

2nd of July 2010, Berlin

To your convenience we blocked a number of rooms at the

adrema Hotel
 Gotzkowskystraße 20-21
 10555 Berlin
 www.hotel-adrema.de
 Phone: +49 30 20213-300
 Telefax: +49 30 20213-333
 E-mail: info.BERADR@gold-inn.de

close to the workshop site.

The Fraunhofer IPK arranged for special rates that will be available until June 14th, 2010 under the following code: PISA 010710
 Prices: Single EUR 80,00 incl. breakfast
 Double EUR 102,00 incl. breakfast

Social event
 All participants are invited to a cruise along the Spree River where dinner will be served. If you bring an accompanying person who is not registering for the workshop please tick the appropriate box on your registration.

Participation fee: EUR 125
 Fee social event for accompanying person: EUR 40



Produktionstechnisches Zentrum (PTZ)
 Pascalstraße 8-9, 10587 Berlin

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 Last Name First Name

 Company

 Position, Division

 Address

 Phone FAX

 E-mail

- I hereby confirm my registration for the workshop
- accompanying person

 Date, Signature

**Flexible Assembly Systems through
 Human-Machine Cooperation**

Final PISA Project Workshop



Fraunhofer
 IPK
 INSTITUT
 PRODUKTIONSANLAGEN UND
 KONSTRUKTIONSTECHNIK

Introduction

The growing number of product variants, smaller lot sizes, accelerated time to market and shorter life-cycles of products have lead to increasing demands on assembly equipment and concepts. Therefore a demand of high flexibility with respect to variants, low-cost adaptability of products and quick amortisation within a sustainable equipment concept is on the rise.

PISA is a European Integrated Project (IP) that is dedicated to cater to these demands.

With the involvement of 18 partners from seven European countries, PISA researches "next generation of flexible assembly technology and processes" and brings together the knowledge of four large companies, seven SME as well as seven research institutes and universities.

In the course of the final presentation of the PISA project results, PISA offers the chance to participate in a workshop that will show how to master these challenges by presenting innovative methods and technologies.

Participants will have the opportunity to learn about PISA's solution to often insufficient performance of existing automation techniques by getting to know new hybrid, i.e. human-integrated approaches. In the focus of attention stands the combination of human flexibility, intelligence and skills with the advantages of sophisticated technical systems. Rather supporting the human worker than replacing him.

The workshop will present intelligent assist systems (IAS) as a rational, advanced method for the assembly of complex products on demand whilst significantly reducing costs. The workshop will furthermore tackle the re-configurability of assembly systems and the reusability of assembly equipment. Methods and tools will be presented for reconfiguration planning, re-programming, life-cycle and equipment management and knowledge bases for assembly solutions. Participants will also benefit from the unique chance to experience newly developed prototypes up close.

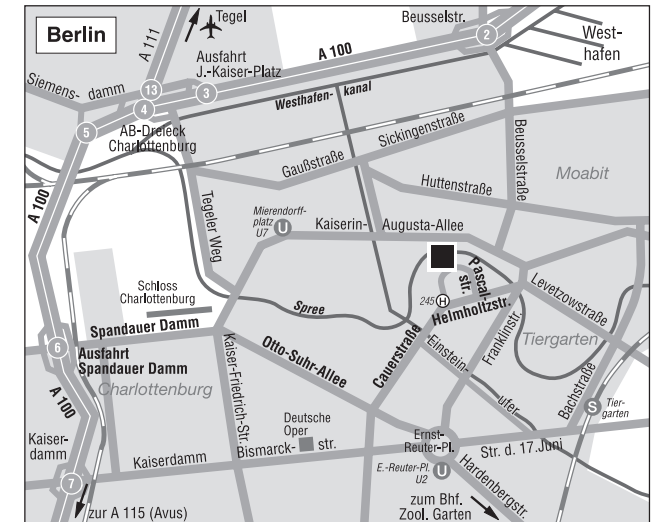
PISA Workshop

2nd of July 2010

- 10:00 Welcome (Prof. Krüger, Fraunhofer IPK)
- 10:10 Keynote: Modular, reconfigurable robotics – basics, state of the art and perspectives (Dr. Sawa Tschakarow, Senior Consultant SCHUNK GmbH & Co. KG)
- 10:40 Short introduction to the PISA-Project (Overview) (Mr. Schreck, Fraunhofer IPK)
- 11:00 Control Concepts for Human centered Automation (Dr. Surdilovic, Fraunhofer IPK)
- 11:30 Industrial Application for Cobot Systems (Dr. Schmidt, Schmidt-Handling)
- 12:00 Dual Arm Robots for Time-sharing Assembly Applications (Mr. Krinke, pi4)
- 12:30 **Lunchtime Snack and short walk through the Fraunhofer IPK lab**
- 13:30 Advanced assembly design planning and optimization tools (Mr. Velez, Visual Components)
- 14:00 Reconfigurable and reusable assembly equipment (Mr. Rusina, Comau)
- 14:30 **Coffee break**
- 15:00 Guided tour to the demonstrators
 - Demonstrator 1 (Power Assist System, Cobot)
 - Demonstrator 2 (Dual Arm Robot)
 - Demonstrator 3 (Robot Arm on Mobile Platform)
 - Demonstrator 4 (Software Tools)
 - Demonstrator 5 (Distributed Control)
- 17:00 Final Discussion
- 17:30 Individual Demonstrator Tour
- 20:00 **Social Event**

General Information

The workshop will be held at the Fraunhofer IPK



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