

# Anodizing



Technical Anodizing

HART-COAT®

Chromic Acid Anodizing

*We add value to your parts*

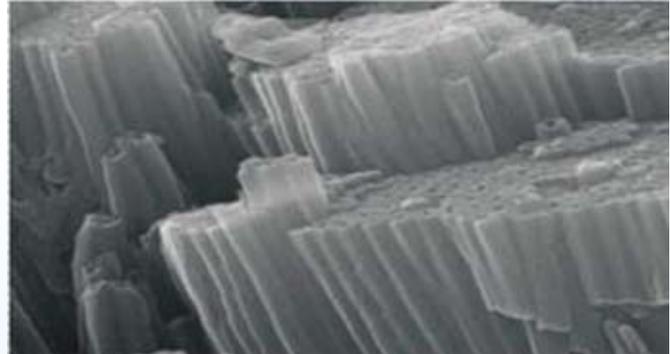
# Anodizing

Anodizing is an electrolytic process used to provide Aluminum parts with a thick oxide layer. This generated oxide layer is hard, porous and wear resistant. An additional sealing of the, through the process formed pores further improve the corrosion resistance.

To perform the anodizing process various types of electrolytes can be used. Depending on the base material as well as the requested properties of the anodizing layer, the electrolyte and process type are chosen.

## The anodizing process consists the following steps

- Cleaning. By removing oils and decontaminations covering the naturally shaped oxide layer the base material is cleaned.
- Eventually reducing of the material thickness by etching with a pickling agent to reach the original dimension (the so-called dimensional stable anodizing).
- Anodizing. The coating is performed in an electrolyte (sulphuric or chromic acid) at temperatures slightly below room temperature. The parts are connected with the anode and, in the course of the treatment, the parts surface is converted into an Aluminum oxide layer. After build-up, the Aluminum oxide layer can be colored with various color pigments.
- Sealing of the Aluminum oxide crystals by hot water.



Anodiseerlaag 50.000 x vergroot

## AHC Benelux is able to provide the three most important anodizing variants

- Technical Anodizing
- Hard Anodizing (HART-COAT®)
- Chromic Acid Anodizing

## Suitable Alloys

Nearly all wrought, cast and die-cast Aluminum alloys destined for industrial can be anodized. However, the alloy has great influence on the colour of the anodized part. An alloy out of the 3.000 series has grey colour, a 7.000 alloy has more gold appearance. For more information please consult your AHC contact.



## Maximum dimensions

Main process	Max. dimensions	Max. weight / part
All variants	3.600 x 500 x 850	500 Kg

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