

TANK	MOUNT	LOCATION
Diaphragm	Flange	Girth

This Tank is a 40-inch oblate spheroid pressure vessel constructed of 6Al-4V titanium. Positive fuel expulsion is provided by a fully reversible ethylene-propylene terpolymer (AF-E-332) rubber diaphragm retained (welded) at the mid-plane. Mounting is accomplished on a continuous flange parallel with and adjacent to the mid-plane.

PSI Part Number 80485-1

SIZE: 40-inch Oblate Spheroid
SIZE: 1016 mm

ISO 9001 & AS 9100 REGISTERED

APPLICABLE DOCUMENTS	
Acceptance Test Procedure	50-000659
Fracture Control Plan	54-000238
Cleaning	CPP 3988

TANK CHARACTERISTICS			
Operating Pressure, psig	338	Total Volume, in ³	28,144
Proof Pressure, psig	525	Prop Volume, in ³	Various
Cryo Proof, psig	N/A	Max Design Wt, lbs	76.00
Burst Pressure, psig	676	Minimum Wall, inch	0.050
Actual Burst, psig			

ACCEPTANCE TESTS
Examination of Product
Pre-Proof Volumetric Capacity Test
Proof Pressure Test
Post-Proof Volumetric Capacity Test
Internal Leak Test
External Leak Test
Radiographic Inspection
Dye Penetrant Inspection
Final Examination of Product
Cleanliness
Data Review

DIAPHRAGM INFORMATION	
Diaphragm P/N	80-263027-1
Diaphragm Mold P/N	T-1868
Diaphragm Gross Wt	7.6 lbs
Diaphragm Matl Type	AF-E-332
Material Specification, Rubber	MT3-73
Diaphragm Processing Note 2	90-000094
N-Ray Procedure	1002

TANK CHARACTERISTICS (Metrics)			
Operating Pressure, bar	23.30	Total Volume, l	461
Proof Pressure, bar	36.20	Prop Volume, l	Various
Cryo Proof, bar	NO	Max Design Wt, kg	34.47
Burst Pressure, bar	46.61	Minimum Wall, MM	1.270
Actual Burst, bar			

Notes:

1. Tooling owned by TRW
2. Proprietary Document
3. This tank was originally qualified under P/N 80263 and the QTP is 50-000209 & QTR is 56-000075
4. Tube Protector SK-1487
5. Different tubes, same mounting flange as 80263-1

FORGINGS		
Forgings P/N	SUPPLIER	Die
80-260061-1		

Roll Ring Forging	Ring Size (Rough Machined)
80-263065-1	40.46 +.09 x 39.12 -.09 ID x 1.68 +.09 LG
80-263063-1	42.57 +.09 x 39.56 -.09 ID x 3.81 +.25 LG

QUALIFICATION TESTS
Qual by similarity on 80263-1.

TUBE TYPE AND SIZE	
TRANSITION	SIZE
80-263001-1, (2)	.250 OD x .016 wall (6.35 x .406 MM)

