

DUPLEX-TIGRAL®

Functional surfaces for aluminium
high pressure die casting

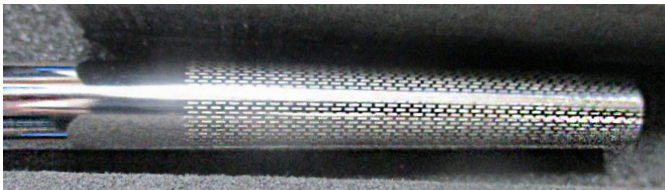


Fig. 1: Mould core with functional surface

Drags, soldering, demoulding problems and wear are constant challenges in aluminium high pressure die casting. At the same time, service and tool life time have to be extended.

At voestalpine, with our experience and competence in steel, coating and texturing, we developed a functionalised surface for aluminium high pressure die casting, with which the results can be significantly improved.



Fig. 2: Cast with the result of the functional surface

YOUR ADVANTAGES AT A GLANCE

The appearance of the functionalised surface is designed in such a way that hardly any visible structures remain on the component.

The function of the texturing is based on a reduction of the surface contact between melt and cavity.

In addition, the Duplex-TIGRAL® coating provides further performance improvement and durable protection of the functionalised surface.

With this combination of high performance steel, textured surface and the advantages of the Duplex-TIGRAL®-coating, significantly longer flow paths can be realised and shrinkage forces reduced.