GEA Ariete
Homogenizer 5400
The most powerful homogenizer on Earth
The widest coverage to suit all your needs

Reliable performance leaving behind the lightest footprint
The most powerful and innovative concentrate of homogenization technology meeting the widest customer’s need, the Ariete Homogenizer 5400 offers the largest capacity ever achieved (80,000 l/h@120 bar) and the greatest versatility for all your applications. The growing demand for high efficiency and safe operations under different conditions in the dairy, beverage and pharmaceutical industry has prompted GEA to develop the only homogenizer in the world able to ensure high quality standards for continuous production with significant reduced power and resources consumption compared to any other 5 piston homogenizers on the market. High efficiency results in sensible reduction of operating costs. The sum of significant and minor technical improvements delivers the highest value to customers in the high pressure homogenization market.

Unique benefits at glance
• POWER & VERSATILITY
• EFFICIENCY
• SAFETY & RELIABILITY
• USER FRIENDLY
Power & Versatility

Launching two brand new Ariete models to best suit your needs

The new concept also offers a 315 kW motor version, the Ariete Homogenizer 5315, in order to guarantee best performance and efficiency for all production capacities. The special design of its liquid end allows an easy product flow not only for milk, but also for viscous and high total solid products. Processing parts are absolutely versatile and allow an easy swap from standard to challenging products. If necessary it’s possible to allocate the machine to a different product line for a different application, i.e. from milk to mayonnaise just by replacing the pumping valves. Such versatility allows Ariete Homogenizer 5400 to meet the widest market demands in all applications: from dairy to beverage, but also in chemical and pharmaceutical sectors.

From high pressure pump to homogenizer

A high pressure homogenizer is a single acting reciprocating multi-plunger pump with a specific adjustable valve designed to create the required pressure to micronize different fluids. Therefore, Ariete Homogenizer 5400 is also available as a pump version in the production of milk powder, coffee and similar products. Ariete pumps can be combined with spray dryers or where liquids need to be transferred from one point to another in any industrial plants.

PERFORMANCES

<table>
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<tr>
<th>Pressure bar</th>
<th>Ariete Homogenizer 5315</th>
<th>Ariete Homogenizer 5400</th>
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Ariete 5-piston homogenizer can adjust flow rate and pressure guaranteeing the highest efficiency for all your application fields!
THE BEST EFFICIENCY PUMP MEETS THE BEST EFFICIENCY OPTIONS
Efficiency

The high pressure Ariete pump requires 7% less energy compared to any other pump in its class.

Customers can benefit from operational efficiency, reduced water and energy consumption thanks to GEA’s high specialization in homogenization technology. Highly improved component designs and functions, careful materials selection, long experience and research in homogenization, award the GEA pump a 7% higher efficiency compared to any other brand on the market. All of this coupled with the possibility to install GEA high efficiency options such as NiSoPURE, NanoVALVE and OPS allows further savings in production costs (power, water, oil).

Helping you save on production costs

- NanoVALVE reduces energy consumption; it is capable at a 30% lower homogenizing pressure to improve the degree of homogenization.
- NiSoPURE reduces energy and water consumption; in aseptic productions, compared to the standard system reduces water & steam consumption up to 90% and guarantees the highest quality standards of sterile water to e. g. flush aseptic barriers.
- OPS (Oil Purification System) prevents oil waste and reduces service time; this oil filtration unit guarantees a continuous oil regeneration, prolongs oil life span, enhances quality and safety, extends 4 times service intervals.

7% More efficient
- Improved design, features and functionality of motor transmission, pistons, liquid end components
- Optimized pumping valves
  98-99% efficiency, no backflow, robust, easy cleaning, aseptic
- Double feeding into manifold
  Smooth operation, reduced pulsations, no need for pulsation dampener, less energy consumption
- Motor belts
  25,000 hours warranty and low energy consumption
Safety & Reliability

A new design to improve your production reliability
The new strengthened and ergonomic design confers greater steadiness and stability to the machine in any working condition. Furthermore, fitting the inlet manifold inside the cladding, along with improving of the fluid dynamics, ensures a considerable noise reduction. Inside and outside design allows extreme hygiene and safety:

These adjustments resulting from constant research in the field by our experts and continuous listening to our customers, allow GEA homogenizers to guarantee higher productivity, along with reliability and peace of mind for our clients. Entirely built around customer’s needs, Ariete Homogenizer 5400 can be perfectly integrated into any system.
**User Friendly**

**Easy and fast maintenance**

Maximum accessibility to the inside of the machine allows the customer to perform maintenance safely and in record time. The large front door with automatic opening system, allows convenient and easy access to the compression head. The side doors and the new position of the motor, allow its replacement and maintenance services from both the right and left side. The easy-to-remove side panels, together with the improved ergonomics of the systems positioning, give the operator the possibility to adjust the oil and air systems in total safety, even with the machine in motion during the start-up phases, maximizing productivity and safety.

**5 best features minimizing service time**

- Motor position allows safe and easy access for the operator
- Oil and air systems can be adjusted in total safety during the start-up phases, even with machine working
- Easy-to-remove panels on both sides of machine
- Compression head easily accessible from both sides
- Easy belt tensioning
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 listed in selected MSCI Global Sustainability Indexes.