

Propellant for Fore Motor (HL-P-F-407)

This project aimed for design and development of Extended Range Rocket for Indian Navy. To meet this requirement without changing external profile, mass of rocket, stacking and launching system, rocket has been designed by changing the fore motor propellant from double base grains to case bonded high energy composite propellant. The propellant grain configuration is eight petal star case bonded. The casing is lined with insulator.

A reduced smoke high energy propellant is developed for Fore Motor confirming all project requirements. Performance of all sub systems have been demonstrated in number of static tests repeatedly. This propellant provides desired total Impulse, hence required range, speed and manoeuvrability to the rocket.

The technology for propellant processing is also established. The propellant developed by HEMRL has successfully demonstrated their performance in static tests in standalone as well as integrated mode as well as in flight test.

Now this technology is completely matured and the same can be transferred to production agencies for further requirement.