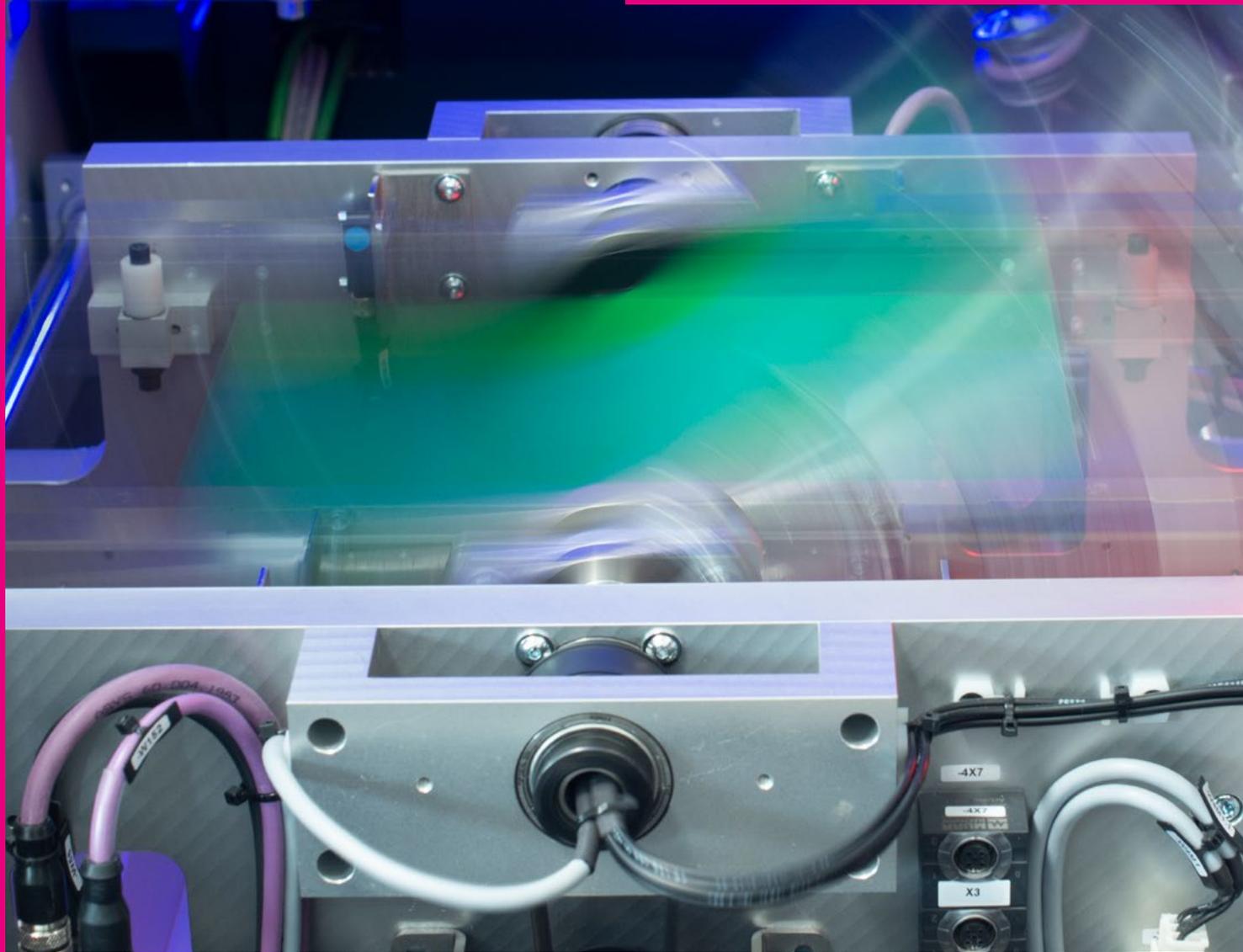


**ASYS  
GROUP**

**E**

# Electronics News



**Highlight: Thinking Forward**

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**Product News: RFID the Technology to Be**

Issue 02/2019

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**ASYS Group**

Business Units      **Electronics**      **Solar**      **Life Science**      **Semiconductor**

Dear Readers,

our goal is to actively and sustainably shape the future: Transforming Ideas into Solutions our DNA.

Today, the real and digital worlds are merging, almost all processes are automated down to the smallest detail and all participants are fully networked. We couldn't describe this better than with our mission: „Automate, Digitalize and Connect“.

At a very early stage, we began to network across company boundaries, win customers and partners, and jointly establish solutions as standards. We are a solid platform and strong community. This symbolizes, for example, the PULSE Community, which has more than 20 brand names in the industry to date.

From experience, we know that listening and rethinking will move us forward. Together we develop innovations from ideas, which means one thing above all: „thinking ahead“, a concept that accompanies you through this newsletter.

You will also learn why partner companies trust us, gain insights into the latest technological developments and a perspective into the future of the company.

Enjoy reading!

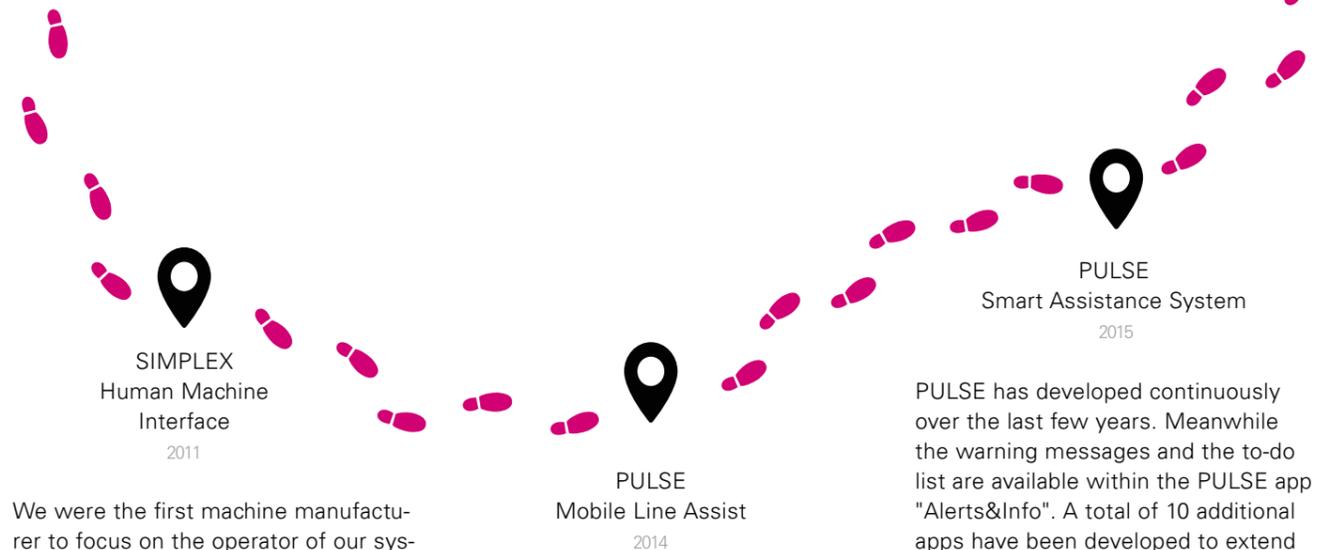


**Karin Walter** - Unit Director  
Marketing and Corporate Identity



# THINKING FORWARD

*Thinking forward - thinking sustainably - helping to shape the future - that is the demand we place on our work. For more than 25 years we have been progressing and do not rest on our success. We are constantly looking for challenges and develop new solutions - Transforming Ideas into Solutions.*



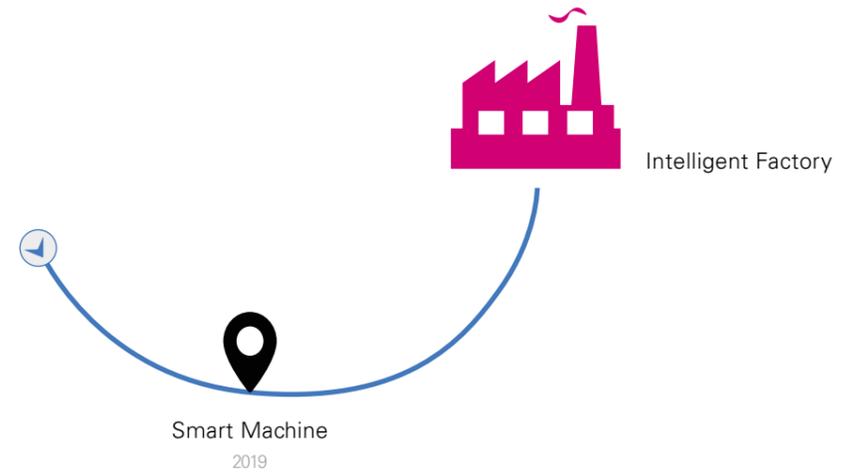
We were the first machine manufacturer to focus on the operator of our systems. New technologies and innovative operating concepts are behind our SIMPLEX user interface. For example, the entire control is done via touch screen, with familiar gestures from consumer electronics. All our process machines, such as depaneling systems or laser markers, are controlled via a standardized user interface. This allows one operator to be deployed anywhere on the entire SMT line, thereby reducing training times to a minimum.

"PULSE - Mobile Line Assist" is an important milestone on the way to industry 4.0. With the first version of the mobile monitoring and control software for machines, ASYS hit the mark in 2013. It allows the operator to keep an eye on the entire line via Smartwatch. For example, he receives advance warnings in the form of a clear to-do list as soon as material needs to be refilled, for example.

PULSE has developed continuously over the last few years. Meanwhile the warning messages and the to-do list are available within the PULSE app "Alerts&Info". A total of 10 additional apps have been developed to extend the software's range of functions. In addition, the applications can be used on several devices: Smartwatch, Tablet and Desktop PC.



Our automation experts have examined the entire path of the material beyond the SMT line, from incoming goods to the finished product. The result is a new product area - ASYS Material Logistics. At the beginning there is the goods receiving station. New material is identified fully automatically and marked with a unique ID. Autonomous transport robots deliver the marked material to the warehouse. Two large material warehouses characterize the image of future electronics production - the Material Warehouse and the Dry Tower. In the Material Warehouse, printed circuit board magazines or KLT boxes can be automatically stored and retrieved. The Dry Tower is a central warehouse for component rolls. They are stored traceably under defined temperature and humidity specifications. RFID can be used to track the entire path of the material. When printing, this technology is also used to check if the right parts have been fitted - see page 10 for more.



Thinking ahead - with a view to innovation, our engineers, following the motto "The smart factory needs smart machines", are on their way to realize them. Many intelligent functions have already been integrated into the new DIVISIO 5000 Series depaneling system. It has intelligent interfaces that allow modules to be integrated without programming if required. In addition, the system supports "predictive maintenance" and thus achieves maximum availability.

**Werner Kreibl**  
Founder & President  
ASYS Group



*Like the years before, the future of ASYS will be characterized by new developments and innovations. We think forward and always have our mission in mind: Automate, Digitalize and Connect.*

Seminar Series  
**MEET THE EXPERTS @ASYS**

Only available  
**IN GERMAN**



**16.07.2019 MTE DIVISIO**  
**Basics of Depaneling**

Learn the basics of the routing process and get up to date on routing design, routing tools and data import.

 **Agenda**

**17.07.2019 MTE INSIGNUM**  
**Marking systems Code verification**

Learn the principles of coding and get expert code verification knowledge.



 **Agenda**



**18.07.2019 MTE Material Logistics**  
**Material Logistics**

Get fit for industry 4.0 and become an expert in automation tasks for your production.

 **Agenda**

**REGISTER NOW FOR THE SEMINARS OF YOUR INTEREST!**



Available in German

**PS PULSE**



*PULSE: Central Access*

**IMPORTANT FUNCTIONS COMBINED ON NEW USER INTERFACE**

*PULSE is increasingly becoming the central control element for production. Meanwhile, the assistance system not only covers plant monitoring. Machines can now also be operated from PULSE. In addition, offline programming stations are anchored in the software.*

With the new PULSE User Interface you can now access many of our software options flexibly and device-independently. It combines the previous PULSE applications such as "Alerts&Info" and "User2Machine", in addition many functions for process machines are integrated. Our SIMPLEX HMI can be displayed via the "Operation" app, so that you can now remotely control the machines via PULSE. The offline programming tools that we offer for our

depaneling and marking systems can now also be opened easily via PULSE.

We combine our software solutions on a central user interface and focus on you: Simplify your planning processes in production with PULSE.

## Network of Partners

# MODUS BECOMES A MEMBER OF THE PULSE-COMMUNITY

*With MODUS another AOI manufacturer puts its trust in our PULSE solution. The inline test and inspection systems from MODUS are now also connected via the smart, manufacturer-independent shop floor solution, and the associated advantages of the central assistance system are available to customers.*

"We are always ready to respond to customer requests. Accordingly, we have quickly advanced the integration of PULSE because we are convinced of the resulting customer benefits," emphasizes Gerald Landt, Managing Director of MODUS.

With PULSE, we are pursuing the goal of establishing a complete solution for line monitoring in the industry that integrates and networks all systems in production. Thanks to an open interface, integration is possible quickly and easily without particular specification or configuration. MODUS sees significant advantages in this: "The one-time integration of the PULSE interface enables us to provide existing and new customers with an even more valuable software package. Thanks to the predefined standard via the PULSE interface, we can easily activate features and don't have to create them individually for each system," says Luca Fungipani, software developer at MODUS.

requirements with openness and manufacturer-independent cooperation," explains Erwin Beck, Senior Vice President Product Management & Marketing at ASYS.

The success of PULSE confirms that we have taken the right path with our strategy of openness. More than 70 PULSE lines are already installed on customers' premises.



### PULSE-Community: Successful thanks to openness

With the integration of PULSE MODUS became part of the constantly growing PULSE-Community. The PULSE-Community now comprises 20 well-known system manufacturers from the electronics industry whose products are "PULSE-capable" thanks to individual connection to the open PULSE interface and thus permit comprehensive system monitoring, for example. We are constantly working on expanding our partner network: "We consistently pursue our goal of offering our customers a solution for their complete line. We believe that in the future we will only be able to react appropriately to customer

### About MODUS

For decades, MODUS has been regarded as a pioneer in the development of fast scanner systems for industrial use. MODUS develops, produces and sells automatic optical test and inspection systems (AOI) for the production monitoring of series production.

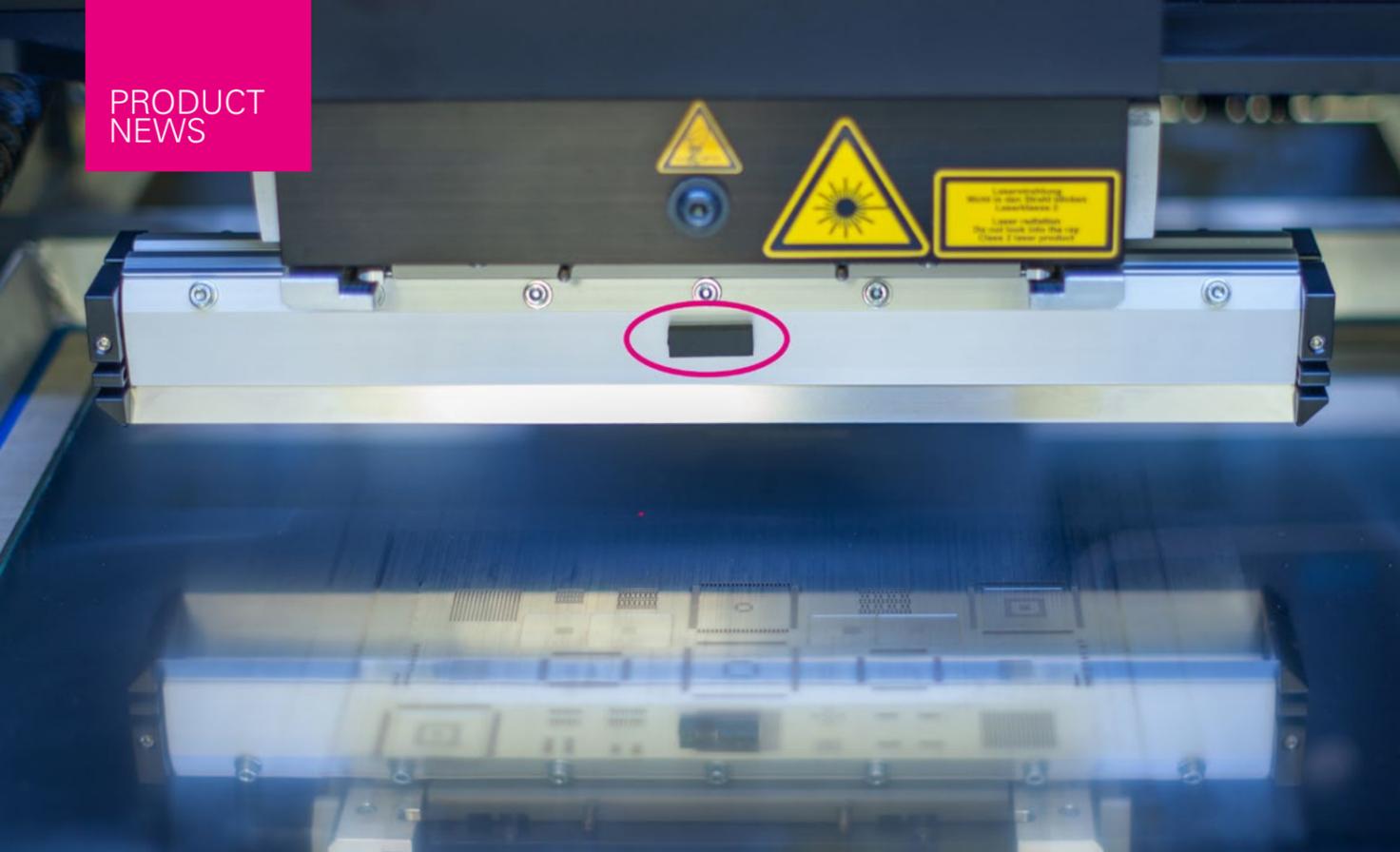


Member of the  
**PULSE**  
COMMUNITY

## We connect all systems in your Production - No matter in which configuration.

PULSE is our solution for your shop floor. Our goal is to support you with a smart assistance system for your production management that connects all systems and assets in production. By now we have built up a solid partner network so that an entire production line can be connected. So you can make full use of our smart assistance system - no matter how your line is configured.

More information on: [www.asys-group.com](http://www.asys-group.com)



### RFID user login secures production processes

Furthermore we dedicate ourselves to the topic RFID in connection with the direct machine operation. The password security of a general password is often weak because it spreads and gets around quickly. That's why we now implement RFID technology when logging in to the machine - for a safe and controlled operating process.

Operators can log on to the machine using an RFID identification chip. Identification takes place via a reader on the machine, which reads the unique code on the login card and then sets the settings accordingly. Control access rights and roles of different employees clearly thanks to RFID technology and easily transfer authorizations to other operators.



## Smart Printer

# RFID – THE TECHNOLOGY TO BE

*The basis of the smart factory are smart machines. In the printing sector, too, the goal is to make machines smart thanks to sophisticated options and features. The latest machine development from the EKRA printing specialists - the SERIO 5000 Back to Back - takes machine intelligence to a new level thanks to RFID technology.*

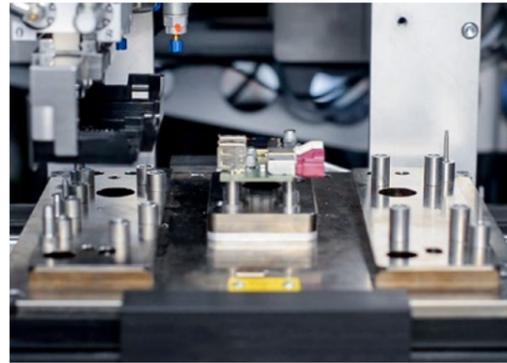
### Zero error setup with RFID Setup Control

In the SERIO 5000 Back to Back, you can now perform setup control using RFID. Start the setup control with a simple push of a button: the process becomes faster, simpler and safer. The setup components are tagged and can be mounted in any order in the machine. As soon as the hood is closed, you can start the setup control. All components are then read and compared with the loaded production program - if everything is correct, production starts immediately. Your advantage: setup control is performed automatically and easily, so you can effectively avoid errors. RFID communication is carried out in such a way that only the tags located in the process room are detected. With our new solution, we are laying the found-

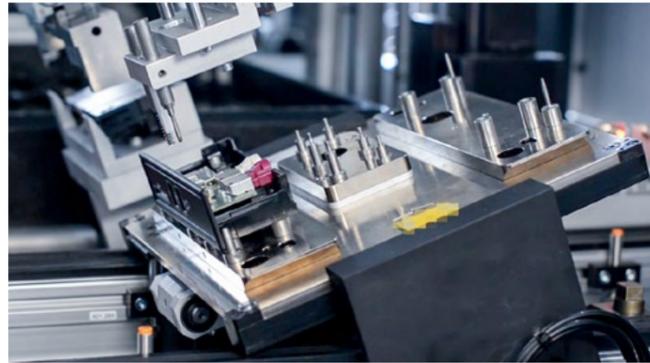
ation for machine material communication and thus the basis for the next step: when machines make their own decisions.

Setup control using RFID synchronizes the flow of materials and information by assigning elements a certain intelligence. The communication between components and machine thus not only enables identification during setup, but also data exchange for other traceability aspects. For example, the system can trace how many printing cycles a stencil has already gone through and preventively point out that it has to be replaced before quality losses occur.

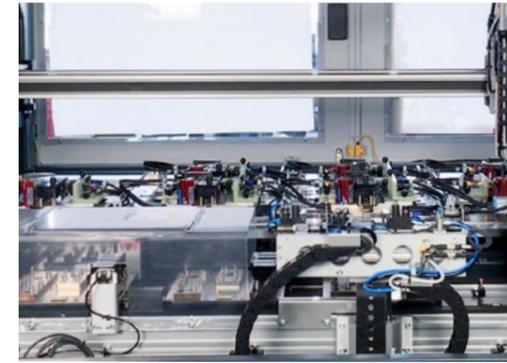




Feeding  
Feed housing



Assembly  
Insert component  
in diagonal position



Testing  
10 parallel end-of-line tests



Tray loading  
Unload product in trays

## Assembly Solution from ASYS INVEN- **HIGHER THROUGHPUT & LESS SET-UP**

With another automated assembly line from the ASYS Group, MOLEX has prepared itself for current and future market requirements. MOLEX is a manufacturer of high-quality electronic components for the automotive industry. They anticipate trends and offer innovative products quickly and in suitable quantities. Accordingly, the production line must be characterized by a high degree of automation, flexibility in product variants and minimum setup effort.

MOLEX manufactures control units for the integration of mobile phones into the extensive vehicle spectrum of well-known automobile manufacturers. For example, the boxes have USB and SD card slots and are installed in the cockpit. The demand for these media interfaces is continuously increasing. This leads to constantly growing production volumes and a high product variance. "With the assembly line and the ASYS experts, we were able to solve the two biggest challenges: High production quantities with low cycle time and product variance with low set-up effort. We have developed the optimal solution for us in close cooperation and joint expertise in product and automation," says Ingo Schrecke, the automation driving manager at MOLEX.

### Significant increase in production thanks to automation

Thanks to a high degree of automation and parallelization, we were able to increase daily production volumes by up to 4,000 units. After feeding the multiple-panel and all assembly/housing parts, the system manufactures, tests, labels and packages fully automatically. Magazines and trays are unloaded, panels are separated and inspected, additional components are applied to the printed circuit board, the board

with the housing parts are assembled and AOI systems monitor decisive assembly steps. In order to achieve the outstanding cycle time of 7 seconds, a further technological trick was also necessary. The focus was on the bottleneck - the EOL test. "The parallelization of 10 end-of-line test systems with related distribution logistics, all compact on a minimum footprint and nevertheless maintenance-friendly: for me an absolute highlight of this assembly line" explains Eberhard Hering, project manager of the ASYS Group.

### Product variations can be met easily

Currently, the client's portfolio consists of six different communication boxes. Our experts have realized the assembly line in such a way that all variants can be produced on the line without any major set-up effort. Standard interfaces and processes are coordinated within our group. The production plant is also characterized by large windows and access points. The operator can easily reach all important parts of the line through the front and back entrances. Even when space is limited in the production hall, the maintenance work can be carried out without any problems.

Loading the  
Magazine



Depaneling

Insert

Laser Marking

"Our goal was to get a compact, modular assembly line that meets both the requirements for high application rates and a maintenance-friendly design. Therefore we were positively surprised by the ASYS concept", Ingo Schrecke continues. In order to keep the space requirement low, all processes were accommodated in the proven ASYS modular design in two systems: the assembly cell and the test cell. If necessary, further attachments can be added.

### Avoid mistakes beyond the rim of your plate

Influences from upstream processes are not absent. For this reason, the assembly line checks supplied parts and consistently eliminates electrostatic charges, for example. Thanks to integrated scanners and cameras, mistakes

during manual feeding can also be detected at an early stage and eliminated. An error message for correction is displayed to the operator. Both feeding tests could be integrated into our PARIO component feeding systems.

"We are happy to have chosen the automation expert ASYS again for this project," concludes Ingo Schrecke. The success story between the two companies MOLEX and ASYS began before 2016, when a panel separator project was realized together. Currently we are working on further exciting new projects and expansion stages.



MOLEX combines innovation and technology to deliver electronic solutions to customers worldwide. MOLEX is present in more than 40 countries and offers a wide range of solutions and services for many markets including data communications, consumer electronics, medical, industrial, automotive and commercial vehicles. In the Automotive Connectivity Solutions division, MOLEX develops and produces solutions for tomorrow's vehicles that are used worldwide. We develop, produce and market innovative solutions for internal and external communication as well as for the integration of telematics systems and mobile devices. Our technology makes it possible for vehicles to exchange data and voice messages inside and outside the car.

ASYS Group Management  
**EXPANSION OF THE ASYS GROUP MANAGEMENT**

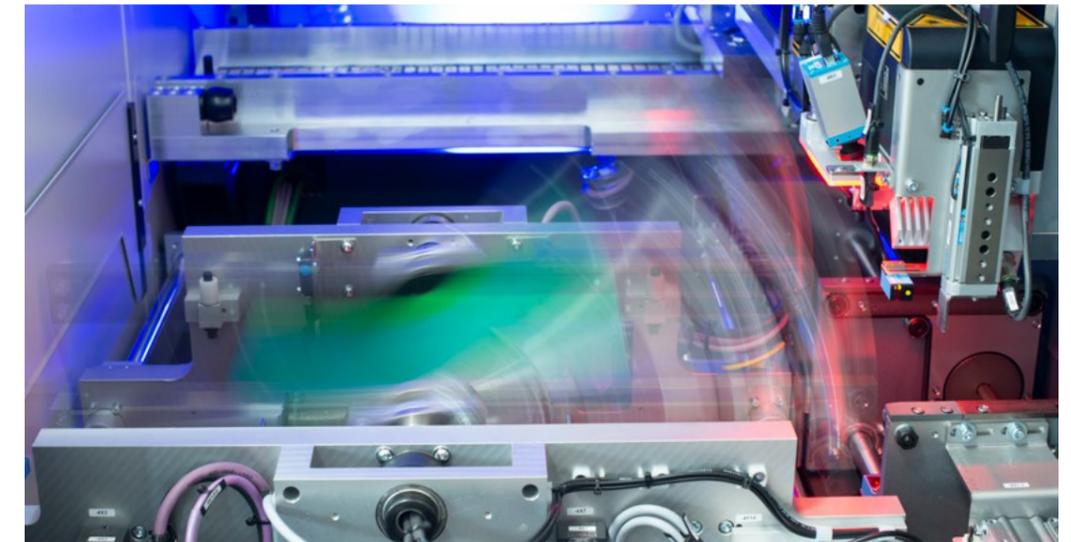
*Jürgen Ries, Managing Director of ASYS Group China, will gradually assume responsibility for the operational business of the ASYS Group starting in 2020. He will take over tasks from Werner Kreibl, who will focus on strategic business development.*



From left to right: Klaus Mang, Jürgen Ries, Werner Kreibl

"With Jürgen Ries, we are appointing an outstanding strategist and businessman to our management team who has already impressively demonstrated his management qualities at our location in China. With this appointment, we are paving the way for a seamless transition of management in the coming years," explains Werner Kreibl, founder and managing director of the ASYS Gruppe.

After 12 years with Siemens, Jürgen Ries started his career at ASYS in 2009 as Key Account Manager. Since 2011, he has been managing director of the company's location in China. Since taking office, the location has grown 12-fold thanks to its broad industrial base. For example, Ries accelerated business in the electronics and semiconductor sectors and built up a strong position for the ASYS Gruppe in the Chinese market. "I am looking forward to extending my experience from my time in Asia to the Corporate Group. I value innovation, reliability and partnership principles that are firmly anchored in my actions. The step into the management of the entire ASYS Gruppe holds exciting, new and challenging topics in store for me, which I am happy to face," says Jürgen Ries.



INSIGNUM Flip Station  
**TURN IN A FLASH**

*Our Hidden Champion comes this time from the laser marking area INSIGNUM: Turn your PCBs in a flash with our proven flip station in the INSIGNUM 2000 and INSIGNUM 4000.*



**0.75 sec**  
 pure turning



**Automatically positioned\***

the position of the flying stopper is automatically retrieved from the laser program



**Processing at the focal point**

PCB is also lifted out after turning for an exact laser focus



**Flying Stopper\***

the plate is automatically stopped in the middle - this avoids unnecessary routes in the process area

**50% Faster**

thanks to the sophisticated turning mechanism, the turning process takes a total of 1.5 seconds



**Lean Design**

better availability of the process area

\*only available for INSIGNUM 4000

## Material Logistics Complete Solution

# SMT connect 2019: ALL AT ONE

*The SMT connect 2019 was once again a complete success for us. We presented the entire Material Logistics portfolio to the numerous interested visitors. The focus was on the intelligent factory - modular and in all degrees of automation.*



At SMT connect we presented a complete Material Logistics scenario. The highlight was the new goods receiving station. With the station, we offer our customers a track-and-trace solution for incoming materials. They are identified by unique-ID or RFID and can be seamlessly traced in the production process. The new solution provides a comprehensive overall solution for electronics production, simply "All at one". "The trend is clearly towards intelligent factory. This was demonstrated by the high demand for our Material Logistics products. Thanks to the presentation of our overall solution, we were

able to engage in in-depth discussions with our customers and receive further information on the needs of the market," says Thorsten Frenzel, Head of Sales DACH & BENELUX.

### On the way to the Smart Machine

There was particularly strong demand for the new DIVISIO 5000 Series. The new depaneling system delivers ideal cut edges thanks to intelligent, dynamic cut positioning and networks with an offline programming station for uninterrupted product changeover at the line. Thanks to predictive maintenance, maintenance



cycles can be initiated as required. We are thus continuing to pursue our strategy of Automate, Digitalize and Connect.

### The time has finally come: central control of the machines

PULSE is developing more and more from a pure information system to an important central information and control component. For example, the "Operation" app can be used to display the user interface of the machine, the SIMPLEX HMI, on a desktop PC. This enables

the remote control of the system. "The central operation of the systems via PULSE is the starting signal for numerous further developments that are waiting for our customers in the coming months," explains Florian Ritter, Unit Director Software Solutions & New Business.

"We would like to thank all visitors at our booth for the informative and stimulating discussions. We are already looking forward to welcoming you back at the Productronica in Munich," says Managing Director Klaus Mang.

# Dates 2019

## *Exhibitions*

- 09.-13.09. **EU PVSEC**, Marseille, France  
24.-26.09. **FachPack**, Nuremberg, Germany  
07.-10.10. **Motek**, Stuttgart, Germany  
22.-24.10. **parts2clean**, Stuttgart, Germany  
12.-15.11. **Productronica**, Munich, Germany

## *Seminare*

- 16.07.2019 **MTE DIVISIO**: Basics of Depaneling  
17.07.2019 **MTE INSIGNUM**: Marking Systems Code Verification  
18.07.2019 **MTE Material Logistics**: Material Logistics

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