MIXING AND GRINDING | IKA MultiDrive basic and control
MultiDrive basic and control

/// The all-rounder in coarse and fine crushing

Regardless of whether samples are hard, soft or fibrous – the IKA MultiDrive crusher can perform a wide range of crushing tasks involving coarse and fine crushing, thanks to the variety of vessels available. With the MultiDrive basic it is possible to mix or grind; MultiDrive control is also fitted with a dispersion vessel and a disposable tube. There is a USB interface available for easy actuation and documentation respectively.

For each grinding task the right vessel

**MULTIDRIVE BASIC**
- MultiDrive BL 2000
  - Ident. No. 0025003961
- MultiDrive MI 250
  - Ident. No. 0025003967
- MultiDrive MI 400
  - Ident. No. 0025003965

**MULTIDRIVE CONTROL**
- MultiDrive BL 2000 T*
  - Ident. No. 0025003962
- MultiDrive MI 250 T*
  - Ident. No. 0025003968
- MultiDrive MI 400 T*
  - Ident. No. 0025003966
- MultiDrive DI 2000 T*
  - Ident. No. 0025003960
- MultiDrive MT 150
  - Ident. No. 0025007130
- MultiDrive BT 250
  - Ident. No. 0025007131

*Vessels include temperature sensor. Measurements can only be evaluated and displayed with MultiDrive control.
MultiDrive basic
Ident. No. 0025002638

High performance

Excellent crushing performance is guaranteed by a combination of variable rotational speeds, ranging from 3000 rpm to 20 000 rpm, and a 1000 Watt output.

Interval operation

The option of interval programming is simple to activate at the press of a button. Interval operation is an asset during the coarse crushing of hard samples or for extra thorough blending.

Integrated cooling

A cooling system is integrated in the milling cup, which allows indirect heat dissipation. Thus, coolant and sample remain separate.

Industries

Coarse and fine crushing plays a role in a diverse range of industries. The all-rounder MultiDrive therefore is ideally oriented for various crushing tasks in the following fields of application:

- FOOD, e.g. meat, wheat, seeds, chocolate
- BIOMASS, e.g. wood pellets, silage, algae
- PHARMACY / MEDICINE, e.g. tablets, bones, skin
- BIOLOGY, e.g. genetically modified organisms, leaves, tissue
MultiDrive control

Ident. No. 0025002643

TFT-display

A clear TFT-display guarantees user-friendly operation.

Temperature measurement

MultiDrive control offers temperature measurement and vessel recognition using RFID. A temperature limit can be set for temperature-sensitive materials, or for specific planned reactions to protect against overheating.

Weighing function

The weighing function is also integrated into the user-friendly workflow of the IKA MultiDrive control. Weighing is performed before crushing using the same mixing cup, so that no transfer of contents is required.

Vessels are not included in the scope of delivery
## Technical data MultiDrive basic and control

<table>
<thead>
<tr>
<th>TECHNICAL DATA</th>
<th>MultiDrive basic</th>
<th>MultiDrive control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating principle</td>
<td>Cutting / impact</td>
<td>Cutting / impact</td>
</tr>
<tr>
<td>Feed hardness max.</td>
<td>5 Mohs (9 Mohs with hard metal knife)</td>
<td>5 Mohs (9 Mohs with hard metal knife)</td>
</tr>
<tr>
<td>Feed grain size max.</td>
<td>BL: 50 mm&lt;br&gt;MI: 7 mm</td>
<td>BL: 50 mm&lt;br&gt;MI: 7 mm&lt;br&gt;MT/MT: 10 mm</td>
</tr>
<tr>
<td>Useable volume max.</td>
<td>BL: 2000 ml&lt;br&gt;MI: 250 ml / 400 ml</td>
<td>BL:DI: 2000 ml&lt;br&gt;MI: 250 ml / 400 ml&lt;br&gt;MT: 150 ml&lt;br&gt;B: 250 ml</td>
</tr>
<tr>
<td>Material of grinding vessels</td>
<td>BL: PCTG&lt;br&gt;MI: Stainless steel</td>
<td>BL/DI/MT/MT: PCTG&lt;br&gt;MI: Stainless steel</td>
</tr>
<tr>
<td>Material beater / cutter</td>
<td>BL / MI: Stainless steel&lt;br&gt;MI: Hard metal</td>
<td>BL / DI / MT / BT: Stainless steel&lt;br&gt;MI: Hard metal</td>
</tr>
<tr>
<td>Speed</td>
<td>Min. 3000 rpm&lt;br&gt;Max. 20 000 rpm</td>
<td>Min. 3000 rpm&lt;br&gt;Max. 20 000 rpm</td>
</tr>
<tr>
<td>Setting of operation time</td>
<td>0 – 5 min</td>
<td>0 – 5 min</td>
</tr>
<tr>
<td>Timer / Counter</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Intermittent operation</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Programmable</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Cooling water connection by milling chamber</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Milling with dry ice by milling chamber</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Temperature measurement</td>
<td>No</td>
<td>Yes*</td>
</tr>
<tr>
<td>Vessel recognition</td>
<td>No</td>
<td>Yes*</td>
</tr>
<tr>
<td>Weighing function</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### GENERAL DATA

<table>
<thead>
<tr>
<th>Voltage</th>
<th>220 – 240 V</th>
<th>220 – 240 V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequenz</td>
<td>50 / 60</td>
<td>50 / 60</td>
</tr>
<tr>
<td>Motor</td>
<td>brushless</td>
<td>brushless</td>
</tr>
<tr>
<td>Motor rating input</td>
<td>1 000 W</td>
<td>1000 W</td>
</tr>
<tr>
<td>Motor rating output</td>
<td>800 W</td>
<td>800 W</td>
</tr>
<tr>
<td>Display</td>
<td>LCD</td>
<td>TFT</td>
</tr>
<tr>
<td>USB interface</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Bluetooth</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Weight</td>
<td>10 kg</td>
<td>10 kg</td>
</tr>
<tr>
<td>Dimensions (W × H × D)</td>
<td>300 × 450 × 250 mm</td>
<td>300 × 450 × 250 mm</td>
</tr>
<tr>
<td>Permissible ambient temperature</td>
<td>5 – 40 °C</td>
<td>5 – 40 °C</td>
</tr>
<tr>
<td>Protection class according to DIN EN 60529</td>
<td>IP 31</td>
<td>IP 31</td>
</tr>
</tbody>
</table>

*Only for vessels with “T”*
Additional products

If required, the following IKA devices are available for your lab to enhance crushing with your IKA MultiDrive:

Tube Mill control
Batch Mill
Ident. No. 0004180000

RC 2 basic
Recirculating chiller
Ident. No. 0004171000

Accessories MultiDrive basic and control

MI 250.1
Beater, stainless steel
For hard, brittle materials up to Mohs hardness 5
Ident. No. 0025003993

MI 250.2
Star-shaped cutter, stainless steel
For fibrous materials such as paper and plant
Ident. No. 0025003951

MI 250.3
Beater, hard metal
For harder materials up to Mohs hardness 9
Ident. No. 0025003953

Find more accessories on www.ika.com