

# Missile Structural and Exterior



The aerospace missile market manufactures many parts that require sealant and adhesive application equipment and composites equipment.

Graco products mix and dispense single- and plural-component materials such as syntactic epoxies and urethanes, as well as lower-viscosity epoxies and urethanes, flexible foams and polysulfides.

The Graco [PosiRatio](#) and the [Graco PR70 Meter, Mix and Dispense System](#) offer advanced two-component dispensing; they handle syntactic materials and dispense them onto honeycomb panels to seal them and also to cover rivets used in assembly. The [Graco HFR Metering System](#) can be used to dispense foam for vibration dampening.

Some missile parts are constructed from composite materials and manufactured by resin transfer molding (RTM) or vacuum assisted resin transfer molding (VARTM). [Graco PosiRatio](#) units and composite [RTM Systems](#) are used to fabricate finished parts by introducing polyester or vinyl ester resins into closed molds containing fiberglass, carbon or other reinforcements.

Polysulfides are often used for exterior missile sealing and coating applications. [Graco PosiRatio](#) units mix polysulfides and either dispense them onto the exterior of a missile or fill high-density cartridges which are then used to dispense the material onto the missile.

Tooling paste is a necessary material for designing molds for composite parts. The [Graco VPM Metering System](#) mixes and dispenses up to 25 kg (55 lb) of tooling paste per minute for making molds for composite part manufacturing.