

# SURFACE TENSION PROPELLANT TANK WITH LIQUID COG CONTROL

## Surface Tension Propellant Tank with Liquid COG Control

**Net Volume Range:**

198 Litres / 282 Litres / 331 Litres

**Propellants**

Hydrazine (N<sub>2</sub>H<sub>4</sub>), MON respectively MMH

**Geometrical Shape**

Cassini with a cylindrical intersection

**Maximum Expected Operating Pressure (MEOP)**

18.6 bar

**Proof Pressure (1.5 x MEOP)**

27.9 bar

**Burst Pressure (2.0 x MEOP)**

37.2 bar

**Interface Fixation**

12 Suspension Tabs  
with floating nuts M6 x 1 (e.g.)

**Materials**

- Pressure Vessel
- Suspension/Ports
- PMD
- Screens
- CoG Baffle

Ti6Al4V STA (3.7164.7)

Ti6Al4V (3.7164.1)

Ti99.4 (3.7034.1) and Ti6Al4V (3.7164.1)

304L (1.4306); qualified also for Ti99.4 (3.7025.1)

Ti99.4 (3.7034.1) and Ti6Al4V (3.7164.1)

**Tank Mass**

27.0 kg (331L)

**CoG**

Liquid CoG control  $\pm 5.0$ mm over range of fill level

**Project Involvement**

JASON CS

