

## Corrosion Resistance of ALUCOBOND® coatings

The corrosion resistance of coatings is widely tested in accordance to AAMA, NCCA and ECCA standards. The excellent performance of the fluorocarbon (PVDF and FEVE ) coatings applied on ALUCOBOND® is public knowledge.

However these tests do not consider open edges or local damages through the surface (e.g. scratches) particular in marine or heavy industrial atmosphere.

In this case the alloy and its chemical pre-treatment is of major importance.

To asses the performance of a material filiform-corrosion tests (DIN EN 3665, ISO 4623) are carried out.

Filiform corrosion is a type that occurs under coatings on the metal substrate in the form of threads. The test runs with a scribed sample which is placed in a corrosive atmosphere and exposed to controlled temperature and humidity conditions conducive to filiform corrosion. The number (M) and length (L) of the corrosion threads are evaluated after 500, 1000, 2000 and 3000h.

ALUCOBOND® uses the alloy AlMg1 (AW5005) a marine quality according to DIN 1725. The aluminium coils runs through a thorough decreasing process before the conversion layer based on the non-carcinogenic Cr<sup>3+</sup> is applied in the coil coating line. Therefore ALUCOBOND shows an exceptional performance in regard to filiform corrosion as well:

