Station-keeping Fusion Engine

A standard sub-light engine of the Abwehran Star Empire for both civilians and military alike, the Fusion Engine is a Magnetic Confinement-style Fusion powered drive using cylindrical geometry. The Abwehran Fusion engine ranges in size between craft, but uses the same quad-skinned engine system. The outer skin is a Durandium Alloy shell used to protect the internal components of the Engine. In between the outer layer and the third layer, several superconductor magnets are used to contain the fusion process and lead it out the nozzle. The space between the third and section layers are used to pump hydrogen from the storage tanks to the propellant injectors at the end of the nozzle. The final space is the fusion chamber, where a fuel mixture of Deuterium and Helium-3 is pumped and compressed until fusion occurs. At the nozzle, the Fusion process connects to the injected hydrogen propellant and is expelled out of the nozzle to create thrust.

Unlike other Fusion Engines, the Station-keeping variant doesn't have the propulsive power to move anything very far. Instead, it's used to keep Abwehran Stations from leaving their assigned orbits. Using just enough thrust, the Engines keep many of the massive space stations orbiting their host celestial body.

From:

https://wiki.stararmy.com/ - STAR ARMY

Permanent link:

https://wiki.stararmy.com/doku.php?id=faction:abwehran_star_empire:technology:station-keeping_fusion_engine

Last update: 2023/12/21 04:22

