

Magnesium Gooseneck

Enabling Industries Through Internal Coating of Magnesium Goosenecks



Motivation and Relevance

- High mechanical and thermal stress on magnesium goosenecks
- This results in high wear of the plunger track
- Bore is usually re-machined and continuously enlarged
- After 6-9 cycles, the casting vessel must be disposed

Approach

- Internal coating of the plunge track to reduce wear as well as repair of the gooseneck
- Development of an internal coating for goosenecks
- Use of different materials and material combinations
- Repair of the plunger track

Results

- Constant geometry and thus constant process control due to continuous repair of the plunger track
- No new components necessary (plunger, plunger rings)
- Circulation cycle for magnesium goosenecks
- Significant extension of the service life of the goosenecks

Research Area

- Foundry industry
- Resource efficiency
- Productivity

Partners



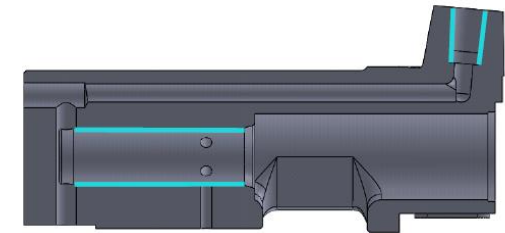
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