General Information

The DVT45 is an ideal feeder for granules and free flowing bulk materials.

The feeder has the following main components:
A freestanding integrated scale with high resolution strain gauge or digital load cell, a support frame with integrated hopper with the volumes of 15 dm³ (0.53 cuft) or 30 dm³ (1.06 cuft) and a vibrating tray mounted in the frame with electromagnetic controlled vibrating drive.

The tray design provides uniform feed for fragile ingredients due to its vibrating principle of operation which gently discharge material.

The electromagnetic vibrating drive features amplitude feedback, ensuring linear feed rate over the entire range.

All modules are fully mounted and internally wired on terminal boxes. The DVT45 can be supplied with integrated control modules.

The gravimetric version includes the weighing system MS3 with strain gauge load cell as well as MD3 featuring a high resolution digital load cell with serial data transmission with advanced filtering technology.

The unit conforms to CE directives.

Model Specification

<table>
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<tr>
<th>DDW-MS3-DVT45-15 CM</th>
<th>Loss-in-weight feeder</th>
</tr>
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<tr>
<td>DDW-MS3-DVT45-15 CM</td>
<td>Weighing system</td>
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<td>DDW-MS3-DVT45-15 CM</td>
<td>Vibrating tray and width (mm)</td>
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<td>DDW-MS3-DVT45-15 CM</td>
<td>Hopper volume (dm³)</td>
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<td>DDW-MS3-DVT45-15 CM</td>
<td>Control module</td>
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<td>Feeding principle</td>
<td>Vibrating Tray</td>
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<tr>
<td>Drive</td>
<td>Electromagnetic vibrating drive</td>
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<tr>
<td>Diode voltage</td>
<td>162 V</td>
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<td>Tray frequency</td>
<td>50 Hz</td>
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<td>Enclosure protection</td>
<td>IP65</td>
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<td>Trough width</td>
<td>45 mm (1.8 in)</td>
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<td>Noise level</td>
<td>53 dB</td>
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<tr>
<td>Mains voltage</td>
<td>230 V</td>
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<tr>
<td>Active power</td>
<td>10 W</td>
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</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.
# Vibrating Tray Feeder

**DDW-M-DVT45**

## Technical Drawings and Dimensions

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<th>Gravimetric feeder</th>
<th>Control module CB</th>
<th>Control module CM</th>
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<tr>
<td>15 dm³ (0.53 cuft) Hopper</td>
<td>DDW-MD(S)3-DVT45-15</td>
<td></td>
<td>DDW-MD(S)3-DVT45-15 CM</td>
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<tr>
<td>30 dm³ (1.06 cuft) Hopper</td>
<td>DDW-MD(S)3-DVT45-30</td>
<td></td>
<td>DDW-MD(S)3-DVT45-30 CM</td>
</tr>
</tbody>
</table>

## 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)

**Ingredient temperature:**
0°C to + 60°C (32°F to 140°F)

**Max. feed rate:**
450 dm³/h **

**Min. feed rate:**
20 dm³/h **

**Max. bulk density:**
1.5 kg/dm³ *

**Trough, outlet, hopper, hopper lid:**
1.4301 (304 SS)

**Non-contact components:**
1.4301 (304SS) steel galvanized or painted light grey (RAL 7035)

**15 dm³ Hopper or 30 dm³ Hopper**
Hopper lid for automatic refilling or manual refilling

**Vibrating drive**
Diode voltage 162 V, frequency 50 Hz, IP65, Active power 10W, Noise level 53 dB

**Power supply**
AC 230/400 V (110VAC/460VAC)- 50Hz

**Net weighing range MD3:**
31 kg (68.3 lb) with hopper 15 dm³ (0.53 cuft); 27 kg (59.5 lb) with hopper 30 dm³ (1.06 cuft)

**Net weighing range MS3:**
36 kg (79.4 lb) with hopper 15 dm³ (0.53 cuft); 32 kg (70.5 lb) with hopper 30 dm³ (1.06 cuft)

**Other values upon request**
**Reference medium:** plastic granulate, free-flowing, bulk density 0.5 kg/dm³, grain size 4 mm. For other dosing media, reductions in capacity must be taken into account.

### Options and Accessories

- Flexible inlet and vent connections
- Flexible outlet connections
- Explosion-proof versions as per directive 2014/34/EU, (ATEX II 2D/-- Ex h IIB T150°C Db/--)
- Hygienic Design versions
- Filter bag or JetFilter for vent pipe
- Pressure compensation
- Turntable, Cart mounting, inertia base
- Higher or lower temperature versions