TANK/FUEL TYPE	MOUNT	LOCATION	PMD DEVICE
Liq.Gas Tank	Lugs	Girth	NONE

NORTHROP GRUMMAN

This tank is a spherical pressure vessel constructed of 6Al-4V Titanium. Mounting is accomplished by lugs parallel with & adjacent to the mid-plane. Oxidizer feed is provided by an outlet tube on the same plane as the mounting lugs. This tank differs from 80461-1 because it does not have a side port.

Part Number 80461-2

SIZE: 19.06 -inch ID Sphere
SIZE: 484 -MM ID Sphere

ISO 9001 & AS 9100 REGISTERED

APPLICABLE DOCUMENTS

Acceptance Test Procedure	50-000647
QBS Report	56-000213
Cleaning	No CPP
Fracture Analysis Plan	54-000140 (for 80379)

TANK CHARACTERISTICS

Operating Pressure, psig	319	Total Volume, ci	3,631
Proof Pressure, psig	498	Prop Volume, ci	3,631
Cryo Proof, psig	No	Max Design Wt, lbs	13.25
Burst Pressure, psig	754	Minimum Wall, inch	0.023

ACCEPTANCE TESTS

- 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
- Cleanliness Verification
- Final Visual Examination

Notes:

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

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	No	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
80-461001-1 (2)	.250" OD x .020" Wall
	(6.35 mm x .5 mm Wall)

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