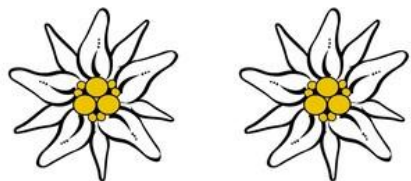
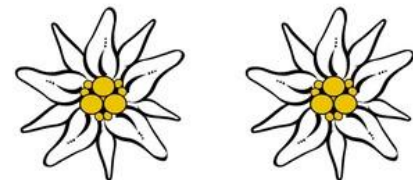


# **Maus**

## **ROTATIONSGIESSFORMEN**





## Range of Services



Design \* Construction \* Patternmaking  
Digitizing \* Re-engineering \* FEA \* Mock-ups  
Prototype Moulds \* Prototype Parts

**CNC or Cast Aluminium (Kelch/Fast-Cast™)**  
**Fabricated Aluminium Sheet moulds**  
**Galvano and Sheetmetal rotational moulds**

Permanent Coatings \* Mould Accessories  
Automation \* Performance Solutions  
Modifications \* Repairs \* Refurbishments



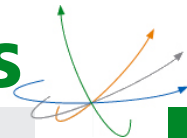
# WHY use permanent mould coatings ?

release of mouldings, consistency of mouldings, quality of mouldings, control of shrinkage, repeatability in production, cutting labour hours, reduced mould maintenance, increased output of products, reduced scrap rates, protection of mould surface, cleanness of mouldings, control of production cost, health & safety reasons, and many more





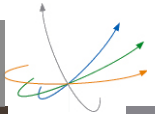
# Permanent Mould Coatings



- ... can be applied to all metallic moulding surfaces, flanges and even to moulds exterior
- ... will increase the reproducibility of rotational moulded parts
- ... can boost appearance of parts, improve heat conductivity, protect textures and tool, etc.

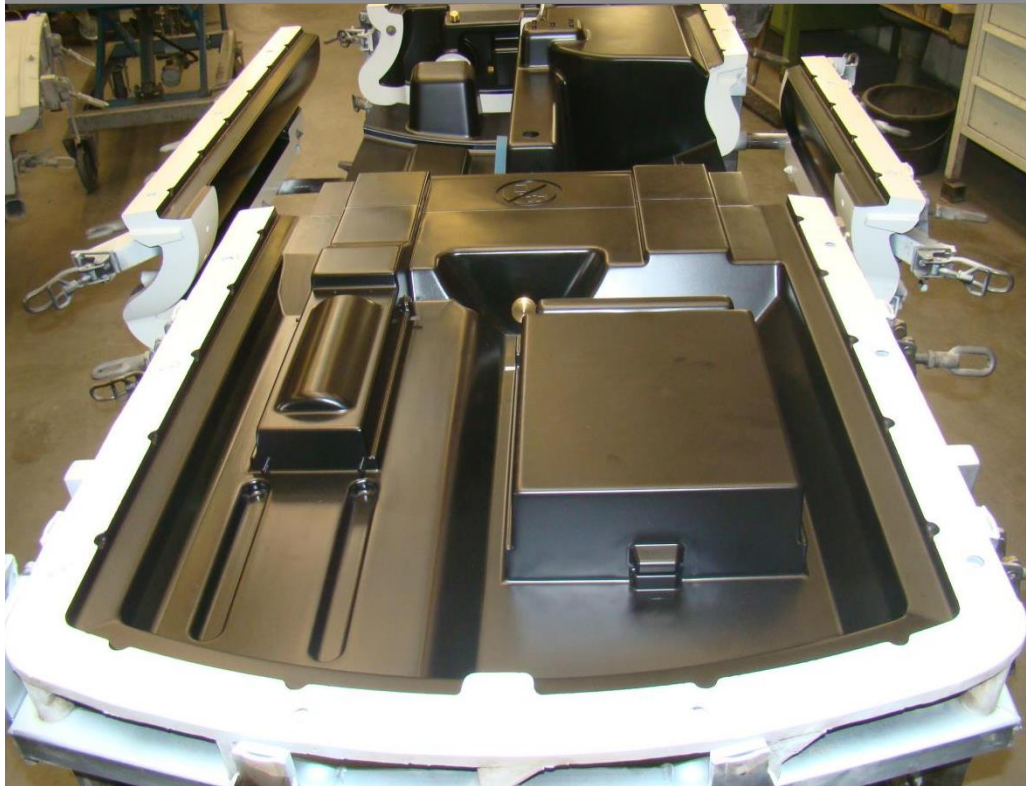


# Edelweiss Coating on Flanges

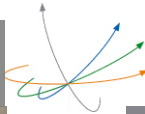




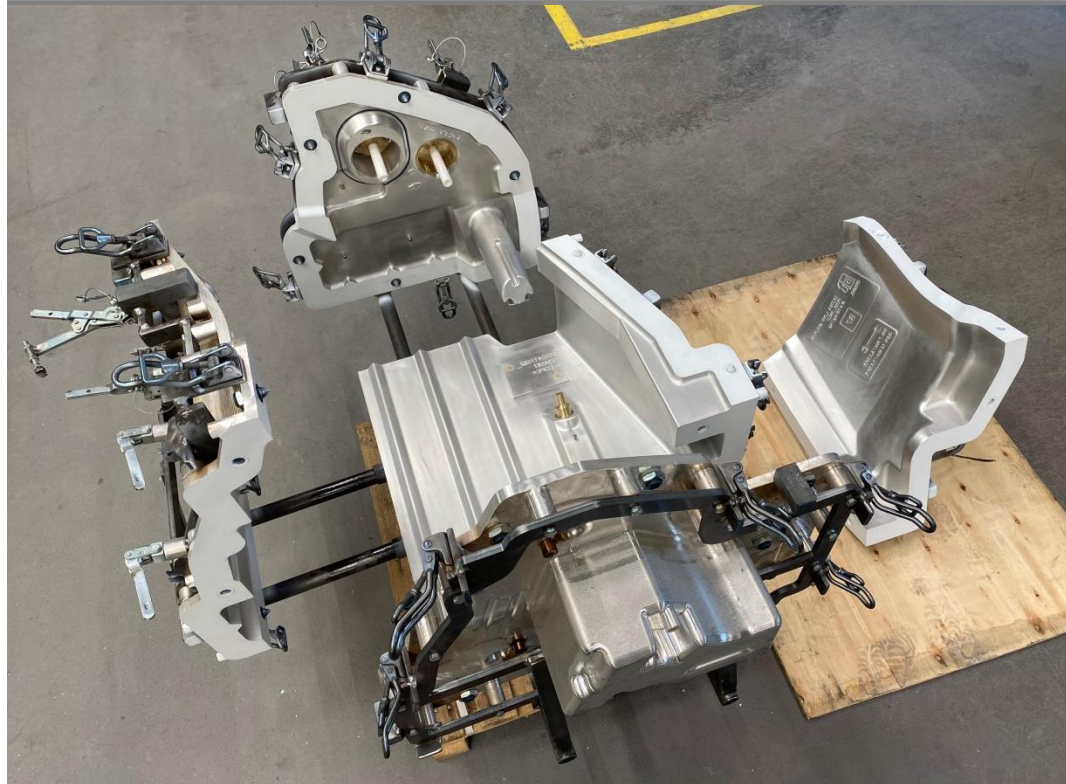
# Edelweiss Coating on Flanges



- developed especially for parting lines
- combining wearing properties with strong release
- reducing cleaning time for flanges
- cuts maintenance work and down-time

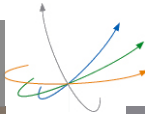


# Edelweiss Coating on Flanges





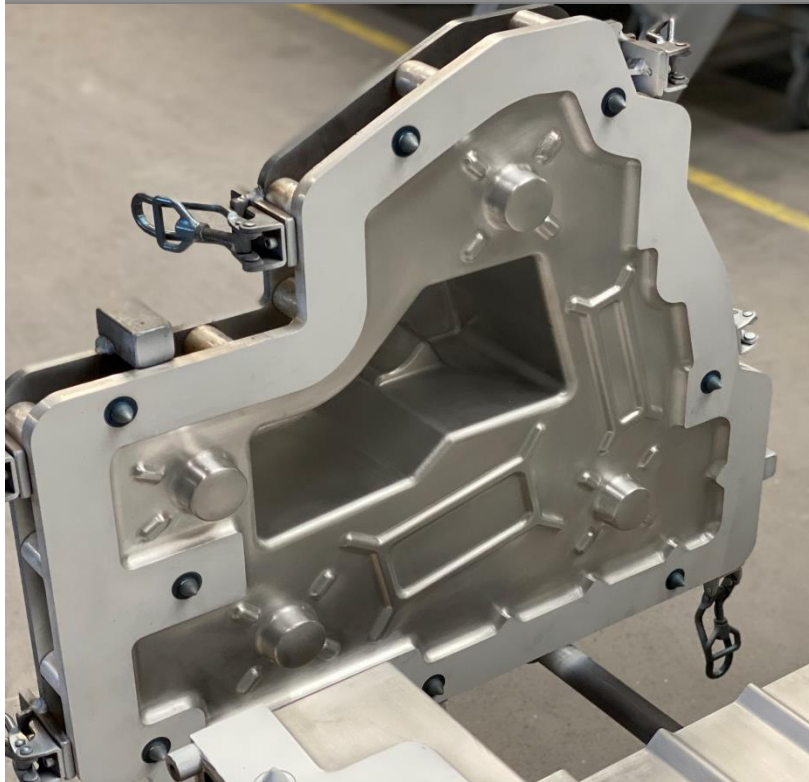
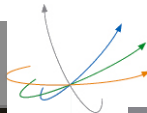
# Edelweiss Coating on Flanges





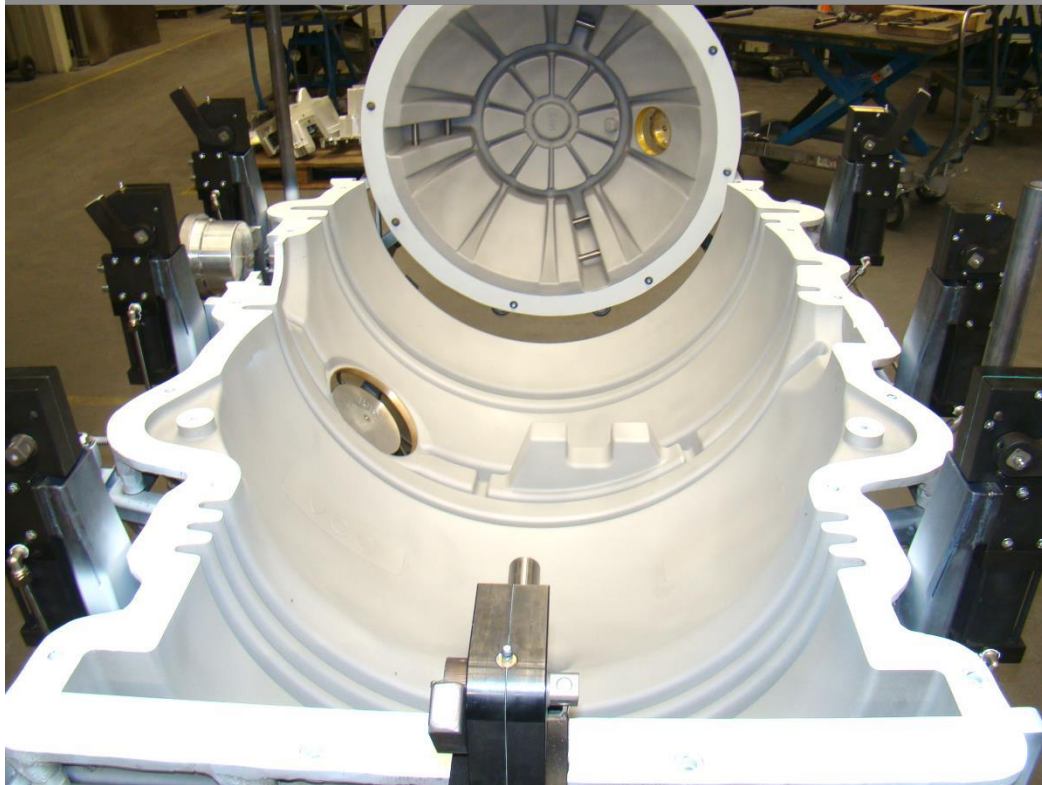
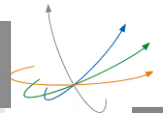


# Edelweiss Coating on Flanges





# Edelweiss Coating on Flanges



- Pure & bright white colour immediately grabs the attention of operators
- Contaminations are easy to spot
- Smooth and hard surface, like glass, easy to clean



# Edelweiss Coating on mould surfaces





# Edelweiss Coating on mould surfaces



- Pure & bright white colour immediately grabs the attention of operators
- Contaminations on mould surface are easy to spot
- Glass hard surface, scratching unlikely

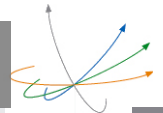


# Edelweiss Coating on mould surfaces

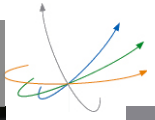




# Edelweiss Coating on mould surfaces



- Strong and steady release properties
- Glossy finish
- Foodproof coating
- Glass hard surface, scratching unlikely
- Easy too clean after colour changes



# Edelweiss Coating on mould surfaces





**TECHNICAL REPORT**

**2.0 – PP Moulding (PP45)**

The PP42 CAT moulding released very well and was of high quality. The surface achieved has a high gloss finish smooth external surface. The screw section once again like the PE moulding didn't mould well, the edges of the section are not smooth or precise as intended but irregular and worn throughout the circumference. The peak internal air temperature achieved was 205°C, so the PP was cooked adequately. The temperature profile of the process can be seen in Figure 2.

Table 2 - PP CAT Moulding

**PP CAT Mouldings**



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**TECHNICAL REPORT**

**3.0 – XLPE Moulding (XL400 Black)**

The crosslink grade used within the CAT mould was XL400 Black. Table 3 displays a range of images taken from the moulding. The crosslink overall moulded well despite being slightly over cooked, the actual PIAT exceed the optimum moulding. The crosslink did remove some of the mould coating, this PIAT at 238°C. The bottom of the tank was excellent, however the XLPE did remove some of the PE and is displayed by the white spots on the tank body within Table 3. The crosslink moulded slightly better than the PE and is displayed by the white spots on the tank body within Table 3. The crosslink moulded slightly better than the PE and is displayed by the white spots on the tank body within Table 3. The crosslink moulded slightly better than the PE and is displayed by the white spots on the tank body within Table 3. The crosslink moulded slightly better than the PE and is displayed by the white spots on the tank body within Table 3.

Table 3 - XLPE, XL400 Black CAT Mouldings

**XLPE CAT Mouldings**



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**TECHNICAL REPORT**

**4.0 – PA Moulding (HIU)**

The finish on the product was excellent indicating a good cook. The first sample of HIU was found to have pinhole on the undersection highlighted in Table 4. Other than this the PA adhered to the mould really well and gave a good release. The surface of the product was very glossy and smooth which indicates a good performance from the permanent mould coating. The top screw section has also moulded very well on both occasions.

Table 4 - PA, HIU CAT Mouldings

**PA HIU CAT Mouldings**





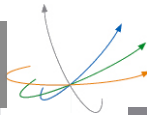
**HIU (NO Rotoflow)**

**HIU (Rotoflow)**

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12





# Technical features Edelweiss Coating

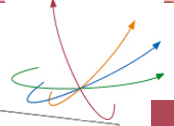
- Extraordinary Hardness and abrasion resistance
- After curing temperature resistant up to 700°C
- Glass-like, non stick surface
- Foodproof, no fluorchemicals, **no PTFE**
- Coating can be easily removed by sandblasting
- Partial repairs are possible (blasting/painting/curing)



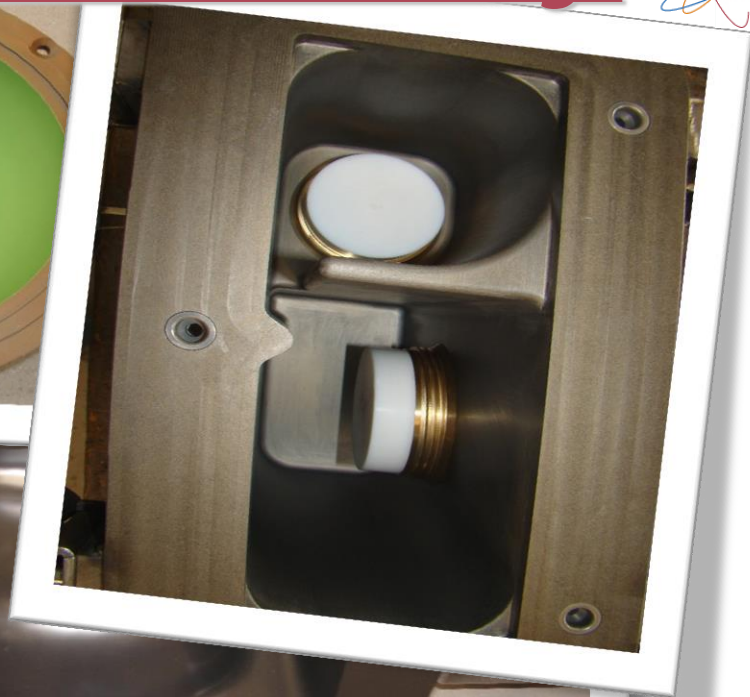
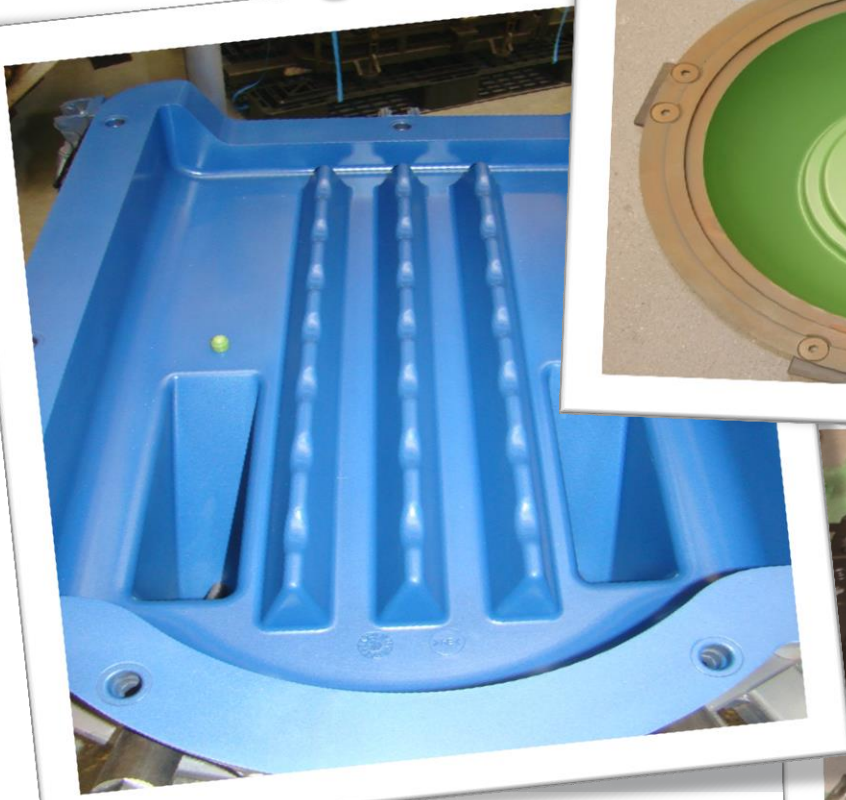
# Technical features Edelweiss Coating



- Good for application on all mould parting lines
- When applied to moulding surfaces:
  - Good for PE, X-PE, PP or PA Materials
  - Good for Medical, Food or Light Applications
  - Reduction of Pinhole effects in products
  - Glossy finish on moulded products
  - *(under development, recipe for MATT finish)*

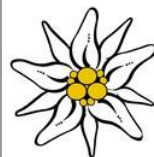
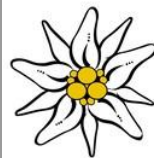


# Range of other permanent mould coatings





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MAUS GmbH – Rotational Moulds  
Am Viehweg 9, 76229 Karlsruhe, Germany  
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