General Information

The FlexWall®Plus FW80/6 feeder is ideal for free flowing bulk ingredients. The feeder has the following main components: a stainless steel trapezoidal housing, flexible polyurethane trough with a large cross-section, a screw, a screw tube, 3 phase motor and a trapezoidal extension hopper with volumes of 100 dm³ (3.53 cuft) or 200 dm³ (7.06 cuft).

The shape of the trough provides a consistent screw filling and mass flow without ingredient deterioration.

Screw removal of the FW80/6 is from the front only.

The FlexWall®Plus is easily disassembled for wet or dry cleaning as the polyurethane hopper that is attached to the housing is easily removed. Moreover, the compact trapezoidal shape allows up to 6 feeders to be arranged around a central feed point. Service can be from the front or back.

The gravimetric version includes the analog weighing system MS6, or the digital weighing systems DLS6 (Digital Load System) or MD6 (for highest measurement accuracy), both featuring a high resolution robust digital load cell with serial data transmission and advanced filtering technology.

The unit conforms to CE directives.

Model Specification

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screw drive</td>
<td>fixed</td>
</tr>
<tr>
<td>Drive power</td>
<td>0.37 kW (0.5 HP)</td>
</tr>
<tr>
<td>Screw speed</td>
<td>198 min⁻¹</td>
</tr>
<tr>
<td>Screw speed optional</td>
<td>346 min⁻¹</td>
</tr>
<tr>
<td>Massage paddles</td>
<td>no</td>
</tr>
</tbody>
</table>

Control modules

Control and speed modules are offered either mounted onto the feeder (Congrav® CM-E) or are available for mounting in a separate control panel (Congrav® CB-E or Congrav® CB-S).

Controls can communicate directly to most host/PLC systems or to Brabender Technologie Congrav® Operator Interfaces.

Technical Drawings and Dimensions

<table>
<thead>
<tr>
<th>Hopper Volume</th>
<th>Volumetric Feeder</th>
<th>Control module CB</th>
<th>Control module CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 dm³</td>
<td>FW80/6-100</td>
<td>DDW-DLS(MD)(S)6-FW80/6-100</td>
<td>DDW-DLS(MD)(S)6-FW80/6-100 CM</td>
</tr>
<tr>
<td>200 dm³</td>
<td>FW80/6-200</td>
<td>DDW-DLS(MD)(S)6-FW80/6-200</td>
<td>DDW-DLS(MD)(S)6-FW80/6-200 CM</td>
</tr>
</tbody>
</table>
Depending on the flow characteristics the screw filling level may decrease to 50%.

Options and Accessories
- Flexible inlet and vent connections
- Interchangeable screws and screw tubes
- BagDumper (for manual refilling)
- DESTACO clamping fasteners with and without safety switch
- Versions for higher and lower temperatures than standard
- Explosion-proof versions as per directive 2014/34/EU (ATEX) or NFPA
- FlexWall® Plus with Hygienic Design (HD) as per directive 1935/2004 or FDA

Screw type | Designation Ø / p [mm] | Tube designation | Tube dia. [mm] | Max. speed [min⁻¹] | Max. feed rate * [dm³/h] | Max. feed rate* [cuft/hr]
---|---|---|---|---|---|---
**Spiral screw (S)** | 443 | 843 | 48.3x2.0 | 198 (346) / 100Hz | 380 (663) | 13.4 (23.4)
| 443 | 843 | 48.3x2.0 | 198 (346) / 100Hz | 635 (1110) | 22.4 (39.2)
| 563 | 843 | 60.3x2.0 | 198 (346) / 100Hz | 821 (1433) | 29 (50.6)
| 563 | 843 | 60.3x2.0 | 198 (346) / 100Hz | 1391 (2431) | 49.1 (85.9)
| 715 | 843 | 76.1x1.3 | 198 (346) / 100Hz | 1665 (2911) | 58.8 (102.8)
| 715 | 843 | 76.1x1.3 | 198 (346) / 100Hz | 2745 (4796) | 96.9 (169.4)
| 843 | 843 | 88.9x2.3 | 198 (346) / 100Hz | 2357 (4120) | 83.2 (145.5)
| 843 | 843 | 88.9x2.3 | 198 (346) / 100Hz | 4499 (7863) | 158.9 (277.7)
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**Spiral screw (S)** for granules | 443 | 843 | 48.3x2.0 | 198 (346) / 100Hz | 521 (910) | 18.4 (32.1)
| 443 | 843 | 48.3x2.0 | 198 (346) / 100Hz | 863 (1509) | 30.5 (53.3)
| 563 | 843 | 60.3x2.0 | 198 (346) / 100Hz | 1191 (2081) | 42.1 (73.5)
| 563 | 843 | 60.3x2.0 | 198 (346) / 100Hz | 2003 (3499) | 70.7 (123.6)
| 843 | 843 | 88.9x2.3 | 198 (346) / 100Hz | 2155 (3766) | 76.1 (133)
| 843 | 843 | 88.9x2.3 | 198 (346) / 100Hz | 3537 (6180) | 124.9 (218.3)
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**Blade Screw (B)** Stainless Steel | 443 | 843 | 48.3x2.0 | 198 (346) / 100Hz | 311 (543) | 11.9 (20.2)
| 443 | 843 | 48.3x2.0 | 198 (346) / 100Hz | 465 (813) | 16.4 (28.7)
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**Blade Screw (B)** Polyurethan | 563 | 843 | 60.3x2.0 | 198 (346) / 100Hz | 797 (1393) | 28.1 (49.2)
| 563 | 843 | 60.3x2.0 | 198 (346) / 100Hz | 1279 (2234) | 45.2 (78.9)
| 843 | 843 | 88.9x2.3 | 198 (346) / 100Hz | 2280 (3985) | 80.5 (140.7)
| 843 | 843 | 88.9x2.3 | 198 (346) / 100Hz | 4193 (7328) | 148.1 (258.8)

Technical specification
- Ambient temperature: 0°C to +45°C (32°F to 113°F)
- Humidity of the air: up to 85% without condensation
- max. vacuum/pressure: 3 HPa (3 mbar) (1.2 inches of water)
- Product temperature: 0°C to +50°C (32°F to 122°F)
- max. bulk density (volumetric): 1.5 kg/dm³ * (94 lb/cuft)
- Max. bulk density (gravimetric): 1.0 kg/dm³ (64 lb/cuft)
- Flexible screw trough: polyurethane, food-proof acc. to LMBG*
- Housing, extension hopper, hopper lid: Hopper lid for automatic refilling with vent pipe or manual refilling
- Screws, screw tubes, outlets: 1.4301 (304 SS)
- Non-contact components: Aluminum, plated or painted steel (RAL 7035)
- Power supply: AC 230/400 V (110VAC/460VAC) 50Hz** or 266/460 V (230/460VAC) - 60Hz
- Net weighing range DLS6/MD6: 238 kg (524.7 lb) with hopper 100 dm³ (3.53 cuft)
- Net weighing range M56: 208 kg (458.5 lb) with hopper 200 dm³ (7.06 cuft)

Options and Accessories
- Flexible inlet and vent connections
- Flexible outlet connections
- BagDumper (for manual refilling)
- DESTACO clamp fasteners with and without safety switch
- Versions for higher and lower temperatures than standard
- Explosion-proof versions as per directive 2014/34/EU (ATEX) or NFPA
- FlexWall®Plus with Hygienic Design (HD) as per directive 1935/2004 or FDA
- Screw extension 300 mm (11.81 inches) (not for blade and fiber screws)
- Vertical outlet with quick release
- Maintenance disconnect box
- Filter bag or JetFilter, for vent pipe
- Turntable or cart mounting
- Pressure compensation for the outlet, and/or feeder hopper
- Cleaning and refill systems upon request

* Theoretical values at 100% screw filling level and motor speed. Depending on the flow characteristics the screw filling level may decrease to 50%.
Further limitations must be considered for gravimetric feeding, as max. speed should be reduced to allow for bulk density variations.

**alternatively also available as stainless steel version

How to read the table of screws

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