

# MAXIMIZE EFFICIENCIES IN OILSEEDS CONDITIONING

PROVEN TECHNOLOGY FOR ENERGY-EFFICIENT OPERATIONS



## Optimized conditioning

The conditioning of oilseeds is an important step to prepare for the extraction process. It can also be an incredibly energy-demanding step, with steam consumption being the largest utility cost.

Solex Thermal Science offers a proven conditioning solution for soybean, rapeseed, canola and sunflower that is more efficient, increases capacity and offers the ability to recover low-grade energy in small, medium and large production capacities.

## Vertical Plate Conditioner (VPC)

Solex is a worldwide provider of customized heat transfer solutions for bulk solids. The Vertical Plate Conditioner (VPC) provides the oilseeds industry with a modular solution that allows for efficient heat transfer in a well-established welded plate-channel design. Benefits include:

- More heat transfer area allows for substantial capacity increase within existing installations with minimal CAPEX expenditure
- Ability to recover low-grade energy, thereby reducing steam consumption
- Vertical design eliminates product abrasion and results in plates that typically last the unit's lifetime
- More efficient air extraction that improves drying performance and guarantees uniform drying profiles
- No moving parts means minimal maintenance

Alternatively, Solex offers a module design that offers an affordable retrofit solution to replace outdated tube-designed equipment while still offering the benefits of welded plate-channel design. Ask your Solex representative for more details.



## Waste heat utilization

The well-established plate design of the VPC allows for a wider range of input mediums, including steam, condensate or hot water — allowing for energy savings. Heat recovery loops can be optimized for maximum energy recovery and operational flexibility.

## Increased capacity, small footprint and modular design options

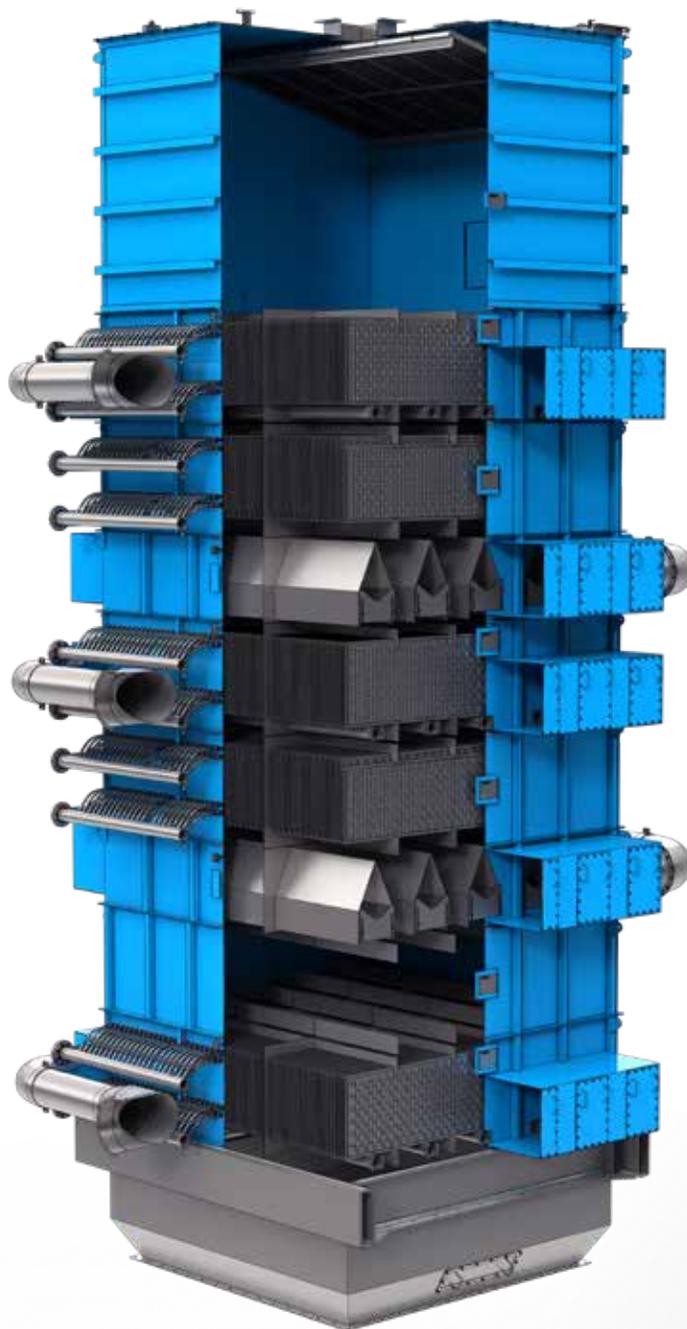
With customized plate spacing, bolted plenums and optimal residence time, Solex's technology provides uniform conditioning for each particle when processing whole or cracked soybeans, canola or rapeseed and sunflowers. Solex's proprietary thermal modeling software reports the seed-to-seed or bean-to-bean temperature profile, moisture profile and drying rate, which is used for predicting the optimal control settings for specific materials.

## Operational flexibility

With customized plate spacing and optimal residence time, Solex's technology provides uniform conditioning for each particle when processing whole or cracked soybeans, canola or rapeseed and sunflowers. Solex's proprietary thermal modeling software reports the seed-to-seed or bean-to-bean temperature profile, moisture profile and drying rate, which is used for predicting the optimal control settings for specific materials.

## Low operating cost

Solex technology is designed to operate without moving parts, offering simple installation, low maintenance and plates that typically last the unit's lifetime. The custom design also reduces downtime by incorporating easy access to heat transfer areas for cleaning, removal and isolation of individual plates when required.



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