



TANK TYPE	MOUNT	LOCATION
Pressurant	Bosses	Polar

This tank is a 12-inch spherical pressure vessel constructed of 6AL-4V titanium. Mounting is accomplished on polar bosses. A single tube is provided for inlet and outlet operation.

ISO 9001 & AS 9100 REGISTERED

ATK Part Number 80194-1

SIZE: 12.23-inch ID Sphere
 SIZE: 310.6 mm

APPLICABLE DOCUMENTS	
Acceptance Test Procedure	50-000136
Qualification Test Procedure	50-000137
Forging Qualification Procedure	55-000047
Weld Qualification Report	55-000048
Qualification Test Report	56-000049
Cleaning	CPP 3352

TANK CHARACTERISTICS			
Operating Pressure, psig	3,600	Total Volume, ci	955
Proof Pressure, psig	5,400	Prop Volume, ci	NA
Cryo Proof, psig	7,560	Max Design Wt, lbs	11.85
Burst Pressure, psig	7,200	Minimum Wall, inch	0.141
Normalized Burst Pres.	7,542		

ACCEPTANCE ENVIRONMENTAL TESTS
Cryogenic Proof

Notes:

1: Tooling owned by HAC & is located at HAC

TANK CHARACTERISTICS (Metrics)			
Operating Pressure, bar	248.21	Total Volume, l	15.65
Proof Pressure, bar	372.31	Prop Volume, l	NA
Cryo Proof, bar	521.24	Max Design Wt, kg	5.38
Burst Pressure, bar	496.41	Minimum Wall, mm	3.581
Normalized Burst Pres.	519.99		

FORGINGS		
FORGINGS P/N	SUPPLIER	Die No
80009-63 (2)	ARCTURUS	N/A

TUBE TYPE AND SIZE	
TITANIUM	SIZE
80-194020-3	.250 OD x .020 Wall 6.35 x .508 mm

