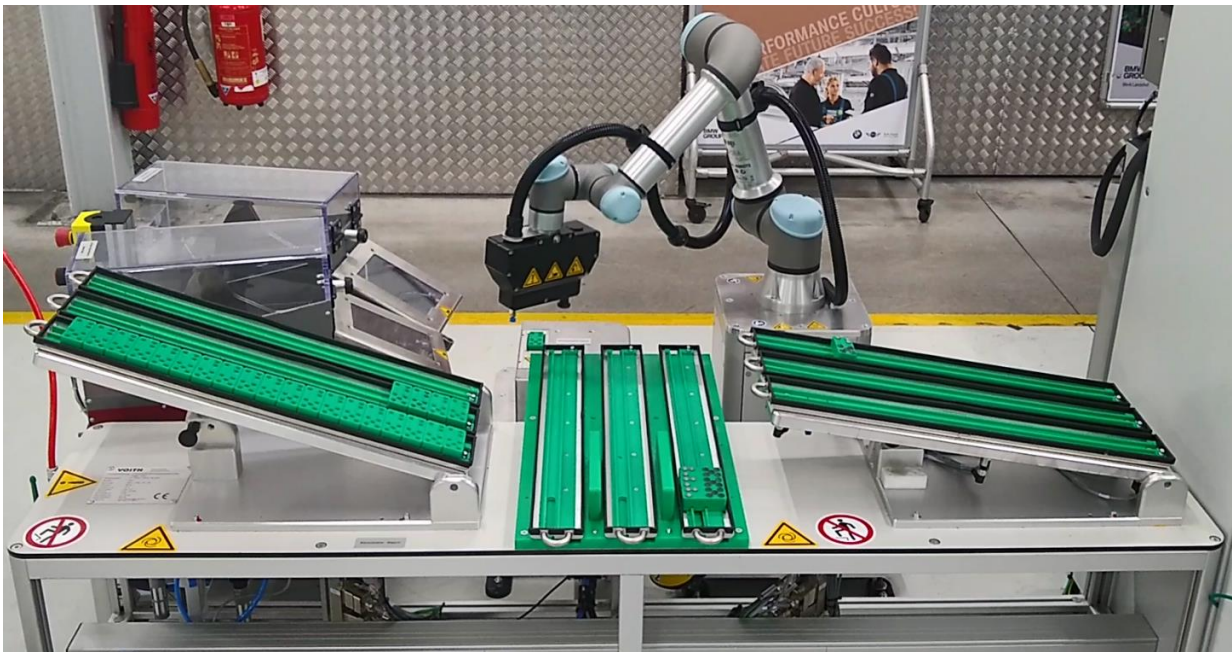


# Automatic Pre-assembly (Preparation of assembly kits) Maximum quantity with minimum use of resources



## Customer benefits

- + Automation of monotonous/unergonomic manual tasks
- + Reduction of non-value adding labour
- + Production expansion without additional personnel costs
- + Elimination of errors and incorrect assembly preparation
- + Separation of various bulk materials
- + Pre-sorting and placement of specified quantities
- + Variable selection of the various parts and quantities, depending on individual requirements

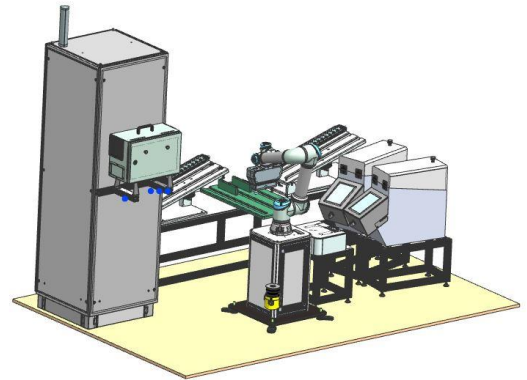
### Automatic component placement of mounting kits (pre-assembly)

In order to automate monotonous tasks in production preparation (e.g. screw block equipping), to increase production and to reduce errors/incorrect equipping, automatic equipping is required in production preparation.

The component placement system runs in full automatic mode completely independent, no operator is needed.

The basic structure for this solution includes:

- Robot UR 5e\*
- Vacuum gripper with protection of the parts
- Separators for feeding the parts
- Infeed slides for the empty parts trays
- Outfeed slides for the equipped trays
- Area-range scanners are used to keep the system safe and maximize robot speed
- Electrical cabinet with integrated HMI



### Implementation of the task

The compact and flexible robot system comes with a base unit and a solid substructure for easy mounting.

The system can feed\*\* in up to six different types of bulk material by separators.

This ensures a long lasting autonomy.

Due to the modular design the system can easily be adjusted to the individual needs of your application.

Different separators for different parts such as screws, nails, rivets, etc. as well as an individual infeed and outfeed can be implemented.

Implementing conveyor belts for in- and outfeed is optionally possible.

The robot takes a parts tray and flexibly equips it with the required amount of variants of parts.

Once fully equipped the tray will be placed on the slide, ready for the subsequent process step.

\* Depending on the application, the system can also be implemented with other types of robots.

\*\* The infeed and outfeed incl. magazine holder can be designed specific to the requirements of your application.



### Technical specifications for UR5e

<b>Set-up dimensions L x W x H</b>	2.8m x 1.4m x 2.1m
<b>Robot reach</b>	850mm
<b>Max. Load capacity (incl. gripper / parts)</b>	5 kg

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