THE PARTS
CHANGE.
THE
FLEXFEEDER
REMAINS
THE SAME.





WE THINK IN PARTS, LIKE YOU.

You can tell a smart feeder by the way it easily conveys even complicated parts. That's why our feeder systems focus on the parts to be processed. Our mission is to bring them into your production precisely, gently, reliably, and highly flexibly, and to ensure that your investment pays off in the long-run. The fact that we have set marketleading standards over the past 20 years makes us proud and motivates us.

> > Developing, manufacturing, testing, optimizing: here, all departments and colleagues work hand in hand, the ways are short and the cooperation is very dynamic. **〈**





Discover what flexibility in feeding means.

Flexibility is already in our name. As a leading developer, manufacturer and supplier, flexfactory stands for high-quality and particularly variable feeding systems for bulk materials. At our headquarter in Switzerland, we apply our expertise and experience to nothing less than revolutionizing feeding technology. Our feeder solutions, for example, add a new dimension to automated production systems: they precisely provide parts with high performance and enable product changeovers in the shortest time possible. And all this with a small footprint and conceivably simple handling. Find out how you can secure crunch competitive edge on this page - or in a one-on-one interview. We look forward to talking to you about the right feeder for you.

Product features:

On request, the feeder can be delivered completely parameterized and ready for your parts.

- + innovative, highly flexible feeding technology for all robots
- + integrated backlight (white/red/infrared)
- fully integrated and wired camera and toplight tower
- + software feedware X with touch screen connection included in delivery
- part spectrum from 0,5 120 mm
- + minimum changeover times for product changes incl. fully automatic discharge
- + integrated discharge of NOK parts
- simple and tool-free change of feeder surfaces within seconds
- extremely robust and durable design with servo-electric drives
- consistent communication for all models

Functional principle

FLEXIBLE FEEDING. THE COMPLETE SOLUTION.

Completely efficient

Conveying small and very small parts and providing them correctly for the next work step: This requires a system with different components and capabilities – especially if different parts are to run over it. In order to smoothly manage the entire process, including part changeover, we have designed the flexfeeder as a complete system. It specializes in flexible feeding and a variety of parts and ensures that one feeder is – and remains – the solution for everything.

1 Software Unit

feedware X's intelligent algorithms continuously analyze the distribution and orientation of the parts on the Flexfeeder. That way, the optimal movements are activated, so the parts can be recognized by the camera and become pickable for the robot. Due to the user interface, the installation process is quick and easy.

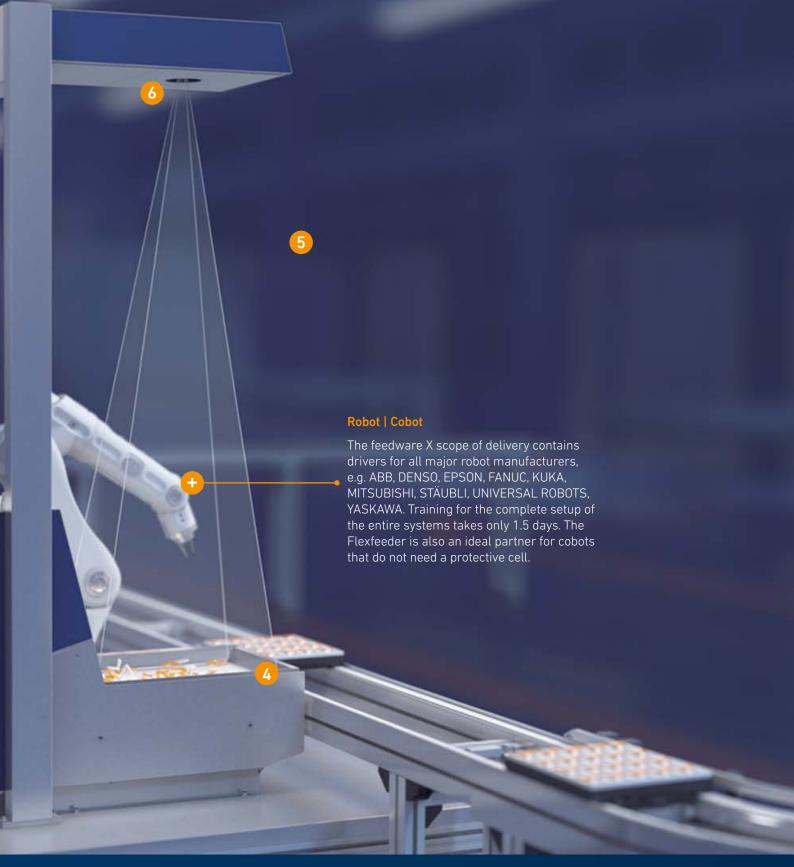
2 Bulk storage bin

The applications autonomy is increased by the bulk storage bin, where a stock of parts remains until the camera, fully automized, requests a fresh supply. In case of a product changeover, both bulk storage bin and the entire Feeder-Unit can be emptied fully automatically.

3 Feeder Unit

The Feeder Unit consists of a bulk storage bin and a feeder platform. Using the Camera Unit and feedware X, parts can be moved back and forth, flipped and seperated. Robust and durable design ensures reliable applications.

flexfeeder X250



4 Shaker

Feed plates made of different materials, colors, surface structures, are available (e.g. for medical or ESD applications or for rolling parts). The manual change of a conveyor plate is done in seconds without tools. The pick-window x equipped with a backlight. An additional toplight is available on request.

5 Data transfer via ethernet

Camera und robot are connected via ethernet. Data flow between feeder, camera und robot is coordinated fully automatically through feedware X, which secures a reliable application.

6 Camera Unit/Camera tower

The camera unit, which is completely pre-installed, wired and integrated in the camera tower, takes over the central control of the application. It continuously analyzes the situation on the flex feeder and sends control commands to the feeder and the robot. LED-Toplight optionally available.

Bonus points

ADVANTAGE FLEXFEEDER. WHAT YOU CAN RELY ON.





FLEXFEEDER X185

Suitable for parts: Dimension < 60 mm Thickness > 0,25 mm Weight < 60 g



FLEXFEEDER X250

Suitable for parts: Dimension < 85 mm Thickness > 0,25 mm Weight < 60 g



FLEXFEEDER X350

Suitable for parts: Dimension < 120 mm Thickness > 0,25 mm Weight < 80 g





Designed for part diversity

The flexfeeder feeding principle is excellently suited to process a wide variety of parts with one feeder. Per feeder, the parts are usually fed by type. This means that several conventional feeders are replaced by one flexfeeder, expensive changeover times are eliminated, and valuable production space can be used elsewhere.

Coordinated complete system

flexfactory feeders consist of a feeding system, a camera system and the software, and are developed as an integrated complete system. Your advantage: The components optimally match each other. This minimizes maintenance and operating errors, and maximizes the potential of your feeder. For more efficiency and process reliability. In addition, flexfactory is thus your one partner for the entire feeder system.

No jammed parts

Flexible feeding is always jam-free feeding - it's in the system. Unlike with e.g. vibratory feeders, nothing jams – everything runs smoothly.

No stress for the parts

The bulk storage bin only activates when the pick-up window requires more parts. Otherwise, the bulk material rests stressfree. The parts in the pick-up window are processed in a short time, and there is no risk of them remaining in circulation indefinitely. Therefore, even cosmetically or functionally delicate parts can be fed gently.

Preset management and easy retrieval

Keyword preset management: On request, we can also teach your parts in advance at our test center and save the settings directly on the feeder.

Uncompromisingly compatible

Interoperable with all commercially available robot systems thanks to feedware X software.

We provide information about the many other advantages here: www.flexfactory.de
Or in a personal conversation?



ONE FEEDER, ALL PARTS



MINIMUM SPACE REQUIREMENT



GENTLE ON YOUR PARTS



EASY COBOTS



SIMPLE OPERATION



READY TO RUN



COMPLETE UNIT

Application areas

FROM PLUG-IN CONTACT TO GEAR WHEEL. DIVERSITY OF PARTS.



The flexfactory feeding technology is used wherever small parts (approx. 1 to 120 mm) have to be provided flexibly and precisely. It proves advantageous especially where production is subject to permanent changes, e.g. at customers in the following industries:

+ Electrical technology

+ Automotive industry

+ Medical technology

+ Jewelry and watch industry

+ Personal care and cosmetic industry

+ Consumer Goods and Packaging industry











Test Center

YOUR PARTS ON THE TEST BENCH. FOR AN WELL-FOUNDED DECISION.



In flexfactory's test center, our application engineers put your critical parts through their paces. This gives you the security you need to make a well-founded decision.

After all, you as a customer want to increase your production quality and reduce costs. This can be achieved through short cycle times, high precision and absolute reliability – flexfactory's key qualities for over 20 years.

How will your parts be handled on the feeder? What settings are required and what performance will be possible with your parts? These questions, and more, will be analyzed in a feasibility study. We would be pleased if you assigned us for this service.









Trainings

GET READY! WITH OUR TRAINING COURSES.





Training – feedware X

In just 1.5 days you will learn everything you need to put your flexfeeder including the image processing system feedWare X into operation. We will also explain to you how the communication between the camera system and your choice of robot is realized and you will have the opportunity to practice what you have learned with various examples.

Communication with flexfeeder

- + Feeding commands
- + Feeder answers
- + Parameterisation

Connection to vision system

- + Electrical connections
- + Data interface
- + How it works

Software

- + Setup
- + General operation
- + Basic settings
- + Set up part recognition
- + Additional tests
- + Feeder parameters
- + Conveying logic
- + Reference calibration data

Communication/interface to robot

- + Operating modes
- + Sequences
- + Error handling

Camera – robot calibration (coordinate alignment)

- + Operating principle
- + Prerequisites/Framework conditions
- + Multiple calibration (for different part heights)

Troubleshooting/Diagnosis

- + Notes on gripper functionality
- + Pointers on the arrangement of camera, flexfeeder and robot
- + Notes on lighting and extraneous light shielding

Robots/Cobots

A TEAM PLAYER, EASY TO INTEGRATE.



To ensure that your feeder integrates perfectly and works with your existing system, we have equipped it with a high level of compatibility.

Over 4,000 feeders are in operation with these robots worldwide.

+ ept Technology
+ Precise Automation
+ Stäubli
+ Yamaha
+ YASKAWA
+ Universal Robots









The future of feeding starts with us.

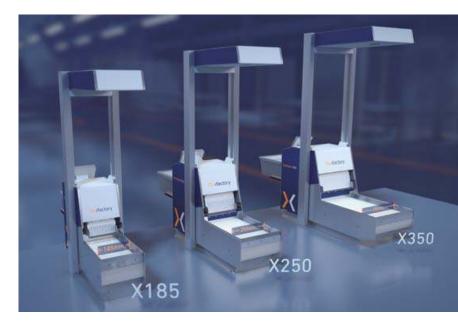
When Felix Büchi founds flexfactory in 1999, he is one of the pioneers in feeding equipment and develops his own patents. This is the spirit of innovation that has remained bright with us to this day. Every day, our team takes on the challenge of not only making automated feeding better and better, but revolutionizing it. The fact that we succeed is perhaps also due to the fact that we have always remained a little old-fashioned in one respect: We do everything ourselves. Which means, we develop and manufacture the systems completely under one roof here in Switzerland in Dietikon. From software to on-site customer service, we thus offer you everything from a single source. Another factor that makes feeding systems from flexfactory a decision for real reliability and long usability.

Do you have any further Questions? We look forward to hearing from you. Our team in Dietikon and at our partners in Europe are there for you to make your feeding more and more flexible, sustainable and faster.

Give us a call or write to us.

See you soon:

Phone +41 44 774 55 66 E-mail info@flexfactory.com





For smaller parts: anyfeed SXM50/SXM100/ SXM140



www.flexfactory.com

