

The event at a glance

- You get to know the **latest developments** in the field of industrial robot programming for shop floor manufacturing and small lot size production in foundries.
- Applicability to **processes at your company** will be discussed with experts.
- **Your opinion** on different methods will guide further developments!

Final Presentation & Assessment Meeting *Intuitive Robot for fettling castings for the foundry*

One of the keys to success for developing and implementing effective and efficient robot systems for small lot size production in an SME end-user environment, is the integration of the specific needs and requirements from the end-user point of view.

The workshop "Final Presentation and Assessment for the Intuitive Robot for fettling castings for the foundry" offers a platform for potential end users and system builders as well as for the technology developers.

During a one-day event 2 fettling robots will be demonstrated and will be tested by the participants. Participants will be also actively involved in the evaluation and assessment of the technologies with respect to their own needs and requirements.

Participation and Benefits

Participation in this interactive workshop is in particular of high interest for SME end-users in the castings sector, e.g. foundries with small batch production, foundry system integrators, and for foundry technology multipliers. During the course the very near future of robot technology suitable for various fettling applications will be demonstrated. It is a unique opportunity for the participants to view and test these devices.

The SMERobot™ Project

SMERobot™ is a European Research Project for Strengthening the Competitiveness of SMEs in Manufacturing. It is aimed at developing low-cost, modular and interactive automation solutions for European Small and Medium-sized Enterprises (SMEs) in manufacturing. Based on the potential of industrial robots, SMERobot™ creates radically new types of robot systems, offering a whole new family of SME-suitable robots.

Organisational

Information and Registration

Mr. Maarten BONKE (SME coordinator in SMERobot)
Pro Support B.V.
Amarilstraat 11
7554 TV Hengelo
The Netherlands
E-mail: info@prosupport-nl.com
Phone: +31 (0)74 255 11 60
www.smerobot.org

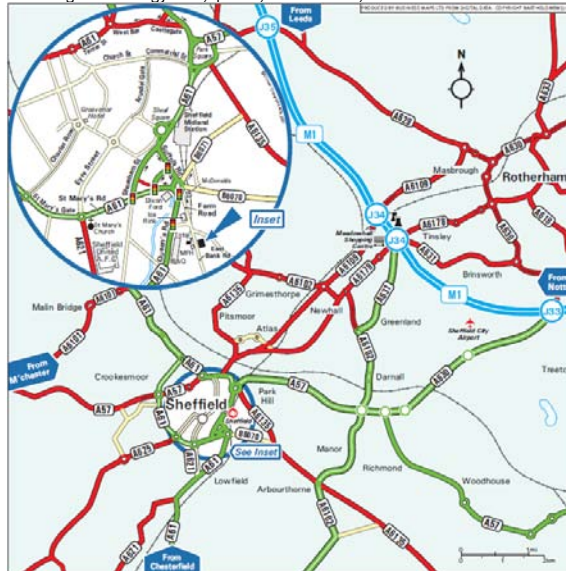
Participation

The workshop is free of charge. We expect your active involvement with respect to a hands-on contribution when testing and evaluating the system and devices. To foster the participation of SMEs we have the opportunity to partly reimburse your travel expenses. Please ask for conditions. We will accept your registration until Monday, April 22nd, 2009.

Venue

Castings Technology International
7, East Bank Road, Sheffield, S2 3PT, South Yorkshire, England

www.castingstechnology.com/public/documents/00000000000074.PDF



SMERobot™ Final Presentation and Assessment

Wednesday, April 22nd, 2009
CTI, Sheffield, UK

Intuitive Robot for fettling castings for the foundry



Final Presentation and Assessment for the Intuitive Robot for fettling castings for the foundry

Program

Wednesday, April 22nd, 2009

- 09:15 Arrival of Participants at CTI
- 09:30 Welcome and Introduction to the European Research Project SMERobot
Presentation of Demonstration Activity
(conference room)
- 09:45 Practical Presentation of the Fettling Robot
(conference room)
- lead through programming
 - slitting operations
- Individual Practical Testing and Assessment of the Demonstration System
(shop floor)
- 10:45 Coffee Break
- 11:00 Introduction to the burning activity
- Practical Presentation of the Burning Robot
(conference room)
- lead through programming
 - burning operations
- Individual Practical Testing and Assessment of the Demonstration System
(shop floor)
- 12:30 Lunch Buffet
- 13:30 Introduction to the grinding operation
(conference room)
- Practical Presentation of the grinding Robot
- lead through programming
 - grinding operations
- Individual Practical Testing and Assessment of the Demonstration System
(shop floor)
- 14.30 Discussion and Assessment of the Demonstrators Results by the Participants
(conference room)
- 16:00 End of Final Presentation & Assessment Meeting

This workshop is part of the Integrated Project SMERobot™ funded by the European Commission's Sixth Framework Programme under grant no. 011838. Please find further information at

www.smerobot.org

Intuitive Robot for fettling castings for the foundry

Lead Through Programming

A demonstration of the ability to use lead through programming:

- voice recognition for control instructions
- point to point control for continuous path programming
- ergonomically designed guidance wheel
- no computer or keyboards

A simple and easy to use process which can be readily learnt by all operators giving the flexibility to process small batch quantities with no need for lengthy off line computer programming activities.

Participants will be able to test the capability by real time programming trials on two robot systems

- an ABB IRB4400 robot fitted with an intelligent burning torch
- a parallel kinematic light weight new robot development fitted with a low weight slitter/grinder end effector



Light Weight Tooling

Intelligent close cutting burner for precise control

"Exactaburn" – a close-cutting burner utilises a specially designed extended cutting nozzle for better oxygen stream control during cutting operations, combined with a reduced external diameter to provide improved access when cutting castings. The burner is fitted with a sensor to monitor the cutting operation providing an intelligent approach to the process.

Intuitive Robot for fettling castings for the foundry

Lightweight cutter grinder using robot control

"Cutlight" is a compact cutting and grinding unit with a low mass-to-power ratio and reduced vibration. Two exchangeable components offer a hybrid solution for the adaptation of hand tools for robotic application

