

DURACOOOL REVOLUTION IN CONFORMAL COOLING



**SCHAUFLE
FISCHER
GROUP**

www.schaufler.de/en

DuraCool

Goal:

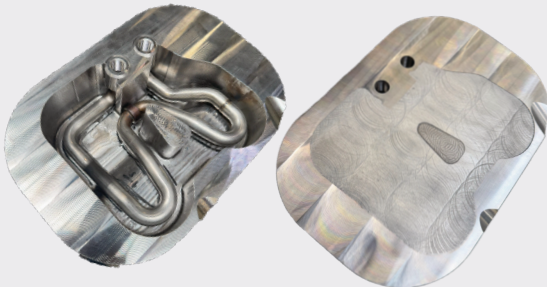
Providing the fastest cooling to achieve shorter cycle time and eliminate cracks into cooling lines

Solution:

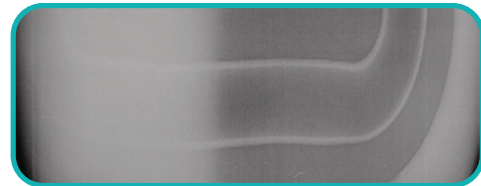
Build a shell with cooling pipes – printed or made of stainless steel – and fill it with a material that has four times higher thermal conductivity than hot working steel!

Benefits:

- significantly reduced cost compared to 3D printed inserts
- 100 % leak-free – no more cracks into cooling lines
- reduced cycle time and improved casting quality
- faster heat removal from hot spots
- less machine downtime due to extended lifetime



back side of shot block



no porosity



zero leakage and less corrosion



perfect bonding even on sharpe edges
- the image shows an example;
in the practical process, we design
maximum radii in critical areas
and on contour sides