

TANK TYPE	MOUNT	LOCATION
Propellant	Lugs	Mid-plane

This tank is a spherical pressure vessel constructed of 6AL-4V Titanium. Positive propellant expulsion is provided by a reversing AF-E-332 rubber diaphragm retained at the sphere mid-plane. Mounting is accomplished by lugs parallel with and adjacent to the mid-plane. Connection is made to the propellant and pressurant compartments through tube stubs.

Part Number 80574-1

SIZE: 19.190" DIA x 21.585" LONG
SIZE: 487.426 mm DIA x 548.259 LONG

ISO 9001 & AS 9100 REGISTERED

APPLICABLE DOCUMENTS

Acceptance Test Procedure	50-000845
Cleaning	CPP 4088

TANK CHARACTERISTICS

Operating Pressure, psig	377	Total Volume, in ³	3,631
Proof Pressure, psig	526	Max Design Wt, lbs	13.25
Cryo Proof, psig	N/A	Minimum Wall, inch	
Burst Pressure, psig		Qual Tank Mass, lbs	
Actual Burst, psig			

ACCEPTANCE TESTS

- Preliminary Examination of Product
- Volumetric Capacity Determination, Pre-Proof
- Proof Pressure
- Volumetric Capacity Determination, Post Proof
- Pressure Differential and Expulsion Efficiency
- Penetrant Inspection
- Radiographic Inspection
- Internal Leakage Test
- External Leakage Test
- Determination of Weight and Final Inspection
- Cleanliness
- Final Examination of Product

TANK CHARACTERISTICS (Metrics)

Operating Pressure, bar	26.0	Total Volume, l	59.5
Proof Pressure, bar	36.3	Max Design Wt, kg	6.0
Cryo Proof, bar	N/A	Minimum Wall, mm	
Burst Pressure, bar		Qual Tank Mass, kg	
Actual Burst, bar			

HEMISPHERE FORGINGS

HEMI P/N	QTY
80-182061-1	2

QUALIFICATION TESTS

RING FORGINGS

P/N	QTY	SIZE
80-274063-1	1	21.25" OD x 19.31" ID x .85" LONG
80-274065-1	1	19.06" OD x 17.75" ID x 1.50" LONG

TUBE TYPE AND SIZE

TI 3AL-2.5V	QTY	SIZE
80-486015-5	2	.250" OD x .020" WALL x 4.20" LONG
Ti 6AL-4V		
80-486015-3	2	.295" OD x .012" WALL

