



COLOUR ANODISING – A GREATER SCOPE FOR DESIGN

Colours extend the design options of aluminium and enrich its use with appealing effects. In our production facility, we can carry out the following processing steps with regard to aluminium.

Mechanical pretreatment methods:

We offer three mechanical pretreatment methods. The aim is to clear away material so as to remove press marks on profiles or to grind down scratched surfaces, as well as to achieve a visible decorative finish. The feasibility of this should be analysed and investigated in more detail on the basis of drawings.

In general, the grinding direction should always be selected in the rolling or pressing direction. We use universal belt and trestle grinding machines for processing profiles, sheet metal, small parts and plates. Surface shape grinding is not possible.

For large façade sheets and large quantities, we work together with a specialized external partner.

E1 Ground

The grinding process creates a directional structure. Unevenness can be removed in this way.

The coarser the abrasive grit, the duller and more irregular the reflections after anodising and the more different the appearance when viewed in longitudinal and transverse direction to the grind. We work with 120 grit as standard. Special requests can be accepted.

E2 Brushed

Brushing produces a uniform light surface with little abrasion. Scratches and grooves are removed only to a limited extent.

For this purpose, we use an abrasive with grit 180 as standard, although customer wishes can also be catered for here.

E4 Ground+brushed

This is the combination of E1 and additionally E2.

Normal irregularities are thus removed and refined in the second step. The grinding is less visible than with E1, but the surface is much more even, as after brushing.

E4 is the most commonly used grinding treatment.

Pretreatments in the process

E0 Without special pretreatment

After degreasing, a short pickling in sodium hydroxide solution takes place. The removal is extremely minimal and is compensated again with the layer build-up.

With E0 and 15µm layer, a nearly dimensionally stable anodising is attained, which is mandatory for technical moulded parts. Press grooves, milling marks, scratches, scuff marks and also slight traces of corrosion remain equally visible. Previously ground parts are normally treated E0.

E6 Chemically matted

A longer pickling process increases the removal rate up to 30µm. This will equalise any unevenness and minor imperfections.

The overall appearance becomes more matt and very homogeneous.

Unground non-dimensional critical parts are usually matted

E3 / E5 / E7 / E8

We do not offer chemical or electrochemical polishing

Our colour spectrum

EV1 Colourless anodised

Designation according to EURAS: C0

Anodised without colouring process. The natural tone depends on the alloy, ranging from very light silvery for pure anodised qualities, to medium grey for higher proportions of foreign metals to alter certain properties.

EV6 Black anodised

Designation according to EURAS: C8

After anodising, the parts are coloured with pigments in a chemical black bath or combination process. Here the pores are filled, which are then sealed in the sealing bath.

Colinal dyeing

This is an electrolytic dyeing process using a tin sulphate.

Due to the different parameters, a characteristic colour range of warm noble tones can be created, which are extremely durable and do not chalk out.

This is best achieved with anodised quality alloys that do not produce a greyish cast.

Colinal is well established in the field of architecture and design.

7 shades are available:
Colinal CNS, C3115, C3145, C3165, C3175, C3178, C3180 (Colinal black)

Certain colour variations are part of this process and make the applications exciting and lively.



Production:
Ateco Tobler AG
Quellmattstrasse 79
CH-5035 Unterentfelden
Tel: +41 62 723 22 41

Headquarter:
Ateco Tobler AG
Weidenweg 17
CH-4310 Rheinfelden
Tel: +41 61 835 50 50