

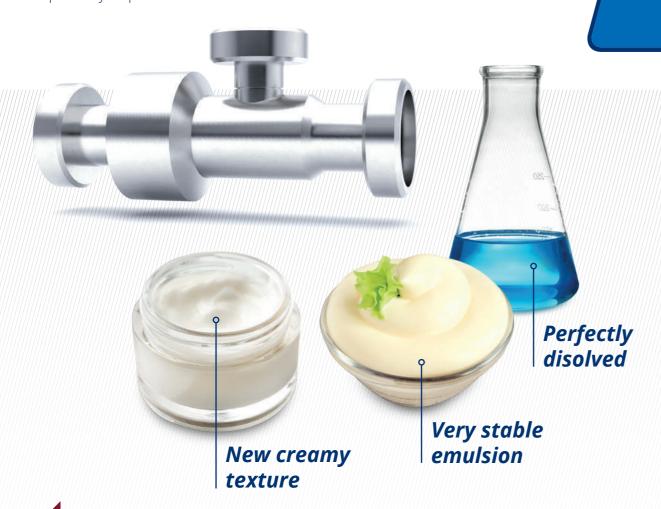
# HIGHEST EFFICIENCY IN DISPERSING & EMULSIFYING

The innovative way to make emulsions and dispersions.



# The M4E technology

The Magnet for Emulsion technology (M4E) combines turbulent flow conditions with the LORENTZ force induced by a permanent magnetic field. In a turbulent flow, particles (powder particles or oil droplets) spin around and collide. This results in particle deformation and break-up. The LORENTZ force will further intensify this spinning and colliding effect. As such, the combination between the turbulent flow conditions and the LORENTZ force create the perfect environment to make stable emulsions and lump-free powder dispersions. The *M4E technology* is mainly an "one-pass" technology, meaning once the product has passed the magnet, it is perfectly dispersed and / or emulsified.



## NEW!

Any emulsion or dispersion in:

- » Food industry
- » Cosmetics & healthcare
- » Chemical industry















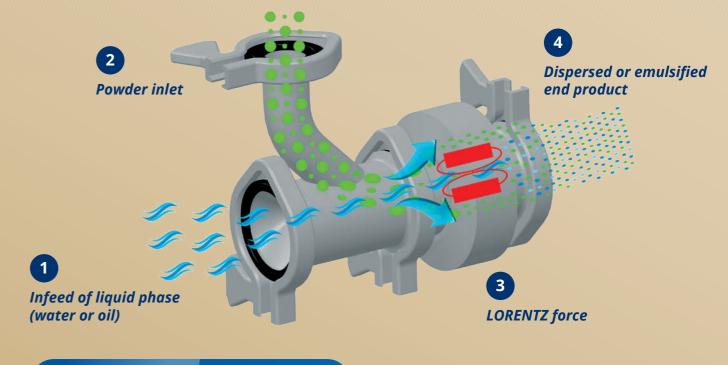


## Benefits

- » Reduced energy costs with increased savings
- » Higher yield and reduced raw material consumption due to reduction in thickener requirements (starches, hydrocolloids)
- » Easy cleaning and low maintenance
- » Highest user friendliness and application flexibility including products with particles (without changes to hardware or software)
- » Very low temperature increase during circulation
- » High capacity with low footprint

## The innovation

By pumping a liquid through our device, a vacuum is created by the venturi effect. Thanks to this vacuum, the powder is aspired and introduced into the liquid phase. Once in contact with the water or oil, powders have the tendency to coagulate and create lumps. Thanks to our innovative technology, immediately after the powder introduction, the mixture passes through our patented device creating perfect, lump-free dispersions and also reduces the dropletsize of oil when making emulsions such as mayonnaise.





Hochland Natec GmbH, Gold Peg International Pty Ltd and Natec USA LLC joined forces to form an international network of food processing companies – the Natec Network. Always team spirited and leading in flexibility, quality, and innovation the network delivers customised equipment and production lines for key challenges in food processing and at every stage of business development. In order to meet the customers' requirements, even at the start of a project, the network uses its own specific service framework which combines extensive experience and professional expertise along with a drive for innovation.

The result is technology and support that is crucial in contributing to the value and development of our customers in the food production industry. The love of generating and implementing cutting edge ideas with great impact, as well as the willingness to tailor technology that can exceed the customer's targets, lets the *Natec Network* always strive to unlock business and human potential in a sustainable way with integrity – and thus be a partner who provide more than just technical infrastructure.







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