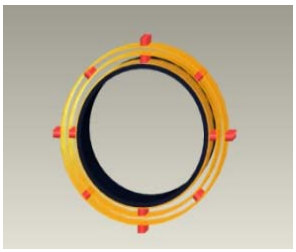
02/2010- NASA awards Quest an SBIR contract to prove feasibility of new Wrapped MLI

NASA has awarded Quest a Small Business Innovation Research contract to develop a new thermal insulation for hot or cold transfer lines using "Wrapped MultiLayer Insulation" (WMLI). Insulating and preserving ultra-cold fuels is critical to NASA next generation missions. Current feed line Multi-Layer Insulation (MLI) performance is 3 – 10X worse per area than tank MLI insulation, and accounts for up to 40% of the total heat leak into the propulsion system. Wrapped MLI is an innovative cryo-feed line insulation that uses Quest's proprietary polymer spacer to control layer spacing and inter-layer heat conduction.



Wrapped-MLI is an insulation that can be wrapped around cold transfer pipes, such as pipes that carry liquid hydrogen (-423°F) or liquid oxygen from propellant tanks to rocket engines or fuel cells. Wrapped-MLI is expected to provide 4X better line thermal insulation than spiral-wrapped conventional MLI, the conventional method to insulate these pipes.

Quest will team with Ball Aerospace in this Phase I program, and will model, design, build prototypes and test their thermal performance to attempt to demonstrate the feasibility of the Wrapped-IMLI concept.

Aerospace applications include cryogenic line insulation for a variety of cryopropellant fueled launch vehicles, spacecraft, space instruments and orbital refueling systems. Non aerospace applications include insulated transfer hoses for dewars for research, medical and industrial uses, food and beverage industry use and LNG use.