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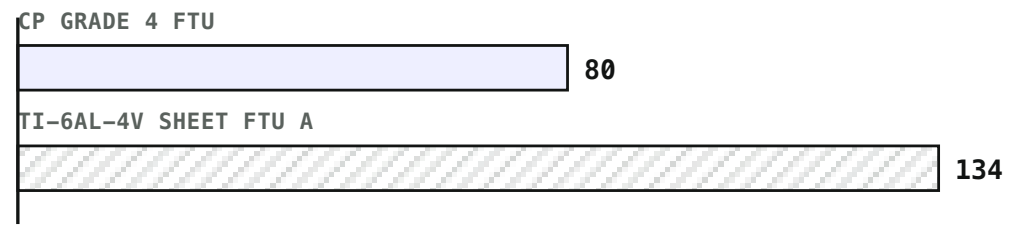
Ti-3Al-2.5V Titanium

The titanium of hydraulic tubing.

REFERENCE DRAWING — NOT APPROVED DATA · THE SRM ALWAYS GOVERNS

TI-3AL-2.5V

HYDRAULIC TUBING ALLOY; NO TABLE IN MIL-HDBK-5J · KSI



PARTS LIST

#	ITEM	NOTE	SRC
1	Tube, annealed	AMS 4943	SAE
2	Tube, CW SR	AMS 4944	SAE
3	Weld rod	ERTi-5	AC 43.13
4	Allowables	Not in HDBK-5J	HDBK-5J

READ BEFORE USE

BARS SHOW NEIGHBOURS FOR SCALE ONLY

NO ALLOWABLES IN THE PUBLIC HANDBOOK

TUBE REPLACEMENT BY PART NUMBER

NOTES

1. Dimensions in inches. Do not scale: the SRM sets the values.
2. For reference. The applicable manual always governs.
3. Based on MIL-HDBK-5J, AC 43.13-1B.

REVISIONS

REV	DESCRIPTION	DATE
A	First issue	2026-10-30

The Aviation Point. Structural repair reference

TITLE Ti-3Al-2.5V			
DRAWING NO. TAP-DWG-085	REV A	SCALE NTS	SHEET 1 OF 1
APPLIES TO Aircraft materials			
DO NOT SCALE DRAWING			

Ti-3Al-2.5V: hydraulic tubing alloy; no table in MIL-HDBK-5J Values from MIL-HDBK-5J, S basis unless noted.

Key facts

Property	Value	Source
Composition	Aluminum 2.5–3.5 %, vanadium 2.0–3.0 %, balance titanium	ASTM B265-10 Table 2 (Grade 9)
Tubing, annealed	AMS 4943, hydraulic seamless tubing, 3.0Al-2.5V	SAE AMS 4943 (title)
Tubing, cold worked and stress relieved	AMS 4944, hydraulic tubing, 3.0Al-2.5V	SAE AMS 4944 (title)
Allowables	None in MIL-HDBK-5J (checked); use the AMS minimums or MMPDS	MIL-HDBK-5J
Filler (titanium)	ERTi-5, AMS 4954, AWS A5.16, is the titanium rod in the AC table; the manufacturer matches the rod to this alloy	AC 43.13-1B Table 4-15

Key points

- **No strength values here.** The public handbook does not list the alloy.
- **Tube replacement is by part number.**

SOURCES · FAA AC 43.13-1B CHG 1 · FAA-H-8083-31B, Aviation Maintenance Technician Handbook, Airframe, Volume 1 · SAE AMS 4943 and AMS 4944 · FAA AC 43.13-1B CHG 1 · MMPDS · ASTM B265, Titanium and Titanium Alloy Strip, Sheet, and Plate

SCAN · OPEN THIS GUIDE
theaviationpoint.com/materials/titanium/ti-3al-2-5v/

Educational reference only, not approved data. Always consult the applicable SRM, AMM, or AC 43.13-1B and your certifying authority.