
Our services for industry



Auto ID



ERP / MES



Forming technology

IPH: service provider for industry

Are you looking for a customized solution to your production challenges? Thanks to our cross-industry experience and our interdisciplinary approach, we can respond precisely to your needs.

According to our areas of expertise, we offer different service modules from which you can compile packages of services according

to your needs. This allows us to solve your individual challenges with tried and tested practices.

More detailed information can be found on the following pages as well as on the Internet: www.iph-hannover.de/services. You can also find the right person there who would be happy to make you an offer.

Our areas of expertise include:



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Our profile:

IPH – Institut für Integrierte Produktion Hannover gGmbH is a production technology service provider. Research and development, consulting and training are our focal points.

Under the leadership of the three shareholders and professors Ludger Overmeyer, Peter Nyhuis and Bernd-Arno Behrens (photo, from left), we are constantly working on the further development and implementation of new and innovative ideas in the fields of pro-

cess technology, production automation and logistics. In addition, we are pioneers in the field of the production of XXL products.

We see ourselves as mediators between theory and practice. Our solutions are created in interdisciplinary teams. Mechanical and industrial engineers, commercial computer scientists, technical business managers and technicians – together we are able to develop innovative solutions and also integrate unconventional ideas in our work.

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Automatic identification (auto ID)






We have in-depth knowledge in the field of automatic identification technologies (auto ID).

Our experience includes established technologies such as bar codes and matrix codes, wireless technologies such as RFID and combinations thereof. In addition, we conduct research in this field and develop

new systems based on optical data transmission.

We would be happy to assist you with your auto ID projects – from the specifications for your identification solution to the implementation of an auto ID study, which shows the potential and deployment scenarios, through to the implementation of auto ID solutions.

We offer the following service modules:

Analysis of the identification processes		Vendor & technology selection	
Development of identification scenarios		Introduction & implementation of identification solutions	
Assessment & selection of identification scenarios			



Our service packages:

You want to introduce an automatic identification system and would like to know if and what improvements you can implement in the processes? Are you wondering what

scope of services should be covered by the system? Then we would be happy to support you – from the analysis of requirements to the introduction of an auto ID solution.

Auto ID specifications



Auto ID study



Development and implementation
of auto ID solutions



“
Together with IPH, we have developed a prototype for a new optical auto ID system in the context of a research project. It's a huge advantage when science and industry work together so closely.

Dr. Frank Mänken, Head of Technology Development
at Jungheinrich AG



Automation technology







We have extensive knowledge of innovative concepts and solutions in automation technology.

With your input, we will create a customized, vendor-independent automation solution for your application – from the assessment of the process with respect to the degree of automation to the selection

and implementation support of automation solutions.

Whether you want an objective assessment of how your production can be economically automated and what improvements are possible, or whether you want to completely automate manual processes, we would be happy to consult you.

We offer the following service modules:

Analysis of production processes		Assessment & selection of automation scenarios	
Development of automation scenarios		Vendor selection	
Material flow simulation		Implementation support of automation solutions	



Our service packages:

You want to automate a manual manufacturing process? You are uncertain as to what degree of automation makes sense? You lack the time for a systematic

analysis and the development of technically and economically optimal automation concepts? Then we would be happy to support you.

Assessment of the degree of automation



Automation study



Development and introduction
of automation solutions



“
The experts at IPH have created a comprehensive automation concept for us. We were thus able to very accurately estimate what is technically feasible – and what costs we will have for the implementation.”

Bernhard Wilken, Managing Director
of WILCO Wilken Lasertechnik GmbH & Co. KG



ERP / MES







Enterprise Resource Planning (ERP) and Manufacturing Execution Systems (MES) form the central backbone of your business, thus ensuring sustainable success.

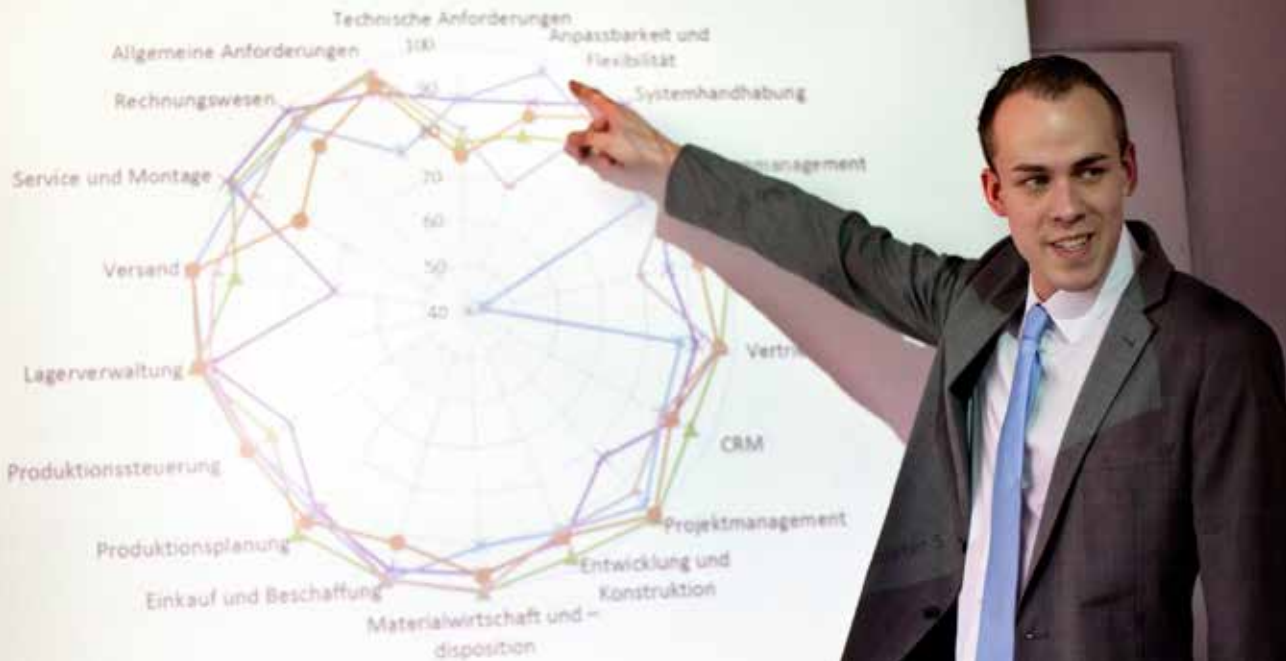
With our team of experts in business organization, production technology, production planning and control and informa-

tion technology, and combined with our years of experience in the piece goods industry (for example, in machine and plant construction), we can support you in the selection of a new ERP or MES system.

As independent experts, we place value on a requirement-, time- and cost-oriented system selection tailored to your needs.

We offer the following service modules:

Analysis & optimization of business processes		Synchronization of system functionalities & detailed selection	
Specification of requirements, including prioritization		Vendor presentation & final selection	
Market analysis & supplier pre-selection		Support in contract negotiations & system implementation	



Our service packages:

You want to implement a new ERP or MES system, but do not know which of the numerous software solutions on the market fit your company? Or your

company already has an ERP or MES system, but you are convinced that there are better solutions? We can assist you with the selection.

ERP / MES review



ERP / MES system selection



ERP / MES system introduction



“
We have finally found the ERP system that can best represent our business processes, because it is particularly well-suited for contract manufacturers. IPH gave us professional support in the decision-making and selection process.
 ”



Marc Hiller, responsible for purchasing at Frerk Aggregatebau GmbH







Factory planning

Since our founding in 1988, we have been successfully planning factories. In addition to the many years of experience and expertise of our former and current shareholders, Professor Hans-Peter Wiendahl and Professor Peter Nyhuis, the latest research findings, such as energy efficiency, have a great influence on our work.

We offer interdisciplinary planning services in cooperation with architectural firms.

The use of the proven synergistic factory planning process ensures fast and high-quality results because the disciplines of architecture, logistics, and building services work together efficiently.

We offer the following service modules:

Specification of requirements & definition of goals		Layout assessment & layout selection	
Factory analysis & basic evaluation		Detailed layout planning	
Structural design & area layout planning		Cost estimation	



Our service packages:

Your factory capacity is threatening to burst at the seams, and established structures are limiting your options? You want to reorganize your factory or even

plan a whole new location on a greenfield site? We are happy to help – whether in assessing your existing plans or planning new ones.

Review of existing plans



Brownfield planning



Greenfield planning



“
Engineers at the IPH proceed very systematically in factory design. With their help, we were able to realize a directed flow of materials and a versatile space module concept and have even won an award for the ‚Factory of the Year‘.”

Dr. Uwe Bretschneider, Head of Engineering & Technology
 at Bahlsen GmbH & Co. KG



Manufacturing processes



We have extensive knowledge of well-known and innovative manufacturing processes. Our core areas of expertise include the evaluation and selection of alternative production options for your components.

We examine manufacturing processes such as casting, machining or forming and

their technical feasibility and economic viability for you.

If you are wondering whether other manufacturing processes are cheaper than the technology you currently have in use, we can support you in researching, evaluating and selecting alternative manufacturing processes and vendors.

We offer the following service modules:

Specification of requirements & definition of goals		Assessment of manufacturing processes	
Analysis of existing manufacturing processes		Vendor selection	
Research of alternative manufacturing processes		Economic evaluation	



Our service packages:

Are you looking for alternative ways to customize your components? Are you interested in the potential of other manufacturing processes and are wondering if they

are cheaper than the technology currently in use? Then we would be happy to support you in researching, evaluating and selecting manufacturing processes.

Research of potential manufacturing processes



Evaluation and selection of alternative manufacturing processes



Research of manufacturing processes and supplier selection



” *We are a tool designer and manufacturer originally delivering mouldings for the iron and aluminum casting industry. Our public awareness has grown a lot since we are able to offer the manufacturing of forging and cross wedge rolling tools. IPH helped us accomplish that.*

Borja Lizari,
Managing Director of Aurrenak S. Coop. (Spain)



Forming technology







We specialize in resource-efficient processes in the field of forming technology. Our core area of expertise includes technologies such as flashless or flash-reduced forging, cross wedge rolling, hydroforming and hybrid forging.

We consider different materials for these applications, such as steel, stainless steel,

aluminum, titanium and Inconel. We have more than 20 years of experience in the flashless forging sector.

If you want to optimize your forming processes, save material in the forming process and reduce the defect rate or are interested in alternative forming methods such as cross wedge rolling, we will gladly advise you.

We offer the following service modules:

Specification of requirements & definition of goals		Construction of forming tools	
Analysis of current state		Forming tests & evaluation	
Design of forming processes		Economic evaluation	



Our service packages:

You want to optimize an existing forming process, but do not possess FEM programs for the design of forming processes? Or you want to test alternative methods,

such as cross wedge rolling or flashless forging? Then we would be happy to support you in the design and execution of forming processes.

Design of forming processes



Implementation of forming tests



Design and testing of forming processes



”

We've been working closely with IPH for more than ten years implementing the newest research results in our forging production. Due to this cooperation, our forging processes have become both more material- and energy-efficient.

“



Gürbüz Güzey, Production Director
at OMTAŞ A.Ş. (Turkey)



Automation technology



Manufacturing processes



Factory planning

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