Innovation designed to last

GEA Ariete Series Homogenizers
Innovation designed to last
Applications & benefits

Dairy
GEA homogenizers set the industry standard for sanitary and aseptic processing, automation and cleanability.
The homogenization process is used on dairy products to improve their stability and shelf life as well as increase digestibility and taste.
• Fresh and pasteurized milk
• UHT milk
• Milk for yoghurt
• Yoghurt drinks
• Desserts
• Cream cheese
• Fermented milk products
• Spray dried products

Pharmaceutical & Biotech
Homogenizers stabilize active ingredients and dispersion in liquid pharmaceutical products for enhanced clinical effectiveness, improved drug tolerance and reduced dosage. Homogenization is also used for cell rupture on yeast and bacteria to extract intra-cellular substances.
• Vaccines
• Intravenous emulsions
• Liposomes
• Yeast
• Enzymes
• Bacteria

Food & Beverage
Homogenization in the food industry is widely used to obtain a stable product, with a longer shelf life. It reduces the amount of additives used while improving the dispersion of ingredients and the absorption of flavors.
• Food emulsions
• Baby foods
• Fruits juices
• Cloudifiers/aromas
• Dressing
• Egg and mayonnaise
• Tomato products (paste/concentrate)
• Starches

Home & Personal Care
High pressure homogenization can effectively reduce the particle size, resulting in uniform dimensional distribution, for stable and longer shelf life of cosmetic products, along with a better active ingredient dispersion.
• Ointments
• Lotions
• Nail varnish
• Hair colorants
• Detergents

Chemical
High pressure homogenization creates stable emulsions, dispersions and mixes for chemical products. It can also improve chemical reaction and extraction processes, polymer properties and pigment color.
• Chemical slurries
• Paints
• Latex
• Polymers
• Pesticides/fertilizers
• Cellulose fibers
Technology advantages

Ariete machines: state-of-the-art technology, powerful and reliable for customized solutions.

Customization beyond the options
The Ariete Series includes 15 models, completely customizable with more than 300 options to guarantee the best performance and reliability. These tailor made solutions help customers meet products needs and resolve technical challenges for new application development.

Main features and options:
- Monoblock construction (up to 600 bar) or multiblock (up to 1500 bar) forged high grade Duplex or Super Duplex SS alloy
- Special block design for cleanibility (NiSoCLEAN) and difficult products (OpenXFLO™)
- 4 types of plunger materials to easily meet any production needs
- Aseptic and sanitary design available
- High efficiency NanoVALVE™ reduces operating pressures up to 30%
- Vibration monitoring system
- Wide range of gaskets and seals for best optimization
- Remote control system

Advantages:
- Best results at lowest consumption of energy and resources
- Fully customizable with more than 300 options
- Eco-friendly options available to maximize efficiency reducing TCO
- Hygienic design
- Fully compliant with all pharmaceutical requirements and regulations
- Working condition monitoring system to avoid downtime
- Easy access and maintenance with removable panels
Green options and special solutions
As part of the program to prioritize sustainability, GEA homogenizers offer specific options for optimizing the use of resources.

NisoPURE
The most efficient system to sterilize water used for aseptic production, saving 90% of water and steam.

Oil Purification System
It guarantees a continuous oil regeneration enhancing oil lifetime, quality and safety.

Gearbox oil cooling unit
This oil-to-air cooling unit saves water and oil using air to cool down oil temperature.

Traceability and certifications
Ariete Series are fully compliant with the Regulation (EC) N. 1935/2004 and all food and pharmaceutical requirements - including the most stringent certifications (USDA, FDA, CE, 3-A Sanitary Standard, ATEX, cGMP).
## Performances

From the smallest machine size to the largest one, GEA assures the same quality on the final product.

### PERFORMANCES

**Max Flow Rate l/h**

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Technical specifications are preliminary and subject to modification without notice.
We live our values.
Excellence • Passion • Integrity • Responsibility • GEA-versity

GEA is a global technology company with multi-billion euro sales operations in more than 50 countries. Founded in 1881 the company is one of the largest providers of innovative equipment and process technology. GEA is listed in the STOXX® Europe 600 Index. In addition, the company is included in selected MSCI Global Sustainability Indexes.