

A background image showing a person's hands holding a smartphone and typing on a laptop keyboard. Overlaid on the image is a network of white hexagonal icons connected by lines. The icons include: a circular arrow with a central dot, a list of three horizontal lines, a semi-circle with a dot, a magnifying glass with a checkmark, and a triangle with an exclamation mark.

green
GLUING

ROBATECH CONTROL SYSTEM (RCS)

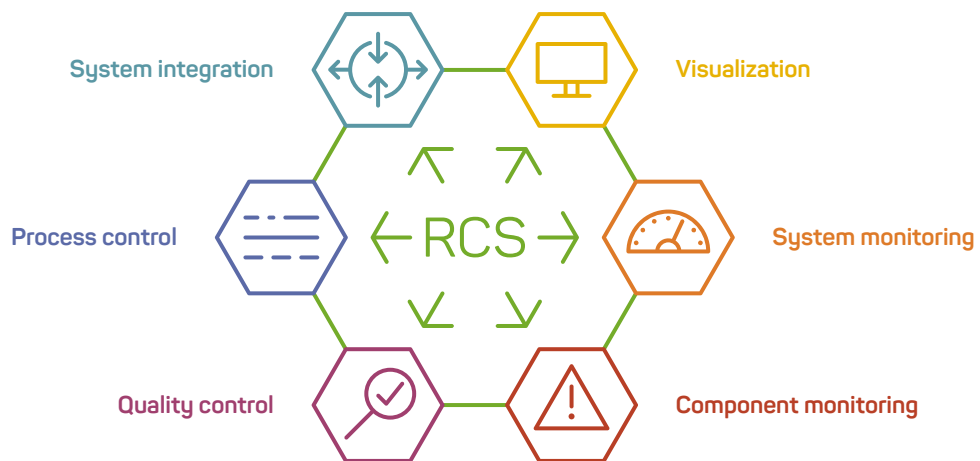
Control, operate, and monitor all functions in the gluing process with just one platform



green GLUING

With Green Gluing we build a bridge between the industrial adhesive application process and fundamental ecological values. We combine innovation and efficiency with sustainable solutions to make adhesive application more environmentally friendly, safe, and straightforward.

SINGLE PLATFORM – SMART CONTROL



The Robatech Control System (RCS) is an integrated all-in-one platform for smart control, operation, and monitoring of gluing processes. The RCS ensures an efficient and transparent gluing process. All functionalities are already “on board” and can be enabled quickly and easily at any time.

The right solution for every gluing process

The Robatech Control System adapts to the particular requirements of a gluing process. Once the adhesive application system is configured, the range of functions can be optionally extended at any time via software keys. It makes no difference whether the adhesive application system is a stand-alone application or integrated into an overall system. Flexibility is guaranteed.

YOUR ADVANTAGES

- Straightforward system integration
- Intuitive operation at the location of your choice
- Efficient configuration and management of application functions
- Process optimization through meaningful system data
- Avoiding unscheduled downtimes thanks to component monitoring
- Maximum process reliability and line efficiency via quality control

BASIC FUNCTIONS

Using the basic functions of the Robatech Control System, simple gluing processes can be configured and basic system data can be called up.

- Heating zones
- Pumps
- Status and error display
- Configuration for application with spray guns
- Temperature reduction
- Weekly timer
- Automatic filling
- Fill level monitoring



Smart Control

Our smart control makes adhesive application smarter. Its comprehensive control and tracking functions safeguard production sequences and optimize processes. It is the interface for efficient networking in the digital environment.



SYSTEM INTEGRATION

The Robatech Control System offers convenient and diverse integration options into higher-level systems. Optimally matched hardware and software made by Robatech ensure clear interfaces and flexibility in the selection of optional functionalities.

Straightforward connection via Fieldbus systems

The Robatech Control System supports numerous Fieldbus systems. This simplifies integration into higher-level overall systems and ensures reliable communication with the host machine.

Direct actuation via open interfaces

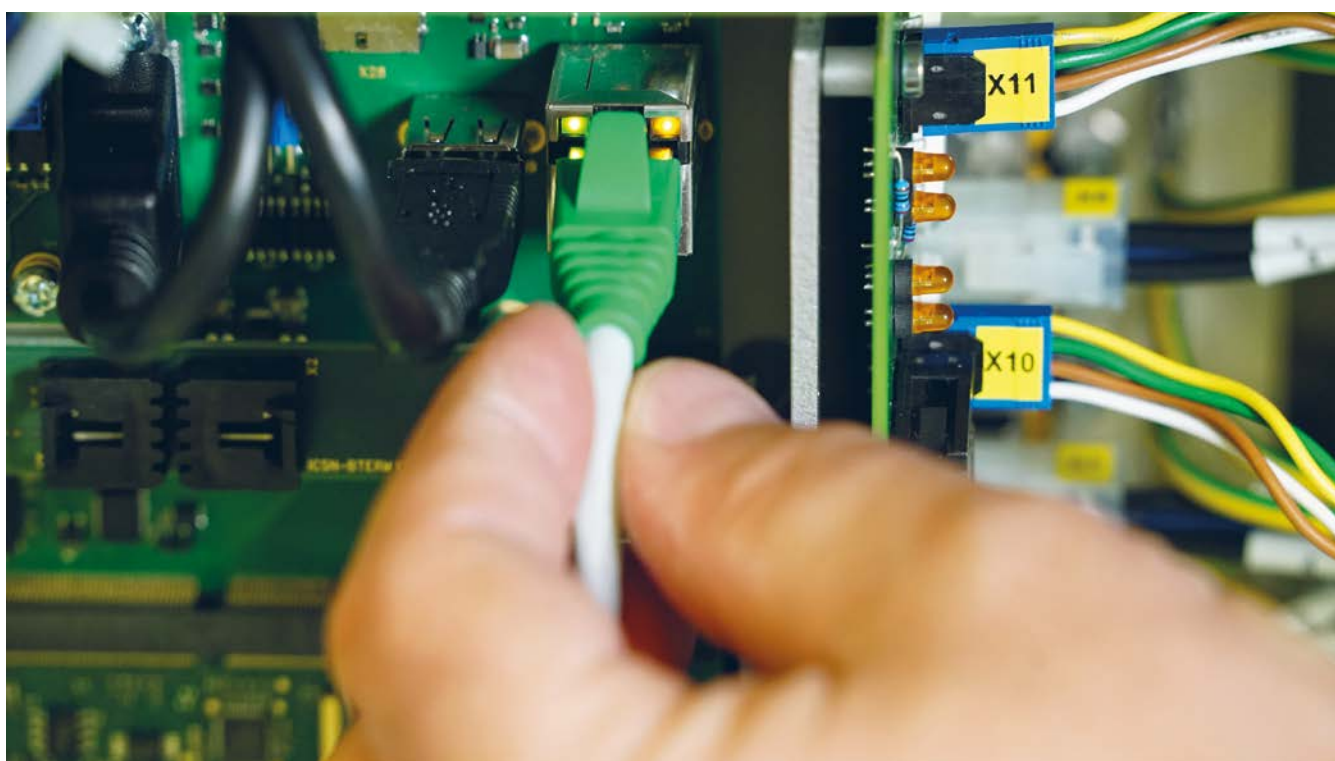
Customer-specific solutions can be easily programmed, and functions directly actuated via open interfaces. Robatech actively supports the integration process with software components, documented know-how, and reference projects.

Seamless HMI integration

The standardized user interface of Robatech application solutions can be easily integrated into host machines. All functions can be visualized, called up, and executed directly from the main screen of the overall system. On request, melters can also be delivered without a local operating unit.

YOUR ADVANTAGES

- Fast system integration thanks to the support of numerous Fieldbus systems
 - Straightforward installation of the Robatech interface and convenient remote access
 - Direct actuation of Robatech systems via programmable control
 - Well documented open interfaces
 - System integration support through software components and know-how
 - Hardware and software are in-house developments and optimally matched
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VISUALIZATION

The Robatech Control System displays all functions for control, operation, and monitoring of the gluing process centrally on a standardized user interface. The graphical displays with a uniform look & feel allow straightforward and intuitive operation from the location of your choice.

Remote access via mobile device

Thanks to integrated web server technology, the gluing process can be controlled, operated, and monitored remotely via a mobile device or a PC. Easy access via web browser and a responsive-design user interface make remote access easy to use.

Access on host machine

All functions of the adhesive application system can be visualized, called up, and executed directly from the main screen of the overall system.

Access via local operating unit

The local operating unit either forms an integral part of the melter (in the case of hot melt adhesive application) or consists of a separate device (for cold glue application). All functions are conveniently operated via a touch screen.

YOUR ADVANTAGES

- Graphical user interface for all functionalities
 - Intuitive user guidance facilitates proper operation
 - Access from the location of your choice – locally, remotely, at the host machine
 - Uniform look and feel reduces training needs
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PROCESS CONTROL

Application lengths and application quantities for hot-melt and cold glue applications can be efficiently controlled and managed using the Robatech Control System. The process control system offers a high degree of operating comfort and enables fast format changes thanks to clear visualization and an extensive job database.

Pattern control - intuitive and integrated

The pattern control integrated into the Robatech Control System is easy and intuitive to operate. Pattern control supports various modes of operation: continuous or intermittent with up to 32 programmable glue lines per channel, dot or line mode, fixed length, or automatic length adjustment. In addition, format-specific settings and application patterns can be stored in over 1,000 jobs and retrieved manually or by PLC.

Quantity control - convenient and integrated

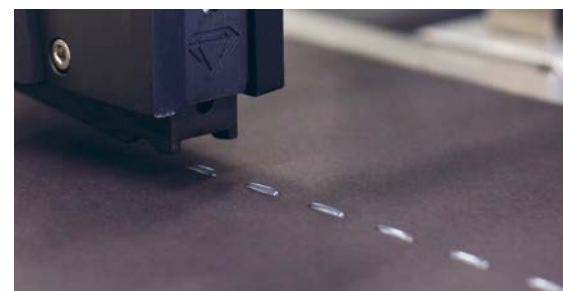
Quantity control is available for models with gear pumps. It allows direct input of the desired application quantity in g/m^2 and the application width in mm, and automatically calculates the pump speed for the precise and uniform adhesive application. This function dispenses with the complex weight check procedure to determine the application quantity.

Pressure control

The pressure control ensures reliable and constant pressure at the application valve. This guarantees a uniform adhesive application from start to finish and achieves high-quality gluing results.

YOUR ADVANTAGES

- Simplified application configuration via application mode selection
- Large selection of standard format templates
- Extensive database for more than 1,000 jobs
- Clear arrangement of all application components
- Preview function facilitates correct data input
- Direct input of the desired application quantity without weight check



PATTERN CONTROL IN TWO VARIANTS

	Integrated into melter	Stand-alone device
Production speed	Up to 300 m/min	Up to 1250 m/min
Number of application heads	1 to 8	1 to 8 (expandable)
Number of storable application patterns	> 1,000	< 90
Automatic length adjustment	Yes	Yes
Palletizing function	Yes	Yes
Verification of application position	Yes	Yes



SYSTEM MONITORING

The system monitoring function of the Robatech Control System provides important consumption and operating data for preventive, corrective, and optimizing process adjustments. Trend analyses and evaluations provide transparency and enable fast error detection in the gluing process.

Storing configuration data centrally

The function allows for the central recording of any number of configuration data for an adhesive application system. Apart from data on adhesive manufacturer and type, pump and air pressure, as well as the distance between application nozzle and product, the article numbers are especially important. These can be used to identify components for a correct spare parts order quickly.

Easily calculating adhesive savings

The adhesive calculator calculates the adhesive and cost savings that can be achieved when the tacking mode is activated. Savings options are thus transparent and understandable.

Visualizing energy efficiency

The energy consumption function records the current heat output of the system, cumulates the values in kW/h per day, month, and year and displays the results graphically and clearly.

Optimizing adhesives application processes

The optional AMS Adhesive Measuring System reliably monitors the amount of adhesive applied. With the configuration and analysis function of the AMS, individual production lines can be compared with each other. New adhesives and application patterns can be evaluated, or information for the procurement and storage of adhesives can be determined. The clear graphical representation of the measured data provides transparency and facilitates the optimization of settings and evaluations. Adhesive savings, while maintaining process reliability, become easier to measure and calculate.

YOUR ADVANTAGES

- Consumption and operating data analysis
 - Adhesive savings due to reduced adhesive application
 - Trend analyses as a basis for process optimizations
 - Evaluation of the adhesive consumption
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QUALITY CONTROL

The Robatech Control System facilitates the integration of quality control systems, as everything is already “on board.” The software for measuring and monitoring adhesive consumption quantities and adhesive application positions as well as the interfaces for connection to third-party quality assurance systems.

AMS Adhesive Measuring System

The optional Adhesive Measuring System enables reliable gluing with minimum adhesive application. The AMS determines the effective adhesive consumption quantities utilizing pump stroke or gear flow. The Robatech Control System compares the measured data with the configuration data and issues a warning message if there is a deviation from the defined tolerance range. Errors in the adhesive application can thus be quickly detected. Reliable glued products are guaranteed – even without safety margins.

Quality assurance systems

Together with its partner W. H. Leary, Robatech offers a wide range of quality assurance systems. The Robatech Control System optimally supports the connection to all detection technologies. The inspection possibilities and configurations are practically unlimited.

Verification of the adhesive application position

Optional sensors on the application head or in the production line monitor the correct positioning of the adhesive application. If an adhesive application pattern is outside the selected tolerance range, the verification function immediately outputs an error signal. The signal can be used as needed for an alarm function, product ejection and/or product marking.

Infrared sensor for hot melt adhesive application

The infrared sensor IR 1.0 monitors the correct positioning and presence of the adhesive application. For this purpose, the sensor measures the temperature of the liquid adhesive beads and signals deviations from the tolerance range.



iTac iT04 sensor for cold glue application

The iTac iT04 sensor measures the moisture content in the adhesive without using UV. The sensor detects adhesive deviation, presence, placement, and volume.



YOUR ADVANTAGES

- High process reliability thanks to fast error detection
 - Straightforward connection to systems for product ejection or marking
 - Configuration via the central user interface
 - Convenient enabling of functions via software keys
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COMPONENT MONITORING

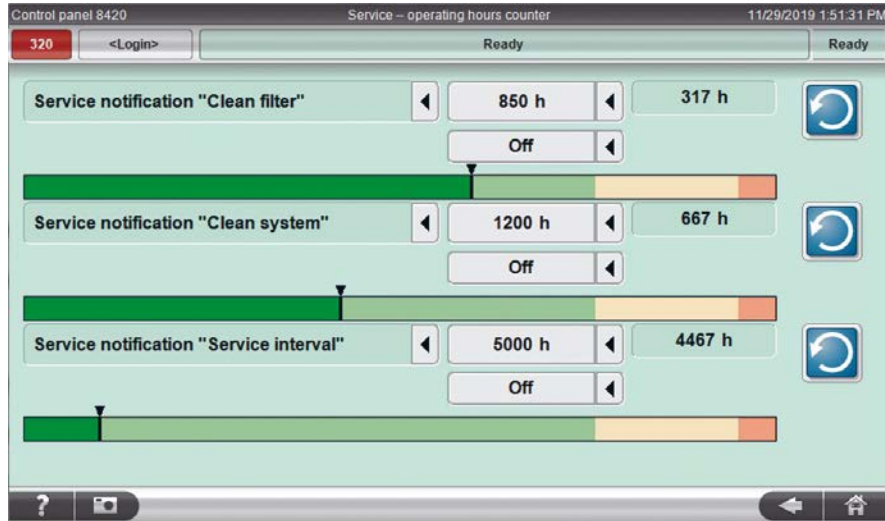
The component monitoring function of the Robatech Control System helps to avoid unscheduled downtimes. Thanks to reliable information on critical components, higher line efficiency can be achieved.

Scheduling maintenance intervals quicker

The component monitoring function supplies data on currently performed operating hours or switching cycles for defined components. Depending on the recorded, recommended service life, the system issues component-specific maintenance messages. The clear graphical representation allows quick recognition of upcoming preventive measures.

YOUR ADVANTAGES

- Simplified planning of preventive maintenance tasks in the production line
 - Avoiding unscheduled downtimes
 - Switching cycle counter for application heads
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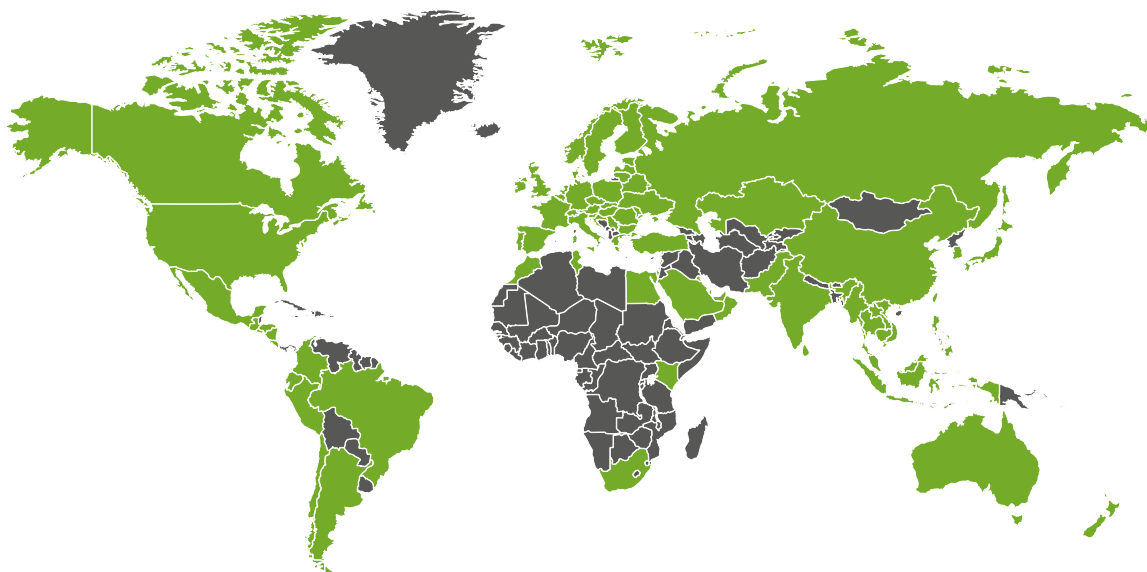
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QUALITY+

Swiss Quality

Our solutions have been developed and produced in Switzerland in line with the Swiss quality standards for over 40 years. This guarantees high quality and reliability, precision and a long service life.

GLOBAL SALES AND SERVICE NETWORK

Robatech is where its customers are – all over the world. This guarantees individual advice, fast service, and maximum system availability.



The big difference

For Robatech, every customer is important. Whether retrofit or new system, competent Robatech sales partners will find the right solution for your gluing process. Our service experts can be reached reliably and quickly. This leads to short response and maintenance times.

YOUR ADVANTAGES

- Global presence, local support
- Competent advice and test laboratory
- Preventive maintenance by qualified technicians (RobaPlus Lifecycle Service)
- 24/7 hotline
- Local availability of spare parts and loaner equipment
- Customer-specific training