

TANK TYPE Pressurant	MOUNT Bosses	LOCATION Polar
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The tank is a spherical pressure vessel constructed of 6Al-4V titanium. The port is a .250 diameter titanium to 304 stainless steel transition tube. Mounting is provided by polar bosses located on the tank center axis.

Part Number 80383-1

SIZE: 16.4-inch ID Sphere
SIZE: 416-MM

ISO 9001 & AS 9100 REGISTERED

APPLICABLE DOCUMENTS

Qualification Test Procedure	50-000300
Acceptance Test Procedure	50-000457
Qualification Test Report	56-000113
Cleaning	CPP 3746

TANK CHARACTERISTICS

Operating Pressure, psig	3,600	Total Volume, ci	2,200
Proof Pressure, psig	5,400	Prop Volume, ci	NA
Cryo Proof, psig	8,740	Max Design Wt, lbs	35.0
Burst Pressure, psig	7,200	Minimum Wall, inch	0.197

ACCEPTANCE TESTS

Preliminary Examination of Product
Pre-Proof Volumetric Capacity Test
Proof Pressure Test
Post-Proof Volumetric Capacity Test
Cryogenic Proof Pressure
Radiographic & Dye Penetrant Inspection
External Leakage
Final Examination of Product
Cleanliness

Notes:

- 1: Tooling belongs to LMSC
- 2: This tank is similar to P/N 80314-1
- 3: Tube protector is SK 969
- 4: Proprietary Document
- 5: Fracture Critical

TANK CHARACTERISTICS (Metrics)

Operating Pressure, Bar	248.21	Total Volume, l	36.05
Proof Pressure, Bar	372.31	Prop Volume, l	NA
Cryo Proof, Bar	602.59	Max Design Wt, Kg	15.88
Burst Pressure, Bar	496.41	Minimum Wall, MM	5.004

QUALIFICATION TESTS

Acceptance Tests
Operating Life
Random Vibration
Burst
Post-Test Analysis

FORGINGS

FORGINGS P/N	SUPPLIER	Die
80011-63 (2)		

TUBE TYPE AND SIZE

TRANSITION	SIZE
80-383001-1	.250 OD x .049 Wall x 4.6 Lg

TUBE TYPE AND SIZE (Metrics)

TRANSITION	SIZE
80-383001-1	6.35 x 1.24 x 116.84 MM

