



WORLD-LEADING EMULSION & DISPERSION TECHNOLOGY

- ✓ Patented – supersedes shear pumps
- ✓ Lump-free hydration – perfect emulsions, dispersions, creams
- ✓ One pass, no mechanical high shear
- ✓ Less thickener, less throw-away
- ✓ Low cost, high yield, fast ROI



Technology

natec
NETWORK

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

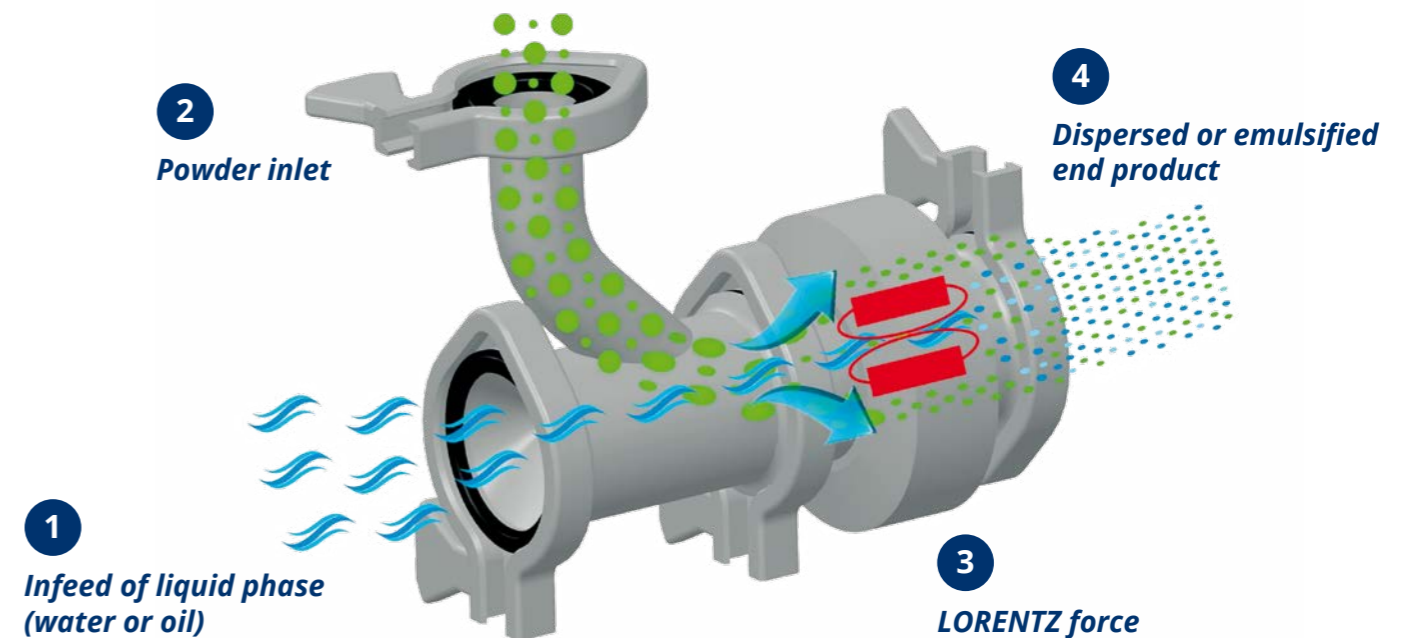


+ Benefits

- » 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 aspirated 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.





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
M4E technology
online



Hochland Natec GmbH

Kolpingstraße 32
88178 Heimenkirch
Germany

+49 8381 502 400
contact@natec-network.com

Natec Australia Pty Ltd

2/10 Abbots Road
Dandenong South
Victoria 3175, Australia

+61 3 8531 2999
contact@natec-network.com

Natec USA LLC

N24 W23750 Watertown Road
Waukesha
Wisconsin 53188, USA

+1 262 457 4071
contact@natec-network.com