

TANK TYPE	MOUNT	LOCATION
COPV	POLAR	POLAR

This composite overwrapped pressure vessel (COPV) Helium tank is 16.7" (424 mm) in diameter and 29.6" (752 mm) in length. The tank is constructed of a CP Titanium center cylinder welded to two CP Titanium end domes and overwrapped with T1000 carbon fiber. Mounting is provided by two polar bosses located on the tank centerline axis.

Part Number 80496-1

SIZE: 16.7" DIA X 29.6" LONG

SIZE: 424 mm DIA X 752 mm LONG

ISO 9001 & AS 9100 REGISTERED

APPLICABLE DOCUMENTS	TANK CHARACTERISTICS	QUALIFICATION TESTS
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Acceptance Test Procedure	50-000668
Cleaning	3992

Operating Pressure, psig	4,800	Total Volume, in ³	4,967
Proof Pressure, psig	6,000	Max Design Wt, lbs	28.00
Cryo Proof, psig	N/A	Minimum Wall, inch	0.018
Burst Pressure, psig	7,200		
Actual Burst, psig	8,297	for P/N 80436	

Qual by similarity to P/N 80436-1

Notes:

1. This tank is similar to 80436-1.

ACCEPTANCE TEST

Examination of Product Preliminary
Volumetric Measurement @ Ambient
Proof Pressure Test @ Ambient
Volumetric Measurement @ Ambient
Volumetric Capacity @ MEOP
External Leak Test
Weld Quality Inspection
Examination of Product Final
Final Clean

PROGRAM INFORMATION	TANK CHARACTERISTICS (Metrics)	VACUUM RATED
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Program	Selene Winds
Customer	Eagle/MELCO
Customer Installed Device	No
Customer Controlled Device	No

Operating Pressure, bar	330.94	Total Volume, l	81
Proof Pressure, bar	413.68	Max Design Wt, kg	12.70
Cryo Proof, bar	N/A	Minimum Wall, MM	0.457
Burst Pressure, bar	496.41		
Actual Burst, bar	572.05	for P/N 80436	

YES

HEMISPHERE FORGINGS			
HEMI P/N	QTY	SUPPLIER	Die No
80-436061-1	2	ARCTURUS	3852

ROLLED AND SEAM WELDED CYLINDER		
P/N	QTY	SIZE
80-436100-1	1	15.87 in ID X 16.75 in LONG

TUBE TYPE AND SIZE (in.)	
Transition Tube Titanium to 304L CRES	SIZE
	0.250 O.D. x 0.035 Wall

