original Equipment Manufacturer
    - Create or Revise specs and other documentation (Local drawings/Tech orders/MIL/AMS/ . . .)
    - Revise Relevant Control Manuals
    - Supply, NSN, Order Quantities, etc.
Non-Critical Application Test Criteria
  • Lab validation per Spec and/or other agency-specific screening tests
  • Field validation: In-service on planned implementation platforms in representative operational conditions, multiple dem/val sites- same or better performance compared to controls

Critical Application Test Criteria (Safety of Operation)
  • Lab Validation per Spec and/or other agency-specific screening tests
  • Lab Validation of critical application specific performance (Ex: Structural Fatigue, etc.)
    • Operational clearance depending on component/risk
    • Field Testing: Will be more stringent validation path than for non-critical applications: longer road, more expensive, more sensitive, more extensive