



IPC Workmanship Study Guide

How to use this study guide.

What's inside

File	What it is / how to use it
01_IPC_Workmanship_Study_Guide.pdf	10 plain-English chapters: how the documents work, classes, condition categories, ESD, soldering, through-hole, SMT, boards and coating, cables and harnesses, exam technique.
02_Practice_Quizzes.docx	28 original multiple-choice questions by chapter, with a separate answer key and a study tracker.

Exam PREP only: not official IPC training or certification. No IPC text, figures or exam questions are included.

4-week plan

1. Week 1: chapters 1-4 + quizzes.
2. Week 2: chapters 5-6.
3. Week 3: chapters 7-9.
4. Week 4: chapter 10, retake every quiz, drill section look-ups in your own copy of the standard.

About the author

Built by Matt Norman, US Navy veteran and former SpaceX Falcon 9 quality inspector and QA supervisor. (Not affiliated with or endorsed by SpaceX.) Norman Quality Tools is Veteran-Owned & Operated. Contains no SpaceX, government, or customer proprietary information; all example data is made up.

License

One company license: use and edit at all sites of the purchasing company. Do not resell or redistribute. Works with Word/Excel 2016+, Microsoft 365, LibreOffice; no macros. Norman Quality Tools (Veteran-Owned & Operated), 600 W Santa Ana Blvd, Ste 114-A3064, Santa Ana, CA 92701. Support: normanqualitytools.com/support.html

IPC Workmanship Study Guide v1, Rev A (2026-10). Independent guidance. Not affiliated with or endorsed by IPC International, WHMA, SAE International, IAQG, ISO, or any current or former employer of the author. Standard clause numbers are for navigation only; buy standards from their publishers. Not legal advice; does not guarantee certification or approval. Exam prep only: not official IPC training or certification. © 2026 Norman Quality Tools. All rights reserved. Licensed for use within the purchasing company; do not resell or redistribute.

Practice Quizzes & Answer Key

IPC Workmanship Study Guide - Document 02 - Rev A (2026-10)

Original practice questions to test your understanding of concepts. They are NOT real IPC exam questions. Answer key on the last page.

1. (Ch 1) Which document tells you how to JUDGE a finished assembly, rather than how to build it?
A) J-STD-001 B) IPC-A-610 C) IPC-2221 D) IPC-7711
2. (Ch 1) If the drawing and the workmanship standard conflict, which usually wins?
A) The workmanship standard B) The inspector's judgement C) The customer drawing/contract D) Whichever is newer
3. (Ch 2) Who selects the product class?
A) The inspector B) The operator C) The customer/user D) IPC
4. (Ch 2) A condition acceptable for Class 1 is always acceptable for Class 3.
A) True B) False
5. (Ch 2) No class is on the drawing. What should the inspector do?
A) Use Class 3 to be safe B) Use Class 1 C) Ask for the class per procedure D) Skip inspection
6. (Ch 3) A process indicator means:
A) Reject the part B) Not a defect, but the process should be watched C) Target condition D) Must be repaired
7. (Ch 3) Who decides what to do with a defect (rework, repair, scrap, use as is)?
A) The inspector alone B) The manufacturer, considering customer requirements C) IPC D) The operator
8. (Ch 3) A condition not shown in the standard is automatically a defect.
A) True B) False
9. (Ch 4) ESD damage is always visible under magnification.
A) True B) False
10. (Ch 4) Best way to carry an ESD-sensitive board between buildings:
A) Bubble wrap B) Static-shielding bag C) Cardboard box D) In hand
11. (Ch 4) Why avoid bare-hand contact with boards?
A) Skin oils affect solderability and coating B) It's a safety rule only C) Boards get hot D) No reason
12. (Ch 5) Good wetting is shown by:
A) A ball of solder sitting on the pad B) Smooth, feathered edge bonding to the surface C) Dull grainy surface D) Visible gap at the edge
13. (Ch 5) A grainy, dull appearance on a lead-free joint is:
A) Always a defect B) Not by itself a defect C) Always a process indicator D) A cold joint
14. (Ch 5) Solder connecting two conductors that shouldn't be connected is:
A) Wetting B) Bridging C) Wicking D) Fillet
15. (Ch 5) A joint where the lead outline is completely hidden by solder suggests:
A) Insufficient solder B) Excess solder C) Target D) Dewetting
16. (Ch 6) The primary side of a through-hole assembly is: