

Printing Plates

The second stage in the refinement process: The anodisation.

As the Ozasol plate is still relatively sensitive to scratches after the electrochemical graining, the surface must also be anodised.

This means that an extra aluminium oxide coating is formed on top of the electrochemically grained surface. This is also achieved with the help of an electrochemical process.

The advantage is that the oxide coating adapts itself to the existing graining structures, which means that the grained surface is not smoothed again but remains practically as it was. The electrochemically grained base is superimposed by the electrochemically generated aluminium oxide structure.

When we talk in everyday life of anodised or eloxed aluminium we think of properties such as "hard", "weather resistant", "easy to clean" and "high-grade". These qualities can also be applied to our printing plates:

hard = scarcely sensitive to scratches

weather resistant = damping solution and paper dust cannot harm the surface; good resistance to many chemicals

easy to clean = little tendency to oxidation during down time and quickly runs clean

high-grade = suitable for very long runs; makes quality printing with very high resolution possible; guarantees constant ink/water balance in offset printing.

2 diagonal section photos of a plate edge on which aluminium, aluminium oxide and the surface structure can be recognized (2 stages of enlargement).

