

## **MODELLING & LAB STUDIES**

### **An overview on solidification modelling**

M.R. Ridolfi

### **Dynamic 3D heat transfer simulation of continuous casting**

K. Hauser, K. Dittenberger, S. Hahn, C. Chimani, C. Fürst, S. Ilie, L. Lindenberger, P. Pichlbauer, G. Xia

### **Investigations on inclusion agglomeration and separation in continuous slab casting tundish applying new numerical simulation approaches**

K. Marx, R. Koitzsch, S. Rödl

### **Optimization of numerical simulation of the bottom blowing process in a plasma heated six-strand Tundish**

J. Fan, J. Lu, S. Ren, S. Zhao, J. Liu

### **The modelling tools in ArcelorMittal R&D, a way to better understand steel cleanliness in CC mould**

M. Simonnet, P. Gardin, J. Gaspard, JF. Domgin

### **Modelling the effect of argon injection and casting speed variations on the meniscus behaviour during continuous casting**

P.E. Ramirez-Lopez, P.D. Lee, K.C. Mills, R.D. Morales, R. Sánchez-Pérez, A. Ramos-Banderas

### **Characterization of initial solidification of steel using a mold simulator**

T.T. Natarajan, T.J. Piccone, I. Sohn, K.D. Powers, C.C. Snyder

### **A finite-element description of the continuous casting of steel slabs**

A.J.C. Burghardt, G. Abbel, S.P. Carless, R.G.B. van Arendonk, J.P.T.M. Brockhoff

### **Autonomous mathematical optimization of continuous casting processes**

W. Schäfer, G. Hartmann, E. Hepp, D.G. Senk, S. Stratemeier

### **Heat transfer in a round CC mould: measurement, modelling and validation**

W. Rauter, M. Erker, W. Brandl, S. Michelic, C. Bernhard

### **Optimization of melt shop logistics using dynamic computer simulation**

J.T. McGinty, J.D. Young, C.E. Greene, V.C. Kendrick

### **Supplementary tools to measure and understand the flow in the continuous casting mould**

H.H. Visser, W. van der Knoop, S. van Oord, D. Bal, W.F.M. Damen, T.G. van Essen, J.P.T.M. Brockhoff, S.R. Higson

### **IDS tool – Theory and applications for continuous casting and heat treatment including modelling of microstructure and inclusions**

J. Miettinen, S. Louhenkilpi, H. Kytönen, J. Laine, S. Wang, T. Hätönen, M. Petäjäjärvi, P. Hooli

**Mathematical mould level model based on numerical simulations and water model experiments**

M. Javurek, M. Thumfart, K. Rieger, M. Hirschmanner

**Physical and mathematical simulation of the inclusion removal and determination of the deposition rate for the continuous casting process**

R. Koitzsch, M. Warzecha, A. Rückert, H. Pfeifer

**Optimized continuous casting simulation model**

J. Barco, J. Líbano, M. Serna, J. Palacios, J.I. Barbero

**Combined modeling of inclusions behavior during tundish process**

O. Smirnov, S. Grydin, S. Louhenkilpi, P. Väyrynen, S. Vapalahti

**An innovative integrated method in MHD design of electromagnetic stirrers**

R. Battistutto, C. Persi, S. Spagnul, E. Nobile

**State of the art in modelling of continuous casting**

O. Ludwig, M. Aloe, P. Thevoz