



Subject to modifications.

# GEA Ariete Homogenizer 2006

## Technical data | Homogenizer & High Pressure Pump

The Ariete Series is the state-of-the-art for powerful reliable high pressure machines and customized solutions. The Ariete machines, compliant to EU safety rules (CE standards) and built according to EN ISO 9001:2008 Quality System, are the best fit for pharmaceutical, dairy, food & beverage, biotech, chemical and cosmetics industries.

Available up to 1500 bar, suitable for CIP and SIP, Ariete Series can be supplied with all necessary customizations for easy integration in any process line. The wide range of available materials, the low running speed (max. 185 rpm) and linear plunger velocity allow Ariete machines to perform at their best also on abrasive and viscous product.

### Main options

- 2<sup>nd</sup> stage homogenizing valve
- Electric power board for fixed or variable capacity
- Machine automation and remote controls
- Aseptic execution
- 3-A execution
- FDA approved gaskets and cGMP documentation

### Sustainability options

- NiSoPURE

### Sustainability values

Energy consumption/1000 l product (kWh)	7,5
Water consumption/1000 l product (l)	61,5
Lubricating and cooling water	40 l/h
Oil consumption ISO VG 150	1,5 l/2.000 h
Noise level	≤72 dB(A) ± 2
Carbon footprint/1000 l product (kg CO <sub>2</sub> )	3,8

### Technical data

Number of plungers	2
Absorbed motor power up to	5,5 kW
Net weight	375 kg
Gross weight	515 kg

### Process data

Sanitary execution: max. capacity at 150 bar; water max. hardness <15°fH, max. particle size 60 microns, filtered water; noise level at max. capacity and max. pressure at 1 meter distance; CO<sub>2</sub> emissions based on electricity production generating 0,5 kg CO<sub>2</sub>/kWh.

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## Liquid end

- High quality stainless steel and special high wear resistant materials for best mechanical and corrosion resistance performance
- 3-A and electropolished versions available
- Ball (PVB) and poppet valves (PVP) interchangeable into the same block design for maximum product handling flexibility
- Aseptic version compression block available as option, with sterile condensate packing flushing
- Various materials for pumping plungers
- Monoblock construction, up to 600 bar or multiblock up to 1500 bar, forged high grade Duplex or Super Duplex SS alloy

## Homogenizing valve

- One stage (standard on homogenizers) with hand wheel adjustment
- Engineered for easy maintenance and cleaning
- Second stage as option
- Wear parts made of tungsten carbide, ceramics as option
- Possible pneumatic upgrade

## Power end

- Cast iron power frame
- Heavy duty and reliable power frame housing the transmission elements
- "V" belts direct drive
- AC motor drive
- Splash type lubrication system, forced as option

## Casing

- Made of polished stainless steel with removable panels
- Stainless steel AISI 304 base frame on adjustable legs

## Plungers

- Chrome coated stainless steel
- Tungsten carbide coated stainless steel
- Solid ceramic
- HCR Chromium Carbide coated stainless steel

## Pump valves

- High wear resistant Stellite™ alloy removable seats
- Ball type (PVB) or poppet type (PVP) in solid Stellite™
- Tungsten carbide materials available as option

## Pressure measurement & control

- Sanitary design analog high pressure gauge
- Pressure transmitters and transducers available as option

## Safety devices

- Overpressure relief valve installed on the compression block available as option in different versions according to customer applications
- Emergency push button with reset
- Stainless steel compression head cover

## Product line connections

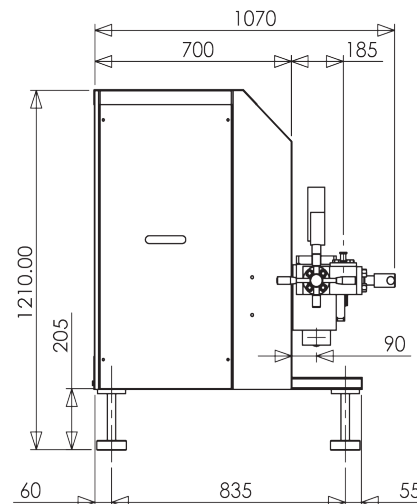
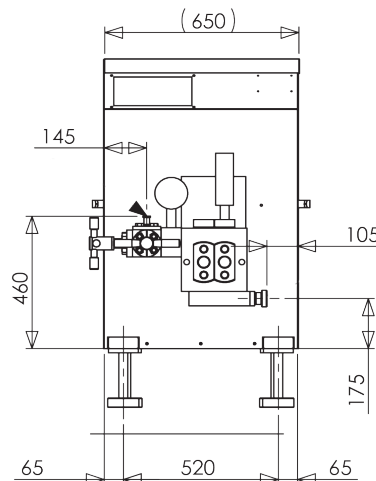
- DIN 11851, Tri-Clamp™, GEA Tuchenhagen Varivent™
- Others as option upon request

## Tools and spare parts

- Ordinary maintenance tools and one set of emergency spare parts supplied with the machine
- O&M manual and spare part list on USB stick

## Dimensional drawing

Overall dimensions (mm)



Performance	
Pressure (bar)	Max Flow Rate (l/h)
100	650
150	650
180	450
200	450
250	400

Performance	
Pressure (bar)	Max Flow Rate (l/h)
400	200
600	100
1.000	80
1.200	80
1.500	35

Each line refers to a different machine, which is designed for the specified maximum pressure and maximum capacity in the above table.

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