

A woman with brown hair tied back, wearing a white polo shirt and a watch, is smiling and operating a robotic arm. The robotic arm is white and black, with a green cable running along its length. It is positioned over a workbench. The background is a blurred industrial setting.

ro

green
GLUING

ADHESIVE APPLICATION WITH ROBOTS

Gluing complex shapes with repeated reliability and
precision – 360° Gluing.

swiss
QUALITY 

GLUING SOLUTIONS **ROBATECH**

PROCESS RELIABILITY AND HIGH PRODUCTIVITY

360° Gluing automates adhesive application on complex and geometrically challenging shapes. Using the Robatech integration kit, a robot and an adhesive application system are connected to each other mechanically and in terms of control. This allows adhesive to be applied two- or three-dimensionally along the movement path of the industrial or collaborative robot (cobot) with repeatable accuracy and in application quantities as required. Depending on the production process, the adhesive is applied in the form of dots, beads, swirls, or by spraying.

Easy programming

The robot's motion path is programmed using the manufacturer's software, e.g., by lead through motion at the robot arm. The settings for adhesive application and monitoring are made via the robot's touch panel using Robatech's visualization software.

Spot-on adhesive application

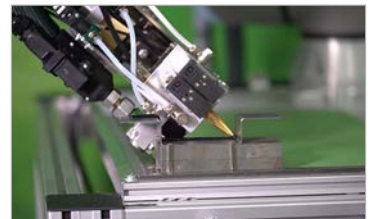
With the Sirius booster module, the application heads can be controlled quickly thanks to over-excitation. This allows the adhesive application quantities to be positioned with high precision along the robot's movement path. The module is freely programmable, compact, and can be mounted on a DIN rail.

Replacing manual adhesive application?

Robot-assisted adhesive application relieves staff of repetitive and tiring work. Adhesive is applied faster, more precisely, and with greater repeatability. The application quantity can be programmed precisely, avoiding dead spots. Cobots in particular offer small and medium-sized companies a straightforward and economical solution for full or partial automation to increase their competitiveness.

Advantages

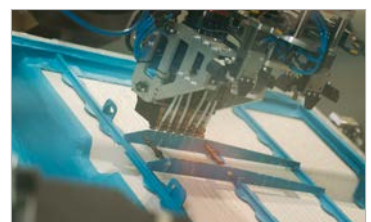
- Increases productivity through reliable and flexible adhesive application
- High adhesive application quality through precise and repeatable execution
- Simple programming and control of the gluing process
- Reduces error susceptibility and costs compared to manual application
- Relieves personnel and protects them from injury
- Straightforward integration using Robatech's integration kit



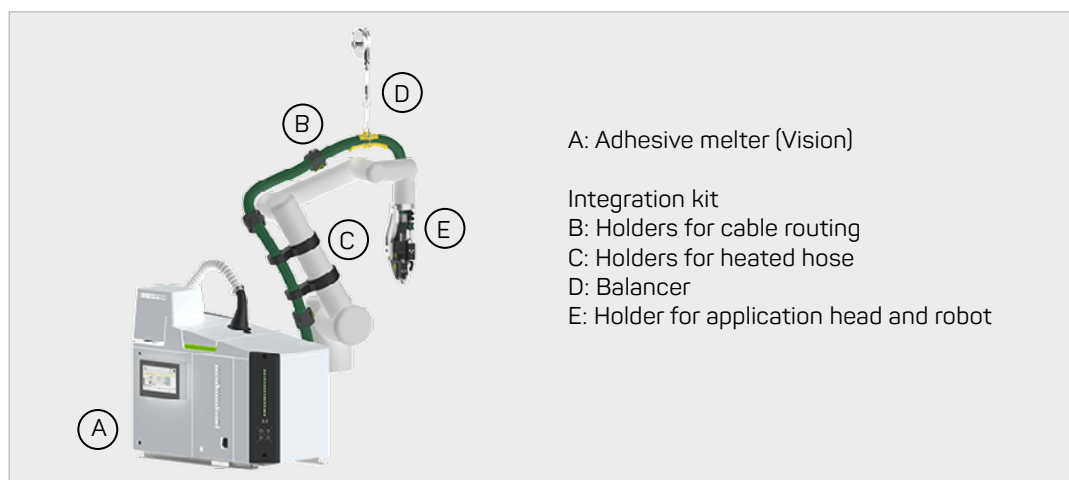
Robot-assisted gluing of complex shapes



Sirius booster module



Robot-assisted multiple bead application for battery covers



Adhesive application system connected to robot via integration kit