

# Intelligence combined with precision.

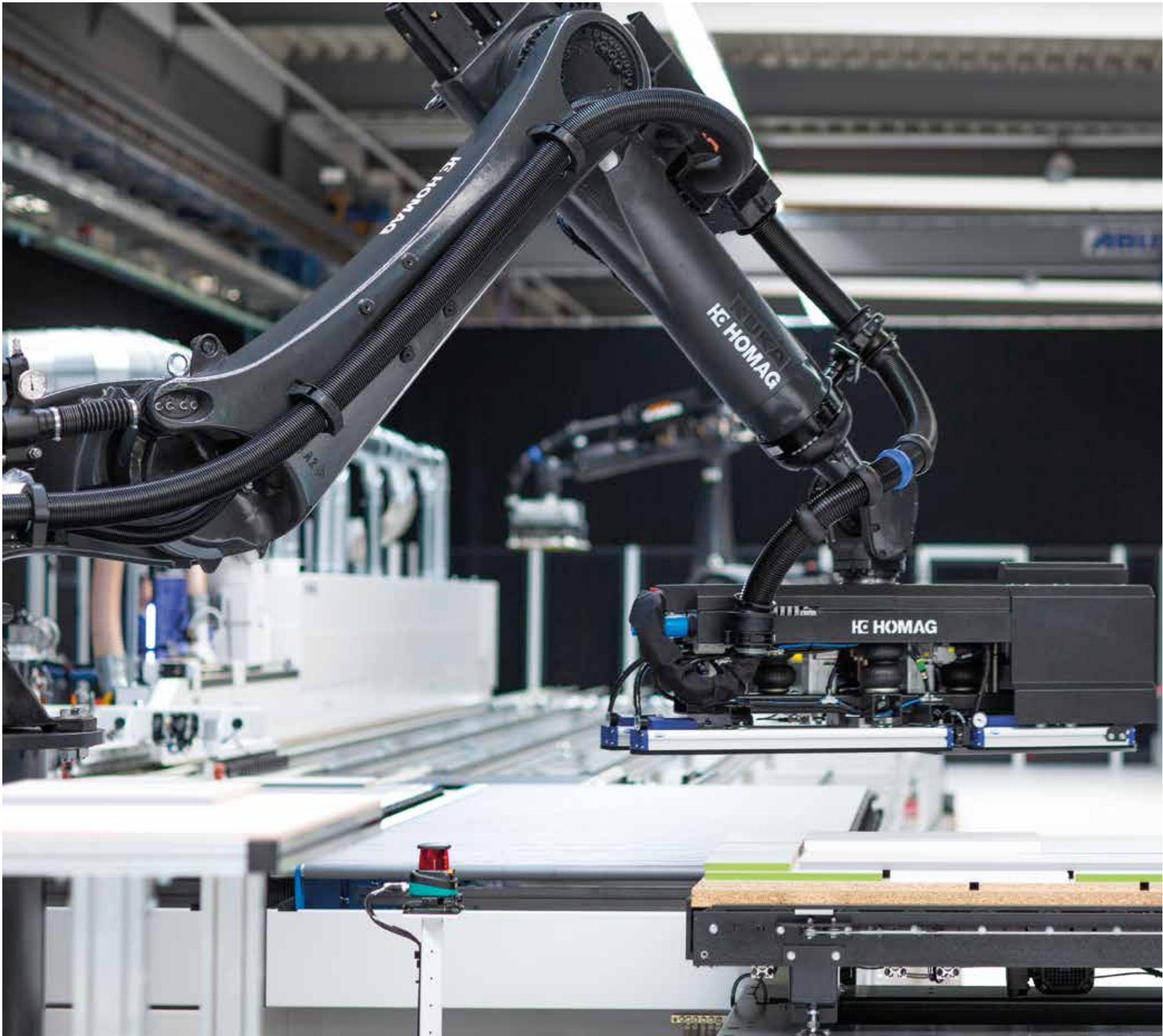
**HC HOMAG**

## **Automation with robotics and AGV**

FEEDBOT E-300, STACKBOT E-600, TRANSBOT S-100

## **YOUR SOLUTION**





# State-of-the-art automation combining FEEDBOT, STACKBOT and TRANSBOT

Increase productivity completely automatically with robot cells from HOMAG. In the combination of the EDGETEQ edge banding machine and automation, the FEEDBOT and STACKBOT robots take over the handling of parts together with the TRANSBOT automated guided transport system. The Logistics are separated from the direct operation of the machine - the added value is increased. The operator only needs to intervene when changing the edging strips on the edge magazine.

## YOUR SOLUTION

[MORE: HOMAG.COM](https://www.homag.com)



Robotics

## CONTENT

- 04 Customized solutions
- 06 State-of-the-art automation
- 08 Function & Technical data





## EDGESEQ with FEEDBOT E-300, STACKBOT E-600 and TRANSBOT S-100.

Availability of almost 100%, high repetition accuracy, and precise workpiece handling — robots are reliable partners and increase the cost-effectiveness of production automatically. The reliable supply of workpieces by the robot system increases the added value of the connected EDGESEQ edgeworking machine.

While the EDGESEQ plays to its strengths when edging workpieces, the automation ensures that the right material is provided for edging at the right time. For this purpose, a feeding robot is positioned at the edge infeed. It removes the workpieces for edging from a sorted stack and places them on the feed system one at a time. The second robot is positioned at the outfeed of the edge banding machine. The second robot picks up the processed parts and forms a stack that is arranged ready for the next edging process. The stacks are formed on trays (table-like structures) and transported back to the feeding robot at the edging infeed by the TRANSBOT automated guided vehicle system. This process is repeated until the workpiece edging is complete.



# FEEDBOT E-300, STACKBOT E-600 & TRANSBOT S-100

The autonomous logistics assistant TRANSBOT automatically links the FEEDBOT and STACKBOT robots for feeding and stacking to the EDGETEQ providing a modular and extendable edge banding center.

**State-of-the-art automation, combined with precision and intelligence for edge processing with a high availability - from series production to batch size 1.**

- Feeding and sorting parts for every edge banding run using robotics
- Formation of stable stacks with a high packing density by intelligent part positioning for each layer
- Autonomous stack transport using an automatic guided vehicle system
- Effort for transport with the TRANSBOT between stacking and feeding station reduced to a minimum
- Operator intervention required only when replacing the edging strips
- Integrated stack loading station for continuous material supply to the edge banding center



**Feeding robot FEEDBOT E-300.** With the assistance of camera technology from KUKA, the robot recognizes every workpiece in the stack and places it precisely, with an availability of close to 100%, in the feeder station of the edge banding machine.



**Stacking robot STACKBOT E-600.** Workpieces coming out of the edge banding process are picked up from the exit conveyor by the robot and placed precisely at the intended position on the stack.



**Automated guided vehicle system TRANSBOT S-100.** TRANSBOTs arrange the material transport between stacking and feeding station. It transports a maximum weight of 1.2 tons at a travel speed of up to 60 meters per minute.

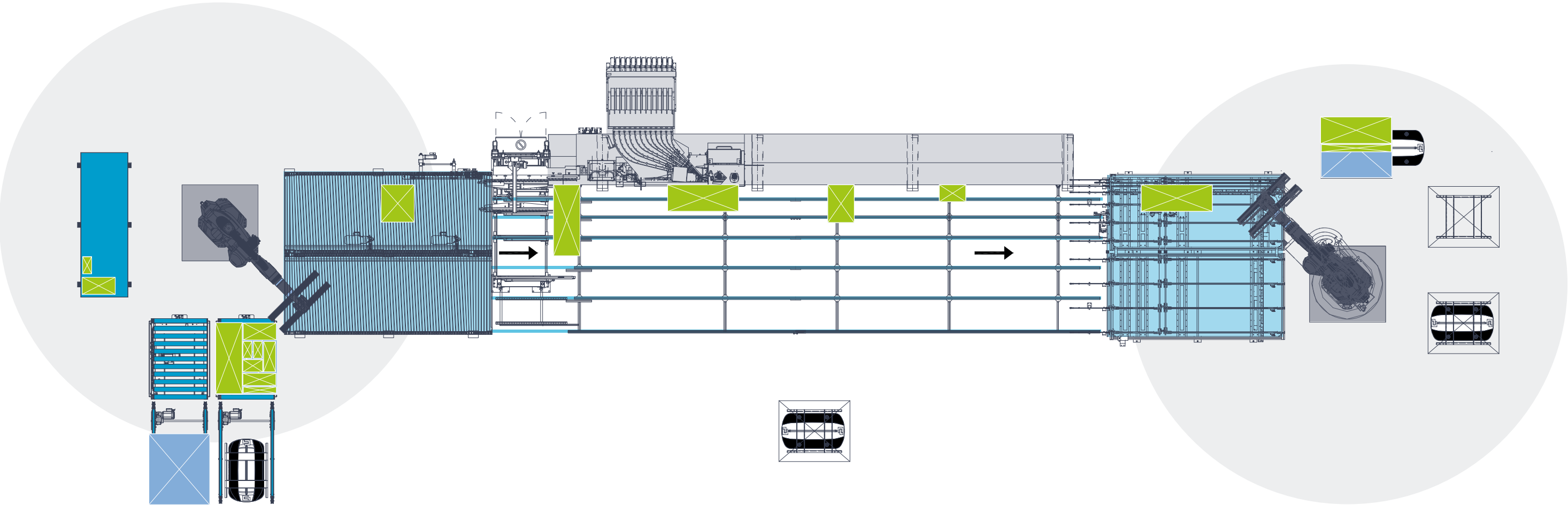


**Intelligently sorted stack formation for high stability.** After every process run the material stacks are formed intelligently so that as many parts as possible are in one layer.



TECHNICAL DATA FEEDBOT E-300			
Workpiece dimensions		Stack pattern	
Workpiece length	240 – 2,800 mm	Chaotic stack for batch size 1	same part height in stack
Workpiece width	120 – 1,200 mm		1 x Euro pallet - 1,300 x 900 mm (layer size)
Workpiece thickness	12 – 60 mm		2 x Euro pallet - 2,500 x 900 mm (layer size)
Workpiece weight	max. 80 kg	Stacking pattern fir tree for batch size 1	arranged longitudinally and transversely central on stack base
Robot performance		Stack base	
Up to 10 parts/min (without stack change, no use of the camera)		Euro pallet	1,200 x 800 x 145 mm
		2 x Euro pallet	2,400 x 800 x 145 mm
		Protective board	2,400 x 800 x 18 mm

TECHNICAL DATA STACKBOT E-600			
Workpiece dimensions		Stack pattern	
Workpiece length	240 – 2,800 mm	Chaotic stack for batch size 1	same part height in stack
Workpiece width	120 – 1,200 mm		1 x Euro pallet - 1,300 x 900 mm (layer size)
Workpiece thickness	12 – 60 mm		2 x Euro pallet - 2,500 x 900 mm (layer size)
Workpiece weight	max. 80 kg	Stacking pattern fir tree for batch size 1	arranged longitudinally and transversely central on stack base
Stack high		Stack base	
Up to 10 parts/min		Euro pallet	1,200 x 800 x 145 mm
		2 x Euro pallet	2,400 x 800 x 145 mm
		Protective board	2,400 x 800 x 18 mm
Space requirement		Room height 3,400 mm	



TRANSBOT TECHNICAL DATA			
Transport vehicle dimensions		Transport vehicle performance	
Length	1,240 mm	Load capacity	max. 1.2 t
Width	695 mm	Travel speed	max. 60 m/min
Height	340–400 mm	Acceleration	0.5 m/second
Transport vehicle turning circle	1,250 mm unloaded	Positioning accuracy	+/- 15 mm
Transport vehicle operating times	max. 7 x 24 h/week	Pick-up and set down time	2.2 seconds



The **transfer station with lift table** raises a material stack until the top layer reaches the ideal height for the FEEDBOT.



Workpieces are temporarily stored in the **sorting station** at the entry to the edge banding machine until they fit perfectly into the stacking pattern that is formed by the stacking robot after a process run.



In the **buffer station**, empty trays can be set down or full trays can be temporarily stored at a waiting position until the material is requested.

# HC LIFE CYCLE SERVICES

Optimal service and individual consultations are included in the purchase of our machines. We support you with service innovations and products which are especially tailored to your requirements. With short response times and fast

customer solutions we guarantee consistently high availability and economical production – over the entire life cycle of your machine.



## REMOTE SERVICE

- Hotline support via remote diagnosis by our trained experts regarding control, mechanics and process technology. Thus, more than 90% less on-site service required and consequently a faster solution for you!
- The ServiceBoard App helps to solve tasks in a fast, simple and concrete way. This is achieved by mobile live video diagnosis, automatic sending of service requests or the online spare parts catalog eParts.



## SPARE PARTS SERVICE

- High spare parts availability and fast delivery.
- Ensuring quality by predefined spare parts and wear parts kits, comprising original spare parts.
- Identify and inquire for spare parts online under [www.eParts.de](http://www.eParts.de) 24/7, or buy even faster and more comfortably in the new HOMAG Webshop eCommerce.



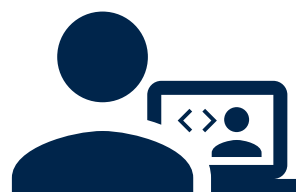
## MODERNIZATION

- Keep your machinery up to date and increase your productivity as well as your product quality. This is how you can meet tomorrow's requirements today!
- We support you with upgrades, modernization as well as individual consultancy and developments.



## DIGITAL SERVICES

- ISN (intelliServiceNet) – The new remote service solution of the future! Fast restart of production because the remote service employee has extensive access to relevant physical data.
- intelliAdvice App – provides help for self-help. The preventive solutions proposed in the new App are the combination of our experiences and existing machine data.



## SOFTWARE

- Telephone support and consultancy through software support.
- Digitalization of your sample parts via 3D scanning saves time and money compared to new programming.
- Subsequent networking of your machinery with intelligent software solutions ranging from construction to production.



## FIELD SERVICE

- Increased machine availability and product quality by certified service staff.
- Regular checks through maintenance / inspection guarantee the highest quality of your products.
- We offer you the highest availability of technicians in order to reduce downtimes in case of unpredictable troubles.



## TRAINING

- Thanks to training perfectly suited to your requirements, your machine operators can optimally operate and maintain the HOMAG machines.
- The training also include customer-specific training documents with exercises proven in practice.
- Online training and webinars. Learn without traveling, meet your trainer in the digital classroom.



For you more than ...

# 1,350

service employees worldwide

# 90%

less on-site service thanks to successful remote diagnosis

# 5,000

customer training sessions per / year

# 150,000

machines, all electronically documented in 28 different languages – in eParts

**HOMAG Group AG**

info@homag.com  
www.homag.com

**YOUR SOLUTION**

