

# FLEXIBOWL<sup>®</sup> BY ars

Large  
challenges  
need simple  
solutions



## Ease and Reliability

A lean and reliable design  
guarantees predictable and low  
maintenance costs

## Flexibility and Productivity

An answer to complex  
demand for high performance  
and frequent product  
changeovers

## Resilience and Strength

Suitable for both  
harsh and clean  
environments

# FlexiBowl® A flexible part feeding system

FlexiBowl® is a flexible part feeding device that can be easily integrated with every robot and vision system. Entire families of parts within 1-250 mm and 1-250 g can be handled by a single FlexiBowl® replacing a whole set of dedicated traditional feeders. Its lack of dedicated tooling and its easy to use and intuitive programming software allows quick and multiple product changeovers inside the same work shift.

## APPLICATION FIELDS



### Fashion accessories and metal parts

Eyeglass components, Buckles, Buttons, Zip Fasteners, etc.



### Consumer Electronics

Appliance components, Computer, Cellular Phones, Remote Controls, etc.



### House and Personal Care

Perfume Dispensers, Spray Pumps, Dental Brushes, etc.



### Toys and Gadgets

Assembly kitting, loading of painting and pad printing machines, etc.



### Cosmetics

Mascara, Lipsticks, Powder Compacts, Brushes, Perfumes, etc.



### Electrical Components

Switches, connectors, fuse holders, electromagnetic components, coils, etc.



### Automobile

Switches, actuators, connectors, clips, suspension, gearbox, clutch, hydraulic fittings, etc.

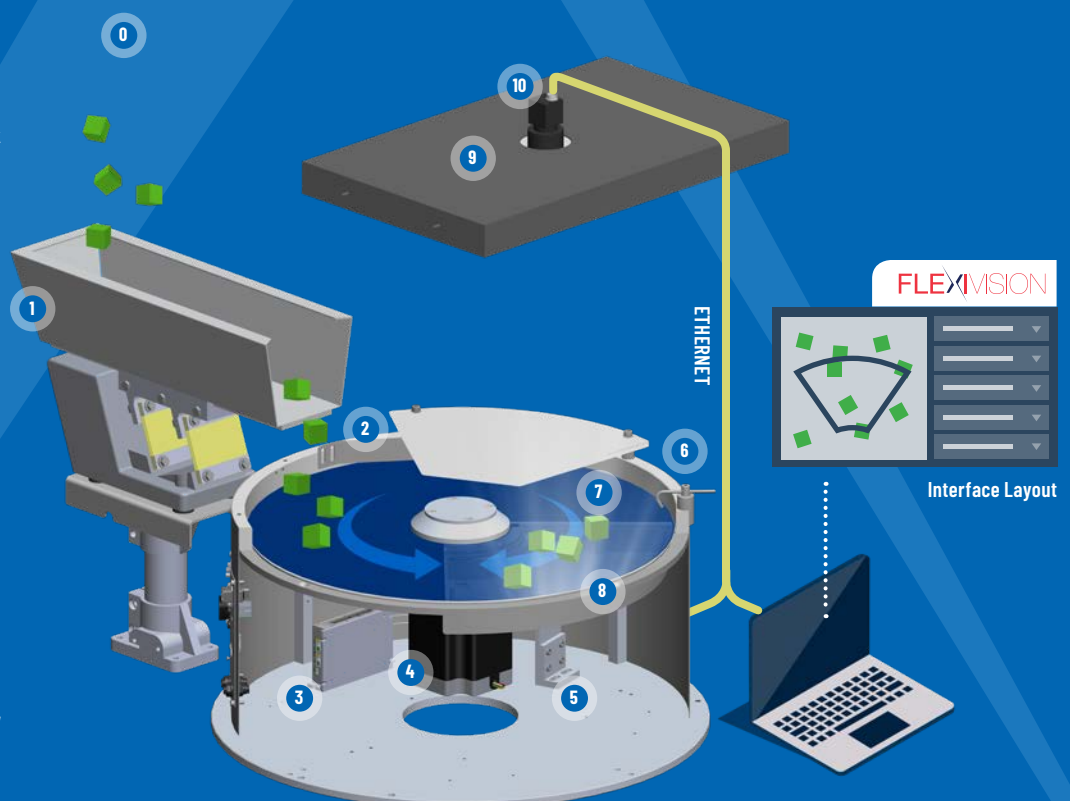


### Medical Disposables

Hypodermic needles & Syringes, Dentistry, etc.

## COMPONENTS

- 0 | **Motorized Hopper**  
Provides higher system capacity
- 1 | **Linear Hopper**  
Allows to dispense parts more accurately
- 2 | **Wiper**  
Diverts parts from outer wall, back under picking area
- 3 | **Servo drive**
- 4 | **Direct Drive Motor**
- 5 | **Flip Unit**  
Flips parts and helps distribution
- 6 | **Air Blow**  
To separate parts from the lateral sides
- 7 | **Belt Disk**  
Wide selection to provide the right grip, background contrast, easy to replace
- 8 | **Backlight**  
Infrared, red, white options
- 9 | **Toplight**  
Infrared, red, white options
- 10 | **FlexiVision vision robot guidance**  
Sends part coordinates to the robot. Controls feeder movements, manages the part flow from the hopper. Part database manager





# FlexiBowl® Four Sizes easily tailored to meet all your production requirements

## A VERSATILE SOLUTION

FlexiBowl® solution is highly versatile and able to feed a large variety of parts, differing by:

**Geometry** – curvilinear, complex tridimensional, thin

**Surface** – smooth, sticky, greasy, tangled

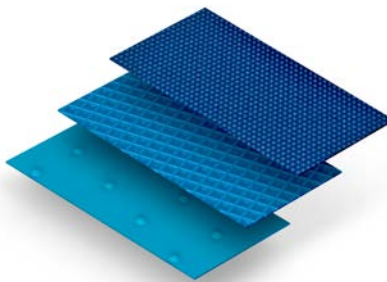
**Material** – fragile, silicon and rubber, conductive, pressed and sheared

**Weight and dimensions**

heavy, voluminous, small

## SURFACE OPTIONS

The rotating disk is available in various colours, textures, degrees of surface adhesion. Ars technical support can assist you to make the correct selection for your application.



## WHY CHOOSE FLEXIBOWL®

- › Feeds gently – ideal for delicate parts
- › Handles heavier parts in dirty environments
- › No Jams
- › Lean and reliable design
- › Low and predictable maintenance
- › Easy and intuitive programming
- › Suitable for precision assembly
- › Delivery in 4 weeks
- › Parts always available in stock
- › Patented



## MODEL SPECIFICATIONS

	FlexiBowl® 350	FlexiBowl® 500	FlexiBowl® 650	FlexiBowl® 800
Part size	< 15 mm	< 40 mm	< 110 mm	< 250 mm
Part weight	< 40 g	< 100 g	< 170 g	< 250 g
Backlight area size	177 cm <sup>2</sup>	475 cm <sup>2</sup>	900 cm <sup>2</sup>	1183 cm <sup>2</sup>
Backlight area size (Max. dimensions)	125/220 mm	205/360 mm	390/250 mm	390/315 mm
FlexiBowl Maximum load	3 kg	5 kg	5 kg	5 kg
Hopper Maximum load	5/10 dm <sup>3</sup>	10/20 dm <sup>3</sup>	20/40 dm <sup>3</sup>	20/40 dm <sup>3</sup>
Overall dimension / Height pick-up surface	Ø 460 / 240 mm	Ø 640 / 240 mm	Ø 800 / 270 mm	Ø 945 / 270 mm
Weight	25 kg	36 kg	51 kg	71 kg

PRODUCTIVITY  
**OVER**  
**9** PPM



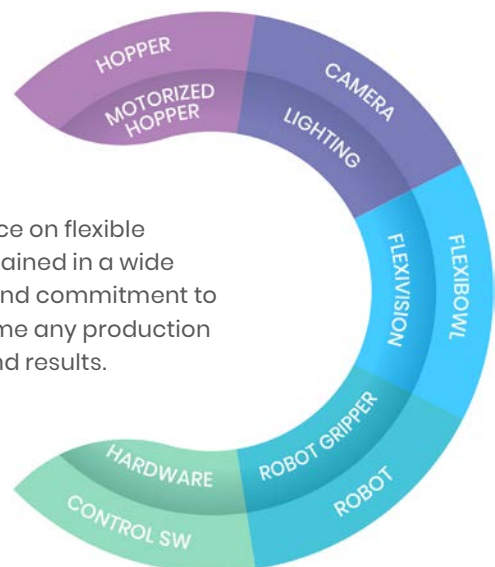
## FlexiBowl Solution®

### A turnkey system

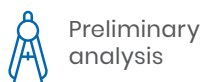
For the ARS Flexibowl solution we have deployed our long experience on flexible application solutions for precision assembly and parts handling, gained in a wide range of industrial fields. A constant cooperation with our clients and commitment to research and development, make ARS the ideal partner to overcome any production requirements. We are committed to achieve the highest quality and results.

#### COMPATIBLE WITH A WIDE CHOICE OF ROBOTS

- › ABB › AUBO › Denso › Epson › Fanuc › KUKA
- › Mitsubishi › Omron › Stäubli › Toshiba › UR › Yaskawa



#### OUR SERVICES



Preliminary analysis



Technical Support and Feasibility Test



Layout and Cycle Time optimization



Equipment Design



Real-time assistance and diagnose



Training



On-site support for system ramp-up



Remote Support



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ARS Automation