

<b>TANK &amp; FUEL TYPE</b> PMD	<b>MOUNT</b> XXXX	<b>LOCATION</b> XXXX	<b>PMD</b> Channel
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The ICM Propellant Tank Assembly consists of a customer furnished 52" inside diameter tank shell into which a PMD Channel Assembly is installed. Inlet and outlet valve assemblies are affixed to the bungs to complete the tank assembly.

**Part Number 80404-5**

**SIZE: 52.0-inch ID Sphere**  
**SIZE: 1321.9 -MM**

The tank was provided as customer supplied material. It consists of a 52.0" ID, 2219 aluminium spherical tank with 5.0" openings at each end. The tank was provided with plastic covers bolted and sealed at each end with 5psi dry nitrogen blanket pressure. The tank was also provided with rigid plastic covers protecting a Koropon painted exterior.

Analysis **Stress Fracture**  
Fracture Control Plan

**ISO 9001 (1994) REGISTERED**

**APPLICABLE DOCUMENTS**

Acceptance Test Procedure	50-000526
Qual Test Procedure	50-000525
Bubble Point Test Procedure	50-000522
Flow Loss	50-000531
Qual Test Report	56-000180

**TANK CHARACTERISTICS**

Operating Pressure, psig	150	Total Volume, ci	73,000
Proof Pressure, psig	N/A	Prop Volume, ci	
Cryo Proof, psig	N/A	Max Design Wt, lbs	
Burst Pressure, psig	N/A	Minimum Wall, inch	

**ACCEPTANCE TESTS**

- Examination of Product ( Preliminary)
- External Leakage Test
- Bubble Point Test
- Vibration Test (Acceptance Level)
- Bubble Point Test
- External Leakage Test
- Examination of Product (Final)
- Cleanliness Verification
- Data Review

**PROGRAM INFORMATION**

Program Name	ICM
Customer	Naval Research
Customer Part Number	IM-TF-0026-01
Original Job No.	9714
Customer Installed Device	No
Customer Controlled Design	No

**TANK CHARACTERISTICS (Metrics)**

Operating Pressure, Bar	10.34197463	Total Volume, l	1,196
Proof Pressure, Bar	N/A	Prop Volume, l	0
Cryo Proof, Bar	N/A	Max Design Wt, Kg	0.00
Burst Pressure, bar	N/A	Minimum Wall, MM	0.000

**QUALIFICATION TESTS**

- Examination of Product (Preliminary)
- External Leakage Test
- Bubble Point Test
- Vibration Test (Acceptance Level)
- Bubble Point Test/Effluent Sample
- External Leakage Test
- Cleanliness Verification
- Bubble Point Test
- Vibration & Sine Burst Test (Qual Level)
- External Leakage Test
- Volume Determination
- Pyro Firing Test
- External Leakage Test
- Examination of Product (Final)
- Disassembly and Inspection
- Data Review

**DIAPHRAGM INFORMATION**

Diaphragm P/N	80-
Diaphragm Mold Tool No.	T-
Diaphragm Gross Weight	
Diaphragm Material Type	AF-E-332
Diaphragm, Material	90-000075
Diaphragm Processing	90-000087
N-Ray Inspection Procedure	1002

**FORGINGS**

FORGINGS P/N	SUPPLIER	Die No
80-404070-1	Customer Furnished	
RING FORGING	RING SIZE, (Rough Machined)	
80-		

**TUBE TYPE AND SIZE**

TRANSITION	SIZE
80-404234-1	

**TUBE TYPE AND SIZE (Metrics)**

TRANSITION	SIZE
80-404234-1	

