

<b>TANK TYPE</b> Diaphragm	<b>MOUNT</b> Lugs, 6	<b>LOCATION</b> Girth
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This is a 13-inch spherical pressure vessel constructed of 6Al-4V titanium. Positive fuel expulsion is provided by a reversible ethylene-propylene terpolymer (AF-E-332) rubber diaphragm retained (welded in) at the sphere mid-plane. Mounting is accomplished by six (6) lugs parallel with and adjacent to the sphere mid-plane.

**Part Number 80290-1**

**SIZE: 12.88-inch ID Sphere**

**SIZE: 327-MM**

**ISO 9001 & AS 9100 REGISTERED**

<b>APPLICABLE DOCUMENTS</b>	<b>TANK CHARACTERISTICS</b>	<b>ACCEPTANCE TESTS</b>
Qualification Test Procedure 50-000238	Operating Pressure, ps: 396 Total Volume, ci 1,080	Preliminary Examination of Product
Acceptance Test Procedure 50-000240	Proof Pressure, psig 594 Prop Volume, ci 760	Pre-Proof Volume
Fracture Control Plan 54-000042	Cryo Proof, psig NA Max Design Wt, 5.6	Proof Pressure
Qual Test report 56-000086	Burst Pressure, psig 792 Minimum Wall, i 0.019	Post-Proof Volume
Cleaning CPP 3542		Internal Leakage
		External Leakage
		Final Examination of Product
		Contamination Check

**DIAPHRAGM INFORMATION**

Diaphragm P/N	80-216007-1
Diaphragm Mold P/N	T-1262
Diaphragm Gross Wt	1.0
Diaphragm Matl Type	AF-E-332
Diaphragm, Materi. Note 2	90-000075
Diaphragm Procs Note 2	90-000087
N-Ray Inspection Procedure	1002

**TANK CHARACTERISTICS (Metrics)**

Operating Pressure, b: 27.30	Total Volume, l 17.70
Proof Pressure, bar 40.95	Prop Volume, l 12.45
Cryo Proof, bar NA	Max Design Wt, 12.3
Burst Pressure, bar 54.61	Minimum Wall, l 0.483

- Notes:**
- 1: Majority of tooling belongs to NG
  - 2: Proprietary Document
  - 3: This tank is similar to P/N 80282-1
  - 4: Fracture Critical

**FORGINGS**

FORGINGS P/N	SUPPLIER	Die
80-187061-1, Propellor Arcturus		2971
80-198061-1, Pressure Arcturus		2970
RING FORGING RING SIZE, (Rough Machined)		
80-187003-1, Retainer OD x 11.81 -.09 ID x 1.38 +.09 Lg		
80-282040-1, OD x 13.18 +.03 -.06 ID x .70 +.06 -.03 Lg		

**PROGRAM INFORMATION**

Program	ITV
Customer	Hamilton Standard
Customer P/N	SV774166-2
Original Job No	8007
Customer Installed Device	No
Customer Controlled Design	No

**TUBE TYPE AND SIZE**

TITANIUM	SIZE
80-282001-1, Inlet	.190 OD x .015 Wall
80-290001-1, Outlet	.190 OD x .015 Wall

