The laboratory Drum Dryer is designed for food, chemical and pharmaceutical research.

The unit can be used for product development and educational use, ideally demonstrating the many drum drying and flaking applications to students.

The equipment is supplied fully assembled and ready for connection to site services.

Conversion to flaking operation can be achieved within minutes.
Molten material to be solidified is applied to the cooled rotating drum. When the solid material reaches the knife it is removed in the form of easily handleable flakes.

**Double Drum Dryer**

The liquid to be dried is fed into the valley created by the two drums, where it is applied to the drums as they rotate together. The dry product is removed by a knife on each drum.

**Single Drum Dryer**

The liquid to be dried is fed to the feed rolls positioned on top of the main drum. Here it is applied to each of the rolls to give a thicker final product.

**Single Drum Flaker**

Molten material to be solidified is applied to the cooled rotating drum. When the solid material reaches the knife it is removed in the form of easily handleable flakes.

**Construction**

The design is fully interchangeable so that any configuration can be achieved by fitting the relevant accessory. The unit is constructed from stainless steel, providing cleanliness and resistance to chemical attack. The drums are cast iron and engineering hard chrome plated to ensure maximum heat transfer and the ability to scale up results to production sized equipment. The shaft mounted main drive speed is simply adjusted by electronic inverter in the control panel.

**Required Accessories**

**Vapour extraction system**

This is fitted above the dryer and draws the vapours produced when drying away through the fan and duct assembly.

**Feed system**

The stainless steel feed tank and variable speed pump deliver the material to be dried through the solid pipeline to the dryer feed

**Optional Accessories**

**Applicator roll**

The applicator roll can be used on both drying and flaking applications, and gives extra control for those materials requiring it.

**Feed roll assembly**

The double drum dryer can be easily converted to operate as a single cylinder feed roll drum dryer with this accessory.

**Dip tray**

The dip tray is positioned under the drum and is used to simply apply a film for either drying or flaking purposes.

**Specification**

<table>
<thead>
<tr>
<th>Drum size</th>
<th>300mm diameter x 200mm long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipping dimensions</td>
<td>2700mm long x 1500mm wide x 1500mm high</td>
</tr>
<tr>
<td>Weight</td>
<td>Approximately 2500 kg</td>
</tr>
<tr>
<td>Drying duty</td>
<td>Max material feed rate 45 kg/hr</td>
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<tr>
<td></td>
<td>Max water evaporated 30 kg/hr</td>
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<tr>
<td></td>
<td>Steam consumption 40 kg/hr @ 6 barg</td>
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<tr>
<td>Flaking duty</td>
<td>Max material feed rate 150 kg/hr</td>
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<tr>
<td></td>
<td>Coolant consumption 2500 Lr/hr</td>
</tr>
</tbody>
</table>

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