

<b>TANK/FUEL TYPE</b> Liq.Gas Tank	<b>MOUNT</b> Lugs	<b>LOCATION</b> Girth	<b>PMD DEVICE</b> NONE
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This tank is a spherical pressure vessel constructed of 6Al-4V Titanium. Mounting is accomplished by lugs parallel with & adjacent to the mid-plane. Propellant feed is provided by an outlet tube on the same plane as the mounting lugs. This tank has a side port.

**Part Number 80461-1**

**SIZE: 19.06 -inch ID Sphere**  
**SIZE: 484 -mm ID Sphere**

**ISO 9001 & AS 9100 REGISTERED**

APPLICABLE DOCUMENTS		TANK CHARACTERISTICS		ACCEPTANCE TESTS	
Acceptance Test Procedure	50-000616	Operating Pressure, psig	319	Total Volume, ci	3,631
QBS Report	56-000213	Proof Pressure, psig	498	Prop Volume, ci	3,631
Cleaning	No CPP	Cryo Proof, psig	N/A	Max Design Wt, lbs	13.25
Fracture Analysis Plan	54-000140 (for 80379)	Burst Pressure, psig	754	Minimum Wall, inch	0.023
<b>Notes:</b> 1: Tooling owned by Northrop Grumman 2: Tank is similar to 80379 except no vortex suppressor 4: Tube protector is SK 1356 7: Fracture Critical		<b>TANK CHARACTERISTICS (Metrics)</b>		<b>ACCEPTANCE TESTS</b> Preliminary Examination of Product Pre-Proof Volume Determination Proof Pressure Test Post-Proof Volume Determination External Leakage Test Penetrant Inspection* Radiographic Inspection* Determination of Weight & Final Inspection Final Visual Examination	
		<b>FORGINGS</b>			
		<b>TUBE TYPE AND SIZE</b>			

TANK CHARACTERISTICS (Metrics)			
Operating Pressure, Bar	21.99	Total Volume, l	59.50
Proof Pressure, Bar	34.34	Prop Volume, l	59.50
Cryo Proof, Bar	N/A	Max Design Wt, Kg	6.01
Burst Pressure, Bar	51.99	Minimum Wall, MM	0.584

FORGINGS		
FORGINGS P/N	SUPPLIER	Die
80-182061-1 (2)	ARCTURUS	2696
RING FORGING		RING SIZE. (Rough Machined)
80-274065-1, Retainer	19.06 +.12 OD x 17.55 -.12 ID x 1.5 +.12 Lg	
80-274063-1, Lug	21.25 +.06 OD x 19.31 -.06 ID x .85 +.06 Lg	

TUBE TYPE AND SIZE	
TITANIUM	SIZE
80-461001-3 (2)	.250" OD x .020" Wall (6.35 mm x .5 mm Wall)

