

## Technical Information 418

Innovative sorting- and supply-device for bulk material

### ZBV-Feeder



#### Advantages of the ZBV-Feeder

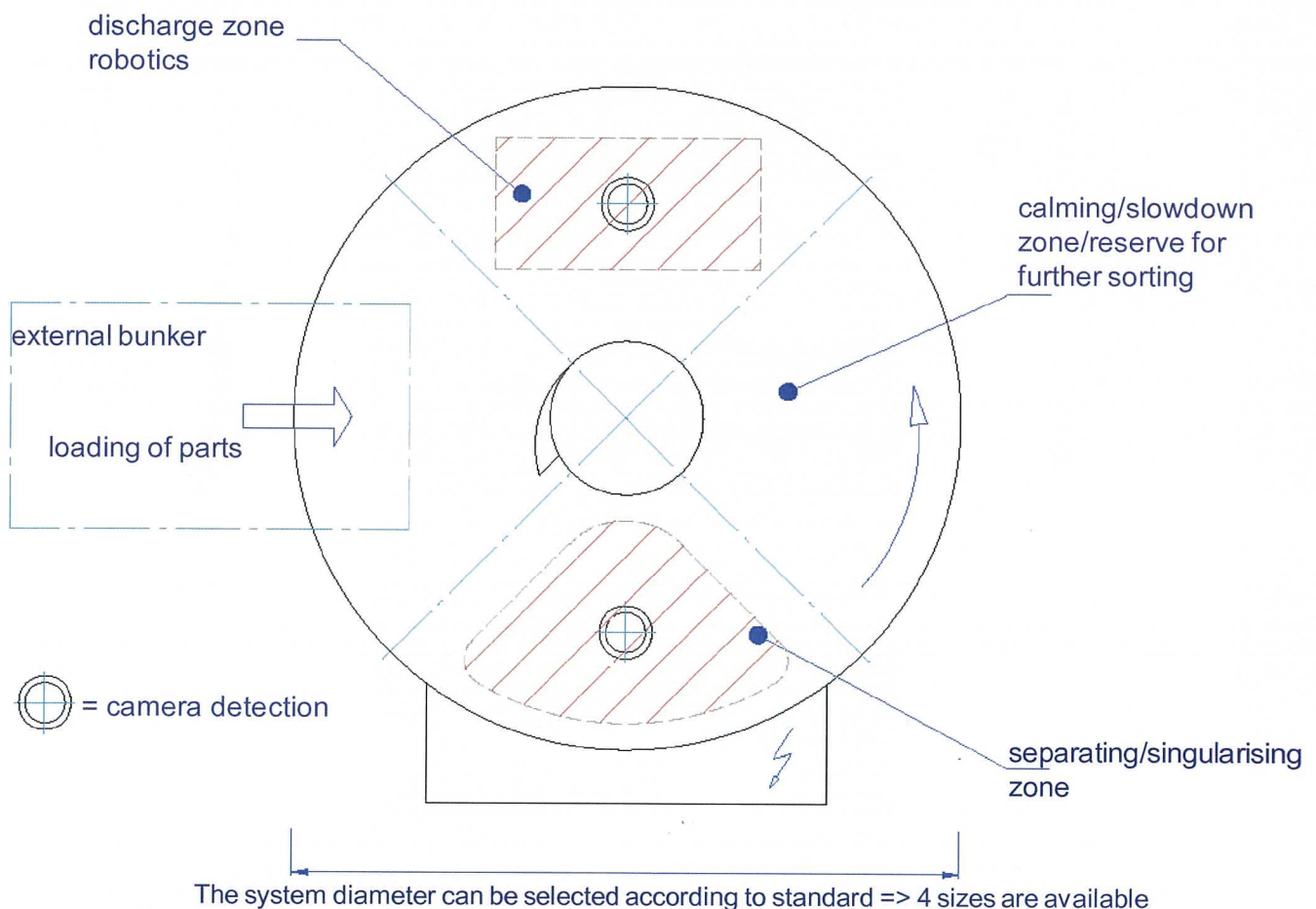
- High availability by decoupling the loading-, sorting- and discharging-process
- Cycle times of 60 parts/min. achievable (depending on parts)
- Gentle handling of parts
- Flexibly applicable for different part sizes (standard = 4 sizes of device feasible)
- Short changeover times (product change) as working range completely free
- Automated „safe“ emptying up to the last part (e.g. for batch tracing)
- Applicable -regardless the system- on all Scara- and jointed-arm-robots;  
scope of delivery with or without vision system
- Low-maintenance
- Pre-configured interfaces for actuation via bus- or I/O-level

## ZBV-Feeder: Innovative sorting- and supply-device for bulk material

The automation technology usually offers flexible feeding systems for part sorting of bulk material, where the single process steps up to the position-orientated supply are locally related to each other. This means that part-sorting/-orientation, camera illuminating and position detection of position-orientated parts can only take place successively. However, by waiting- and calming-/slowdown-times the availability of the parts, which can be picked up, is limited. In order to trap this negative effect on the machine performance - when you use usual market system solutions - often the intermediate buffering of parts is very complex or the supply solution is upgraded doubly.

The **ZBV-Feeder** has been designed to change this by a completely new sorting concept. The loading-, sorting- and discharge-process can be decoupled in any order, and it runs locally separated on a circular arc - at the same time. Thereby valuable cycle time can be saved, the parts availability with a system in use can be clearly increased, and thus the total productivity of the machine is higher. ZBV uses the experience of many years in the high-speed feeding field by using the centrifugal feeding technology (see **Technical Information 407**), and supplements with the **ZBV-Feeder** the product range of the feeding solutions for the medium range of performance/capacity.

This protected feeding solution is provided by the schematic construction of the **ZBV-Feeder**, which can be configured according to parts in different arrangements.



### ZBV Feeder 500/625/750 or 1000 mm

(dependant on part-geometry/-dimension as well as -center of gravity)

Image 1, sample application with 4 zones

The **ZBV-Feeder** can be purchased as a system block or as a complete solution, i.e. fully adjusted with camera system, including locator function and robot system.

A simple change of configuration (teaching) of the camera system and, e.g., integration of a grip-arm changing system at the robot enables to use parallelly the **ZBV-Feeder** for several product types or to re-use it after re-equipment/conversion.