

ASIA-PACIFIC WEEKS BERLIN 2017  
**SITE VISIT: REAL-LIFE INDUSTRY 4.0**  
CURRENT TRENDS AND DEMONSTRATOR SOLUTIONS

**Site Visit to Fraunhofer IPK**

Fraunhofer Institute for Production Systems and Design Technology (IPK) shows how flexible factories of the future may look like. After learning about current trends and progress in R&D and about practical applications of the digitalization of production lines, participants will visit the Demonstrator Solutions site. During the tour through a virtual reality platform, they will learn about the complex scenario of how digitally integrated technologies facilitate transparency in flexibly organized production - developed by the Fraunhofer IPK. The scenario uses the example of gear production to demonstrate the possibilities offered by novel technologies and how that will redefine the tasks and work of production employees along a process chain from corporate-wide job management through manufacturing organization to work on individual machines.

Time: **May 15<sup>th</sup> 2017, 10.00-12.00**

Venue: **Fraunhofer IPK, Pascalstr. 8-9, 10587 Berlin**

Schedule: 10:00 Presentation on current trends & progress in R&D and practical applications  
11:00 Visit of Demonstrator Solutions

***For registration please write to: [lea.schaumann@apfberlin.de](mailto:lea.schaumann@apfberlin.de)***

**Context: Industry 4.0 – Flexible Transparent Manufacturing**

Manufacturing small and fluctuating batch sizes while still keeping costs stable is an increasing demand in industry. Yet if production becomes more flexible, processes become more complex, increasing the danger of unmanageable procedures making production inefficient. Industry 4.0 promises mostly one thing: Great flexibility in production. In the future, it will be possible to adapt production to ever-changing versions of products and processes and still keep costs stable.

Present production lines have one major problem: they are interconnected. If one machine goes offline, the whole line will come to a standstill. In addition, it is complicated, if not impossible, to adapt lines to changing product ranges or to produce orders to special demands. Greater flexibility in this regard requires that such interlinked structures be broken up. One way to do so is to employ the job shop production principle. It groups machines that may be employed in similar manufacturing tasks – for instance, several turning machines could be combined into a turning machine group – which permits orders to be guided flexibly through the manufacturing process. It also allows machine groups for different machining tasks to be laid out in different sizes – greater capacities, for instance, could be facilitated for machining processes that are more time-consuming. The result would be a significant improvement in response times and capacity utilization.

The site visit **Real-Life Industry 4.0** is organized by the Fraunhofer IPK in cooperation with the Asia-Pacific Forum Berlin ([www.apfberlin.de](http://www.apfberlin.de)).