# AnoxPro REVOLUTION IN CORROSION PROTECTION

for conformal cooling

## AnoxPro - the solution for corrosion protection in additively manufactured mould inserts

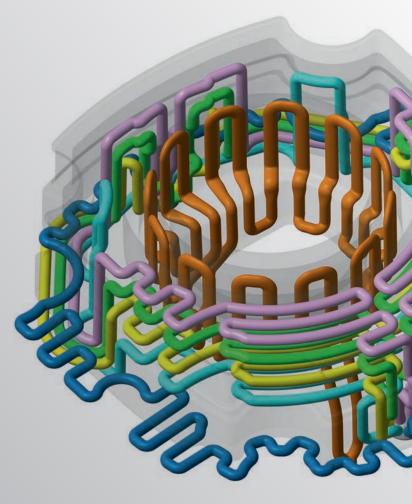
Up to now, there have been hardly any possibilities to guarantee effective corrosion protection for **additively manufactured**, conformal temperature control channels. The new **AnoxPro** coating now offers the solution:

- Optimum protection of extremely small channel diameters with long flow lengths
- Preservation of the heat exchange effect for the rough surface structures typical in additive manufacturing processes
- Retards lime and bacteria accumulation and can be used up to a media temperature of 180°C
- Additional active corrosion protection through metallic particles in the lacquer system

## INNOVATIVE LACQUER SYSTEM WITH ACTIVE PROTECTION MECHANISM

The special coating method of **AnoxPro** has the advantage that the geometry of the cooling channels has no influence on the formation of the coating. The average layer thickness is 10  $\mu$ m. **AnoxPro** can therefore be used universally for the most varied geometries of temperature control channels.

Whereas previously only passive coatings were used, the innovative **AnoxPro** coating system contains metallic particles. These act as sacrificial anode and thus ensure permanent active corrosion protection for the base material even in the case of minor defects.



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## SIGNIFICANT PROTECTION EFFECT

#### Pic 1: uncoated

Pic 2: With AnoxPro coating on tool steel 1.2709. After the salt spray test over 230 h with NaCl solution according to DIN EN ISO 9227 the result is clearly visible.



Pic 1: uncoated



Pic 2: with AnoxPro coating

#### COATING:

The internal coating is applied in a very safe procedure. It is sufficient here to wet only the walls of the cooling hole with the lacquer and then remove the excess with compressed air. The lacquer is then tempered at approx. 220°C. Hotset GmbH Hueckstraße 16 58511 Lüdenscheid Germany Telefon: +49 2351 4302 471 iQtemp@hotset.com www.hotset.com

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