एन्ट्रिक्स
ANTRIX

Satellite Propellant Tanks

ANTRIX markets the space products and services emanating from Indian Space Program. ANTRIX's range of robust propulsion system and components suit commercial and institutional applications and make us partner of choice for our customers.

ANTRIX's capabilities include design, manufacture and testing of propellant and pressurant tanks. Our tanks have been used in mission to moon and mars. Tank geometry may be adapted according to the required propellant mass and volume available for accommodation. Typical tank geometries are spherical and cylindrical with either hemispherical or Cassini shaped domes.

- Surface tension Propellant Management Device (PMD) tanks for the supply of MMH and MON-3 to the LAM and AOCS thrusters.
- The Propellant Management Device (PMD) shall be designed according to the worst case of launch loads defined by the launchers.
- The tank shall be capable of supplying gas free MMH/MON-3 at the rate of 80 cc/s (maximum) during the Apogee burn and 20 cc/s (maximum) during on-orbit operations.
- The family of propellant tank capacity varies from 7L to 875L.
- Material of Construction: Ti-6Al-4V in STA and annealed condition, commercially pure Titanium and SS-304L.

7L Propellant Tank

Nominal internal volume	7.5 L
Tank pressure	24 bar (MEOP)
Proof pressure	36 bar
Burst pressure	96 bar
External leakage	Less than $1x10^{-6}$ Scc/s of GHe
Operating temperature	+5°C to 55°C
Dry mass	2.0 Kg
Residual volume	100 cc
Propellant flow rate	5cc/s max at 0.2 bar Δp
Interface Details	12 Holes of 5.2 Dia on 146 PCD

30L Propellant Tank

Nominal internal volume	30L
Tank pressure	24 bar (MEOP)
Proof pressure	36 bar
Burst pressure	96 bar
External leakage	Less than $1x10^{-6}$ Scc/s of GHe
Operating temperature	+5°C to 55°C
Dry mass	5.7 Kg
Residual volume	250 cc
Propellant flow rate	50cc/s max at 0.2 bar Δp
Interface Details	18 holes of 5.5 Dia on 214 PCD

35L Propellant Tank

Nominal internal volume	35L
Tank pressure	24 bar (MEOP)
Proof pressure	36 bar
Burst pressure	96 bar
External leakage	Less than $1x10^{-6}$ Scc/s of GHe
Operating temperature	+5°C to 55°C
Dry mass	7.0 Kg
Residual volume	250 cc
Propellant flow rate	50cc/s max at 0.2 bar Δp
Interface Details	16 holes of 5.5 Dia on 214 PCD

390L Propellant Tank

Nominal internal volume	390L
Tank pressure	16.5 bar (MEOP)
Proof pressure	24.75 bar
Burst pressure	33 bar
External leakage	Less than $1x10^{-6}$ Scc/s of GHe
Operating temperature	+5°C to 55°C
Dry mass	23.0 Kg
Residual volume	2.25L
Propellant flow rate	80cc/s max at 0.2 bar Δp
Interface details	18 Nos. of M6x1 floating plate nuts on Dia 877mm

516L Propellant Tank

Nominal internal volume	516L
Tank pressure	16.5 bar (MEOP)
Proof pressure	24.75 bar
Burst pressure	33 bar
External leakage	Less than $1x10^{-6}$ Scc/s of GHe
Operating temperature	+5°C to 55°C
Dry mass	26.0 Kg
Residual volume	2.5L
Propellant flow rate	80cc/s max at 0.2 bar Δp
Interface details	18 Nos. of M6x1 floating plate nuts on Dia 877mm

650L Propellant Tank

Nominal internal volume	650L
Tank pressure	16.5 bar (MEOP)
Proof pressure	24.75 bar
Burst pressure	33 bar
External leakage	Less than $1x10^{-6}$ Scc/s of GHe
Operating temperature	+5°C to 55°C
Dry mass	31.0 Kg
Residual volume	3.2L
Propellant flow rate	80cc/s max at 0.2 bar Δp
Interface details	18 Nos. of M8x1 floating plate nuts on Dia 877mm

769L Propellant Tank

Nominal internal volume	780L
Tank pressure	17.5 bar (MEOP)
Proof pressure	1.5x MEOP
Burst pressure	2.0x MEOP
External leakage	Less than $1x10^{-6}$ Scc/s of GHe
Operating temperature	+5°C to 55°C
Dry mass	37.0 Kg
Residual volume	3.9 L
Propellant flow rate	80cc/s max at 0.2 bar Δp
Interface details	24 Nos. of M8x1 floating plate nuts on Dia 1154mm

875L Propellant Tank

Nominal internal volume	875L
Tank pressure	17.5 bar (MEOP)
Proof pressure	1.5x MEOP
Burst pressure	2.0x MEOP
External leakage	Less than $1x10^{-6}$ Scc/s of GHe
Operating temperature	+5°C to 55°C
Dry mass	40.5 Kg
Residual volume	4.3 L
Propellant flow rate	80cc/s max at 0.2 bar Δp
Interface details	24 Nos. of M8x1 floating plate nuts on Dia 1154mm

For business enquiries, please contact:

ANTRIX Corporation Limited
New BEL Raod
Bangalore-560 094, INDIA
Email: rajiv@antrix.co.in, brijesh@antrix.co.in