

Advanced Casting Technologies for Light Metals

轻金属的先进铸造技术

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Abstract: This talk will provide an overview of the latest process developments for lightweight aluminum and magnesium castings. Vacuum-assisted die casting and high vacuum die casting technologies have been developed for high-integrity components. Thin-wall and hollow casting components are being produced by low-pressure die casting processes for structural applications. Overcasting technology has enabled multi-material manufacturing of lightweight systems. Process simulation and integrated computational materials engineering (ICME) play an important role in the development of new casting processes and lightweight products.