



**FEEDING SYSTEMS**

# STEP FEEDINGS

**Precise – Versatile – Gentle**

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## STIWA MECHATRONIC SYSTEMS – YOUR PLUG & WORK PARTNER FOR OPTIMIZED PRODUCTION

As a leading manufacturer of automation technology, we have been providing products, projects and services for many years, thereby enabling optimized technology integrations with the best possible overall effect. Through the targeted interaction of mechanics, software and electronics, we achieve production solutions that guarantee the

greatest possible flexibility, standardization, and safety. Our approach is all about “cooperative growth”, meaning we are there every step of the way along our client’s value added chain. No matter whether you need supply, handling, process, or automation systems, STIWA is your partner for mechatronic special solutions!

### STEP FEEDING SYSTEMS

In industrial production, supply and disposal processes are most fundamental elements of modern production and automation systems.

STIWA step feeder systems ensure the careful transportation of parts for modern assembly units with correspondingly low cycle times.

### MECHANICAL STRUCTURE

Two steps moving in opposite directions convey a partial quantity of bulk material (determined by the step width) from a storage hopper and transport it upwards. The steps and side panels of the step feeder are made from rust- and acid-resistant steel. A variable conveying rate is possible thanks to the adjustable and robust drive unit. For functional reasons, our conveyors are very quiet and can be combined in assembly lines with manual work stations for optimal results.

1. Step feeder
2. Dosing hopper
3. Return transport
4. Emptying mechanism for SLC containers



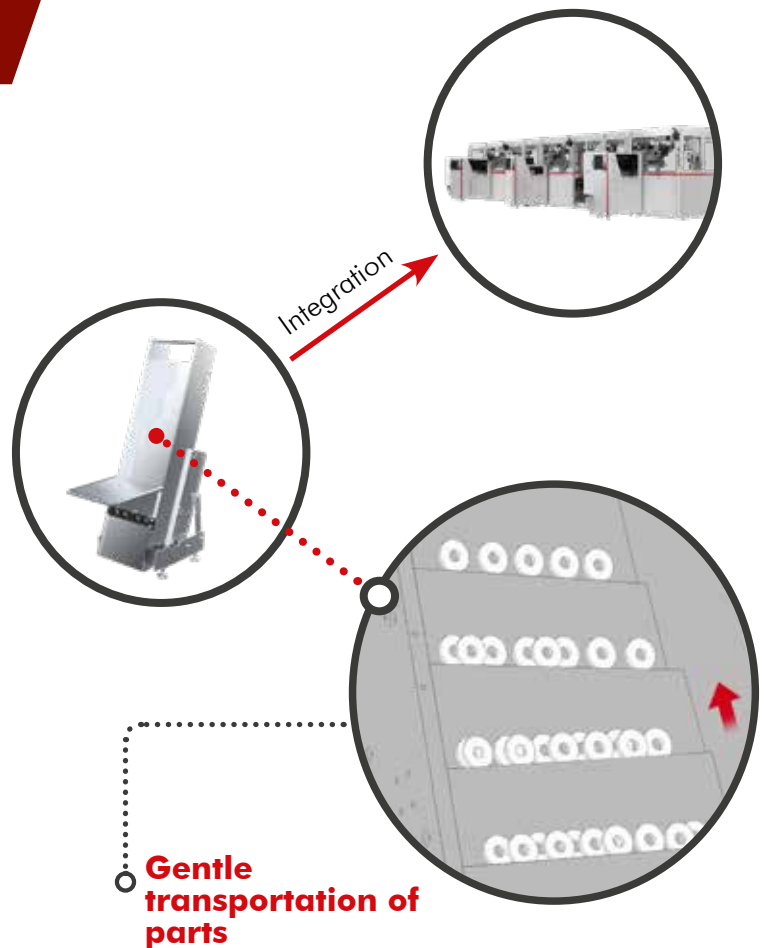
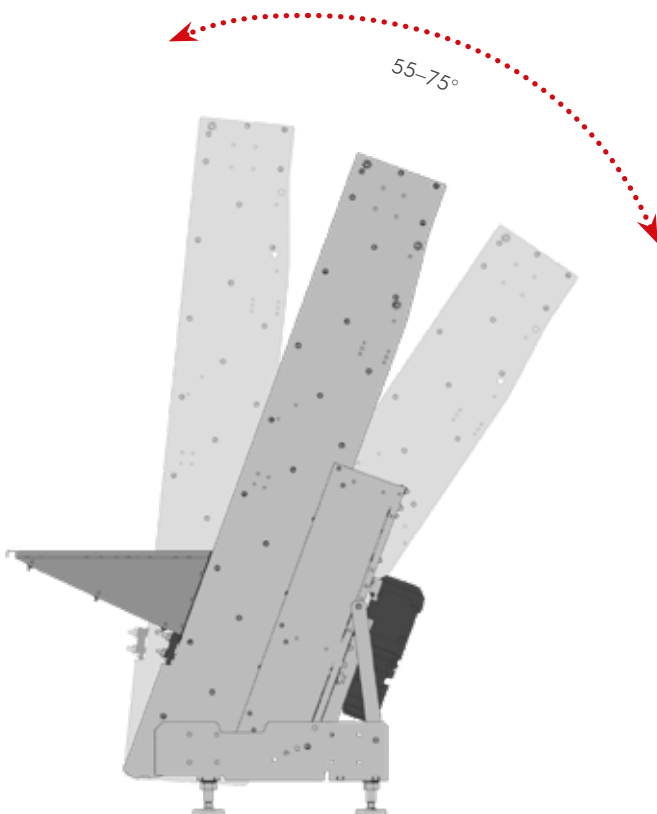
○ **Optional fill level sensor**



## BENEFITS

The STIWA step feeder is the ideal component for easily presorting feeding parts from a bulk material hopper or from a transport, separation or guide unit. Thanks to a low intermixing rate, critical parts with coatings or varnishes are also carried up gently from the storage hopper.

- » It is well suited for handling flat parts, because its precise mechanics (gap size between the individual steps < 0.5mm ) prevent the feeder from jamming.
- » The special design of the guidings ensures a practically abrasion-free movement of the steps.
- » For rotationally symmetric parts in particular, a preliminary orientation and separation of components takes place in the step feeder.
- » The upward transportation of parts by the steps provides a disentangling function.



## FUNCTIONS AND IMPACT

### Gentle Transportation of Parts

- » Thanks to selectable step widths and an adjustable tilt angle, a variable discharge height is possible with the corresponding number of steps. This means it is suitable for universal use.

### Ergonomics

- » Low vibration and noise generation
- » Easy filling from SLC containers

### Quality

- » The high-quality components ensure maintenance requirements are kept to a minimum.



» STIWA step feeders are optionally expandable, all the way up to a complete feedingsolution!

## OPTIONAL ACCESSORIES

- » Dosing hopper for stocking large volumes of bulk material
- » Fill-level detection
- » Transport rollers and mounting brackets
- » Return transports



## TECHNICAL DATA

Step feeder	C 8107
Device width	577 mm (without discharge hopper)
Device depth	800 mm
Device height	1660 mm
Tare weight	260 kg
Tilt angle	Standard 70° (55°, 60°, 65° and 75°)
Number of steps	From 6, 8 up to 10
Depth of first step	30 (50) mm (other depths available on request)
Step depth	20 (30) mm (other depths available on request)
Step width	400 mm (other widths available on request)
Stroke distance	200 mm / 225 mm / 245 mm
Stroke speed (two transmission variants)	0–278 and 0 – 427 mm/sec
Discharge height	940 mm up to 1558 mm (depending on number of steps and tilt angle)
Hopper height	675 mm
Noise emission	Depends on the component
Power range	230 V AC +/- 5% 50Hz star connection / 400 V AC +/- 5% 50 Hz delta connection
Interface	Optionally via digital I/O on frequency inverter / EtherCAT

## COMPLETELY INTEGRATED:

- » Flexible plug & work solutions tailored to your needs
- » Control of the IIoT (Industrial Internet of Things): Optimized technology and system integration thanks to many years of experience in the production and networking of automation systems
- » Safe processes with the best possible overall effect and lowest total costs
- » Adaptive, subsequent production: Based on the pre-production processes and according to the situational requirements
- » Comprehensive standardization – high scalability



### Your contact person

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