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NASA TECH BRIEF



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A Method for Precision Anodize Stripping

The problem:

To design a method for removing anodized finish from aluminum without damage to the surface.

The solution:

Use felt templates saturated with an etch solution.

How it's done:

A sanding medium coarse enough to cut through the anodize also damages the parent material. To solve this problem, a felt template is cut to fit the part to be cleaned, placed on the part and saturated with the cleaning solution. The solution is a combination of nitric acid (10.0 to 12.0 percent by weight), chromic acid (1.0 to 2.0 percent by weight), and hydrofluoric acid (0.4 to 0.6 percent by weight).

The solution is slowly applied to the cloth with an eye dropper or plastic squeeze bottle to prevent dripping or spreading of the solution.

The saturated felt is left on the surface until visual examination indicates that stripping is complete (usually 3-1/2 min.). The solution left on the surface

of the part should be immediately removed by using water. The part can either be air-dried or wiped dry with a clean cheesecloth.

Notes:

1. The information contained in this Tech Brief may be of interest to personnel in the metal working industry and to users of metal products.
2. No further documentation is available. Inquiries may be directed to:

Technology Utilization Officer
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Patent status:

No patent action is contemplated by NASA.

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Category 03