

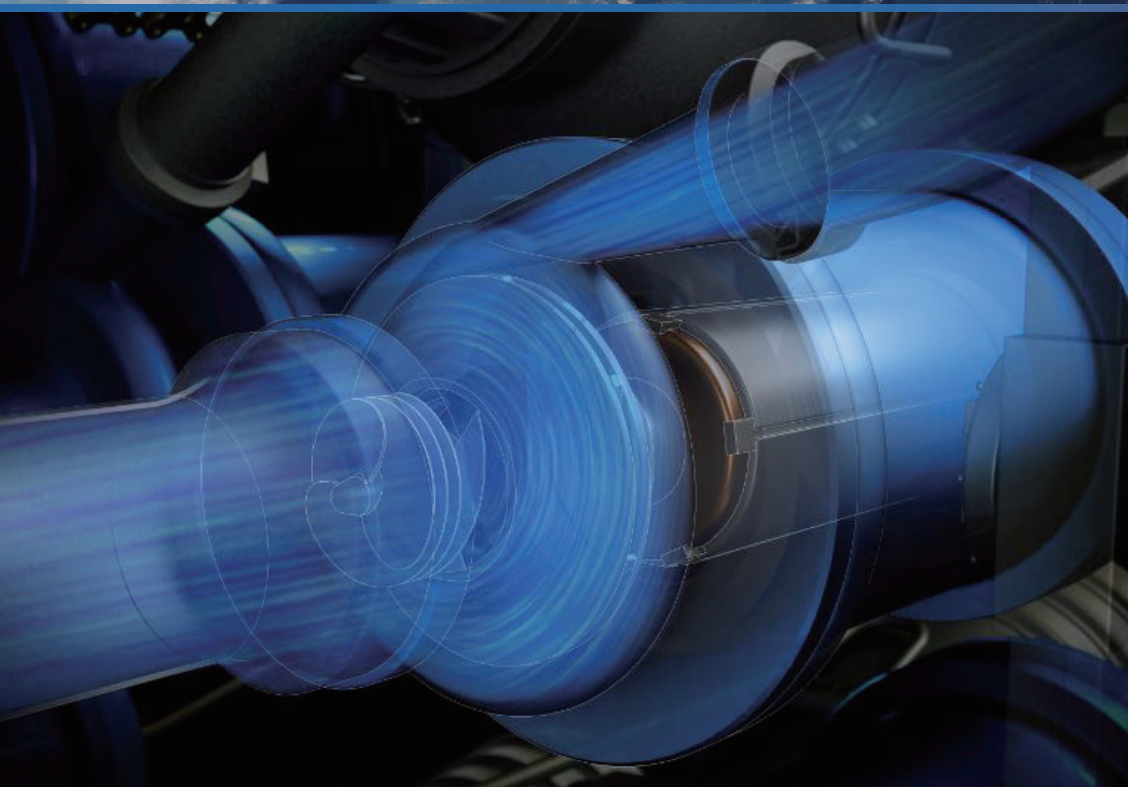


VISION

Igniting ingenuity, crafting indispensable technologies that redefine human space activities with boundless dynamic values.

MISSION

In recent years, the utilization of space by terrestrial industries has accelerated with the realization of small satellite constellations in low Earth orbit, and the ways in which space is being utilized are evolving. We believe that through the exploration of space as the next frontier, we can contribute to the progress of science while also promoting environmental conservation on Earth.



Electric Pump for Rocket Engines

(PROPELLANT: LOX / LCH4)

Unlike conventional turbo pumps *1, our electric pump for rocket engines uses an electric motor as its driving mechanism. By electrifying the pump, we aim to provide new value in terms of engine maintenance and ease of handling. *2

*1 Turbo pump: A centrifugal pump that pressurizes liquid propellant by rotating with high-temperature combustion gas.

*2 Ease of handling: Makes thrust control easier.

WHY LCH4

As a liquid fuel, methane has better storage properties than traditional liquid hydrogen in terms of density and difficulty in evaporation in space. Compared to kerosene, it is less likely to produce soot during engine combustion, making it less prone to failure during re-ignition or reuse.

These advantages have attracted attention not only for use in Earth orbit but also in long-distance transportation to the moon and other planets. The electric pump is also gaining attention for its maintenance and ease of handling, and the adoption of liquid methane allows us to leverage its strengths.

