



Aerospace Satellites



Lubricants designed specifically for satellite components that must survive the severe conditions of the space environment, where long life is critical for the success of the mission.

SOLAR ARRAY DRIVE

This system is responsible for positioning the solar panels in order to harvest sun light that can be turned into energy. MAC lubricants fortified with both anti-oxidants and anti-wear additives will help ensure long life of components.

Harmonic Gear Drive - Rheolube® 2004 & Synthetic Oil 2001-3PB

Slip Ring in Power Transfer Assemblies - Rheolube® 2001

SCAN MIRROR ASSEMBLY

This system moves in a horizontal motion to scan targeted areas for imaging. Lubricating the bearings within the assembly will reduce vibration, and allow the system to move in a quick, smooth motion.

Bearings - Synthetic Oil 2001-3PBNP

REACTION WHEELS

By providing attitude control, reaction wheels are the control gyros for satellites. A medium viscosity MAC grease will operate through high-torque adjustments and can withstand extreme temperatures.

Barrier Film - NyeBar® Type-P

Bearings - Rheolube® 2000

SPIN MECHANISM ASSEMBLY

This instrument supports and spins the satellite throughout the mission. The bearings within the assembly are in constant rotation and require a MAC grease fortified for friction reduction.

Angular Contact Bearings - Rheolube® 2000 & Synthetic Oil 2001

CAMERA OPTICS

To ensure contaminants from other lubricants do not creep onto the camera lens, NyeBar® can be applied to multiple mechanisms on the camera mast. NyeBar® creates a barrier film, holding the lubricating oil in place. Ultrafiltered MAC lubricants have low outgassing rates and superior anti-wear performance, making them ideal for components within or near a satellite camera. Lubricants with a lower particle generation count will ensure that optical components are not compromised.

Bearings - Rheolube® 2000-LO & Rheolube® 2004-LO

Camera Mast - NyeBar® Type-P

