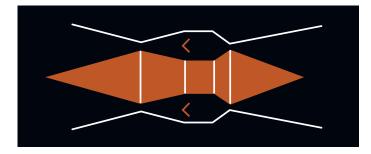


Ramjet Propulsion

Northrop Grumman's Missile Products business unit is pioneering air-breathing propulsion systems to deliver high supersonic propulsion speeds for air-launched and ground-launched weapons applications. Tailored to the mission, a solid fuel-based ramjet propulsion system allows for a powerful, steady and more efficient package and ability to withstand higher temperatures, while a liquid fuel-based ramjet propulsion system offers the ability to be ignited and shut off with precise thrust control.



Features

Northrop Grumman brings together technology, capabilities, and existing and new facilities to design, test and produce ramjet propulsion systems.





Launched

Missions We Support

- Long-range precision fires
- Air-to-air and ground-launched extended range missions
- · Air-to-ground extended range missions

Experience

>250 ground tests

Our Advanced Weapons Edge

- More than 2,100 acres of facilities provides advanced propulsion manufacturing, development and testing for propulsion (including high performance solid propellant boosters, controllable-thrust propulsion, and hypersonic ramjet and scramjet propulsion systems), and electronic subsystems for thrust vectoring and attitude control systems
- Only defense company with integrated fuze and warhead design to maximize effectiveness and performance
- In-house aerothermal testing up to Mach speeds

Benefits

- Affordable
- Extreme range extension
- · Small form factor



Limited Volume Constraints



Supersonic Speeds





For more information, please contact: Northrop Grumman missileproducts@ngc.com