

TANK TYPE	MOUNT	LOCATION	PMD DEVICE
Simple Pmd	Bosses	Polar	Vane, Note 6

This tank is a 22-inch x 32-inch long annealed cylindrical pressure vessel constructed from light-weight 6Al-4V titanium. Mounting is accomplished on polar bosses. A vane type propellant management device (PMD) is provided to expel the fuel under low or zero gravity conditions.

Part Number 80309-1
SIZE: 22.14-inch ID x 32-inch Long
SIZE: 562-MM ID x 813-MM Long

ISO 9001 & AS 9100 REGISTERED

APPLICABLE DOCUMENTS		TANK CHARACTERISTICS		ACCEPTANCE TESTS		
Acceptance Test Procedure	50-000283	Operating Pressure, psig	318	Total Volume, ci	9.210	Preliminary Examination of Product Pre-Proof Volume Proof Pressure Post-Proof Volume Gas Leakage Radiographic & Penetrant Cleanliness Random Vibration Pre-Proof Volume Proof Pressure Post-Proof Volume Gas Leakage Radiographic & Penetrant Final Examination of Product Cleanliness
Engineering Analysis Report	54-000061	Proof Pressure, psig	477	Prop Volume, ci	Note 2	
Material & Processes List	54-000062	Cryo Proof, psig	NO	Max Design Wt, lbs	17.8	
Cleaning	CPP 3614	Burst Pressure, psig	636	Minimum Wall, inch	0.029	
		TANK CHARACTERISTICS (Metrics)				
		Operating Pressure, bar	21.92	Total Volume, l	153.44	
		Proof Pressure, bar	32.89	Prop Volume, l	N/A	
		Cryo Proof, bar	N/A	Max Design Wt, kg	8.07	
		Burst Pressure, bar	43.85	Minimum Wall, MM	0.737	
		FORGINGS				
		FORGINGS P/N	SUPPLIER	Die No		
		80-212061-1 (2)				
		RING FORGING	RING SIZE. (Rough Machined)			
		80-212063-1, Cylinder	22.75 +.09 OD x 21.87 -.09 ID x 8.75 +.25 Lg			
		TUBE TYPE AND SIZE				
		TRANSITION	SIZE			
		80-309001-1 (2)	.250 OD x .020 Wall			
Notes: 1: Tooling owned by Northrop Grumman 2: Propellant volume is between 10% & 99.5% of total volume 3: This tank is similar to 80281-1 4: This tank is annealed 5: The PMD is customer proprietary 6: Simple Vanes (Four Vanes) 7: Fracture Critical				QUALIFICATION TESTS	Qual by similarity 80281-1.	

