

Selected Publications on the Research Focus Heat Transfer in Intensive Cooling of Metals

- ▶ Specht, E.; U. Alam, K.H.H. Abdalrahman.: Influence of Quality of Water on the Heat Transfer in Secondary Cooling Zone during Continuous Casting. Proceedings of DGM 15-17 November 2010, Ulm, 33-38.
- ▶ Abd Alrahman, K.; Alam, U.; Specht, E.: Wetting Front Tracking during Metal Quenching using Array of Jets: Proceedings of the 14th International Heat Transfer Conference (IHTC14-22080), August 8-13, 2010, Washington, DC, USA.
- ▶ Alam, U.; Abd Alrahman, K.; Specht, E.: Experimental Investigation of Influence of Dissolved Salts and Surfactant on Heat Transfer in Atomized spray Quenching of Metal. Proceedings of the 14th International Heat Transfer Conference (IHTC14-22873), August 8-13, 2010, Washington, DC, USA.
- ▶ Abd Alrahman, K.; Alam, U.; Nallathambi, A.; Specht, E.: Aluminium quenching by array of water jets. 1st Mediterranean Conference Heat Treatment and Surface Engineering, 1-3. Dec. 2009, Sharm El-Sheikh, Egypt.
- ▶ Nallathambi, A.K.; Specht, E.: Estimation of heat flux in array of jets quenching using experimental and inverse finite element method. Journal of Materials Processing Technology, 209 (2009) 5325-5332.
- ▶ Alam, U.; Krol, J.; Specht, E.; Schmidt, J.: Enhancement and local regulation of metal quenching using atomized spray. Journal of ASTM International Vol. 5, No. 10 (2008). Paper ID JAI 101805. Nallathambi, A.K.; Alam, U.; Specht, E.: Heat flux estimation in direct chill casting using experimental and inverse finite element method. SME 2008 Summer Heat Transfer Conference, August 10-14, Jacksonville, Florida, USA, 2008, HT 2008-56500.
- ▶ Specht, E.; Krol, J.: Enhancement and defined regulation of metal quenching using atomized sprays: Proceedings of the European Metallurgical Conference, June 11 - 14 (2007), Düsseldorf, Germany, 1917-1928.
- ▶ Bleiker, G.; Specht, E.: Film Evaporation of Drops with Different Shape above a Horizontal Plate. International Journal of Thermal Science 46 (2007) 835-841.
- ▶ Krol, J.; Specht, E.: Influence of Quality of Water and Roughness of Surface on Quenching Rate. International Conference on Continuous Casting of Non-Ferrous Metals. 14. - 16. Nov. 2005 Neu-Ulm (Germany), 118-123.
- ▶ Puschmann, F.; Specht, E.: Atomized Spray Quenching as an Alternative Quenching Method for Defined Adjustment of Heat Transfer. Steel research int. 75 (2004) 283-288. Puschmann, F.; Specht, E.: Spraykühlung als alternatives Kühlverfahren für heiße Metalle. Chemie Ingenieur Technik 75 (2003) 1625-1628.

Intensive Cooling of Metals with Hardness and continuous casting Processes

- ▶ Selected Publications of intensive Cooling
- ▶ Cooling Strategies to equalize Surface Hardness and minimize Distortion