Compact and versatile.

K3-series continuous centrifugals for efficiency in operation, the right match for every process, and perfect human-machine-interaction.

A new addition: the K3080 for use in refineries, as a replacement for the K850 and K1100, etc.
Outstanding efficiency, a wide range of options, intuitive operation.

Since 1947, BMA has been setting standards in the design of sugar centrifugals – thanks to knowledge gained over many years and our broad range of process expertise. Always focusing on improving your plants. More than 8,000 commissioned centrifugals are evidence of our success.

The strengths of K3-series continuous centrifugals include their technical performance, wide range of model variants and intuitive operation. They can be used in beet and cane sugar factories or in refineries.

Via the charging device, the massecuite, water and steam are continuously fed into the product distributor, where they are thoroughly mixed, evenly distributed and accelerated. Then the mixture enters the conical basket. The larger the basket diameter, the greater the centrifugal force, efficiently separating the mother liquor from the sugar crystals. These pass via the basket edge into the sugar chamber, dropping continuously onto the conveying unit to be installed below it.

The basket is driven from below by an external AC motor via a V-belt. Whether your focus is on throughput or on sugar or syrup quality – our K3-series continuous centrifugals can be configured to meet your needs: the perfect design for every process requirement.

Design features

- Patented basket design for quick syrup discharge
- Improved product distributors for perfect massecuite conditioning
- Double-angled basket for high throughputs*
- Suitable housing types for all process requirements
- Very smooth running thanks to improved vibration isolation
- Reduced use of wear parts, use of maintenance-free components
- Newly designed screen clamping to permit quick and simple screen replacements

Housing types

- Dry discharge via cone-crystalline sugar
- Dry or wet discharge via cone-crystalline sugar, massecuite or sugar solution
- Wet discharge via pipeline-massecuite or sugar solution
Bringing out the best.
Benefits at a glance.

Maximum output and minimum input – this definition of efficiency also applies to centrifugals. For BMA it means having to find the perfect balance between throughput and availability on the one hand, and investment and maintenance costs and the need for parts on the other.

Perfect operation: efficient processes
- Can be configured for different process aims: throughput – output – sugar quality – molasses purity
- Turbo3 product distributor can improve performance by up to 10 %* 
- Water and steam application rates can be adjusted for a higher sugar output
- Elliptical basket openings and enhanced product conditioning for high energy efficiency
- Maximum availability thanks to minimal maintenance requirements
- Hard-wearing design, e.g. rubber buffers with an expected service life of up to 8 years**

Perfect interaction: human-machine team
- Plug-and-produce: quick installation and commissioning
- Focus on ergonomics
- Ease of use thanks to compact design
- Good accessibility thanks to improved maintenance openings
- Screens can be replaced in just 30 minutes

Perfect fit: the right match
- Flexibility thanks to custom configurations
- Discharge of crystalline sugar, massecuite or sugar solution
- Automation systems based on Siemens, Rockwell or Schneider
- Optional frequency converter for speed adjustment

Meets maximum safety and hygiene standards
- Vibration sensor for greater reliability as standard
- V-belt tension monitoring as standard*
- Parts that come into contact with the product are made from stainless steel
- Optional lubrication with food-grade grease
- Fewer contamination areas by placing a single front cover across several machines

* K3300 model
** During normal operation, with routine maintenance
Machines and automation from a single source

Based on a tried and tested PLC, BMA’s own automation system, designed specifically for this application, perfectly meets sugar centrifugal requirements. A local touch panel (HMI) ensures simple operation. The operating parameters can be set and adjusted to varying conditions. Developments in, for instance, power consumption, vibrations or water addition are clearly displayed. Integration with a higher-level process control system is available as an option. Triple benefit: simple operation, process control, and reproducible results.

BMA Service: from the first consultation to the finishing touches

Whatever your process requirements may be, BMA will help you find a suitable solution. We will be an expert partner you can rely on throughout – from choosing a configuration from our extensive product range, to professional commissioning, and to regular maintenance. And if you need more than single centrifugals, we can develop and supply a complete centrifugal station, including all the necessary parts and equipment. We are, after all, a provider of integrated solutions.
Facts and figures.
Performance in brief.

**Dimensions and weights**

<table>
<thead>
<tr>
<th></th>
<th>K3080</th>
<th>K3300</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basket diameter top mm</td>
<td>1080</td>
<td>1300</td>
</tr>
<tr>
<td>Length a mm</td>
<td>1800</td>
<td>1990</td>
</tr>
<tr>
<td>Depth b / b’ incl. motor mm</td>
<td>1800 / 2520</td>
<td>1990 / 2800</td>
</tr>
<tr>
<td>Height c mm</td>
<td>960</td>
<td>1030</td>
</tr>
<tr>
<td>Weight kg</td>
<td>2300</td>
<td>3400</td>
</tr>
<tr>
<td>Basket angle °</td>
<td>14/30 (25/27)</td>
<td>14/30 (25/27)</td>
</tr>
</tbody>
</table>

**Throughputs**

<table>
<thead>
<tr>
<th></th>
<th>K3080</th>
<th>K3300</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Motor rating</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Beet</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B product t/h</td>
<td>15</td>
<td>21</td>
</tr>
<tr>
<td>C product t/h</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>C affination t/h</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td><strong>Cane</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B product t/h</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td>C product t/h</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Raw sugar affination t/h</td>
<td>15</td>
<td>21</td>
</tr>
<tr>
<td><strong>Refinery</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A product t/h</td>
<td>15</td>
<td>21</td>
</tr>
<tr>
<td>B product t/h</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td>C product t/h</td>
<td>8</td>
<td>11</td>
</tr>
</tbody>
</table>

1) Varies depending on massecuite quality and model.
2) Typical throughput.
3) Maximum throughput. Max. throughput for top machine design; limited by motor rating (sugar quality slightly lower than 2).
BMA – Passion for Progress

For over 160 years, BMA has been developing and manufacturing machinery and equipment for industrial-scale sugar production. BMA system solutions for sugar factories and refineries are in demand wherever minimum energy consumption and consistently high product quality are top priorities. With our more than 650-strong workforce around the globe and in-depth knowledge of process engineering, BMA’s service profile is unique in the sugar industry.