
Press release

Hannover Messe 2025:
Increased efficiency through AI and cobots

Press release from March 10, 2025

The IPH - Institut für Integrierte Produktion Hannover gGmbH will be exhibiting a cobot that can draw an unknown image with the help of AI at the Hannover Messe from March 31 to April 4, 2025. The exhibit illustrates how AI in combination with robotics can lead to increased efficiency in production and reduce the workload of personnel. Interested visitors can explore the exhibit in hall 16, stand F09 at the joint hannoverimpuls stand.

Automation with artificial intelligence and cobots

Even though the number of vacancies in Germany has fallen in recent years, the figure remains at a high level. The shortage of skilled workers is omnipresent in almost all sectors and is an increasingly difficult challenge to overcome, especially for small and medium-sized companies. Demographic change will lead to a further decline in the number of people of working age in the coming years and thus to a worsening of the situation. The use of collaborative robots (cobots) in conjunction with artificial intelligence (AI) offers a promising solution to these challenges. This can make production processes more efficient and counteract the shortage of skilled workers.

AI and robotics in production

In 2025, the IPH – Institut für Integrierte Produktion Hannover gGmbH will demonstrate how artificial intelligence and robotics can be combined to automate production processes. The aim is to react to unforeseen events on the one hand and, on the other, to achieve this with lower personnel costs.

Against the backdrop of labor market developments, it is therefore advisable for companies to start thinking about automation and the use of AI now. This is an elementary building block for securing Germany and regions such as Hanover as business locations in the long term.

Cobots: human-robot collaboration

Collaborating robots, known as cobots, are an innovative approach. Unlike conventional industrial robots, they can work directly with humans. Safety guards are not necessary as they have special sensors and protective mechanisms that prevent collisions. This makes it clear that cobots are not intended to replace human workers, but to provide them with targeted support and thus relieve their workload.

One example of this is an IPH exhibit that uses innovative image processing algorithms. An image unknown to the cobot is captured and pre-processed so that the cobot can then draw it in detail. The AI processes the image and automatically creates a movement instruction for the cobot without a human having to program the process. This technology can be transferred to various production areas, such as automated welding. The targeted use of AI and cobots offers companies significant potential.

Research and prospects

IPH has extensive experience in the field of artificial intelligence from numerous consulting and research projects. These include AI-based data analysis of medical data and AI-supported order verification. IPH is also involved in the European research project “AIMS5.0”, which is further developing AI in the manufacturing industry and setting the course for Industry 5.0 in Europe.

IPH engineers will be on hand at the stand to provide information on projects and welcome inquiries from research and industry. Visit IPH at the Hannover Messe 2025 in hall 16, stand F09: <https://www.hannovermesse.de/exhibitor/iph-institut-fur-integrierte-produktion/N1511939>

About the IPH

The IPH – Institut für Integrierte Produktion Hannover gGmbH (which literally translates into Hannover institute of integrated production) is a service provider for production technology and was established in 1988 at the Leibniz University in Hannover. The IPH offers research and development, consultation and qualification concerning the subjects of process technology, production automation and logistics. Its customers include companies from the sectors of tool and mould construction, machine and plant construction, aerospace and the automotive industry, electro industry and forging industry.

The business has its headquarters in the science and technology park – Science Area 30X in the northwest of Hannover and currently employs about 80 people, of which about 30 are scientific personnel.

Note for the editors

For further information, please contact

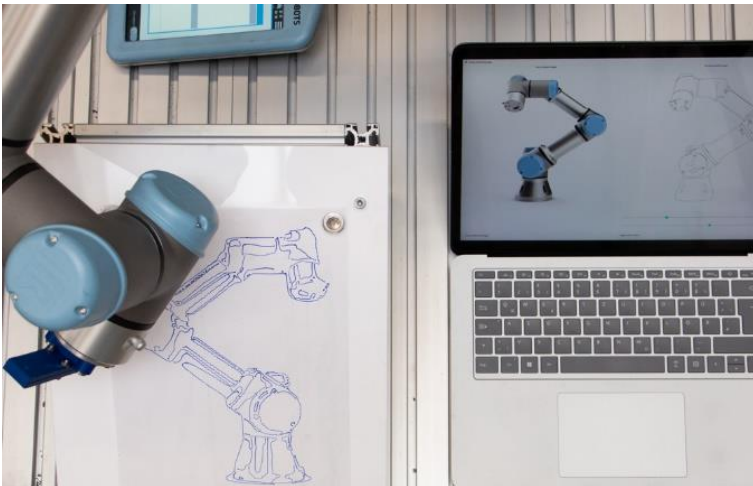
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Image material



Cobots are collaborative robots that can work directly with humans to support them. (Photo: Susann Reichert / IPH gGmbH)



The cobot that the IPH demonstrates at the Hannover Messe can draw photos - thanks to AI image recognition. (Photo: Susann Reichert / IPH gGmbH)