

# Technical Information 421

## Flexible Feed System ZBV-AC-Feeder®



### New features with our machine:

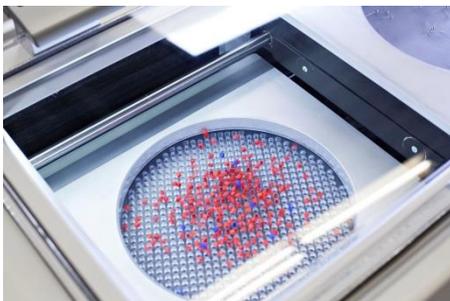
- Suitable for a great range of product parts.
- Same setting for a wide scale of applications
- Simple and steady: With its non-stop availability, the AC-Feeder will do the job for you.
- Highly protective:  
Due to the new sorting system the AC-Feeder will take care of the product parts.

### Application fields:

- Fully automated constructions
- Manual, partly automated domains
- Alternating induction
- OK/NOK testing
- Inspection
- Sorting

The new ZBV AC-Feeder® is an excellent completion to flexible feeder units and is revolutionary due to its sorting vibration system and its product-individually adjustment of amplitude and frequency. This machine can make it possible: sorting and feeding of many and various product parts on-site and thus flexible and quick adjustments in production processes.

### Operating mode:



The product parts are being inducted in small amounts on the vibrating plate via a pre-operation bin. The plate will start vibrating due to a stepless setting in frequency and amplitude of the vibration transmitter, which is positioned under the vibrating plate. The inserted parts on the plate are thus being untangled, separated and finally being brought into an on-site and specified orientation through a shaping underlay. This can happen e.g. for means of visual checking via camera system or for lifting by the robot.

The vibrating plate is changeable and can be therefore adapted to all sorts of products.

The new AC-Feeder® is available in two variants:

- 1) The Single System consists of only one vibrating plate.
- 2) The Twin System has two vibrating plates, which are being run on the vibration transmitter in reversing mode. The first disc is designed for simultaneously feeding and sorting, while the second enables checking and lifting.

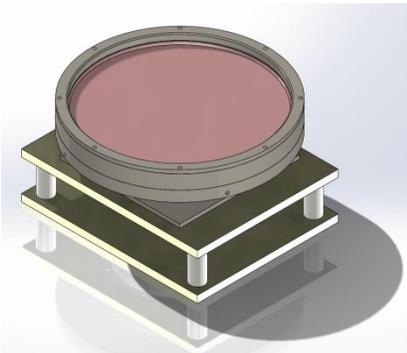
**Direction of lifting:**

The sorted parts on the vibrating plate are being lifted by an axis system or a robot. Normally the coordinates for lifting the single parts are calculated by a camera system with a menu guided teaching function. This camera system is optional and can be delivered with the AC-Feeder®.

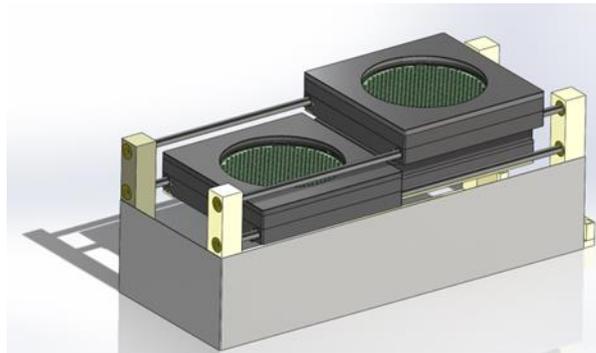
There is no camera system needed for on-site sorting into molds on the vibrating plate.

**Technical structure:**

- Vibrating plate made of e.g. perspex disc, Makrolon, rubber
- Pulse generator with adjustable frequency and amplitude
- Shaping underlay
- Pneumatic connection for the air blower to center the parts on the vibrating plate.
- Stainless steel tracks for running the sled (only for Twin System)
- Pneumatic cylinder for infeeding the pulse transmitter under the corresponding vibrating plate (only for Twin System)
- Optional: AC-Controlling with touch panel
- Optional: Camera system for position detection
- Optional: Hopper Sorter



ZBV-AC-Single-Feeder



ZBV-AC-Twin-Feeder

**Technical data**

Ø Vibration plate:	50 mm – 750 mm
Output*):	> 30 pcs./min (Twin-System)
Noise*):	< 72 dBA
Connection:	230/400V, 50Hz/60Hz
Sorting impulse*):	1Hz – 150Hz (  )

\*))depending on geometry and weight of parts