



<b>TANK TYPE</b> Simple Pmd	<b>MOUNT</b> Bosses	<b>LOCATION</b> Polar	<b>PMD DEVICE</b> Vane, Trap & Screen
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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	
Bubble Point Test Procedure	50-000278
Qualification Test Procedure	50-000280
Vibration Test Procedure	50-000280
Acceptance Test Procedure	50-000324
Material & Processes List	54-000060
Qualification Test Report	56-000102
Cleaning Procedure, Tank	CPP 3611
Cleaning Procedure, PMD	CPP 3546

TANK CHARACTERISTICS			
Operating Pressure, psig	255	Total Volume, ci	10.679
Proof Pressure, psig	400	Prop Volume, lbs	9.274
Cryo Proof, psig	NA	Max Design Wt, lbs	28.41
Burst Pressure, psig	520	Minimum Wall, inch	0.027

ACCEPTANCE TESTS
Inspection
Mass Measurement
Proof Pressure & Internal Volume
Random Vibration
Radiographic Inspection
Penetrant Inspection
Bubble Point Test
External Leakage
Visual Inspection
Cleanliness & Visual Inspection
Preparation for Data Review

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

**Notes:**

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

**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

