FEEDING/FILTRATION CASE STUDY
STEEL

Casting: Roof node for Berlin Olympic Stadium

STELEX* PrO filters, KALMINEX* sleeves

Foundry:
Friedrich Wilhelm-Hütte G III, Mülheim (R), Germany

Opportunities:
- Improve yield
- Decrease welding costs
- Reduction fettling costs

Alloy:
G20Mn5

Casting weight:
792 kg

Pouring temperature:
1610°C

Pour weight:
Before – 1,298°C
After – 1,060°C

FOSECO products used:

STELEX* PrO filter
KALMINEX* sleeve
CERAMOL* Coating
FERRUX* hot-topping compounds

Pouring time:
24 sec

Moulding process:
Furan resin bonded Silica/Chromite sand

Pouring/filtration practice:
Before – no filter, with KALMINEX X 12 and hollow ware gating system

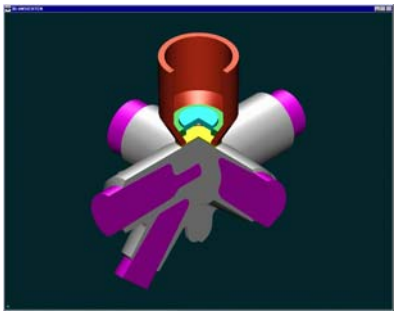
After – direct pour with STELEX PrO Ø 200x35/10 ppi and KALMINEX TA 11 + X 12 ring

Improvements:
- Improved yield from 61% to 75%
- 4x reduction of fettling and cleaning area

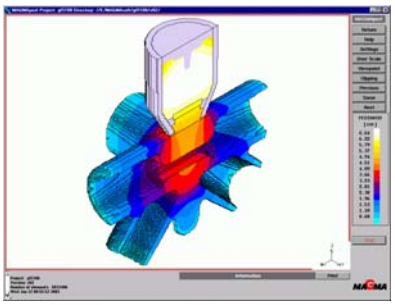
Casting with filter-feeder

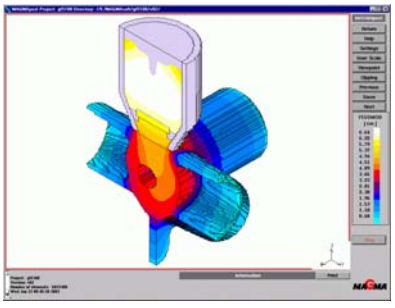
Key Benefits

- **Cleaner castings**
- **Improved yield**
- **Cost reduction**



CAD Layout





Solidification Simulation