Engineered Products



PLASTICS

voestalpine VENTING INSERT ROUND designed for pure performance

voestalpine Venting Inserts are engineered to allow the venting of injection molds where standared venting is limited.

YOUR ADDED VALUE

Proper venting in injection molds is crucial for releasing trapped air and gases. This ensures optimal material flow, uniform cavity filling, and high-quality parts. Inadequate venting can lead to defects such as short shots, burn marks, voids, and weak weld lines, compromising part integrity and appearance.

By leveraging the possibilities of additive manufacturing, voestalpine solves these challenges with porous, corrosion-resistant tool steels for injection mold inserts. Microscopic pores allow gases to escape directly through the mold surface without affecting structural strength. The standard component voestalpine Venting Inserts are compact porous plugs, which are easy to integrate into molds, boosting productivity, reducing waste, and ensuring superior part quality.

CUSTOMER BENEFITS

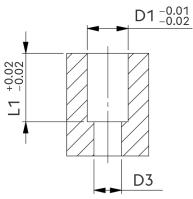
- » Solves venting related quality issues such as burn marks, weld lines, flow marks, short shots
- » Improves moldability of microstructures
- » Widens the processing range, allowing for higher injection speeds
- » Easy installation due to minimal machining effort
- » High wear and corrosion resistance



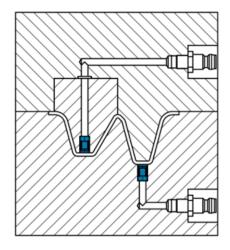
INSTALLATION GUIDELINES

Article Nr.	D1 [mm]	L1 [mm]	D2 [mm]	D3 [mm]	L2 [mm]	Material	Hardness [HRC]
79005241	5	10	3	3.5	3	Uddeholm Corrax	48-50
79005243	6	10	3	4.5	3	Uddeholm Corrax	48-50
79005242	10	10	5	8.5	3	Uddeholm Corrax	48-50
Custom	≥3	≥4	≥2	≥1.5	≥1.5	Uddeholm Corrax	48-50

- D1 m6 D2 D2 D2 D2 D2
- 1. When installing or removing the venting insert, use copper or brass tools to avoid damaging the venting structure
- 2. Machining (e. g. for contour adjustment) is not possible with this insert
- Polishing for improved surface quality can reduce the venting performance
- 4. Periodically clean the venting structure with compressed air. Alternatively, apply a solvent for 1 to 2 hours before air blowing to maintain venting performance (please inquire with the supplier about which solvent is best for the plastic resin being processed)
- 5. Please note that the venting structure can break under high injection pressure

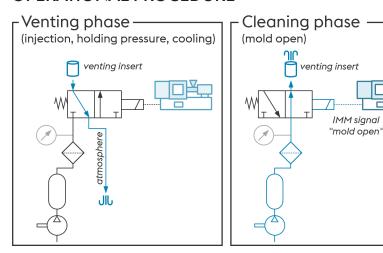


INSTALLATION EXAMPLE



Prepare an air relief under the venting insert.

OPERATIONAL PROCEDURE



Venting performance can be maintained by backflushing the insert after part ejection with pressurized air.

Pressure drop through the insert can be measured to monitor function.

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