



# tundishView

## Problem:

Tundish is not only a steel transfer pot from ladle to mould. If its design is not optimised, inclusion cannot be kept by slag and also thermal homogenisation does not occur. Finally, slag entrapment can occur during transient conditions.

## Solution:

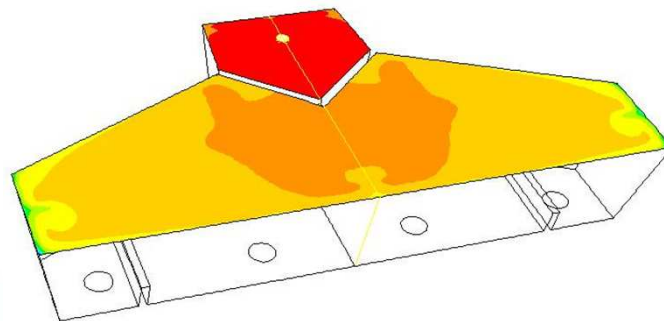
tundishView is a service CSM offer to its Customer in order to define the most suitable tundish geometry design for improving inclusion capture by tundish powder, thermal homogenization and slag entrapment during transient conditions.

tundishView is based on both CFD and physical model for transient and steady state conditions.

The 3D fluid dynamics Finite Element mathematical code applied to actual tundish design mainly for transient condition.

A 1:1 water physical model is built to have a visual representation of steel flows in steady conditions.

Mathematical and physical models help defining the complete internal geometry of the tundish including position and size of walls, dams and other flow modifiers.

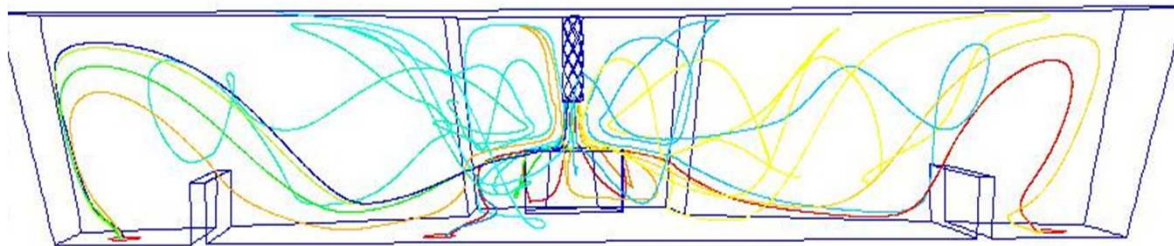
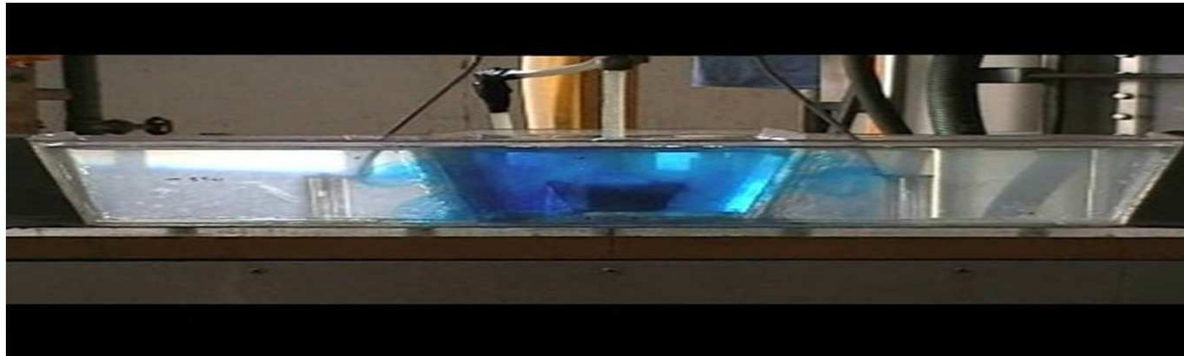


## Benefits:

- Correct tundish design
- Maximisation of inclusion capture
  - Minimisation of slag entrapment in transient conditions
  - Improving of steel thermal homogenisation

## Data request:

Present tundish design, operative practices, top slag datasheets.



tundishView, when applied systematically, can allow to define the optimal set of tundishes with different internal design to be used with different steel grades or on different casting machines.



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