

# IMPROVE EFFICIENCIES DURING BIOMASS WOOD PELLET COOLING

WORLD-TESTED TECHNOLOGY FOR ENHANCED OPERATIONS



## Optimized wood pellet cooling

Cooling pellets that are discharged from the pellet-making process is a critical step that requires the ability to accurately and evenly reduce temperatures and moisture levels while avoiding breakages and the production of additional fines. The even distribution of heat transfer to every pellet has multi-fold advantages, from mitigating spoiled product to creating a safe handling environment during storage and transport.

## The Solex Advantage

Our plate-based moving bed heat exchange technology enables precise control of both the temperature and moisture content of your product, while producing near-zero emissions, mitigating contamination/breakage and reducing energy demands. The combination of proprietary thermal modelling software and guaranteed mass flow design results in optimal cooling and drying of every individual pellet.

We have more than 30 years of experience in heating, cooling and drying numerous bulk solid products. To date, Solex has more than 1,200 installations active in more than 50 countries worldwide . . . and counting.

Solex's advanced thermal modeling, rich reference list and years of experience in this field makes Solex the ideal partner for your next wood pellet cooling application.



# PROPRIETARY TECHNOLOGY THAT MAXIMIZES OPERATIONAL EFFICIENCIES

## Accurate temperature/moisture control

With customized plate spacing and optimal residence time, Solex technology provides uniform cooling for each pellet during processing. Our world-tested heat exchangers combine proprietary thermal modeling software with a mass flow discharge device that controls the rate of flow through the unit. This ensures optimal product temperature at the outlet to the required parameters of 3-5°C above room temperature and moisture content between acceptable ranges.

## Gentle handling

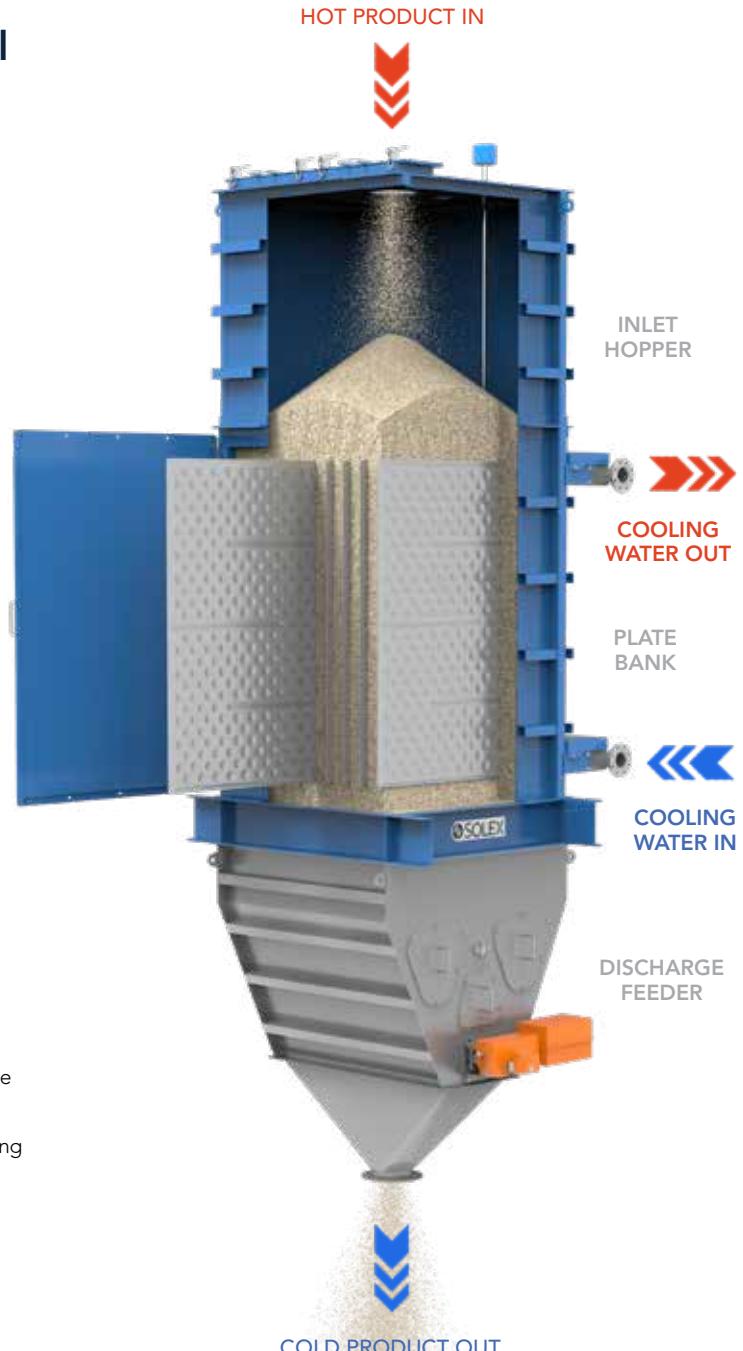
The mass flow design of our heat exchange technology ensures uniform material flow controlled at low velocities. There is no mechanical handling and moving of the pellets, rendering the technology ideal for even the most friable grades. This gentle product handling prevents product abrasion, degradation and creation of additional fines.

## Near-zero emissions/contamination

Because the heat exchange medium flows counter-currently inside the plates, it never touches the product and thereby avoids bacterial or odour contamination as well as emissions, dust and fines. This eliminates the need for pollution control equipment and makes tight emission limits easier to meet.

## Reduced installation/operating costs

Our technology is designed to operate without moving parts, offering simple installation, low maintenance and years of reliable operation. The custom design reduces downtime and lowers maintenance expenses by incorporating easy access to heat transfer areas for cleaning, removal and isolation of individual plates when required. Our cooling technology is also beneficial in capacity increase projects. Through its modular design, additional plate banks can be stacked vertically to increase capacity.



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