# New FlexiBowl® Options



### **Table of contents**

1	Bru	Ish Diverter Options	3
1	.1	Brush Diverter	3
1	.3	Brush Diverter for Central Flange	4
1	.5	Brush Diverter for Flip Cover	5
2	We	dge Diverter	6
2	2.1	Installation	6
3	Lift	Support	9
4	Mu	Itiple Sectors Rotary Disc	10
4	1.1	Installation	10
4	1.2	Timing	12
5	Adj	ustable Brush	13
Ę	5.1	Installation	13
6	Qui	ick Emptying Box	16
e	6.1	Installation	17
7	Ma	nual Emptying	19
7	.1	Operation	19
8	Air	Blow For Central Flange	21

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## 1 Brush Diverter Options

#### 1.1 Brush Diverter

The **Brush Diverter** option (see image below) is compatible with **FlexiBowl**<sup>®</sup> 500/650/800 models and is designed to move components away from the edge of the **FlexiBowl**<sup>®</sup> and towards the centre. It is usually placed before the flip unit to ensure that most of the parts are hit by the pulse.

It is usually preferred to the steel diverter when using components that tend to get stuck between the rotary disc and the metal diverter.

The two slots allow the deflection angle of the brush to be adjusted to suit each type of component



The unit must be fixed directly onto the retaining ring at the holes already present, using two M6 screws (see image below).



#### 1.3 Brush Diverter for Central Flange

The **Brush Diverter for Central Flange** option (see image below) is compatible with **FlexiBowl**<sup>®</sup> 500/650/800 models and is designed to move components away from the central flange to prevent them from building up around it. The slot allows the deflection angle of the brush to be adjusted to suit each type of component.



The screen and brush kit replaces the screen supplied with the **FlexiBowl®**. The screen is attached to the three rear turrets with M6 screws.



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#### **1.5 Brush Diverter for Flip Cover**

The **Brush Diverter for Flip Cover** option (see image below) is compatible with **FlexiBowl**<sup>®</sup> 500/650/800 models and has two different functions:

- to contain components that are shaken by the flip unit, thus preventing them from falling out of the FlexiBowl®
- to untangle and "lay down" components that tend to tangle with each other or assume an upright position during normal operation of the **FlexiBowl**<sup>®</sup>.



The screen and brush kit replaces the screen supplied with the **FlexiBowl®**. Fixing is done on the 3 rear turrets using M6 screws (see image below).



### 2 Wedge Diverter

The **Wedge Diverter** option (see image below) is compatible with **FlexiBowl**<sup>®</sup> 500/650/800 models in standard version (C-CC), it is not compatible with any Edge version (200E, 350E and 500E). This option is designed to move components away from the outer edge of the **FlexiBowl**<sup>®</sup> and is particularly suitable for parts that roll or slide easily.

The wedge diverter is installed on the **FlexiBowl**<sup>®</sup> table, below the rotary disc. This is a kind of wedge that gives the rotary disc a suitable slope so that the workpieces are brought inwards.



#### 2.1 Installation

Follow the steps below to install the **Wedge Diverter** option:

- Unscrew the central flange and remove the belt.
- Remove the two option holders and the upper cover screen of the flip area



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• Remove the top ring of the **FlexiBowl**<sup>®</sup> with the belt guiding edge. This type is not compatible with the **Wedge Diverter** option, so it must be replaced with a suitable one; remove all perimeter screws and slide the ring upwards.



- Install the ring, paying attention to its orientation. All installation holes in the option brackets must match the threads below as before.
- Reinstall the screen and only the option holder before the viewing area.



• Mount the external bulkhead with its supports starting from the last column supporting the screen.



• Mount the wedge in the hole provided, the 3 fixing slots allow you to customise the point and angle of divergence of the components.



• Reassemble the belt

### 3 Lift Support

The **Lift Support** option (see image below) is compatible with **FlexiBowl**<sup>®</sup> 500/650/800 models and is designed to lift custom perforated discs to handle components up to a maximum length of 100mm. The lifting system is compatible with all types of **Rotary Custom Disc**.



The lifting system consists of a guide ring attached directly to the **FlexiBowl**<sup>®</sup> table and a spacer (1) attached to the disc by means of the fixing screws on the **FlexiBowl**<sup>®</sup> disc premium flange (detail A).

The disc will be supported on the outside by ball-bearing sliding elements (2), fixed directly to the ring, which ensure correct positioning and smooth movement. Containment casings (3) prevent the parts from falling out during handling. These guards are fitted with a special slot that allows their height to be adjusted to suit all types of components (detail B). The unit is also equipped with a brush (4) and a perpendicular blower (5) to remove pieces that tend to accumulate along the external edges of the disc. The position of the blower can be adjusted via the slot in the fixing bracket, and the deflection angle and height of the brush can be changed as required via the slots provided.





Loosen the casing fixing screws, adjust the height of the containment casings, retighten the screws.

### 4 Multiple Sectors Rotary Disc

The **Multiple Sectors Rotary Disc** option is compatible with sizes 800/650/500 in standard version (C-CC), it is not compatible with any Edge version (200E, 350E and 500E). It allows several types of components to be fed simultaneously into the same FlexiBowl.



Depending on the requirements of the application, discs with:

- 2 x 180° sectors
- 3 x 120° sectors
- 4 x 90° sectors
- 6 x 60° sectors

Note: Discs can mount one or more different surfaces.

#### 4.1 Installation

Follow the steps below to install the **Multiple Sectors Rotary Disc** option:

• Unscrew the central flange and remove the belt.



• Remove the two option holders and the upper cover screen of the flip area.

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Remove top ring of FlexiBowl<sup>®</sup> with belt guiding edge. This type is not compatible with the Multiple Sectors Rotary
Disc option, so it must be replaced with a suitable one by removing all the perimeter screws and sliding the ring
upwards.



- Install the ring, paying attention to its orientation. All installation holes in the option brackets must match the threads below as before.
- Remove all diverters and fix the previously removed option supports.



- Install the Multiple Sectors Rotary Disc
- Refit the protective screen supports in the flip area.



• Mount the shield for the Multiple Sectors Rotary Disc option.



#### 4.2 Timing

In order to use the Multiple sectors rotary disc option, it is necessary to perform a timing operation to know the location of the various sectors. Timing must be carried out using a vision system that recognises the exact position of the hole in one of the disc spokes.



Note: It is very important that when the flip is operated the spokes never fall above this area (see image below).



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### 5 Adjustable Brush

The **Adjustable brush** option (see image below) is compatible with the **FlexiBowl**<sup>®</sup> 500/650/800 models and is designed to untangle and "lay down" components that tend to tangle with each other or assume an upright position during the normal operation of the **FlexiBowl**<sup>®</sup>. The option is equipped with a height adjustment system to suit each type of component.



#### 5.1 Installation

Follow the steps below to install the **Adjustable soft brush** option:

• Remove the screws that secure the option support



• Install the adjustable brush using the two holes on the option support.



• Secure the option to the support by tightening the two pins, there is a seat in the lower part of the pin for the flat spanner.



• Complete the installation by tightening the two screws located on the upper part.

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It is now possible to adjust the brush in height, proceed as follows:

• Loosen the two screws located on the side



• It is now possible to move the brush "up" or "down" to obtain the desired height. There is a graduated scale and a zero mark on the front of the brush for a more precise adjustment.



• Once adjusted, re-tighten the two screws located on the side.

# 6 Quick Emptying Box

The **Quick Emptying Box** option (see image below) is compatible with **FlexiBowl**<sup>®</sup> 500/650/800 models and is designed to guide the components that come out of the **FlexiBowl**<sup>®</sup> during the quick emptying phase.



**NB.** The Quick Emptying Box option is not designed to act as a piece collection system, but only to guide them as they come out of the FlexiBowl<sup>®</sup>. The end customer will be responsible for creating an opening on the table in correspondence with the box and to set up a collection system.

The Quick Emptying Box option is equipped with a height adjustment system that allows the emptying of components up to 75mm high.

Proceed as follows for the height adjustment.

• Loosen the four screws on the two sides of the box



• Set the desired height, in accordance with the dimensions of the components handled by the FlexiBowl®.



• Re-tighten the four screws on the two sides of the box

#### 6.1 Installation

The Emptying box option must be installed in correspondence with the portion of the mobile ring in the FlexiBowl® (see image below). Fastening must be done on the FlexiBowl® support table by means of two fastening blocks in the lower part of the box. The fastening blocks have the seat for an M6 screw.



There is a slide inside the box for guiding the components.

Proceed as follows for installation:

• Take the handle off the FlexiBowl®



• Install the slide using the two fastening holes used for the handle.



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### 7 Manual Emptying



The Manual emptying option is used to empty residual pieces from the FlexiBowl® before a production change. Piece removal is facilitated by the vertical sliding of a portion of the ring. An inductive sensor checks that the ring is closed before being able to restart normal operation of the FlexiBowl®.

#### 7.1 Operation

Proceed as follows to open the emptying bulkhead:

• Disengage the two pistons shown in the image



- Slide the part of the mobile ring downwards until it reaches the lower stop.
- Engage the two pistons in the appropriate seats.



In this condition, it is possible to evacuate the parts present in the FlexiBowl®.

#### After emptying:

• Disengage the two pistons in the low position.



- Slide the part of the mobile ring upwards until it reaches the upper stop.
- Engage the two pistons in the appropriate seats.



If the ring is closed correctly, the inductive sensor in the upper position will allow normal operation of the FlexiBowl® to resume

### 8 Air Blow For Central Flange

The **Air Blow for Central Flange** option (see image below) is compatible with **FlexiBowl®** 350/500/650/800 models and is designed to move away the components that accumulate in correspondence with the FlexiBowl® central flange.



The unit must be secured below the FlexiBowl® screen, using the two screws highlighted in the figure below.



A flow regulator is present at the rear with a Ø6mm tube inlet for the pneumatic connection.





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