

# MASKING TIP SHEET

## Masking missile radar dome assemblies

**Problem.** A leading aerospace firm encountered a difficult masking problem when powder coating missile radar dome (raydome) assemblies. The issues?

- The company needed to mask the entire white area of the raydome's radar-blocking finish—a large, curved, difficult-to-mask area.
- The company needed a fine coating line where the missile raydome met the missile shroud.
- The company needed a masking solution that was fast and efficient, unlike masking with tape, which was extremely time consuming and delivered uneven results.



**Solution.** A large, 18-inch-long custom mask with a 7-inch-diameter opening was designed for the application. A mask this large presented a few design challenges, including the difficulty of installation and removal, the danger of trapped air under the mask (compromising the finish), and a fine balance between bulk and durability.

The unique design incorporated handles to speed installation and ensure a precise fit, internal grooves to bleed off trapped air, and a custom rubber compound that met all criteria for durability and flexibility. In addition, the custom mask was designed to fit precisely into the groove where the raydome and shroud mate, creating the fine coating line needed by the company. The mask's ease of installation, removal, and reusability, and its contribution to overall quality has dramatically accelerated production. PC

*Thanks to Shercon, Santa Fe Springs, Calif.; 562/946-8555 [www.shercon.com].*

