For this feeder, be sure to use the electromagnetic feeder dedicated controller.

Do not use any controller other than electromagnetic feeder dedicated controller.

Safety Precautions

Before Using

- Use this feeder at ambient temperatures ranging from 0 to 40 ℃.
- Do not install this feeder at any hot and humid place but at a well-ventilated indoor place.
- Do not retrofit this feeder. Using this feeder with retrofitting could cause failure or breakage to this feeder.
- Do not place this feeder in or on piles for storage or transportation, as it could cause breakage not only to itself but also to other equipment.
- Do not work with this feeder in the live status, or you could have an accident.

Structure and Each Part Name

- The feeder was broken apparently by improper usage.
- The feeder was disassembled or retrofitted by the user.
- The feeder was broken by force majeure (e.g., fire, earthquake, flood).

Specifications

- For MB-630D/700D models, be sure to use the inverter controller.

Mounting the Bowl Feeder

- Mount the bowl on the vibrator.

Bowl mounting reference table

- For BFC of MB-390D or smaller-numbered, there is no need to use the center bolt for fixing.

Specified core gap

- Adjust the leaf springs can cause change in core gap.
- Loosen the magnet fixing bolts (2 locations) and readjust the core gap using the magnet adjusting bolts (4 locations).

Warranty

- The warranty period shall be 12 months from the date of delivery (provided that the feeder is operated 8 hours a day).
- In any of the following cases, the warranty shall not be applied:
  a. The feeder was disassembled or retrofitted by the user.
  b. The feeder was broken apparently by improper usage.
  c. The feeder was broken by force majeure (e.g., fire, earthquake, flood).
  d. Expendables (e.g., rubber leg, leaf spring, mounting bolt)
  e. Repair with payment shall be fixed through deliberations with us, and the repair charge shall be invoiced by us.

Adjusting the frequency with leaf springs

- Procedures for adjusting the vibration (frequency)
  ① Mount the bowl. (Mount all parts to be fixed to the bowl.)
  ② Fix the bowl feeder to the base or the like having sufficient rigidity (so that the vibrating part does not interfere with any peripheral parts).
  ③ Confirm that the bowl feeder and other bolts are not loose.
  ④ Turn ON the controller and raise the input to around the middle of the scale.
  ⑤ Check whether the current leaf spring composition is appropriate or not.
  ⑥ If the vibration is increased by losing the bolt, remove the leaf spring one by one.
  ⑦ If the vibration is decreased by losing the bolt, add the leaf spring(s).
  ⑧ Ensure that the bolt has enough thread exposed. Use longer bolts as necessary.
  ⑨ Repeat the step ⑤ for adjustment until the maximum vibration is achieved with the minimum input (at a low scale point of the controller).
  ⑩ The composition of the leaf springs should be approximately equivalent for each set.
  ⑪ Adjusting the leaf springs may cause change in core gap.
  ⑫ Loosen the magnet fixing bolts (2 locations) and readjust the core gap using the magnet adjusting bolts (4 locations).

Thank you for purchasing BFC Parts Feeder. To ensure the right usage, please read this manual carefully before using. Also, please deliver this manual to the end user.
Thank you for purchasing BFC Parts Feeder. To ensure the right usage, please read this manual carefully before using. Also, please deliver this manual to the end user.

1. Before Using

- **Controller**
  - For this feeder, be sure to use the electromagnetic feeder dedicated controller.
  - Do not use any controller other than electromagnetic feeder dedicated controller.

- **Safety Precautions**
  - Do not work with this feeder in any place where there is a dangerous material (e.g., ignitable material, inflammable material). Since it is not of explosion-proof type, using this feeder in such place could cause ignition or inflammation.
  - When welding the bowl, be sure to disconnect the controller and ground the bowl firmly beforehand.
  - When placing this feeder on or near places for storage or transportation, or this feeder could drop, causing injury or breakage.
  - Do not damage the lead wire, or fire or electric shock could be caused by short circuit.
  - Connect an earth wire to this feeder before using.

2. Wiring and Operation

- **Make connection to the electromagnetic feeder dedicated controller.**
- Frequency and voltage are adjusted at the leaf spring or the controller to achieve the optimum vibrations.

3. Structure and Each Part Name

4. Specifications

<table>
<thead>
<tr>
<th>Vibration</th>
<th>Max unit mass (kg)</th>
<th>Max power consumption (W)</th>
<th>Max. bowl diameter (φ)</th>
<th>Max. bowl mass (kg)</th>
<th>Applicable controller</th>
</tr>
</thead>
<tbody>
<tr>
<td>MB-230D</td>
<td>24</td>
<td>120</td>
<td>370</td>
<td>6</td>
<td>EWC-003</td>
</tr>
<tr>
<td>MB-390D</td>
<td>78</td>
<td>400</td>
<td>620</td>
<td>20</td>
<td>110-30V0 (recommended)</td>
</tr>
<tr>
<td>MB-460D</td>
<td>127</td>
<td>540</td>
<td>760</td>
<td>30</td>
<td>110-30V0 (recommended)</td>
</tr>
<tr>
<td>MB-610D</td>
<td>260</td>
<td>900</td>
<td>1000</td>
<td>50</td>
<td>110-30V0 (recommended)</td>
</tr>
<tr>
<td>MB-700D</td>
<td>330</td>
<td>930</td>
<td>1200</td>
<td>70</td>
<td>110-30V0 (recommended)</td>
</tr>
</tbody>
</table>

For MB-630D/700D models, be sure to use the inverter controller.

5. Mounting the Bowl Feeder

6-1. The vibration main unit is supported by the vibration-isolating rubber legs. Position and fix the vibration-isolating rubber legs so that the vibrator can be positioned horizontally via the frame and the mounting base.

- **Bowl mounting reference table**
  - **Vibrators**
  - **Mounting method**
  - **Center bolt (M12)**
  - **Center bolt (M15)**

7. Adjusting the frequency with leaf springs

8. Warranty

1. The warranty period shall be 12 months from the date of delivery (provided that the feeder is operated 8 hours a day).

2. In any of the following cases, the warranty shall not be applied:
   - The feeder was disassembled or retrofitted by the user.
   - The feeder was broken apparently by improper usage.
   - The feeder was broken by force majeure (e.g., fire, earthquake, flood).
   - Expendables (e.g., rubber leg, leaf spring, mounting bolt)

3. Repair with payment shall be fixed through deliberations with us, and the repair charge shall be invoiced by us.

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**BFC Co. Ltd., Sales Division**

Head Office: Tel: +81-567-56-2550 Fax: +81-567-56-2552

Tokyo Office: Tel: +81-6-4806-4777 Fax: +81-6-4806-4778

Osaka Office: Tel: +81-6-4806-4777 Fax: +81-6-4806-4778

Hanbabara 2nd Bldg.702, 4-11-27 Kashiwakamia Yodogawa-ku, Osaka, 532-0011 Japan

**BFC Applications, Ltd.**

Tokyo Office: Tel: +81-3-5905-7160 Fax: +81-3-5905-7161

MB-315, 3-4-2, Higashizumio, Nerima-ku, Tokyo 178-0063 Japan

This manual is subject to change without notice for upgrading.