

TANK TYPE Complex PMD Hydrazine	MOUNT Bosses	LOCATION Girth	PMD DEVICE Vane (4), Channel(2) Trap & Screen
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This tank is a spherical pressure vessel constructed of 6AL-4V titanium. Fuel (Hydrazine) expulsion is provided by a complex vane, channel & trap type propellant management device (PMD) fabricated to provide expulsion capability under low or zero gravity conditions.

Part Number 80373-1

SIZE: 34-inch ID Sphere
SIZE: 863-mm

ISO 9001 & AS 9100 REGISTERED

APPLICABLE DOCUMENTS		TANK CHARACTERISTICS		ACCEPTANCE TESTS																	
Qualification Test Procedure	50-000432	Operating Pressure, psig	300	Total Volume, ci	20,580																
Acceptance Test Procedure	50-000438	Proof Pressure, psig	375	Prop Volume, ci	20,579																
Protoflight Test Procedure	50-000434	Cryo Proof, psig	500	Max Design Wt, lbs	30.5																
Bubble Point Test Procedure	50-000439	Burst Pressure, psig	450	Minimum Wall, inch	0.029																
Installation / Vibration Bracket	50-000434	TANK CHARACTERISTICS (Metrics) <table border="1"> <tr> <td>Operating Pressure, Bar</td> <td>20.68</td> <td>Total Volume, l</td> <td>337.25</td> </tr> <tr> <td>Proof Pressure, Bar</td> <td>25.85</td> <td>Prop Volume, l</td> <td>337.23</td> </tr> <tr> <td>Cryo Proof, Bar</td> <td>34.47</td> <td>Max Design Wt, Kg</td> <td>13.83</td> </tr> <tr> <td>Burst Pressure, Bar</td> <td>31.03</td> <td>Minimum Wall, Kg</td> <td>0.737</td> </tr> </table>				Operating Pressure, Bar	20.68	Total Volume, l	337.25	Proof Pressure, Bar	25.85	Prop Volume, l	337.23	Cryo Proof, Bar	34.47	Max Design Wt, Kg	13.83	Burst Pressure, Bar	31.03	Minimum Wall, Kg	0.737
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Cleaning	CPP 3728	ACCEPTANCE TESTS Examination of Product Tank Assembly Bubblepoint Test Pre-Proof Volumetric Capacity Proof Pressure Test Post-Proof Volumetric Capacity Cryogenic Proof Pressure and Post Cryo Dimensional Post-Cryo Dimensional Vibration Test Vibration Test Dry Random - Protoflight Wet Sine Acceptance Wet Random External Leakage Bubble Point Test Radiographic & Dye Penetrant Fianl Examination of Product Cleanliness Prepare for Delivery																			
Notes: 1: Tooling owned by Northrop Grumman 2: Acceptance Sine is wet & dry 3: INTELSAT 80373-3, ATP 50-000434 4: Fracture Critical		FORGINGS <table border="1"> <thead> <tr> <th>FORGINGS P/N</th> <th>SUPPLIER</th> <th>Die</th> </tr> </thead> <tbody> <tr> <td>80-373061-1 (2)</td> <td></td> <td></td> </tr> </tbody> </table>		FORGINGS P/N	SUPPLIER	Die	80-373061-1 (2)			TUBE TYPE AND SIZE <table border="1"> <thead> <tr> <th>TITANIUM</th> <th>SIZE</th> </tr> </thead> <tbody> <tr> <td>80-373020-7, Inlet</td> <td>.375 OD x .025 Wall</td> </tr> <tr> <td>80-373040-5, Outlet</td> <td>.500 OD x .025 Wall</td> </tr> </tbody> </table>		TITANIUM	SIZE	80-373020-7, Inlet	.375 OD x .025 Wall	80-373040-5, Outlet	.500 OD x .025 Wall				
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