

SILA-COAT[®] 5000

powerful sealings of aluminum alloys surfaces



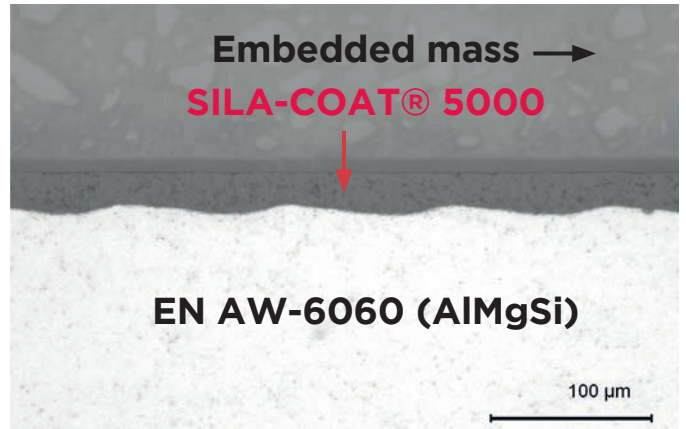

aalberts surface technologies

SILA-COAT® 5000

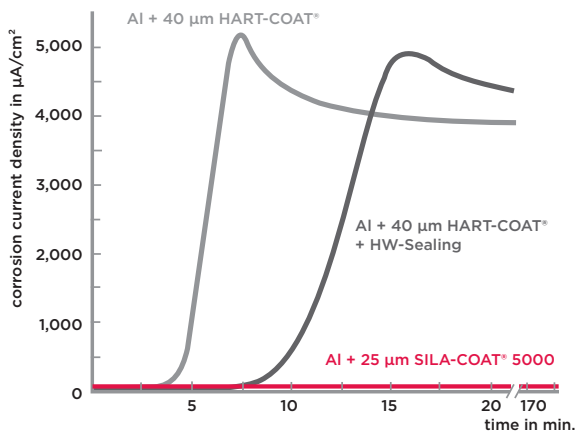
SILA-COAT® 5000 is carried out in a three-step process:

1. Pre-treatment, suited to the aluminum material
2. Conversion treatment
3. Sealing using an electrophoretically applied liquid paint

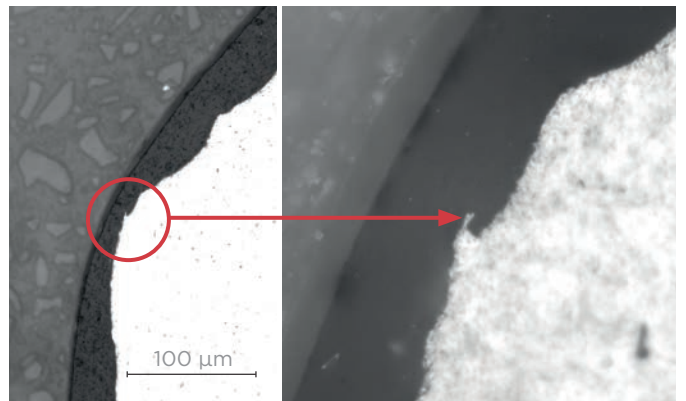
The corrosion resistance will be improved and particularly the alkali resistance increases considerably. The regularly formed network structure of the paint system enables the sealing and levelling of the surface.



Improvement of corrosion protection and levelling of the surface with electrophoretically applied liquid paint.



Improvement of alkali resistance compared to HART-COAT® layers. Via the chronoamperometric method (measurement at rest potential) it can be determined after which time the corrosion attack starts. In this case the measurement was performed in a 3 % aqueous sodium hydroxide solution.



Cross section of EN AW-6060 (AlMgSi) with SILA-COAT® 5000.

SILA-COAT® 5000	process details	
Benefits	<ul style="list-style-type: none"> • excellent alkali resistance (following ASTM D1647) • high corrosion protection • levelling of surface (e.g. from $R_a=1.28 \mu\text{m}$ to $R_a=0.27 \mu\text{m}$) • high dielectric strength 	<ul style="list-style-type: none"> • food compatibility according to FDA regulations • no cytotoxicity according to ISO 10 993-5 (biocompatibility) • uniform layer formation • thickness of the paint layer $25 \pm 5 \mu\text{m}$
Applications	SILA-COAT® 5000 is especially well-suited for applications in the following industrial sectors: <ul style="list-style-type: none"> • food processing industry • medical engineering • mechanical engineering • plant and systems engineering • packaging industry • automotive industry 	