Benefits

- » One cooker, many applications
- » Fast and even heating by unique steam fusion technology with multiple steam injector points
- » Diverse range of products and flexible processing conditions - low temperature, pasteurise, UHT & aseptic
- » Consistent quality with reduced formulation costs and reduced waste
- » Efficient energy usage and fully CIP-able

- » Designed for minimal downtime, maximum productivity
- » Highly automated presettable recipes provide consistency
- » One-touch START, STOP and CLEAN simple to use
- » The only continuous cooker that can pause and restart without any waste
- » Lowest & highest viscosities achievable

Options & attachments

- » Long non-stop production up to 156 hours
- » Blending and feeding systems
- » Vacuum cooling and de-aeration systems
- » Liquid dosing
- » Highly configurable for shear management, pressures, temperature, time, etc.
- » Further options available



Technical data

Capacity data

» 50 - 20,000kg/h (110 - 44,000lb/h)

Run time

- » Up to 156 hours between fast CIP for dual systems
- » Up to 72 hours between fast CIP for single systems

Cleaning

» Stand alone, or integrated CIP system

Heating temperature

» 40°C - 145°C (104°F - 293°F) » Can pasteurise & UHT

Execution

» Highest quality construction materials to meet all the hygiene requirements of the food industry

» Steam, air, water and power as required

Footprint

» 1.14m x 1.5m for one cooker alone

Turndown

» Turndown Ratio of 1:3

Human resources

» Less than 1 person

Product surfaces

» AISI 316L (1.4044) stainless steel



Natec Network is a global group of food technology companies, with vast expertise and experience that innovates with you to deliver the exact production solution you need.

We pride ourselves on building adaptable machines and production lines that are super-efficient, reliable, have huge productive capacity and bring you fast ROI. This machine is no exception.

Let's work together to develop your ideal solution.

Please contact us today.





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RotaTherm®

WORLD-LEADING CONTINUOUS COOKING

DIRECT STEAM INJECTION **TECHNOLOGY**

- Highest product quality freshest taste & colour
- Low operating costs, fastest ROI, lowest waste
- **⊘** 50kg/h up to 20,000kg/h
- Runs up to 156h between fast CIP
- Pasteurise & UHT







RotaTherm®

Fastest ROI

The *Natec Network RotaTherm*® is a unique single stage continuous cooking system. It provides significant flexibility, automation and control across a diverse range of products and processing conditions, delivering considerable benefits.

The **RotaTherm**® enables optimised processing of a complete range of product types, viscosities and compositions such as processed cheese, pasta filata types, sauces, purees, baby food, pet food and more.

✓ PRODUCTIVITY

- » Can produce up to 20,000kg per hour.
- » Cook temperature achieved in a super-quick 10 to 30 seconds, meaning reduced processing time.
- » Up to 156-hour runtime maximising production runtime and minimising CIP downtime.
- » Intelligently designed to require minimal maintenance and a small physical footprint (1.14m x 1.5m).

✓ VERSATILITY

- » Leading-edge technology that delivers accurately controlled cooking and processing.
- » Optimise the cooking conditions for each recipe.
- » Rapid automatic recipe changeover.
- » Set and save the cook temperature / heating profile / pressure and other system parameters.
- » Pause control it is possible to stop the product flow without waste or rework.

SAFETY & HYGIENE

- » Pasteurisation and sterilisation / UHT are achieved in a single step, through super-efficient even heating. This delivers improved bacteriological results and therefore improvements in product shelf life.
- » Fully enclosed and hygienic design heats to pasteurise and UHT in a single step.
- » Cleaning is performed through an integrated CIP system.

Compared to batch cooking:

✓ PROCESSED CHEESE

- » Increased productivity up to 30%.
- » Reduced formulation cost save up to 10%.
- » Improved density and weight control.
- » Reduced give away save from 5 to 25%.

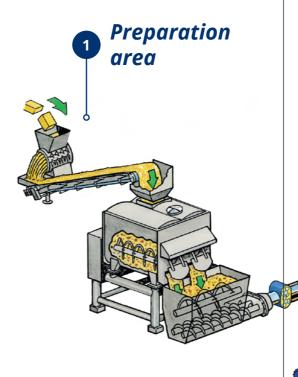
✓ SAUCE PRODUCTS

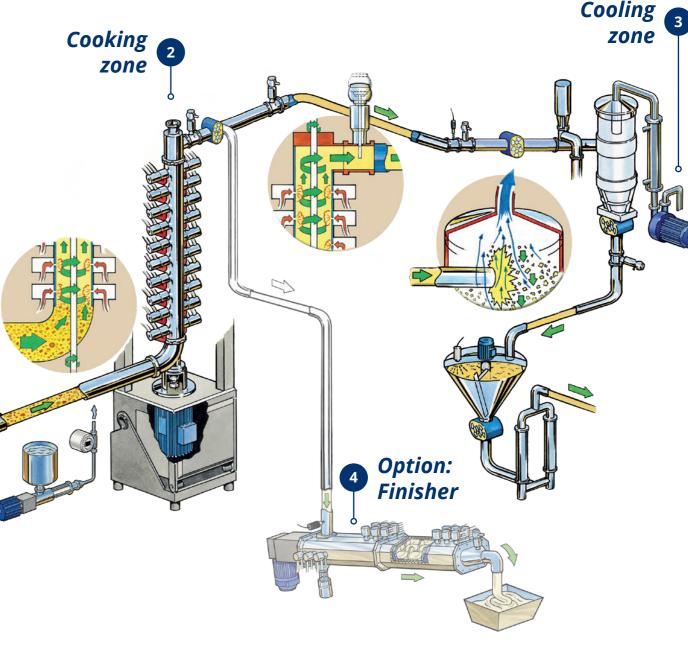
- » Fast product changeover with minimal product loss – typically less than 30 minutes with full CIP in 2 hours.
- » Pause ability allows for no or little waste impact from up or downstream issues – up to 2 hours pause (product dependent).
- » Better utilisation of functional ingredients.

✓ MEAT PRODUCTS

- » Increased yield up to 7%.
- » Fast processing and flexibility from the one **RotaTherm**® cooker – set to maintain particulate integrity (up to 25mm) through to processing a homogenous product as required for each recipe.







How our *RotaTherm*® works for you

1 Preparation area

» The formulation preparation equipment depends on the recipe ingredients and generally includes mixing and feed equipment.

2 Cooking zone

Fast heating & clean product

- » The fully enclosed high pressure cooking zone allows for cooking up to 145°C.
- » Steam is injected through proprietary non-burn jets.
- » The steam is mechanically mixed and fused with the product by a speed-adjustable rotor evenly heating your product in about 15 seconds.

Control of work / shear on product

- » The rotor mixes steam into the product and flattens the "laminar flow", creating "plug flow" in the cooking column
- This ensures all product receives the same heat treatment.
- The rotor's variable speed allows for fine-tuning the mechanical work / energy / shear on the product.

Versatile processing conditions

» Optimise the processing conditions for each product by managing the temperature, heating profile pressure, shear, holding time, de-aeration, cooling, density and viscosity. The settings are saved for later selection.

3 Cooling zone

Adaptable cooling

» At the end of the process the product is directly cooled and de-aerated by vacuum cooling to a set point, gently cooled indirectly, or in a combination appropriate for the particular product.

4 Option: Finisher

For '2 in 1'

» The same cooking technology can produce pasta filata cheese with the addition of our innovative Finisher, which will stretch and knead the cooked pasta filata to form its special long protein fibres.



