Proven, reliable, future-proof – step up your plant productivity

The advantages at a glance:

High availability and robustness for continuous operation under the most demanding process conditions
The mechanical design of the polytrack® withstands challenging operating conditions. The separation of aeration and clinker conveying guarantees a constantly high cooling performance. Efficient conveying reduces the wear of the conveying elements (guaranteed operating lifetime of five years) and that of the hydraulic cylinders.

Low operating costs through high thermal efficiency and low power consumptions
The new aeration element design allows for a high thermal recovery at a reduced pressure drop (10 mbar lower). For new plants this also means smaller fans and lower invest costs.

Minimal, easy maintenance through low wear and maintenance-friendly design
All innovations in polytrack® were designed to reduce wear to a minimum and ease maintenance.

• Due to the reduced air outlet velocities the wear of the aeration elements is minimized. A stationary layer of cold clinker provides autogenous wear protection, leading to a long operating lifetime of the aeration floor, with a five year guarantee.

• The new bearing system is extremely easy to exchange. Only two bolts need to be removed and the sliding plates can be fitted without any tools.

New sealing – new bearings – simplified substructure – easy maintenance
Based on a track record of more than 130 installations worldwide, polytrack® has been optimized to maximize availability, improve maintenance and allow fast conversions with minimum production downtime. The static, horizontal aeration floor and the separate clinker conveying system result in a superior cooling performance, high thermal efficiency, as well as unbeatable robustness and equipment durability. The highly flexible and modular construction makes polytrack® the ideal solution for fast conversion projects.

Attractive investment cost
Thanks to the static aeration floor in combination with an improved sealing system, there is virtually no clinker spillage and no need for an undergrate spillage conveying system. Additionally, the efficient conveying principle allows for a horizontal, compact design that minimizes the construction height of the cooler and the associated civil construction costs, not only for the cooler, but for the entire clinker production line.
Integrated roller crusher
The efficient polytrack® roll crusher can be installed at the cooler discharge as an end crusher or as a cooled intermediate crusher. This serves to increase the temperature of the midair tapping for more efficient waste heat recovery, and to minimize the clinker end temperature to meet the demands of the downstream milling equipment.

Modular and flexible design
The modules are 4.8 m or 7.2 m long and available in widths of 1.5 m, 2.0 m and 2.5 m. With small module dimension steps – of 0.5 m over the width and only 2.4 m over the length – it is possible to design coolers to suit any plant and fit into pre-existing housings, thus enabling fast and uncomplicated conversion projects.

Services
Our teams of experts are at our customers’ side from the early stages of a project, through the erection and commissioning phases, and beyond. Our experts have extensive experience in all aspects of the clinker production process and can help you maximize the output and availability of your existing equipment. Additionally, we offer customized training courses to instruct operators in the safe and efficient use of the cooler.

Technical specifications

<table>
<thead>
<tr>
<th>Facts</th>
<th>Hydraulics</th>
<th>Roller crusher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field of application: Grey and white cement, minerals</td>
<td>Stroke length: 300 mm</td>
<td>Design: Intermediate or end crusher</td>
</tr>
<tr>
<td>Capacity: 500 – 12,000 tpd</td>
<td>Strokes /min: 3 – 5 normal</td>
<td>Capacity: 500 – 12,000 tpd</td>
</tr>
<tr>
<td>Typical area load: 42 – 45 t/m²/d</td>
<td>8 max</td>
<td>Roller speed: 4 rpm</td>
</tr>
<tr>
<td>Width load: 800 – 1,500 t/m²/d</td>
<td></td>
<td>Drive: Electro-mechanical or hydraulic</td>
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<tr>
<td>Clinker bed height: ≥ 800 mm</td>
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</tbody>
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Aeration

<table>
<thead>
<tr>
<th>Installed</th>
<th>2.0 – 2.2 Nm³/kg cl</th>
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</thead>
<tbody>
<tr>
<td>Operation</td>
<td>1.7 – 1.9 Nm³/kg cl</td>
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</tbody>
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