

Lockheed Martin Space Systems designs and manufactures the Space Shuttle External Tank. The thermal protection materials used on the External Tank are also utilized for Fire Protection and Thermal Management in many high-heat applications.

# Specialty Materials

High Temperature
Electrically
Conductive Coating
The material is a
sprayable, electrically
conductive coating that
maintains electrical
properties at elevated
temperatures (up to
950° F for short duration).
Typical electrical

resistance is less than 0.5 ohms/square. The coating was developed for lightning protection, EMI shielding and is in service for electrically conductive requirements on rocket system applications.

# **SLA 220**

SLA 220 is a molded, low density, RF Transparent ablator. A silica-filled composition, which forms a siliceous char under ablative heating conditions. The material retains RF Transparency during and after thermal exposure. Typical applications are the Mars Lander radar altimeter, Space Shuttle Range Safety antennas and other RF systems applications.

#### **FAA Certified**

MA 25, MI 15 and Topcoat materials are FAA Certified for GE and PW aircraft engine nacelle and thrust reverser fire protection.

### MA 25

A sprayable, medium density, (25 lbs/cuft) ablator/insulator used extensively for thermal protection in space launch vehicles and aircraft applications. On the Space Shuttle, short duration exposure to

temperatures exceeding 1,200° F may be encountered and continuous operating temperatures up to 600° F are nominal for aircraft engine applications.



Are you experiencing expensive cowling repair and replacement because of high temperature exposure? Call or e-mail us and see how we can improve your Mean Time Between Repairs.

#### MI 15

When weight and proven performance are critical, the sprayable, low density MI 15 (15 lbs/cuft) will protect metal or

composite substrates from high operating temperatures as well as providing a fire safety barrier. MI 15 is flying on rocket systems as well as military and commercial aircraft.

# Topcoat

Topcoat is a sprayable, tough, fiber-filled material that protects the basecoat thermal protection materials. It is abrasion resistant and provides outstanding protection against Skydrol, fuel and other aircraft fluids.



# Repairs

MA 25 and MI 15 can be repaired with sheet stock or a trowelable material. Repair kits containing all required materials and consumables to complete small repairs are also available.