



Spacecraft Propellant Tanks

Customized Solutions from Metal Alloys

Spherical / Cylindrical / Toroidal / Other Shapes

AQST USA produces metallic propellant tanks for scientific and commercial satellites, orbital platforms, space probes and launch vehicle roll control systems. The tank geometry can be customized according to the required propellant mass and volume available for accommodation. Typical tank geometries are spherical, cylindrical with domes and toroidal. Other individual shapes can be also realized.



1.5 Liter Titanium Tanks for 8 bar MEOP



Stainless Steel Tanks for 300 bar MEOP

AQST USA offers a variety of metallic pressure vessels for different types of propellants and a large range of operating pressures from 5 bar to 300 bar. Besides designing and manufacturing the tanks according to the customer's requirements, AQST USA covers all necessary qualification and acceptance tests including burst testing, proof pressure testing, helium leakage testing and cleanliness verification.

Parameter	Value
Geometry	Spherical, Cylindrical with Domes, Toroidal, Other Shapes
Diameter	10 - 1,000 mm
Wall Thickness	0.8 - 5 mm
Max. Operating Pressure (MEOP)	5 - 300 bar
Material	Titanium, Stainless Steel, Aluminum
Joints	Laser Welding, Electron Beam Welding
Innovation	New Manufacturing Technologies
Development Status	TRL 8-9