Drying and cooling systems of extreme flexibility

Modern bulk material technology intelligently combined
References worldwide:

Cooling by mixing wet material with dried material to achieve low temperatures irrespective of the ambient temperature and of the use of any external cooling medium.

Quick-Mix: Großjörl
Quick-Mix: Kaltenkirchen
Quick-Mix: Ludwigsfelde
Quick-Mix: Rostock
Bayosan: Schönbach-Sermuth
Forsand Kompani: Forsand (Norway)
Diamant: Hardenberg (Netherlands)

Cooling with ambient air, suitable also for cooling material with grain size of up to 32 mm.

Quick-Mix: Leipzig
Sakret, Berlin: Rüdersdorf
Sakret, Brandenburg: Schmerzke
HBI: Henstedt-Ulzburg
Västbruk: Sweden
Umtec: Erbak, Zywiec (Poland)
Advan Chemicals: Riyadh (Saudi Arabia)

Cooling with an external cooling medium to bring dried material to very low temperatures.

Quick-Mix: Marl
Interstructa: Russia
Interstructa: Malaysia
Mörtel 2000: Reinbek-Büchsenschinken
Beckschulte: BMW Landshut
Optiroc: Motala (Sweden)
Thyssen-Sonnenberg: Vlissingen (Netherlands)
Drying & cooling: Minimum energy input.

System MOZER® TK+

Wet material is dried completely in the inner drum and is then mixed with more wet material in the outer drum. The wet material draws heat from the dried material which is used for the drying of the wet material. Thus drying and cooling is effected in a single operation.

The TK+ system offers high efficiency. Neither ambient air nor cooling water is needed for cooling since cooling is solely effected by the mixing wet material with material that has already been dried.
Drying & cooling: Coarse bulk materials.

System MOZER® TK

The TK system is extremely robust and remarkably flexible. Material with a grain size of up to 32 mm can be dried and cooled with this system without difficulty. Wet material is first dried in the inner drum and then passed to the outer drum where ambient air is drawn through the hot, dried material. The hot material gives up its heat to the air which is then cleared of dust in a dust filtration unit.

<table>
<thead>
<tr>
<th>Investment costs</th>
<th>Material delivery temperatures</th>
<th>Grain size</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>55-75°C</td>
<td>&lt;32 mm</td>
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<tr>
<td></td>
<td>50-60°C</td>
<td>&lt;8 mm</td>
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<tr>
<td></td>
<td>&lt;50°C</td>
<td>&lt;4 mm</td>
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</tbody>
</table>
Drying & cooling:
Extremely low material temperature.

System SK

The hot, dry material is transferred to the sand cooler whose interior is equipped with a number of tubes through which a cooling medium such as chilled water passes.

The hot dry material gives up its warmth to the cooling medium which itself is then cooled in an external refrigerative cooler which gives up the extracted heat to the environment by way, for example, of a cooling tower.

System SK plants can be used to advantage where it is required to achieve constant low material temperatures at the outlet irrespective of the ambient temperature.