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Nota di contenuto	Cover; Title Page; Copyright Page; TABLE OF CONTENTS; Preface; Foreword; Session One: Magnesium Reduction - Lloyd M. Pidgeon Memorial Session; Lloyd M. Pidgeon - Magnesium Pioneer; The Pidgeon Process in China and Its Future; Chinese Adaptation of the Pidgeon Process (abstract only); Vertical Larger-Diameter Vacuum Retort Magnesium Reduction Furnace; A Computational Thermodynamic Analysis of Atmospheric Magnesium Production; Producing Magnesium for Use in the Titanium Manufacturing Process; Modernization at MAGCORP - Coming of Age in the 21st Century (abstract only) Session Two: Refining and Recycling Hydrofluorocarbons as a Replacement for Sulphur Hexafluoride in Magnesium Process; Interfacial Reactions Between SF6 and Molten Magnesium; U.S. EPA's SF6 Emmission Reduction Partnership for the Magnesium Industry: An

Update on Early Success; A New Conti-Process for the Fluxless Recycling of High Purity Magnesium; Innovative Vacuum Distillation for Magnesium Recycling; Mathematical Modeling of the Magnesium Refining Furnace; A New Self-Gravitation Filtering Technique for Rapid Assessing Cleanless of Magnesium Alloy Melt
Session Three: Casting and Solidification Magnesium Alloy Sheet Produced by Twin Roll Casting; Solidification Behavior of Commercial Magnesium Alloys; The Effect of Aluminium Content and Grain Refinement on Porosity Formation in Mg-Al Alloys; Effect of Beryllium Content in Thixomolding® AZ91D; The Influence of Primary Solid Content on the Tensile Properties of a Thixomolded AZ91D Magnesium Alloy; Session Four: Alloy Development; Magnesium Alloy Development Guided by Thermodynamic Calculations; Computational Thermodynamics and Experimental Investigation of Mg-Al-Ca Alloys Development of Creep Resistant Mg-Al-Sr Alloys Die Casting Magnesium Alloys for Elevated Temperatures Applications; Diecastability and Properties of Mg-Al-Sr Based Alloys; Tensile and Compressive Creep of Magnesium-Aluminum-Calcium Based Alloys; Creep and Bolt-Load Retention Behavior of a Die Cast Mg-Rare Earct Alloy (abstract only); The Mg-Zn-Al Alloys and the Influence of Calcium on Their Creep Properties; Session Five: Physical Metallurgy; Digital Image Analysis Technique for Characterization of Shrinkage and Gas (Air) Porosity in Cast Magnesium Alloys
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Experimental and Computational Study of Bolt Load Retention Behavior of Magnesium Alloy AM60B (abstract only)

Sommario/riassunto

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