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ThermoBars[™] – for optimum heat flux





Initial situation

As the operating speed increases, the condensate in the dryer follows the dryer shell more and more until it forms a complete rim at approx. 400 m/min. From that point on the turbulence in the condensate is reduced drastically and with it the heat transfer of the dryer. ThermoBars reverse this negative influence and are economically effective at speeds above 500 m/min.

Principle of function

- Condensate spoiler bars are placed at an optimal distance around the circumference
- The bars are pressed uniformly against the dryer shell with springs
- Utilization of gravity of the condensate rim:
 - "downhill" side:
 - Condensate accelerates "uphill" side:
 - Condensate is retarded

Result

- Increased turbulence in the condensate rim
- Improved heat transfer
- Uniform effect over the entire dryer width and the entire dryer circumference

Your benefits

- Production increase through increased drying performance
- Improved quality through more uniform CD moisture profile

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Preloaded spring

Relieved spring

Patented profiling of spoiler bars



Effectiveness of ThermoBars as a function of the condensate rim thickness



Installed condition

Quick installation

- The retaining rings and spoiler bars consisting of channels, are light and stable in shape
- The premounted clamping elements are easy to install
- The spoiler bars are positively locked to the retaining rings, no screws and pins are necessary
- The spring balances out diameter tolerances of the dryers and is heat-resistant to premature settling and fracture
- Clamping of the retaining rings and removal of the screws is very easy

Mechanical set-up

- Light, patented system of channels, easy to install
- 3-piece retaining rings consisting of channels form a stable supporting frame
- Premounted clamping elements, springs easy to relieve

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Engineered reliability.

- Springs balance out diameter tolerances of the dryers and also ensure that the different thermal expansions during heating-up of the dryers are balanced out
- The patented profiling of the spoiler bars prevents them from shifting by themselves