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NASA TECH BRIEF

Inexpensive, Removable Coating for Plaster Tooling

A procedure for thinning and spraying a vinyl material, previously used as a "hot melt" coating, provides a completely strippable film for plaster surfaces. The coating is a low-cost, effective seal against moisture and other sources of possible damage to large plaster tools that must be stored for long periods. Previous low-cost coverings could not be stripped completely from the plaster because they would adhere in places and cause damage when removed, and urethane coatings and sealed boxes, though satisfactory, were too expensive.

The protective coating is prepared by mixing a hot-spray vinyl material with 30% to 50% by volume of methyl ethyl ketone. The mold-line surface is cleaned and sealed with a lacquer, and the material is sprayed on the plaster to a maximum thickness of 1/32 in. (four coats), using a standard spray gun. The back of the plaster and any structural members are also coated. After 24-hr curing at room temperature, the plaster is completely encapsulated and moisture resistant; and months of testing have shown that the coating does not adhere to the mold line of the plaster. A knife or razor is used to cut the coating along the outer periphery and peel it from the mold-line surface: the coating is then easily stripped away.

Note:

Requests for further information may be directed to:

Technology Utilization Officer
Manned Spacecraft Center, Code BM7
Houston, Texas 77058
Reference: TSP70-10666

Patent status:

No patent action is contemplated by NASA.

Source: Robert R. Martin and James M. Dimino of North American Rockwell Corp. under contract to Manned Spacecraft Center (MSC-15819)

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