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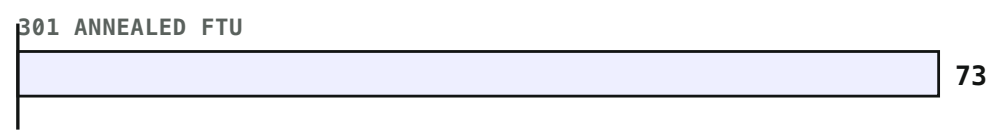
321 Stainless Steel

Stainless stabilized with titanium so it survives the heat of exhausts and collectors.

REFERENCE DRAWING — NOT APPROVED DATA · THE SRM ALWAYS GOVERNS

321 STAINLESS

STABILIZED WITH TITANIUM; NO TABLE IN MIL-HDBK-5J · KSI



PARTS LIST

#	ITEM	NOTE	SRC
1	Sheet, plate	AMS 5510	SAE
2	Composition	18 CR, 11 NI, C .08	AC 43.13
3	Stabilizer	Titanium	AC 43.13
4	Twin	347 (Nb/Ta)	AC 43.13

READ BEFORE USE

NO ALLOWABLES IN THE PUBLIC HANDBOOK
USE THE SPEC OR MMPDS
BAR SHOWN FOR SCALE ONLY

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: 321 reference			
DRAWING NO.: TAP-DWG-072	REV: A	SCALE: NTS	SHEET: 1 OF 1
APPLIES TO: Aircraft materials			
DO NOT SCALE DRAWING			

321 stainless: stabilized with titanium; no table in MIL-HDBK-5J Values from MIL-HDBK-5J, S basis unless noted.

Key facts

Property	Value	Source
Composition	Carbon 0.08 %, chromium 18 %, nickel 11 %, stabilized with titanium	AC 43.13-1B CHG 1, Table 4-3
Class	Austenitic	AC 43.13-1B CHG 1, Table 4-3
Sheet, strip, plate	AMS 5510	SAE AMS 5510 (title)
Allowables	Not in MIL-HDBK-5J (checked); use the spec minimums, MMPDS or the manufacturer	MIL-HDBK-5J
Welding	Weldable like the other austenitic grades; the handbook lists 347 among fillers for austenitic types	AMT Handbook, p. 5-22

Key points

- **No allowables here.** Use the spec or MMPDS.
- **No weld procedure.** Follow the SRM.

SOURCES · FAA AC 43.13-1B CHG 1 · FAA-H-8083-31B, Aviation Maintenance Technician Handbook, Airframe, Volume 1 · SAE AMS 5510 · MMPDS

SCAN · OPEN THIS GUIDE
theaviationpoint.com/materials/steel/321/

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