ShearTherm

WORLD-LEADING HIGH-SHEAR COOKER EMULSIFIER & STEAM BATCH COOKER

- Up to 2,400L per hour
- Patented M4E emulsifying technology eliminates lumps
- Minimal throw away
- Fast CIP for maximum uptime

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Low operating cost, fast ROI



ShearTherm

The *Natec Network ShearTherm* is specifically developed to include basic process requirements and extensive shear and emulsification options, in a modular design that can be individually adapted to the customers' needs. Many processes are combined and controlled in the small *ShearTherm* footprint, delivering maximum process, recipe and application flexibility. With full control of all process functions it delivers excellent finished product characteristics and quality - even with particles!

The *ShearTherm* is the perfect choice for high powder concentrated and plant-based products. In combination with our innovative and unique *Magnet for Emulsion (M4E) technology*, together with a special multi directional pre-mixer and agitator, it delivers short and efficient mixing of all ingredients. The integrated vacuum system and different homogenization units, each with controlled variable speed, guarantees a very high repeatability, short batch cycles, 100% homogeneous and lump free product. Product heating utilises unique

Natec Network direct steam injection while temperature is accurately monitored by *Natec Network* self-cleaning temperature probes.

ShearTherm with M4E: a unique combination!

The M4E is ideal for almost any process for mixing/emulsifying of dry materials and liquids or as replacement for shear pumps and commercial emulsifying units.

Benefits of using M4E technology compared to a mechanical shear unit

- » Simple handling and easy to integrate into any process
- » Improved product quality and product stability
- » Significantly lower service and energy consumption
- » No wear, no maintenance costs as there are no moving parts and complicated shaft seals
- » No product contamination through abrasion or defective seals



M#E INSIDE





cheese



cheese



Soups, sauces & dressings

Plant based & vegan



Specialty

Benefits

- » Highest control over processing conditions delivers excellent product characteristic and quality
- » Maximises yield less raw material consumption with less production time
- » Optimum functionality generates stable emulsifications with repeatability quality

Options & attachments

» Bin lifter for ingredients addition	» Coi
» Level measurement for exact dosage	» Int
and traceability	» Du
» Steam conditioning unit	» Sea
» Powder and ingredient	Rot
addition systems	» Fur
» Air nurge line	

» Air purge line

③ Technical data

Machine data

» 400V, 50Hz, 3 phase

Utilities

» Up to 4 batches/h

Capacity data

» Steam, air, water and power as required

Cleaning » Stand alone, or integrated into CIP system

Туре	Direct steam injectors (DSI)	Capacity*	Buffer tank	Dimensions** (LxWxH)
ShearTherm 150	4	150L	Approx. 250L	6,000 x 2,500 x 3,300mm (237" x 99" x 130")
ShearTherm 300	6	300L	Approx. 450L	6,600 x 3,700 x 3,600mm (260" x 146" x 142")
ShearTherm 600	10	600L	Approx. 800L	6,600 x 3,700 x 3,600mm (260" x 146" x 142")

* Capacity range from 50% to 100%, ** Dimensions including bin lifter and buffer tank. Different configurations available to suit your plant layout

- » Reduced energy costs and space requirements
- » Easy production and CIP through automatic programs
- » Fully enclosed, CIP-able, hygienic design ensures product safety

ombined discharge and CIP pump tegration with existing CIP system uplex filters (for processed cheese) amless integration with a UHT otaTherm[®] cooker urther options available

Heating temperature

» Up to 98°C (208°F) by direct steam injection

Execution

» All product surfaces are AISI 316L (1.4404) 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.



Explore our ShearTherm online



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