

P R E S S R E L E A S E

FOR IMMEDIATE PUBLICATION

12^h April 2013

POLAB[®] Shuttle - The new generation of laboratory automation

The ThyssenKrupp Polysius laboratory automation system, POLAB[®], has been an international byword for quality control and process optimisation in the cement industry for more than four decades and is now available for minerals and pharmaceuticals.

Innovative automation solutions and intelligent control systems help minimise raw material costs and assure product quality. Fully automatic POLAB[®] samplers are used to take representative samples throughout the process which are sent in capsules by pneumatic tube to the lab, where they are divided again, prepared, and automatically transported to various analysers.

“To minimise downtime during maintenance, lab personnel must be able to access the machines while the robot is working. Only a system with a common human-machine workspace could therefore be considered,” says Polysius Product Manager, Marius Combrinck.

Enter the POLAB[®] Shuttle, an innovative laboratory automation system, which was developed by ThyssenKrupp after years of experience working with large industrial robotic manipulators and having to deal with the human safety concerns during maintenance or manual sample introduction. The POLAB[®] Shuttle was designed focusing on the following aspects:

- Collaboration of humans and machines in a common workspace
- High maximum sample throughput
- Minimum downtime for maintenance
- Possibility of full redundancy
- Extensibility for new components and analyzers
- Use of proven components

2/... POLAB[®] Shuttle

2/... POLAB[®] Shuttle

In POLAB® Shuttle the mobile robot consists of a low-powered lightweight robot arm and a transfer robot, a mobile platform that moves independently on rails to predefined stops. “The transfer robot is intrinsically safe and can be operated without additional safety equipment. A lift allows vertical floor changes,” explains Combrinck.

Combrinck discusses the unique flexibility of the POLAB® Shuttle laboratory automation system. “Sample transfer by means of the mobile robot allows unprecedented freedom of configuration and extensibility. The individual modules, such as receiving station, sample preparation, input/output magazine and analysers, are interconnected by the rail system on which the robot moves,” says Combrinck and adds that the innovative safety concept makes the laboratory into a common human-machine workspace. “The laboratory is barrier-free and the individual components can be operated either automatically or manually,” concludes Combrinck.

Photo Captions:

1. POLAB® Shuttle Installed at Holcim, Lagerdorf, Germany
2. POLAB® Shuttle interacting with a POLAB® AMP while lab personnel are refilling consumables

ISSUED ON BEHALF: POLYSIUS

Tel: 011 236 1218 / Fax: 011 236 1301

Contact: Marius Combrinck, Product Manager:

marius.combrinck@thyssenkrupp.com

Email: Pia Guertler:

pia.guertler@thyssenkrupp.com / www.polysius.co.za

Issued by: Sonia Laverick: Laverick Media Communications cc

Tel: 083 310 4491 / 086 671 6836

lavmedia@iafrica.com / www.laverickmedia.co.za