#### **Engineered Products**



**PLASTICS** 

# voestalpine INSERTS FOR PET PREFORMS designed for pure performance

Inserts for PET preforms are used in plastic injection molding, where they increase productivity by lowering cycle times using optimized cooling designs.

#### YOUR ADDED VALUE

voestalpine inserts for PET preforms are produced using additive manufacturing and **premium materials by BÖHLER/Uddeholm**. The PET preform inserts have optimized conformal cooling structures, which improve our customers' productivity by reducing cycle times and increasing process stability.

Our ready to use solution offers higher wear resistance and lifetime compared to Copper Beryllium and standard used AM tool steel 1.2709, which leads to lower costs per part. The product additionally removes all of the inserts toxicity by replacing Copper Beryllium with premium steel.

Many PET preform producers have tested our AM solutions and confirmed the increased profitability by using our inserts for PET preforms.

### INDUSTRIAL PERFORMANCE COMPARISON

- » Replacement of Copper Beryllium inserts
- » Higher productivity through lower cycle time
- » Improved lifetime
- » Significant maintenance savings

#### **Main Properties**

High corrosion resistance

High wear resistance typically 49-53 HRC

High ductility (safety against cracks)

Advanced polishability

Good machinability







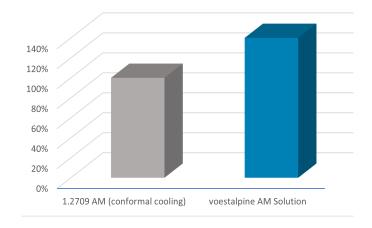
#### **OUR MATERIALS**

С	Si	Mn	Cr	Ni	Мо	Al
0.03	0.30	0.30	12.00	9.20	1.40	1.60

С	Cr	Ni	Мо	Al	Ti
< 0.02	12.20	10.00	1.00	0.60	1.00

## INDUSTRIAL PERFORMANCE COMPARISON





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