

## Drawing Standards

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### PURPOSE & SCOPE

This Internal Specification (IS) is intended to provide general information regarding engineering drawing standards. Drawing standards are the means by which engineering drawings are created, reviewed and interpreted. The Specifications and Guidelines noted herein are not stand-alone documents for the purpose of addressing basic practices. The ASME Y14 series of standards, AWS, IEEE, IPC, SAE, and other L3Harris Technologies, Communication Systems-West (CSW) documents are separate instructions that, when addressed as a composite set, provide an accurate compilation of engineering drawing practices.

This document is used when preparing L3Harris Technologies, Communication Systems-West (CSW) Salt Lake City engineering drawings and associated documents. It is not the intent of this standard to prevent the organization from utilizing specific drawing practices that meet individual needs, but rather to delineate the set of common standards used to promote understanding, interpretation, and use of CSW drawings and models.

### INTERNAL SPECIFICATION

The documents listed in the table below (Table 1: SPECIFICATIONS AND GUIDELINES) shall be used for definition, understanding and interpretation of CSW drawings and models. Internally developed portions of the drawing standards are considered L3Harris proprietary and shall not to be copied, loaned, or transferred without written authorization through the Engineering organization. Standards, such as ASME Y14.5, that make up part of CSW drawing standards are covered under their own copyright and suppliers are responsible to obtain personal copies from the governing association. To accomplish the requirements of the applicable purchase agreement, specific internal standards may be made available to suppliers per L3Harris policies and procedures for exporting Internal CSW documents.

L3Harris CSW internal documents are created when external standards provide discretion, lack clarity, or CSW has a compelling need to deviate. CSW documentation is created “in accordance with” (IAW) the standard, both internally developed documents or the industry and national standards. Examples or language shown in the standards need not be followed verbatim when the design intent is clear and all design characteristics can be found within the product definition data set (drawing, model, parts list, wiretable, etc). When tailoring any standard, company quality documents as described in Workmanship Specifications Manual (WSM) shall not be compromised unless specific notation is identified within the released product data set providing an allowance.

Any changes to this document in whole should not be applied to drawings created prior to the change. Drawings meeting the existing standards at the time of creation should not be changed to meet new drawing standards. Specifications or Guidelines may occasionally go “Out of Date” by deletion or

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supersession. Referring to out of date Specifications or Guidelines will be based on Contractual Agreements to meet requirements.

**Table 1: SPECIFICATIONS AND GUIDELINES**

ASME Y14.100	Engineering Drawing Practices	**
ASME Y14.1	Decimal Inch Drawing Sheet Size and Format	
ASME Y14.1M	Metric Drawing Sheet Size and Format	
ASME Y14.2	Line Conventions and Lettering	
ASME Y14.24	Types and Applications of Engineering Drawings	
ASME Y14.3	Multi and Sectional View Drawings ASME Y14AM, Pictorial Drawing	
ASME Y14.31	Undimensioned Drawings	
ASME Y14.34	Associated Lists	
ASME Y14.35M	Revision of Engineering Drawings and Associated Documents	
ASME Y14.36M	Surface Texture Symbols	
ASME Y14.37	Composite Part Drawing	
ASME Y14.38	Abbreviations and Acronyms for Use on Drawings and Related Documents	
ASME Y14.44	Reference Designations for Electrical and Electronic Parts and Equipments	
ASME Y14.5	Dimensioning and Tolerancing	
ASME Y14.41	Digital Product Definition Data Practices	
ASME Y14.6	Screw Thread Representation	
ASME Y14.8M	Castings and Forgings	
AWS D17.1	Specification for Fusion Welding for Aerospace Applications	
AWS A2.4	Symbols for Welding, Brazing, and Nondestructive Examination	
AWS A3.0	Standard Welding Terms and Definitions	
IEEE 91	Graphic Symbols for Logic Functions	
IEEE 91a	Supplement to Graphic Symbols for Logic Functions	
IEEE 260.3	Mathematical Signs and Symbols for Use in Physical Sciences and Technology	
IEEE 315	Graphic Symbols for Electrical and Electronics Diagrams	
IEEE 315A	Supplement to Graphic Symbols for Electrical and Electronics Diagrams	
IEEE 991	Logic Circuit Diagrams	
IPC D-350D	Printed Board Description in Digital Form	
SAE AS 1290B	Graphic Symbols for Aircraft Hydraulic and Pneumatic Systems	
60037425	Specification, Practices for EMC – Electromagnetic Compatibility	
60056954 **	Interpreting Limited Dimension Drawings and Expectations	
60083155	Torque Specification	
60102381	Guideline for Interpreting L-3 Com Cable/Harness Drawings	
60112799	Cable Molded Backshell Design	
1000383796	Engineering Drawing and Related Documentation Practices	

60056954 has been superseded by document 1000383796 for new hardware part drawings released after Sept 1, 2014. After this date, the controlling document must be referenced in the product definition data



**Internal Specification – Level I**  
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set. Prior to this date, 60056954 may be applied to all CSW designed hardware parts by default when neither document is cited.

**END OF DOCUMENT**



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### DOCUMENT INFORMATION

Responsible Organization: Engineering (ENG)  
Sub-Level Function: Hardware Development and Support (HDW)  
Governing Document: Y-001, Quality Management System  
Subordinate Documents: NA  
Related Documents: See [Table 1](#)  
Approval Requirements: Document Control Administration  
Quality Representative  
Engineering Representative  
Operations Representative  
Review Requirements: DCMA

### Electronic approvals in Teamcenter

### Revision History Summary:

Revision #	Reason for Update/Revision	Date
New – 02	Initial release through revision 02	VARIOUS
03	24 month review. Updated reference section.	02-18-2008
04	24 month review. Added reference documents.	7/20/2011
05	Updated for Clarification – Added Specs and Guidelines. Added new Table 1. Modified approval requirements. Changes are indicated with blue text.	9/23/2014
06	Updated company logo and name.	9/29/2025