

TANK TYPE	MOUNT	LOCATION
Pressurant	Bosses	Polar

This is a spherical pressure vessel constructed of titanium. Mounting is accomplished on polar bosses.

Part Number 80499-1
SIZE: 7.66-inch ID Sphere
SIZE: 194.5 mm

ISO 9001 & AS 9100 REGISTERED

APPLICABLE DOCUMENTS

Forging Qualification Procedure	50-000308
Acceptance Test Procedure	50-000669
Qualification Test Procedure	50-000318
Weld Qualification Report	55-000064
Forging Qualification Report	55-000065
Qualification Test Report	Note 2
Cleaning	CPP 3994

TANK CHARACTERISTICS

Operating Pressure, psig	3,600	Total Volume, ci	228
Proof Pressure, psig	5,400	Prop Volume, ci	NA
		Max Design Wt, lbs	3.38
		Actual Wt. lbs.	3.43
Burst Pressure, psig	7,200	Minimum Wall, inch	0.092

ACCEPTANCE TEST SEQUENCE

Preliminary Examination of Product
Pre-Proof Volume
Proof Pressure Test
Post-Proof Volume
External Leak Test
Final Examination of Product
Cleanliness

- Notes:**
- 1: Tooling belongs to Martin/JPL
 - 2: In lieu of a qual test report a data package was provided to Martin Marietta
 - 3: This tank is a re-design of P/N 80024-1
 - 4: Proprietary Document
 - 5: Fracture Critical

TANK CHARACTERISTICS (Metrics)

Operating Pressure, bar	248.21	Total Volume, l	3.736
Proof Pressure, bar	372.31	Prop Volume, l	NA
		Max Design Wt, Kg	1.533
		Actual Wt. Kg.	1.556
Burst Pressure, bar	496.41	Minimum Wall, MM	2.337

QUALIFICATION TESTS PERFORMED

ATP above plus the following:
Pressure Cycle Life
Burst Pressure Test (Not To Failure)

FORGINGS

FORGINGS P/N	SUPPLIER	Die
80-326061-1 (2)		

TUBE TYPE AND SIZE

TRANSITION	SIZE
80-326001-3	.250 OD x .035 Wall (6.35 x .889 MM)

