## Technical Information

# **Enclosed Plate and Frame Filter BECO INTEGRA® PLATE 800 EP**



# Stainless Steel Chassis, Plastic Filter Plates, and Cake Frames

BECO INTEGRA PLATE 800 EP enclosed plate and frame filter from Eaton's Begerow Product Line is for critical filtration tasks in the pharmaceutical and biotech, chemical, cosmetics, and food industries.

BECO INTEGRA PLATE 800 EP is a multi-sheetfilter with an external chamber. The product channels are sealed with depth filter sheets only. The sealing of the whole filter package is realized by means of gaskets around the external chamber.



- **CIP** of filter package without depth filter sheets.
- Complete drainage of filter due to unique filter plate design.
- Safe operation: No drip loss due to sealed external chamber and automatic hydraulic pressure regulation.
- Easy handling and good cleanability thanks to ergonomic design of chassis, and open support grid of filter plates; cake discharge downwards into tray underneath of filter package.
- High flexibility: The filter can be used as a sheet filter or as a pre-coat filter. For precoating/removing of high particle load, cake frames in different widths are available.
- BECO INTEGRA PLATE 800 EP filter is designed and manufactured according to the cGMP guidelines and the FDA regulations.

Customization or additional components allow for system expansion or complete systems according to customer specifications.



| Operating pressure/temp.:    | max. 72 psi (500 kPa/5 bar)<br>at 104 °F (40 °C)<br>max. 29 psi (200 kPa/2 bar)<br>at 140 °F (60 °C) |
|------------------------------|--|
| Differential pressure/temp.: | max. 43 psi (300 kPa/3bar)<br>at 104 °F (40 °C)  |
| Filter area per sheet:       | 4.74 ft² (0.44 m²)   |





## Materials

| Product contacting parts: | Polypropylene/Stainless<br>steel AISI 316L |  |  |
|---------------------------|--|--|--|
| Other parts:              | Stainless steel AISI 304                   |  |  |
| Gaskets/O-rings:          | Silicone, EPDM<br>(FDA listed), Viton      |  |  |





| Туре   | Filte  | r area  | Cake volume* |        | Chassis<br>size | Filter plates/ cake frames | plates/ sheets cake 26.8 x 30.7 in |        | Weight  |  |
|--|--------|---------|--------------|--------|-----------------|----------------------------|------------------------------------|--------|---------|--|
|  | ft²    | (m²)    | gal          | (I)    |                 | qty                        | qty                                | ≈ Ib   | (kg)    |  |
| 800 SF plate and   | 236.80 | (22.00) | 43.59        | (165)  | 1               | 24/25                      | 50                                 | 7,672  | (3,480) |  |
| frame filter   | 388.36 | (36.08) | 71.59        | (271)  | 2               | 40/41                      | 82                                 | 8,323  | (3,775) |  |
| with 0.79" (20 mm)   | 539.92 | (50.16) | 99.33        | (376)  | 3               | 56/57                      | 114                                | 8,984  | (4,075) |  |
| cake frames  | 710.42 | (66.00) | 130.77       | (495)  | 4               | 74/75                      | 150                                | 9,656  | (4,380) |  |
| 800 ASF frame  | 208.39 | (19.36) | 63.93        | (242)  | 1               | 21/22                      | 44                                 | 7,937  | (3,600) |  |
| filter   | 331.53 | (30.80) | 101.71       | (385)  | 2               | 34/35                      | 70                                 | 8,488  | (3,850) |  |
| with 1.18" (30 mm)   | 464.14 | (43.12) | 142.39       | (539)  | 3               | 48/49                      | 98                                 | 9,149  | (4,150) |  |
| cake frames  | 606.22 | (56.32) | 185.98       | (704)  | 4               | 63/64                      | 128                                | 9,811  | (4,450) |  |
| 800 ASF frame  | 179.97 | (16.72) | 77.40        | (293)  | 1               | 18/19                      | 38                                 | 8,102  | (3,675) |  |
| filter   | 284.17 | (26.40) | 122.05       | (462)  | 2               | 29/30                      | 60                                 | 8,598  | (3,900) |  |
| with 1.57" (40 mm) cake frames                               | 397.83 | (36.96) | 170.92       | (647)  | 3               | 41/42                      | 84                                 | 9,149  | (4,150) |  |
|  | 530.45 | (49.28) | 237.12       | (862)  | 4               | 55/56                      | 112                                | 9,866  | (4,475) |  |
| 800 ASF frame<br>filter<br>with 2.36" (60 mm)<br>cake frames | 142.08 | (13.20) | 95.90        | (363)  | 1               | 14/15                      | 30                                 | 8,154  | (3,700) |  |
|  | 227.33 | (21.12) | 53.22        | (580)  | 2               | 23/24                      | 48                                 | 8,763  | (3,975) |  |
|  | 312.58 | (29.04) | 210.81       | (798)  | 3               | 32/33                      | 66                                 | 9,326  | (4,230) |  |
|  | 416.78 | (38.72) | 281.34 (     | 1,065) | 4               | 43/44                      | 88                                 | 10,031 | (4,550) |  |

<sup>\*</sup> usable cake volume

# Filter Plates/Cake Frames

|                        | Width     | Cake<br>volume* | Weight      |  |  |
|------------------------|-----------|-----------------|-------------|--|--|
|                        | in (mm)   | gal (I)         | lb (kg)     |  |  |
| Initial /<br>end plate | 1.10 (28) |                 | 38.6 (17.5) |  |  |
| Filter plate           | 1.10 (28) |                 | 33.1 (15.0) |  |  |
| Cake frame             | 0.79 (20) | 1.74 (6.6)      | 12.1 (5.5)  |  |  |
| Cake frame             | 1.18 (30) | 2.91 (11.0)     | 17.6 (8.0)  |  |  |
| Cake frame             | 1.57 (40) | 4.07 (15.4)     | 23.1 (10.5) |  |  |
| Cake frame             | 2.36 (60) | 6.39 (24.2)     | 35.3 (16.0) |  |  |

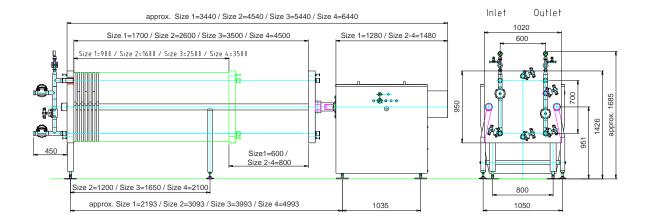
<sup>\*</sup> usable cake volume

# Connections

| Filter inlet:     | TC 2" ISO2852/ASME BSP |
|-------------------|------------------------|
| Filter outlet:    | TC 2" ISO2852/ASME BSP |
| External chamber: | TC 2" ISO2852/ASME BSP |

# **Other Connections**

Threaded connections according to DIN 11851/11864



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