DATASHEET

FlexiBowl® 500E C/CC

Flexible feeding system for all parts measuring between **1** and **50 mm** and weighing up to **100 g**

FlexiBowl® 500E C/CC can feed products of any geometry, surface and material.
It is compatible with all industrial robots and vision systems. One FlexiBowl® can feed entire ranges of parts measuring 1 to 50 mm and weighing up to 100 g, replacing the need for the numerous units used in conventional systems.


ADVANTAGES

- High performance
- Accurate location of parts
- Compatible with 99.9% of parts
- Suitable for delicate parts
- Maximum load 7 kg
- Large area for singulation and picking
- Essential design, robust construction
- Specifically engineered for small parts
- Remote-controlled electronics for dirty environments
- Patented
- Rapid, intuitive integration
- Low maintenance

HOW IT WORKS

Parts dropping, singulation and picking take place simultaneously in dedicated sectors. For greater productivity. In FlexiTrack, all four operations take place simultaneously.

DROPPING — A
SINGULATION — B
PICKING — C
RECIRCULATION — D
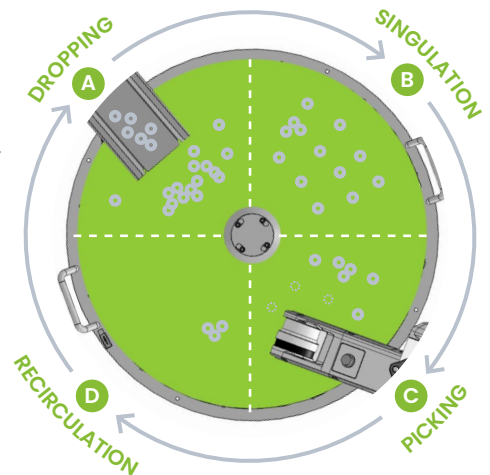
OPERATING MODES

Traditional

Parts are singulated by the combined action of bidirectional rotation and the pulse generator. Once the parts are separated, the robot uses the coordinates sent by the vision system to locate and pick them up, while the disc is not moving.
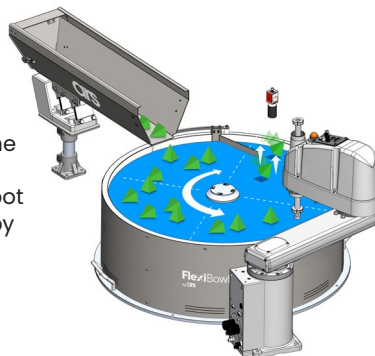
PRECISION	■■■■■	LAYOUT	■■■□□
PERFORMANCE	■■■■□	EASY TO INTEGRATE	■■■■□
SINGULATION	■■■■■		

FlexiTrack

FlexiTrack enables circular conveyor tracking of the FlexiBowl®. In the FlexiTrack mode, the vision system operates in the sector just ahead of the robot picking area; processing for the vision system and the robot is simultaneous.

PRECISION	■■■□□	LAYOUT	■■■■□
PERFORMANCE	■■■■■	EASY TO INTEGRATE	■■■□□
SINGULATION	■■■■□		

FlexiBowl® 500E C/CC
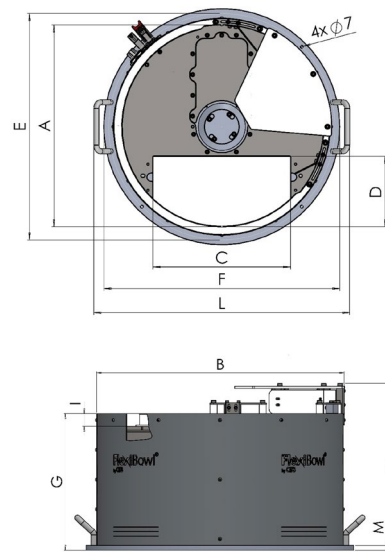
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SPECIFICATIONS

Dimensions of parts	1<x<50 mm
Weight of parts	<100 g
Backlit area	475 cm2
Load capacity	7 kg
Bulk feeder/hopper load capacity	10/20 dm3
Overall dimensions	640 mm
Picking height	270 mm
Installation temperature	5-45 °C
Installation position	Floor
Air pressure (dry and filtered)	6 bar – Ø 6 mm pipe
Electronic power supply	110-230 VAC
Red backlight wavelength	630 nm
Infrared backlight wavelength	850 nm
Absorption	150 W
Data connection	– Ethernet IP – Digital I/O – TCP/IP-UDP – Gateway for other protocols

DIMENSIONS

A	503 mm	G	296 mm
B	533 mm	H	362 mm
C	334 mm	I	28 mm
D	167 mm	L	629 mm
W	556 mm	M	10 mm
F	580 mm	Weight	42 Kg

Backlight area

ROTARY DISC TYPES

Including FDA-compatible and anti-static

Spike

Negative pyramid

Smooth

Silicone

Grooved

Custom

OPTIONAL ACCESSORIES

▸ Analog electro-pneumatic regulator
▸ Calibration plate
▸ Camera bracket base stand
▸ Custom grooved discs
▸ Diverters
▸ External swivel gripper
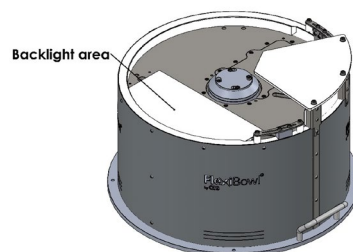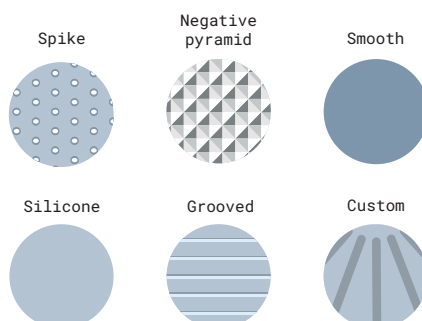▸ FlexiTrack
▸ Lighting (white, red, IR)
▸ Remote control box

PLUG-INS

FlexiBowl is compatible with all TCP/IP socket languages and offers plug-ins for a vast range of robots, including:
▸ ABB
▸ Denso
▸ Doosan
▸ Epson
▸ Fanuc
▸ Kawasaki
▸ Kuka
▸ Mecademic
▸ Mitsubishi Electric
▸ Omron
▸ Stäubli
▸ Techman Robot
▸ Universal Robots

PLC PLUG-INS AVAILABLE:

▸ Allen – Bradley
▸ Omron
▸ Siemens

CONTACTS