

HPDC "smart" die - future of casting quality and die fatigue control

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In "SMARTDIE" project academic and manufacturing specialists on HPDC technology and simulation of casting processes are trying to develop new kind of HPDC die, which based on advance numerical simulation of whole process of casting cycles will determine best (most influential) places of the die from fatigue life point of view.

Such places will be observed by measuring equipment which will bring possibility to take care about die treatment in a way to prolong die fatigue life as much as possible. This completely new approach to die design not only aims to increase service life but also, based on data collection from real production, allows foundry engineers to predict the approaching end of die life.