

Casting: VW suspension component PQ 24

SIVEX* FC filter

Foundry:
Kloth-Senking Metallgießerei
GmbH in Hildesheim, Germany

Opportunities:
High casting heights result in high flow speeds. The use of SIVEX FC filters guarantees a smooth mould filling, especially from high downsprue

Alloy:
GK-Al Si 11 Mg wa

Casting weight:
Net: 2 x 2.1 kg

Pouring temperature:
780°C

Poured weight:
Gross: 9.5 kg

Pouring time:
Approx. 12 sec.

Moulding process:
Gravity die casting;
8 station rotary casting machine
Filling by dosing furnace

Pouring/filtration practice:
DYCOTE 2050 insulating coating for mould casting and gravity die casting with a particularly long exposure time

Requirements:

- High elongation
- Shrinkage free
- No gas porosity
- Clean surface after machining
- Dimensional accuracy

Problems:

- Gas porosity
- Trapped air
- Shrinkage cavities

Other Advantages:

- Reduced scrap
- Constant form filling
- No shrinkage porosity
- Less material recirculating
- Reduction of machining, less work, reduced sawing
- Reduction of the mould costs, as the casting die can be made smaller

FOSECO products used:

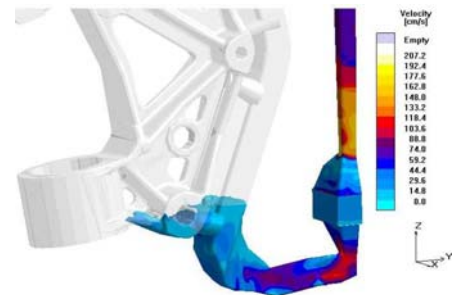
SIVEX FC Filters
DYCOTE* Coatings

Key Benefits

- No turbulence causing trapped air
- Less inclusions
- Better mechanical properties



Integrated undercarriage parts



Part of the mould filling simulation. The depiction clearly shows the strongly reduced flow speed through the SIVEX FC for a non turbulent flow.