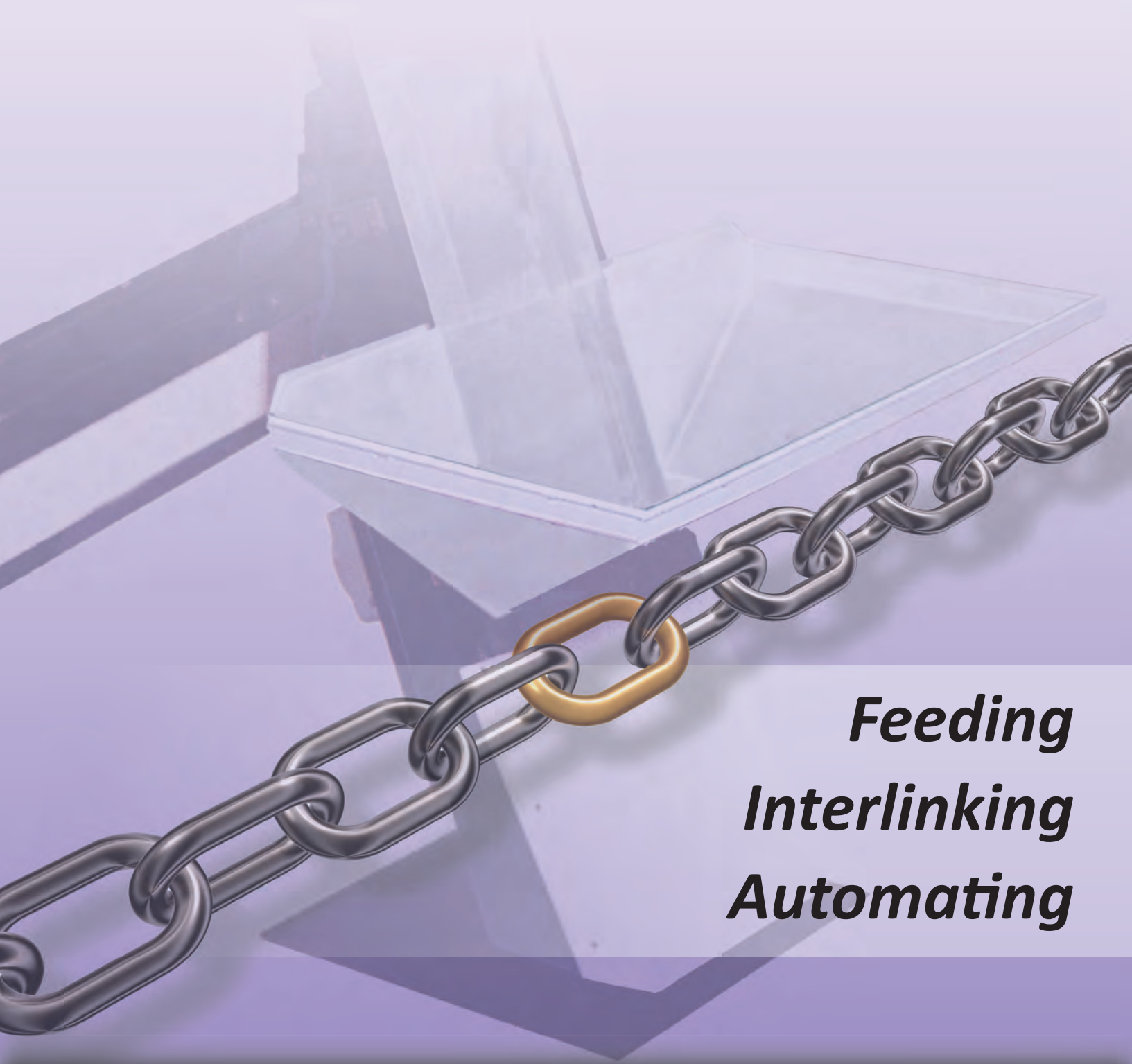


**SCHINDLER**  
HANDHABETECHNIK GmbH



*Feeding  
Interlinking  
Automating*



## Company profile



## Feeding • Interlinking • Automating

Schindler Handhabetechnik GmbH- your competent partner in the area of feeding technology, interlinking systems & automation.

For more than 40 years we have been convincing our customers all over the world. Our main customers belong to the automotive-, plastics-, electro- and fittings industries. We are able to react very fast and flexible to your individual requirements because everything- from development to delivery- takes place in our premises. Even after delivery we take care of all your needs. We guarantee trouble-free installation and commissioning as well as an excellent after-sales-service. In all areas, quality plays an important role- we are certified according to DIN EN ISO 9001:2008.

### Know-How made by Schindler

...from single solutions up to system integration and turnkey systems

**We are looking forward to receiving your task!**

## Feeding

### Tipping devices

The tipping device is suitable for all common pallet dimensions and for weights up to **2.000 kg**.

The tipping device is loaded by a manual lift truck or forklift. After the safety door is closed, the content of the pallet will be distributed on the conveyor belt by a sliding chute.



### Conveyor belts

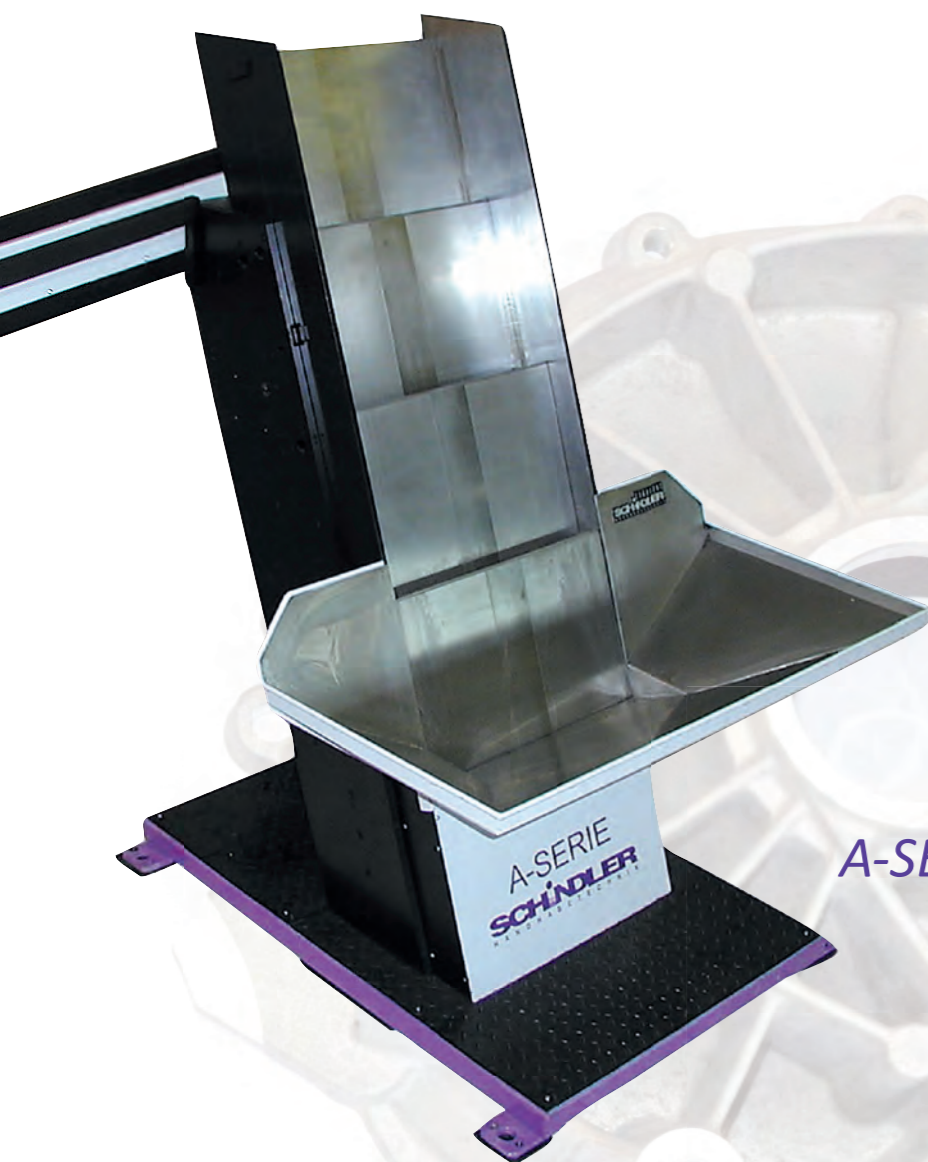
To extend the hopper volume of the step feeder, we provide conveyor belts. Using the conveyor belt, the sorting parts are brought dosed to the hopper of the step feeder.

For frequent type changing we offer a quick emptying with reverse function of the belt.

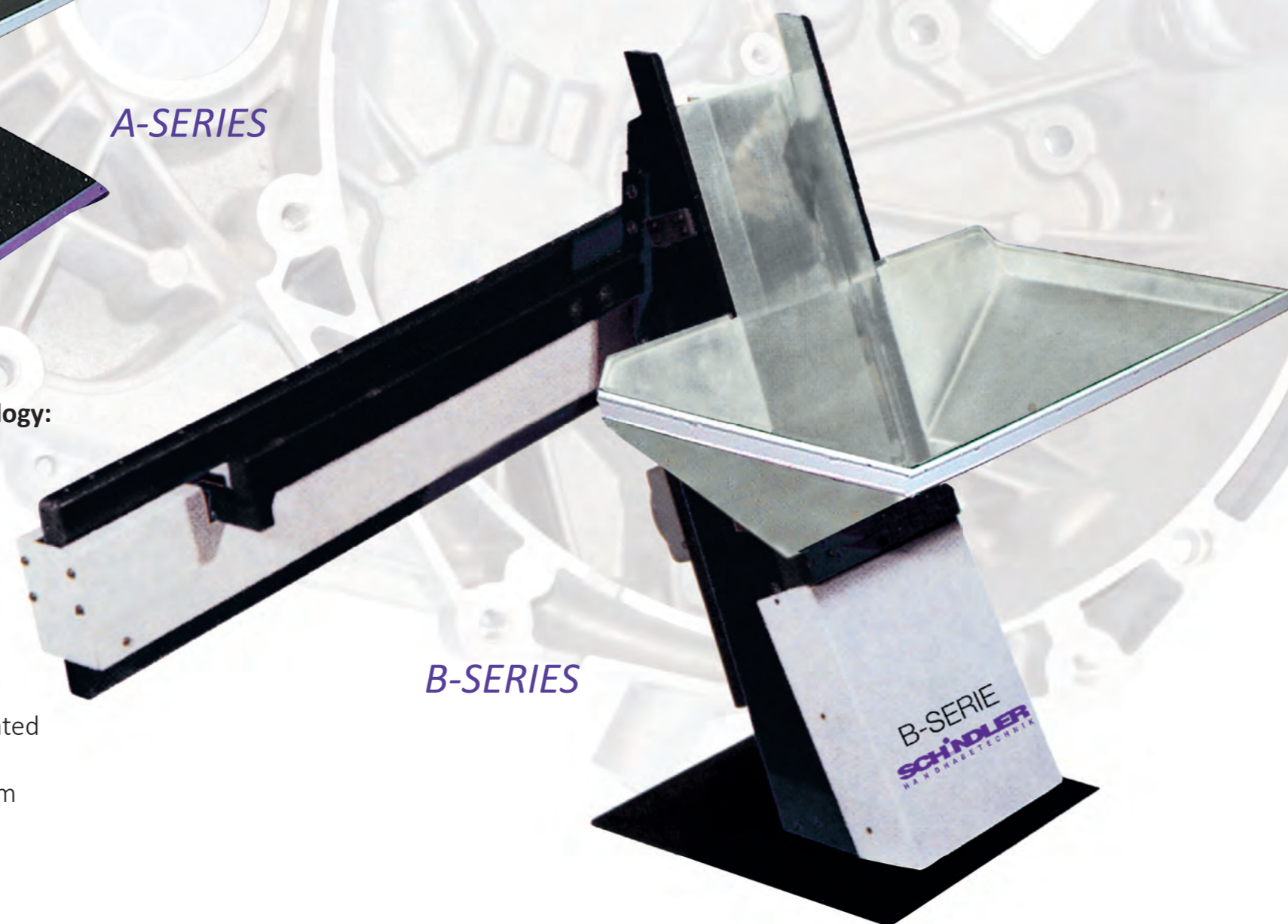


## Step feeders

The step feeder is used in order to transfer parts with the aid of steps dosed and pre-orientated to the subsequent sorting line. Here, parts are brought in desired position and then, provided according to your requirements.



A-SERIES



B-SERIES



C-SERIES

### Advantages of the step feeder technology:

- gentle treatment of parts
- low noise generation
- high feeding performance
- grit or dirt on the sorting parts do not occur
- low-maintenance
- to avoid malfunction, n.i.o. parts or dirt can be discharged
- parts which got caught up are separated
- flexible discharge heights
- retrofittable by quick-changing-system of the sorting line

## Raw part loading - PICKLA®

This system specially was developed to take heavy parts out of a standard barred box by using an electromagnet and place them on a belt for further processing.

The vertical arm with the magnet plunges within a defined grid into the barred box and takes out one or several parts (depending on the execution of the magnet).

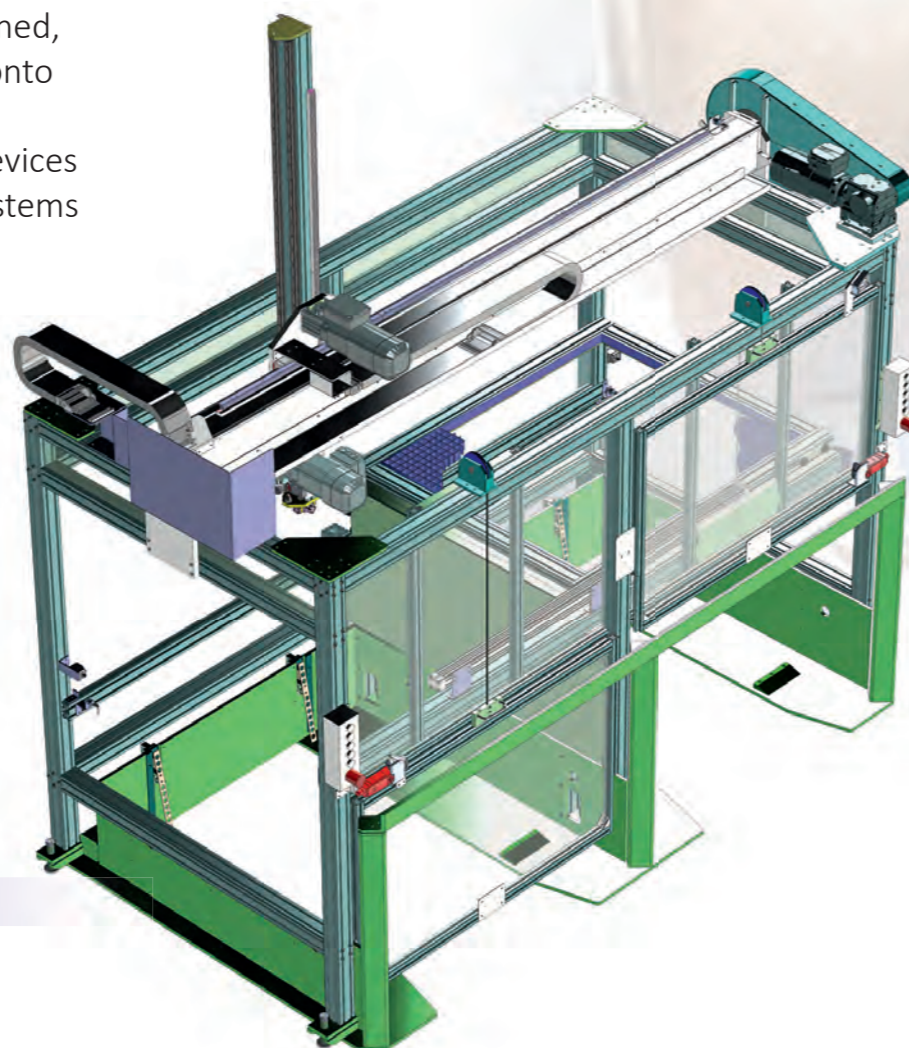
The x-axis is equipped with a moving carriage, while the y-axis is realized by swivelling the magnet arm.

For off-loading the magnet arm swivels to 45° over the unloading point.

The advantage is, that the station does not overbuild the unloading point.

Additionally, this station can be designed, that 2 barred boxes can be emptied onto one transfer position.

Furthermore, subsequent sorting devices and interlinking systems as well as systems with robot can be used.



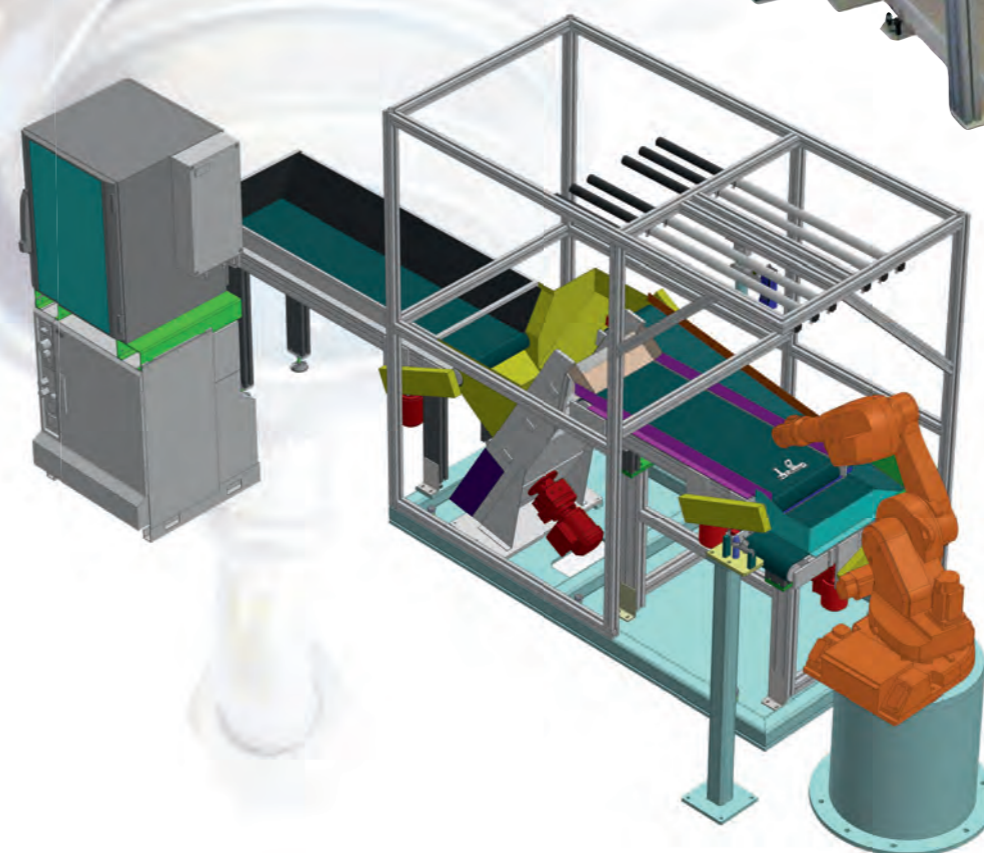
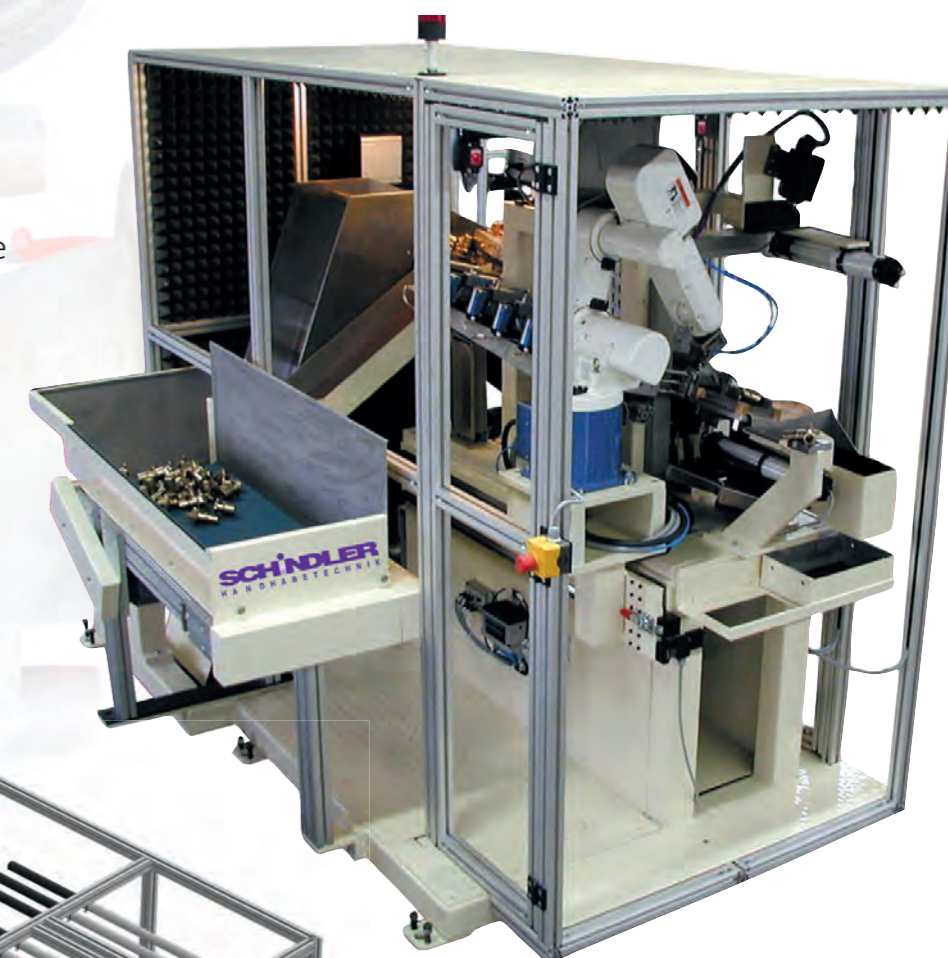
Double-PICKLA

## Flexible feeding system SCHIMAT®

- cycle times up to approx. 3 sec. with 6-axis-robot
- cycle times up to approx. 0,8 sec. with SCARA-robots

The flexible robot cell basically consists of following components:

- Step feeder
- Overhead-slide
- Conveyor belt for seperated feeding
- Image processing system
- Robot with gripper system
- Interfaces to the processing machine
- Return-back system
- Noise- and protection cover



## ***Palletizing-transport-systems***

All palletizing transport systems are built up modularly. At building up we combine our proven standard solutions like webs, curves, switches and controlling concepts with individual customer requirements as work piece carriers, positioning or layout. Furthermore all our components are compatible to the current transporting systems of this construction type. The work piece carriers (pallets) are solely moved by static friction. Thus, a steady transport is possible. As the system is clock-independent, the availability of the assembly- or manufacturing line also increases.

To increase flexibility, the work piece carriers can be memory-equipped. This secures information flow because with this system, work piece data can be tracked.

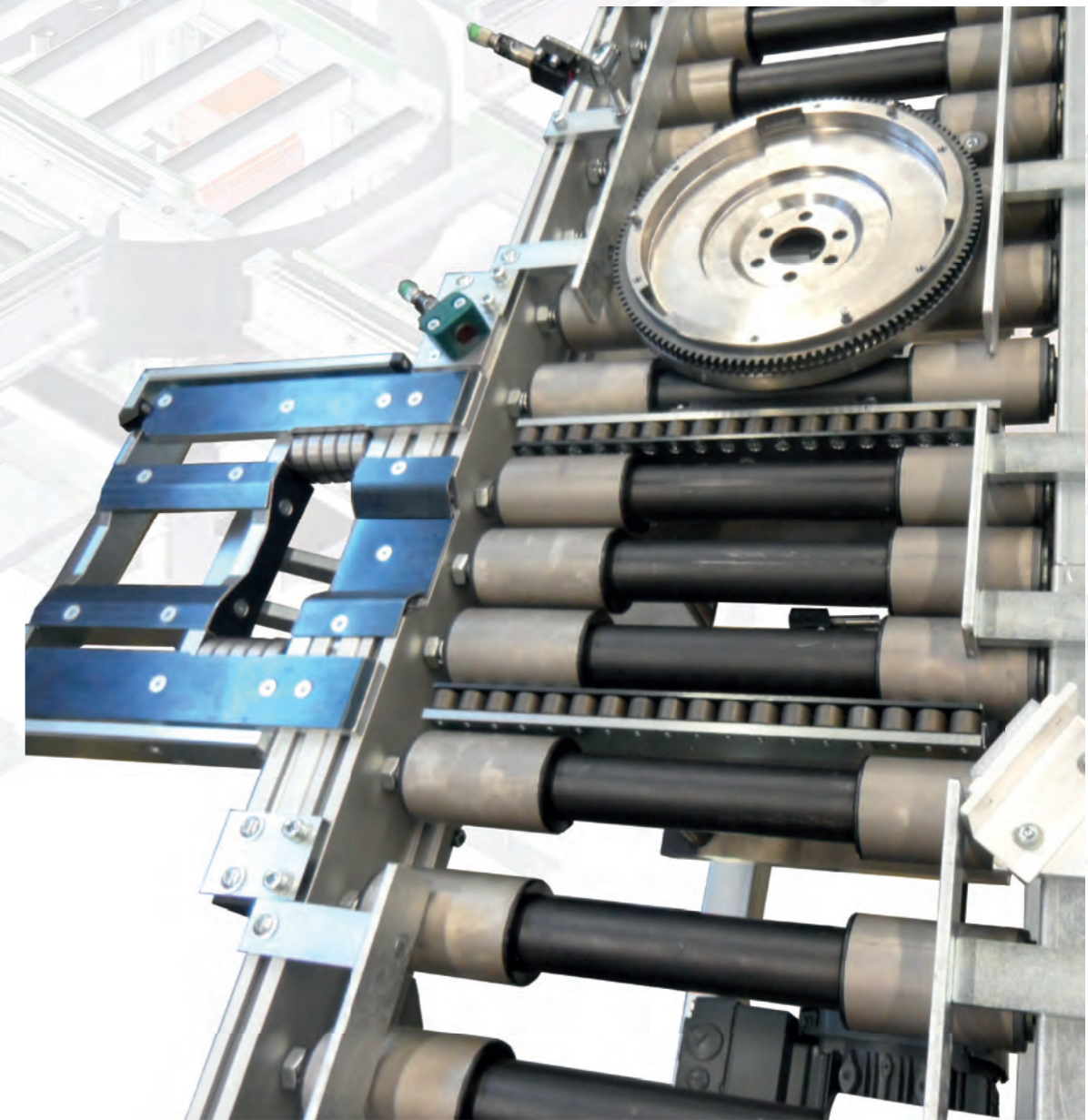
Palletizing-transport-systems boast a high reliability. They work under extreme production conditions as grinding dust, oil or chippings. A transport without damages on the products is ensured. Palletizing-transport-system modules enable a flexible, cheap and save construction. The sturdy and low-maintenance structure guarantees a customized and universal design of conveying systems.

## ***Friction roller conveyors***

The innovative friction roller conveyor bases on proven standard friction rollers. They represent sophisticated industrial quality to great cost effectiveness. Fixed rollers are driven by a chain, which runs through a guide rail of plastic. This chain is protected by a cover. When piling up, rollers below the parts stop. Bearing of the drive shafts on the sides of the belt is ensured by valuable ball bearings. The standard surface of the friction rollers is steel but they also can be produced of plastic.

The plastic-coating is suitable to avoid damages on the work piece surfaces. The feeding parts, simply can be stopped by hand or mechanically- then, following parts pile up.

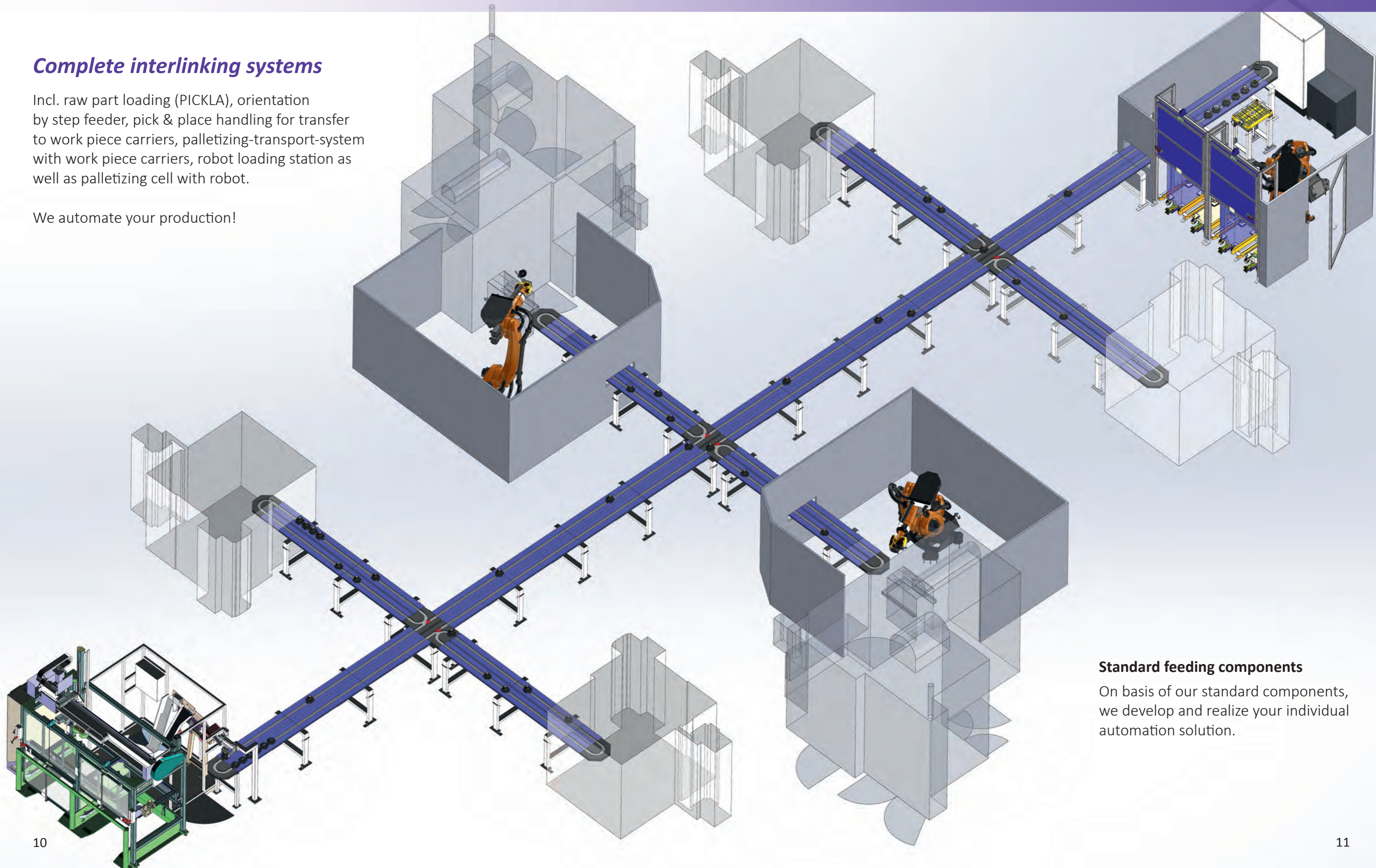
Schindler plans friction roller conveyors modularly and exactly regarding your requirements. Later adjustments are possible at any time.



## Complete interlinking systems

Incl. raw part loading (PICKLA), orientation by step feeder, pick & place handling for transfer to work piece carriers, palletizing-transport-system with work piece carriers, robot loading station as well as palletizing cell with robot.

We automate your production!

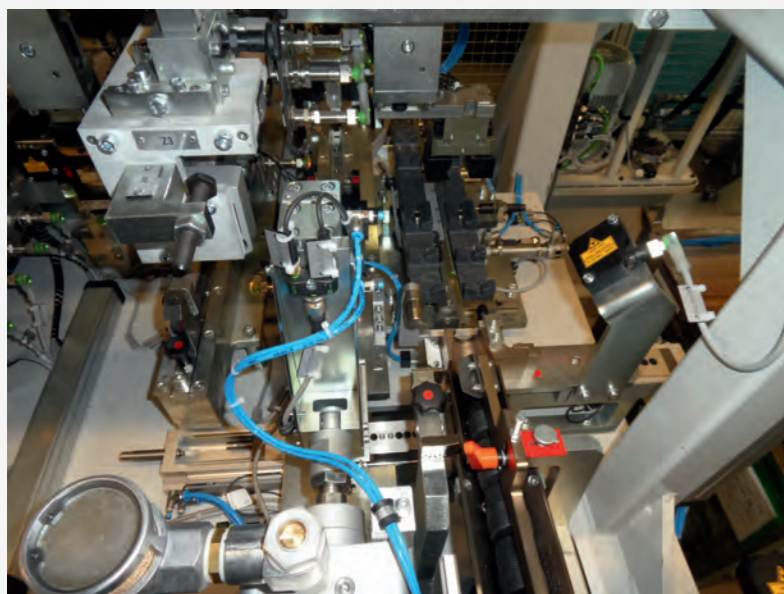
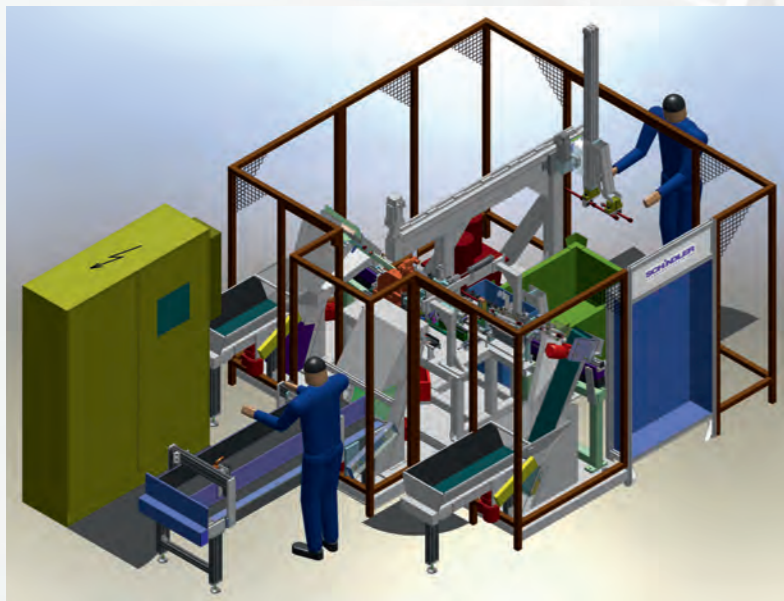


## Standard feeding components

On basis of our standard components, we develop and realize your individual automation solution.

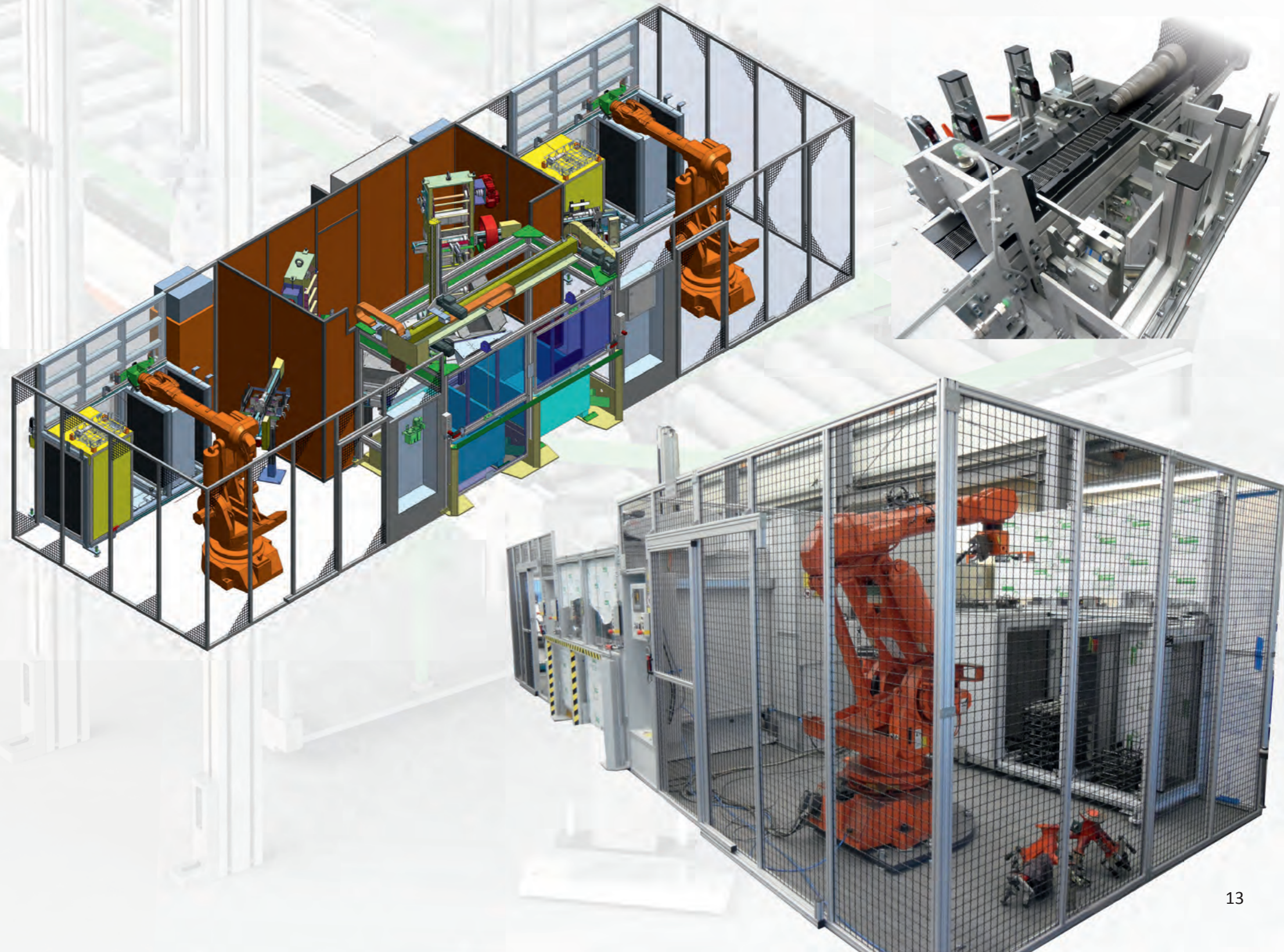
## Reference example assembly unit for tripod feet:

- Feeding
- Transporting
- Punching
- Assembling
- Palletizing



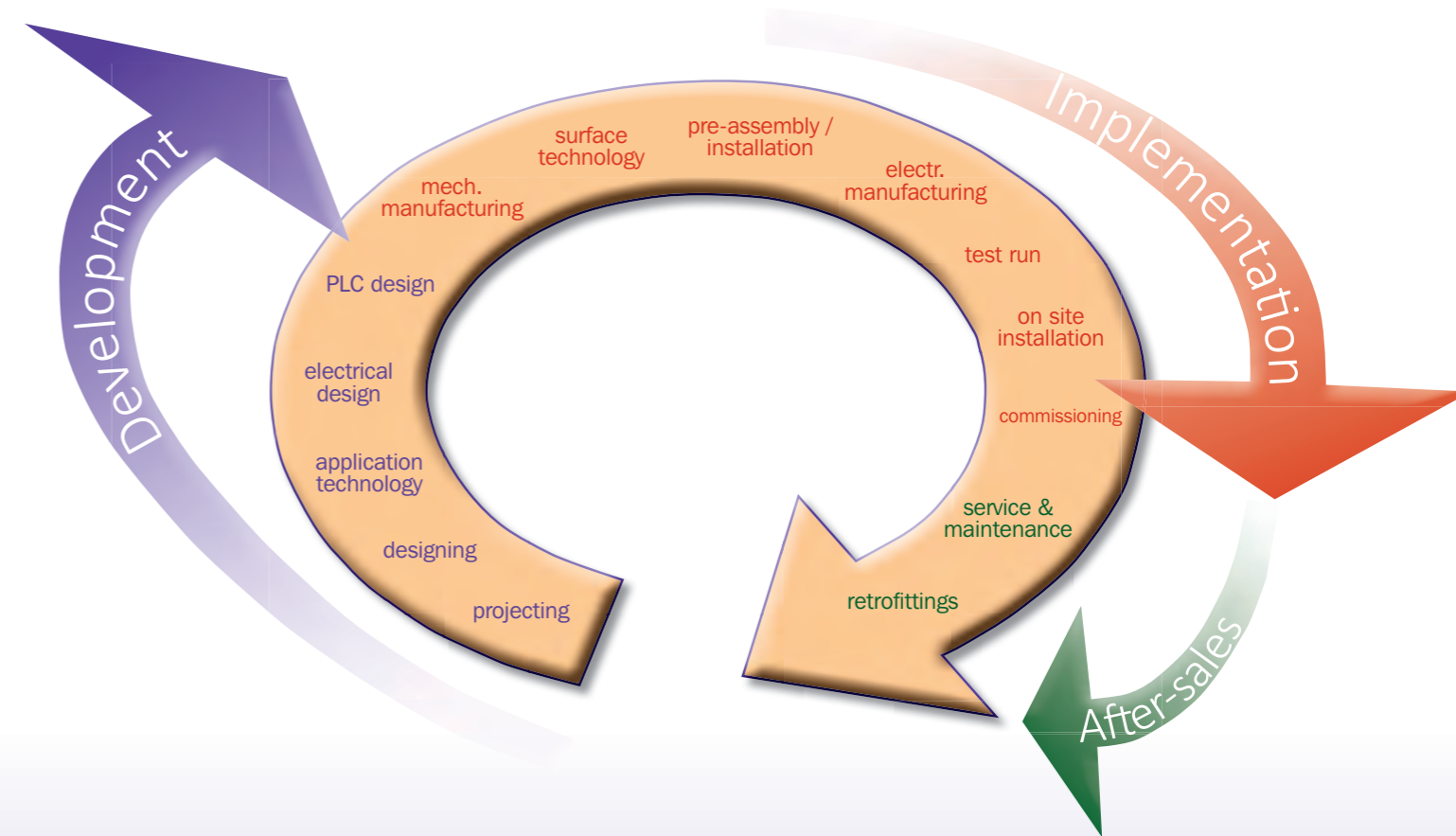
## Reference example raw part loading system for drive shafts:

Double-PICKLA incl. 2 robots for basket loading





For each phase of development and implementation of various applications- **Schindler Handhabetechnik GmbH** has the necessary know-how and own resources.



*To our customers belong among others:*

**Automotive**

Audi  
 Bentley  
 BMW  
 Bugatti  
 Daimler  
 Getrag Ford  
 GM / Opel  
 Volkswagen  
 Volvo

**Suppliers**

Benteler  
 Bosch Rexroth  
 Buderus Guss  
 KAMAX  
 KS Kolbenschmidt  
 Leist  
 NTN-SNR  
 SKF  
 ZF Friedrichshafen

**Machinery and plant engineering**

ABB  
 Dürr  
 Elwema  
 EMAG  
 Emil Schmid  
 MBB Fertigungstechnik  
 Licon  
 ThyssenKrupp  
 Werner Bayer





# *Feeding Interlinking Automating*

Kapelleinsweg 3  
D-97631 Bad Königshofen  
Telefon: +49 9761 9181-0  
Telefax: +49 9761 9181-29  
info@schindler-handhabe.de  
www.schindler-handhabe.de

