thyssenkrupp Industries India (tkII) was the foremost in India to introduce indigenously manufactured centrifugal machines to sugar industries in 1960 and have so far supplied more than 5400 Batch & Continuous machines of various models, types and sizes worldwide.

Our company pioneered the use of higher capacity Batch centrifugal machines from 750 kg/charge to 2250 kg/charge capacity and Continuous centrifugals of 1100 mm dia. to 1500 mm dia. to cater to the need of the industry.

Our company was the first company in India to develop and supply continuous centrifugals with in-built melting and mixing devices.

INSTALLATION OF BATCH AND CONTINUOUS CENTRIFUGAL MACHINES (WITH INBUILT MIXING ARRANGEMENT) AT SORASUCRE SUGAR REFINERY, ALGERIA.
thyssenkrupp Industries India, fully automatic recycling, Batch (Discontinuous) type Centrifugals are provided with energy efficient drives.

Several operational interlocks and safety devices are provided to ensure smooth and safe operations.

The material of the basket is a special quality duplex stainless steel that has high corrosion resistance and a long working life. The basket, designed according to international norms and standards, is manufactured under stringent quality controls, with inspection and test procedures that ensure quality and safety through its long operational life.

thyssenkrupp Industries India, Batch type machine is of compact modular construction, duly tested and fully assembled in our workshop prior dispatch. As a result, installation of the machine is easier and time required for installation at site is substantially reduced.

### Salient features

<table>
<thead>
<tr>
<th>Parameter</th>
<th>KB 750</th>
<th>KB 1250</th>
<th>KB 1500</th>
<th>KB 1750</th>
<th>KB 2250</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Filling capacity (kg/ch)</td>
<td>750</td>
<td>1250</td>
<td>1500</td>
<td>1750</td>
<td>2250</td>
</tr>
<tr>
<td>Basket inside dia. (mm)</td>
<td>1220</td>
<td>1260</td>
<td>1350</td>
<td>1550</td>
<td>1720</td>
</tr>
<tr>
<td>Basket inside height (mm)</td>
<td>750</td>
<td>1050</td>
<td>1100</td>
<td>1160</td>
<td>1300</td>
</tr>
<tr>
<td>Spinning speed (rpm) - max</td>
<td>1350</td>
<td>1300</td>
<td>1250</td>
<td>1100</td>
<td>1020</td>
</tr>
<tr>
<td>Centrifuging effect (g)</td>
<td>1243</td>
<td>1190</td>
<td>1180</td>
<td>1050</td>
<td>1000</td>
</tr>
</tbody>
</table>
Product features and advantages

- High gravity factor ensures effective purging of massecuite, optimizes wash water consumption and run-off quantity.
- Locking elements, instead of the conventional key way arrangement for fitting basket and coupling, eliminates stress concentration effects in the spindle.
- Uniform and better quality of dry sugar.
- Effective separation of heavy and light run-off helps in process balance.
- Elimination of steam drying increases crystal yield and reduces bagging temperature of sugar.
- Special design features and material quality allow construction of a lighter basket that requires lower driving power.
- Saving in power consumption per cycle occurs due to energy efficient drives and lower driving power of motor.
- Spindle locating device dampens undue oscillation of basket during ploughing operation thereby ensuring proper scrapping of sugar and avoiding contact of plough blade with the screen.
- Air scavenging arrangement is provided on the scrapper blade for removal of residual sugar.
Continuous Centrifugals

Salient features

- Our company’s Continuous Centrifugal machines are of the latest design, with an adequately large screen area to ensure desired output and uniform quality of end products.
- On demand, our company can provide an auto-feed control system that is dependent on power consumed by the driving motor.
- Our company also supplies Continuous Centrifugal machines suitable for discharge of dry sugar, with built-in melting device for preparing melt, as well as built-in mixing device for preparing magma in the machine itself.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Models</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>KC 1100 T/N/M</td>
</tr>
<tr>
<td>Top diameter of basket (mm)</td>
<td>1100</td>
</tr>
<tr>
<td>Basket inclination (deg.)</td>
<td>30</td>
</tr>
<tr>
<td>Basket speed (rpm)</td>
<td>2000/1800</td>
</tr>
<tr>
<td>Centrifuging effect (g)</td>
<td>2460/1990</td>
</tr>
<tr>
<td>Motor rating (kw)</td>
<td>55</td>
</tr>
</tbody>
</table>

T: dry discharge of sugar,  N: built-in chamber for melt,  M: built-in chamber for magma mixing
Product features and advantages

- Easy curing of massecuite of higher brix, higher crystal content and viscosity.
- Automatic regulation of massecuite feeding ensures uniform quality of sugar, run-off and loading of Centrifugal.
- Centrally located feed pipe provided with steam jacket for heating of low grade massecuite.
- Optimum water consumption facilitates precise control over quality and quantity of run-off.
- Large surrounding housing minimizes crystal damage in centrifugals for dry discharge of sugar.
- With specially designed built-in mixing arrangement the discharged sugar is mixed with water / conditioned molasses and magma of optimum brix is prepared which flows from outlets on the machine. The main advantages of this construction are:

Magma mixer is not required saving drive power, installation space and the operation costs. Uniform quality melt is discharged from the melt outlet of machine.
thyssenkrupp Industries India has developed and introduced new series of Batch and Continuous Type Centrifugal Machines for

- Sustainability and improved performance
- Enhanced safety
- Higher throughput
- Energy saving per ton of massecuite
- Ease and reduced maintenance resulting in superior performance
- Designed as per international norms

## Product features and advantages

### TKB 1750 Batch Centrifugal Machines:

- Oscillation control unit (OCU) restricts movement of basket during ploughing operation which allows optimum blade setting.
- Bearing Unit with grease lubrication and provision of setting for rubber buffer pads externally.
- Plough of robust design with two parallel chrome plated main guide and counter guide shaft. Provision of air scavenging arrangement for elimination of residual sugar.

### TKC 1500 Continuous Centrifugal Machines:

- Suitable for discharge of dry sugar or with built in melting / mixing device.
- Bearing Unit with grease lubrication.
- Water spray coil & nozzles provided with washing on lower screen.
- Higher throughput with increased drainage area.
- Lower power consumption.