

Minor Revolution in Major Pyrometallurgy

The German raw material efficiency prize 2015 goes to IAS GmbH: The company located in Weil der Stadt develops innovative high performance cooling for sensors in high temperature applications

Outstanding scientific and economic projects have been awarded with the German raw material efficiency prize 2015. The award winning success stories exemplify the outstanding innovations for efficient and sustainable use of raw materials in both research and economics in Germany. The prize winners demonstrate in diverse ways how great leaps are possible in raw material efficiency. One of the prize winners is the company IAS GmbH from Weil der Stadt near Stuttgart. Managing Director Steven Hartmann received the award in Berlin. Mr. Uwe Beckmeyer, Parliamentary State Secretary at the Federal Ministry for Economic Affairs and Energy presented the awards. IAS is one of two award winners in the competition category for corporations.

Pyrometallurgy is an extensive sector in the extraction of raw materials up to the creation of semi-finished goods which operates with an enormous consumption of material and energy. Monitoring levels of molten glass and metals is a constant challenge for operators: How can the level be measured so that continuous ideal castability of the melted mass is ensured? Prevalent methods for controlling and monitoring such systems involve visual inspection by experienced employees, whereby the system needs to be opened or is permanently open. Generally, up to 20% of the energy in a casting system is wasted by opening the ovens.

The raison d'être for IAS GmbH is to develop and market a suitable cooling system to enable the use of off-the-shelf inductive or microwave sensors for measurements at temperatures of up to 800°C. The result is industrial standard prototypes of passively cooled sensors for durable applications in high temperature zones. These contribute to the improvement of automatic processes through a reliable non-contact detection of melting bath levels.

Ideal monitoring of molten mass in ovens, casting channels, and casting-dies

„The cooled sensor systems contribute to optimization of high temperature processes in metal and glass pyrometallurgy. They can be used for monitoring molten mass in ovens, casting channels, and casting-dies“, explains Steven Hartmann. A further field of application lies in controlling the position of hot semi-finished goods.

Kontakt:

IAS GmbH
Steven Hartmann
Hausener Straße 7
71263 Weil der Stadt
Telefon 07033 / 4698 - 290
Fax 07033 / 4698 - 292
Mail: sh@ias-sensorik.de
www.ias-sensorik.de

Pressekontakt:

Titania Kommunikation
Dr. Simone Richter
Kreuznacher Straße 62
70372 Stuttgart
Telefon 0711 79481988
Fax 0711 79481984
Mobil 0170 9031182
Mail: richter@titania-pr.de

-2-

As well as higher quality and increased production lot sizes, a significant increase in energy efficiency for these processes is also achieved. „Receiving an award for our innovative development makes us not only proud; it also demonstrates that the IAS high performance cooling for sensors in high temperature areas closes one of the still existing gaps in the foundry sector thus further optimizing production conditions.“

The German raw material efficiency prize is awarded by the Federal Ministry for Economic Affairs and Energy to Small and Medium-sized Enterprises as well as Research Centres for the development and implementation of raw material efficient products, processes, and services. The jury includes representatives from science, economics, and business.

The film of the nomination of IAS GmbH:

<https://www.youtube.com/watch?v=VmHw0ZkRKPU>

The film of the award ceremony:

https://www.youtube.com/watch?v=_WcsjxZ3zPc

Kontakt:

IAS GmbH
Steven Hartmann
Hausener Straße 7
71263 Weil der Stadt
Telefon 07033 / 4698 - 290
Fax 07033 / 4698 - 292
Mail: sh@ias-sensorik.de
www.ias-sensorik.de

Pressekontakt:

Titania Kommunikation
Dr. Simone Richter
Kreuznacher Straße 62
70372 Stuttgart
Telefon 0711 79481988
Fax 0711 79481984
Mobil 0170 9031182
Mail: richter@titania-pr.de