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Altri autori (Persone)	TaylorJohn A <1969-> (John Alexander) GrandfieldJohn F PrasadA (Arvind)
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Nota di contenuto	Aluminium Cast House Technology XII; Preface and Committees; Table of Contents; Chapter 1: Markets and Cast House Layouts; Improving Casthouse Throughput Using Discrete-Event Modelling; Chapter 2: Controlling Melt Loss; A Historical Perspective on Dross Processing; The Approach to Zero Waste from Smelter and Secondary Dross Processing; Preserving Metal Units Utilising the Latest Generation of Aluminium Dross Press; Crucible Fluxing with Hycast™ RAM- Effect on Metal Quality and Operational Cost; SPH Modeling of the Effect of Crucible Tipping Rate on Oxide Formation Oxidation of Rolled and Flash Anodized 3000 Aluminum in Air, Nitrogen, Oxygen, and Carbon Dioxide AtmospheresChapter 3: Furnaces and Refractories; A Historical Perspective of Aluminium Casthouse Furnace Developments; Improved Monolithic Materials for Lining Aluminium Holding and Melting Furnaces - Roof, Upper Walls and Flue; Phosphate Bonded Monolithic Refractory Materials with Improved Hot Strengths as a Potential Replacement for Phosphate Bonded Bricks; Cost Savings in the Cast House through Optimizing

Furnace Operation, Staff Training and Associated Variables
Thermocouple Protection Tube Options for Aluminium Casthouses
The Challenges to Supply New Casthouse Furnaces in a Modern Aluminium Smelter Project; Chapter 4: Safety; Can the Aluminium Industry Learn from another Industry's Catastrophe?; Chapter 5: Melt Quality and Treatment; Increasing Cast House Throughput through "In-Spec First Time"; Control and Removal of Impurities from Al Melts: A Review; Development of a Fused Magnesium Chloride Containing Refining Flux Based on a Ternary System
Recent Results with New Filter Technologies Based on the Principle of Multi Stage Filtration with Grain Refiner Added in the Intermediate Stage
Automatic Control of Molten Metal Flow for Improving Casting Performance; Chapter 6: Direct Chill Casting; The Development of Alsim - a Modelling Tool for Direct Chill Casting, Twin Roll Casting, Wheel and Belt Casting and Chain Conveyor Casting; Aluminum Ingot Thermal Stress Development Modeling of the Wagstaff® Epsilon™ Rolling Ingot DC Casting System during the Start-up Phase
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Hot Tearing in Al-Mg-Si Alloys with Minor Additions of Cu or Mn; Chapter 7: Ingot and Continuous Casting; Implementation of CASTfill Low-Dross Pouring System for Ingot Casting; 3D Thermo-Mechanical Modelling of Wheel and Belt Continuous Casting; Chapter 8: Alloys and Heat Treatment; Design of Secondary Alloy Compositions for High Performance Aluminium Pressure Diecastings; The Effect of Calcium on the Rolling Behaviour and Hot Tensile Properties of AA5182; The Metallurgy of Homogenisation
Effect of Homogenisation Parameters on Dissolution and Precipitation in Aluminium Alloy AA7150

Sommario/riassunto

The Aluminum Cast House Industry recognises the importance of technology management in reducing operating costs and making high-quality products safely; with minimal environmental impact. The 12th Aluminium Cast House Technology Conference and Exhibition provided a unique venue where researchers, producers and suppliers could present and discuss the latest ideas in the science and technology of casting aluminium-alloy semi-finished products. The proceedings, with 29 peer-reviewed papers, offer invaluable insights into the subject.
Review from Book News Inc.: Researchers, producers, and suppliers
