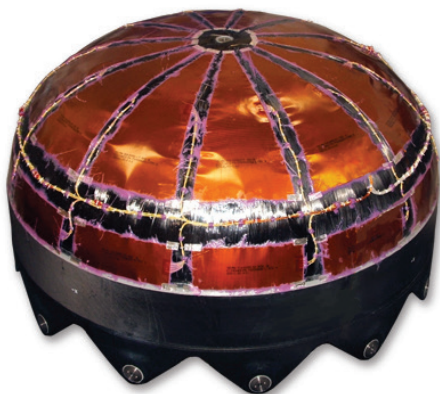


Xenon Propellant Tank

COBHAM

The most important thing we build is trust



Cobham has designed, developed and qualified the largest composite xenon propellant tank ever flown. This high performance titanium-lined, carbon composite pressure vessel was qualified to launch with 992 lbs of xenon at 1,250 psig. The full assembly weight of the tank and skirt is under 49 pounds.

In addition to the composite propellant tank, Cobham designed, fabricated and integrated a composite skirt. This hand laid-up, autoclave cured skirt is an extremely lightweight and effective solution for integrating the propellant tank with the spacecraft structure.

The composite skirt was subject to proof load testing prior to integration as well as dynamic testing after integration.

Cobham designs pressure vessels for liquid propellant and also has flight heritage with pressurant tanks for cold gas propulsion, fuel expulsion, and thrust vector control.

With over 80 qualified vessel designs, Cobham's composite pressure vessels can be easily integrated into existing and new systems where high performance gas storage is essential.

Key Features

- Titanium-Lined, Carbon Composite Pressure Vessel
- Integral Carbon Composite Skirt
- Designed and Qualified to AIAA S-081
- Spacecraft Interface using Stainless Inserts/Nutplates
- 316L CRES Stub Tube for Gas Interface

Specifications

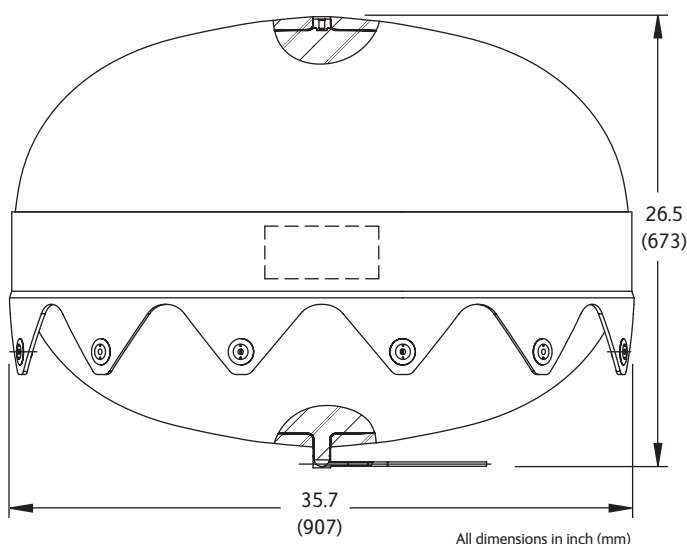
| | | |
|---------------|--|-----------|
| Medium | Xenon Gas | |
| Fill Pressure | 1,250 psi | (86 barg) |
| Water Volume | 16,350 ci | (268 L) |
| Dimensions | Diameter 35.7" at spacecraft interface | (907 mm) |
| | Length 26.5" | (673 mm) |
| | Mass: 49 lbs max | (22 kg) |

Operating Environment

| | | |
|-------------|-----------------|------------------|
| Temperature | 77 to 122 deg F | (25 to 50 deg C) |
|-------------|-----------------|------------------|

Product Interfaces

| | |
|------------|---|
| Port Types | 0.25" dia x 0.02" wall x 4.6" long 316L Stub Tube (6.3 mm x 0.5 mm x 117 mm) |
|------------|---|



Cobham Propellant Tank

For further information please contact:

Cobham Mission Systems
711 Corporate Center Court
Westminster, MD 21157 USA

Tel: +1 (410) 871 9966 x 104
Fax: +1 (410) 871 9960
Kevin.Kilgore@cobham.com