



<b>FUEL TYPE</b> Xenon	<b>MOUNT</b> Polar	<b>LOCATION</b> Boss	<b>PMD DEVICE</b> no
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The Xenon Propellant Tank is a composite overwrapped pressure vessel (COPV) with a liner constructed of a center cylinder welded to end domes and overwrapped with T1000 carbon fiber. The CP-70 titanium heads, and CP-3 cylinder have a nominal .032" membrane thickness. Mounting is provided by polar bosses located on the tank centerline axis.

**ATK Part Number 80458-101**

**SIZE: 16.2 inch ID x 40.7 inch**  
**SIZE: 411.48 x 1,033.78 mm**

**ISO 9001 & AS 9100 REGISTERED**

APPLICABLE DOCUMENTS		TANK CHARACTERISTICS		ACCEPTANCE TESTS
Acceptance Test Procedure	50-000625	Operating Pressure, psig	2,700	Examination of Product, Preliminary Autofrettage @ Ambient Volumetric Measurement @ Ambient Proof Pressure Test @ Ambient Volumetric Measurement @ Ambient Volumetric Capacity @ MEOP Boroscope Inspection Internal Vacuum Test External Leak Test Weld Quality Inspection Examination of Product, Final Final Clean
Qualification Test Procedure	50-000626	Proof Pressure, psig	3,375	
QBS Report	See note 1	Cryo Proof, psig	No	
Fracture Analysis Plan	54-000230	Design Burst Pressure, psig	4,050	
Stress Analysis Report	54-000231	Actual Burst Press, psig	see 80458-1	
Qualification Test Report	56-000206			
Range Safety Compliance Report	56-000207	<b>TANK CHARACTERISTICS (Metrics)</b>		
Cleaning	CPP 3970	Operating Pressure, Bar	186.16	
		Proof Pressure, Bar	232.69	
		Cryo Proof, Bar	No	
		Burst Pressure, Bar	279.23	
		Actual Burst Press, Bar	see 80458-1	

**Notes:**

(1) QBS is incld in Stress Anal Report 54-000231

FORGINGS	
<b>FORGINGS P/N</b>	
80-436061-1	

TUBE TYPE AND SIZE	
<b>304 SS</b>	<b>SIZE</b>
80-458001-1	.375 OD x .050 Wall

TUBE TYPE AND SIZE (Metrics)	
<b>304 SS</b>	<b>SIZE</b>
80-458001-1	9.525 x 1.27 MM Wall

QUALIFICATION TESTS
Examination of Product, Preliminary
Autofrettage
Volumetric Measurement
Proof Pressure Test
Volumetric Measurement
Strain Data Correlation
Volumetric Capacity @ MEOP
External Leakage Test
Weight Measurement and Inspection
Propellant Flow Rate Test
MEOP Pressure Cycle Life Test
Proof Pressure Cycle Life Test
External Leakage Test
Dynamic Testing Approval
Sinusoidal Vibration Test
Sine Burst Test
Random Vibration Test
External Leakage Test
Thermal Cycling Test
Random Vibration Test
External Leakage Test
Weld Quality Inspection
Examination of Product, Final
Burst Test



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