R-HPDC in South Africa

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Abstract

The history of semi-solid metal forming and in particular rheo-high pressure die casting at the Council for Scientific and Industrial Research in South Africa is discussed. Processing flexibility is demonstrated on the Al-Si-Mg, Al-Mg-Si, Al-Cu-Mg and Al-Zn-Mg-Cu casting and wrought alloy systems as well as on high purity aluminium, unmodified Al-Si binary eutectic, metal matrix composites and magnesium alloys. Material properties are highlighted.