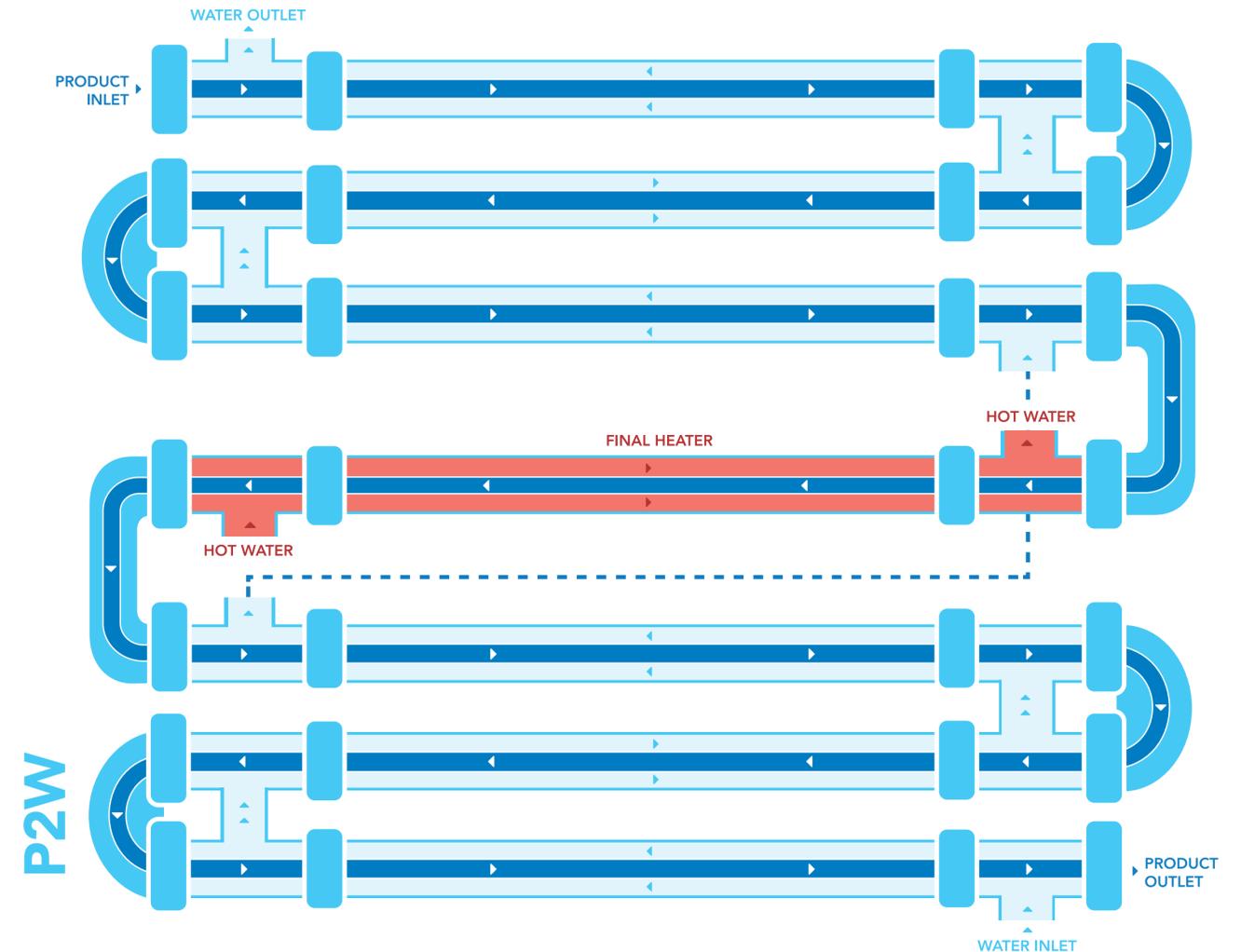
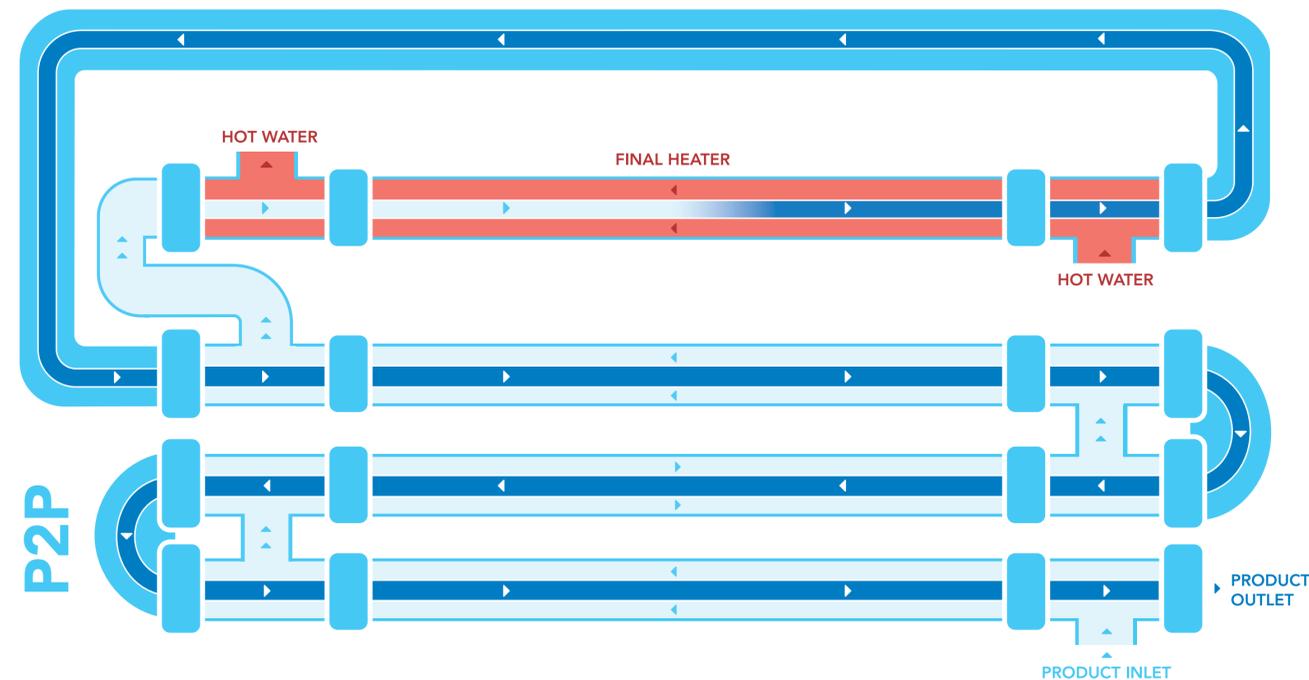


P2P OR P2W? WHEN AND HOW TO CHOOSE



There are two main ways to heat food and beverages during processing. One uses hot water in tubes inside a product-to-water (P2W) heat exchanger. The other harnesses the product's own energy by circulating product in tubes at different temperatures inside a product-to-product (P2P) heat exchanger to achieve the desired temperature level.

Both technologies have their place in a heating portfolio. Many suppliers rely heavily on P2W, often because they lack application knowledge and technical experience of P2P. Tetra Pak has been using P2P for 20 years, with outstanding results. So when should you choose P2P? And why?



LOWER LIFETIME COST

Fully optimised for energy saving, a P2P unit can cut your energy costs by up to 55%. Switching from P2W to P2P can pay for itself in as little as six months, depending on your production volume. This is because using product to heat and cool itself uses much less energy than hot water and steam.



SPEND LESS, SAVE MORE

A P2P heat exchanger has fewer tubes doing more. Eliminating water makes the unit simpler, smaller and easier to operate. Less steel gives a lower purchase cost. Long 6-metre tubes, rather than the 3-metre tubes typical of P2W versions, mean fewer bends – and even less steel and an even lower investment cost. Depending on the chosen energy configuration, a P2P unit can be up to 55% cheaper to buy than a P2W one.



GO WITH THE FLOW

The energy-saving benefits of P2P are greatest at high volume. For lower capacities, P2W might be the logical choice. If you produce just a few thousand litres per hour, for instance, P2W is probably the more economical option.



VITAL VISCOSITY

P2P is ideal for low to medium viscous products and can process anything from milk and other dairy products to beverages with or without fibres. For a high-volume producer of low viscous products like beverages or juices, P2P can be the optimum solution.



PARTICULAR ON PARTICLES

P2W is the traditional choice for high viscous products like orange concentrate, and soups and sauces with particles. A P2P unit can also handle products with particles but typically takes longer to clean than a P2W model. Alternatively, you could simply enjoy the best of both worlds and use both. Consult an expert to discuss the best solution for you.



MARVELLOUS MODULES

Make sure your supplier offers P2P units with a modular design. This will allow them to be connected to P2W units in the same frame, giving huge operational flexibility. If you produce low and high viscous products on the same line, you can base your production on energy-saving P2P and simply switch to P2W when the application demands it. When producing a product with large differences in viscosity, you can also choose to run P2W for lower temperature ranges and P2P for higher temperatures. Full flexibility for maximum efficiency.