FOSECO

REDUCTION OF THE REJECT RATE AND MANUFACTURING COSTS THROUGH THE USE OF FINER SEDEX* SUPER FLOW FILTERS

PARAMETERS:

Alloy:	GJS 600, Rm ≥ 590 N/mm², Rp0,2 ≥ 370 N/mm², A ≥ 10%
Casting weight:	4.9 kg
Pouring temperature:	1430 °C
Filter print:	SEDEX FP4
Poured weight:	43 kg
Pouring time:	8 s
Magnesium treatment:	Inmould process
Moulding process:	Horizontal parted moulding line - green sand

STEERING KNUCKLE

FOUNDRY:

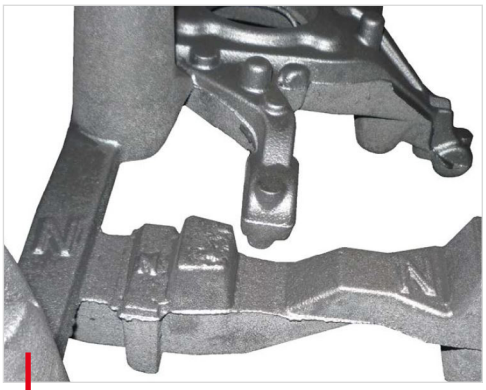
TEKSID IRON POLAND is based at Skoczów belonging to the Teksid Group. The plant was built in 1974. The annual production capacity is 70,000 t. The plant develops, industrialises, and produces various types of iron castings for the automotive sector. The products range from safety components such as suspension arms and steering knuckles, as well as manifolds, differential cases, crankshafts and cam shafts.

FOSECO PRODUCTS

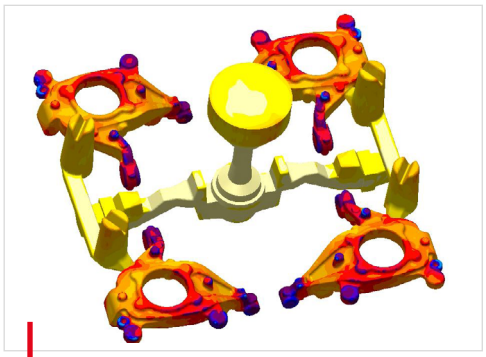
- Initially SEDEX 50x50x22/10 ppi
- Finally SEDEX SUPER FLOW 50x50x15/20 ppi

KEY BENEFITS

- Improved filtration efficiency due to the use of finer filters
- Improvement of casting quality in terms of surface quality and machining
- Reduction of the reject rate
- Reduction of manufacturing costs



Filter print



Spray of castings

THE CHALLENGE

Optimisation of the reject rate by using finer filters with the aim of reducing manufacturing costs. In this application, the magnesium treatment process used is of great importance since the inmould process can be problematic due to possible filter blockages.

OUR SOLUTION

The use of finer SEDEX SUPER FLOW filters provides the opportunity to achieve an improved filtration efficiency.

THE OUTCOME

Despite the critical application conditions, on changing to SEDEX SUPER FLOW filters, the pouring time was maintained providing reliable manufacturing conditions. The reject rate was reduced by approximately 40 %.

VESUVIUS