



TANK TYPE	MOUNT	LOCATION	PMD DEVICE
Simple Pmd	Bosses	Polar	Vane, Trap & Screen

This tank is a 24-inch x 33-inch long cylindrical pressure vessel constructed of 6AL-4V titanium. Mounting is accomplished on polar bosses. A vane, trap type propellant management device (PMD) is provided to expel the fuel under low or zero gravity conditions.

**ATK Part Number 80334-1**

**SIZE: 24.0-inch ID x 33.0-inch Long**  
**SIZE: 584-mm ID x 838-mm Long**

**ISO 9001 & AS 9100 REGISTERED**

APPLICABLE DOCUMENTS	TANK CHARACTERISTICS	ACCEPTANCE TESTS
Bubble Point Test Procedure 50-000278	Operating Pressure, psig 255 Total Volume, ci 10.679	Inspection
Qualification Test Procedure 50-000280	Proof Pressure, psig 400 Prop Volume, lbs 9.274	Mass Measurement
Vibration Test Procedure 50-000280	Cryo Proof, psig NA Max Design Wt, lbs 28.41	Proof Pressure & Internal Volume
Acceptance Test Procedure 50-000324	Burst Pressure, psig 520 Minimum Wall, inch 0.027	Random Vibration
Material & Processes List 54-000060		Radiographic Inspection
Qualification Test Report 56-000102		Penetrant Inspection
Cleaning Procedure, Tank CPP 3611		Bubble Point Test
Cleaning Procedure, PMD CPP 3546		External Leakage
		Visual Inspection
		Cleanliness & Visual Inspection
		Preparation for Data Review

**Notes:**

- 1: Tooling belongs to LMAS
- 2: Fracture Critical
- 3: Tube protector: SK-927 Pressurant
- 4: Tube protector: SK-928 Propellant

**TANK CHARACTERISTICS (Metrics)**

Operating Pressure, bar	17.58	Total Volume, l	175.00
Proof Pressure, bar	27.58	Prop Volume, l	151.98
Cryo Proof, bar	No	Max Design Wt, kg	12.89
Burst Pressure, bar	35.85	Minimum Wall, MM	0.686

**FORINGS**

FORGINGS P/N	SUPPLIER	Die
80-310061-1 (2)	ARCTURUS	2431C
RING FORGING		RING SIZE, (Rough Machined)
80-334061-1, Cylinder	24.19 +.5 ODx23.09 -.5 IDx9.75 +.12,-.06 Lg	

**TUBE TYPE AND SIZE**

TITANIUM	SIZE
80-310001-5, Outlet	.377 OD x .016 Wall
80-310002-3, Inlet	.252 OD x .016 Wall

