

TANK TYPE	MOUNT	LOCATION
Propellant		
ISO 9001 & AS 9100 REGISTERED		

Part Number 80577-1

SIZE: 28.55" DIA x 54.915" LONG

SIZE: 725.17 mm DIA x 1394.841 mm LONG

APPLICABLE DOCUMENTS

Acceptance Test Procedure	50-000877
Qual Test Procedure	50-000878
Qual Test Report	56-000337
Stress and Fracture Analysis	54-000476
Cleaning	CPP 4100

TANK CHARACTERISTICS

Operating Pressure, psig	340	Total Volume, in ³	26,750
Proof Pressure, psig	438	Max Design Wt, lbs	50.0
Cryo Proof, psig	N/A	Minimum Wall, inch	0.032
Burst Pressure, psig	546	Qual Tank Mass, lbs	48.01
Actual Burst, psig	681		

ACCEPTANCE TESTS

Preliminary Examination of Product
Volumetric Capacity Measurement, Pre-Proof
Hydrostatic Proof Test
Volumetric Capacity Measurement, Post-Proof
PMD Bubble Point
External Leakage
Non-Destructive Evaluation
Final Examination of Product
Cleanliness Verification

TANK CHARACTERISTICS (Metrics)

Operating Pressure, bar	23.4	Total Volume, l	438.4
Proof Pressure, bar	30.2	Max Design Wt, kg	22.7
Cryo Proof, bar	N/A	Minimum Wall, mm	0.813
Burst Pressure, bar	37.6	Qual Tank Mass, kg	21.78
Actual Burst, bar	47		

QUALIFICATION TESTS

Cyclic Pressurization
Pressure Drop, Mass Flow Rate, and Priming
PMD Bubble Point
External Leakage
PMD Radiographic Inspection
Slosh Loads (partial)
Tank and PMD Radiographic Inspection
PMD Bubble Point
External Leakage
Vibration (Dry Random)
Vibration (Wet Natural Frequency)
Acceleration Testing
Penetrant Inspection
Acceleration Testing Retest
Radiographic Inspection
PMD Bubble Point
External Leakage
Axial Stiffness Test
Non-destructive Evaluation
Slosh Loads (Remainder)
PMD Radiographic Inspection
External Leakage
Penetrant Inspection
Final Visual and Dimensional
Data Review
Burst Pressure Test
Post Burst PMD Bubble Point

HEMISPHERE FORGINGS

HEMI P/N	QTY
80-577061-1	2

RING FORGINGS

P/N	QTY	SIZE
80-356063-3	1	28.37" OD x 27.87" ID x 23.31" LONG

TUBE TYPE AND SIZE

Ti 3AL-2.5V	QTY	SIZE
80-577162-1	1	.690" OD x .018" WALL x 5.050" LONG
Ti 6AL-4V		
80-398002-1	1	.250"-.335" OD x .020" WALL x 5.30" LONG
Ti 6AL-4V		
80-398002-3	1	.250"-.335" OD x .020" WALL x 5.30" LONG

