

TANK TYPE COPV	MOUNT POLAR BOSSES	LOCATION CENTERLINE AXIS
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Part Number 80615-1

SIZE: 16.50" DIA x 13.95" LONG

SIZE: 419.1 mm DIA x 354.3 mm DIA LONG

The Pressurant Tank is a composite overwrapped pressure vessel (COPV) with a liner constructed of two domes welded together and overwrapped with T1000 carbon fiber. The commercially pure titanium liner has a nominal .020" membrane thickness. Mounting is provided by polar bosses located on the tank centerline axis.

ISO 9001 & AS 9100 REGISTERED

APPLICABLE DOCUMENTS

Acceptance Test Procedure	50-000952
QBS Report	56-000343
Cleaning	AP07-300-P170

TANK CHARACTERISTICS

Operating Pressure, psig	4,500	Total Volume, in ³	1,709
Proof Pressure, psig	5,625	Max Design Wt, lbs	15.0
Cryo Proof, psig	N/A	Minimum Wall, inch	0.020
Burst Pressure, psig	QBS	Qual Tank Mass, lbs	QBS
Actual Burst, psig	QBS		

ACCEPTANCE TESTS

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

TANK CHARACTERISTICS (Metrics)

Operating Pressure, bar	310.3	Total Volume, l	28.0
Proof Pressure, bar	387.9	Max Design Wt, kg	6.8
Cryo Proof, bar		Minimum Wall, mm	0.508
Burst Pressure, bar	QBS	Qual Tank Mass, kg	QBS
Actual Burst, bar	QBS		

QUALIFICATION TESTS

HEMISPHERE FORGINGS

HEMI P/N	QTY
80-436061-5	2

TUBE TYPE AND SIZE

TI 3AL-2.5V	QTY	SIZE
80-615020-5	1	..250" OD X ..028" WALL x 2.70" LONG

