

# Surface Treatment

## CHROMIC ACID ANODISING

Chromic acid anodising is a type of anodising that results in a thin oxide layer with optimal adhesion and corrosion resistance. Like all types of anodising, aluminium is converted into aluminium oxide, as a result of which optimal adhesion is guaranteed. Chromic acid anodising is applied if strict requirements are imposed on corrosion resistance and if sulphuric anodising is not an option due to the negative effects on the fatigue strength or the risk of sulphuric residues. Chromic acid anodising is mainly applied to aerospace components. A large number of fine pores occur in the oxide layer during the treatment. Under normal circumstances, these pores are sealed after the anodising. As a result, the pores are closed, which means a high resistance to corrosion is achieved.

### Applications

Aircraft building, aerospace industry, defence equipment, etc.

### Characteristics

- The fatigue strength of the base material is hardly affected.
- Any chromic residues will not damage the base material.
- This is a huge advantage in, for instance, the case of pre-assembled aircraft parts.
- High corrosion resistance.
- As a result of the excellent adhesion characteristics, chromic acid anodising is a suitable pre-treatment for further coating processes.
- Small layer thickness (2 to 7  $\mu\text{m}$ ), as a result of which dimensional coating can be applied.

### Specification

- MIL-A-8625, type I & IB
- AMS-2470

### Certificates / approvals

NADCAP, Airbus, Boeing, Bombardier, Lockheed Martin, McDonnell Douglas, Stork Fokker

