

TANK TYPE	MOUNT	LOCATION
DIAPHRAGM	LUGS	MID-PLANE

The propellant 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 80582-1

SIZE: 19.331" DIA x 21.05" LONG

SIZE: 491.01 mm DIA x 534.67 mm LONG

ISO 9001 & AS 9100 REGISTERED

APPLICABLE DOCUMENTS

Acceptance Test Procedure	50-000872
Cleaning	CPP 4003

TANK CHARACTERISTICS

Operating Pressure, psig	377	Total Volume, in ³	3.631
Proof Pressure, psig	490	Max Design Wt, lbs	13.45
Cryo Proof, psig	N/A	Minimum Wall, inch	
Burst Pressure, psig		Qual Tank Mass, lbs	
Actual Burst, psig			

ACCEPTANCE TESTS

- Preliminary Examination of Product
- Pre-Proof Volume Determination
- Proof Pressure
- Post-Proof Volume Determination
- Expulsion Efficiency
- Internal Leakage
- External Leakage
- Radiographic Inspection
- Penetrant Inspection
- Determination of Weight and Final Inspection
- Cleanliness Verification
- Final Examination

TANK CHARACTERISTICS (Metrics)

Operating Pressure, bar	26.0	Total Volume, l	59.5
Proof Pressure, bar	33.8	Max Design Wt, kg	6.1
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

	QTY	SIZE
80-486015-5	2	.250" OD x .020" WALL x 4.20" LONG

