

GEA Niro Soavi Technical Datasheet

Homogenizer & High Pressure Pump

Ariete NS3006

From the world leader in high pressure homogenization: absolute quality and reliability with advanced technical solutions for any process need.



The Ariete series is the state-of-the-art technology 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, biotechnology, chemical and cosmetics industries.

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

Homogenising valve

- One stage (standard on homogenizers) with hand wheel adjustment
- High efficiency homogenizing valve, based on advanced fluid dynamics concepts
- Engineered for easy maintenance and cleaning
- Second homogenizing stage as option
- Wear parts made of tungsten carbide, ceramics as option

Power end

- Heavy duty and reliable power frame housing the transmission elements
- AC motor drive
- Splash type lubrication system
- "V" belts direct drive

Casing

- Polished stainless steel with removable panels for easy access and maintenance
- Galvanized steel base frame on adjustable legs

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 CD-ROM

Pump Valves

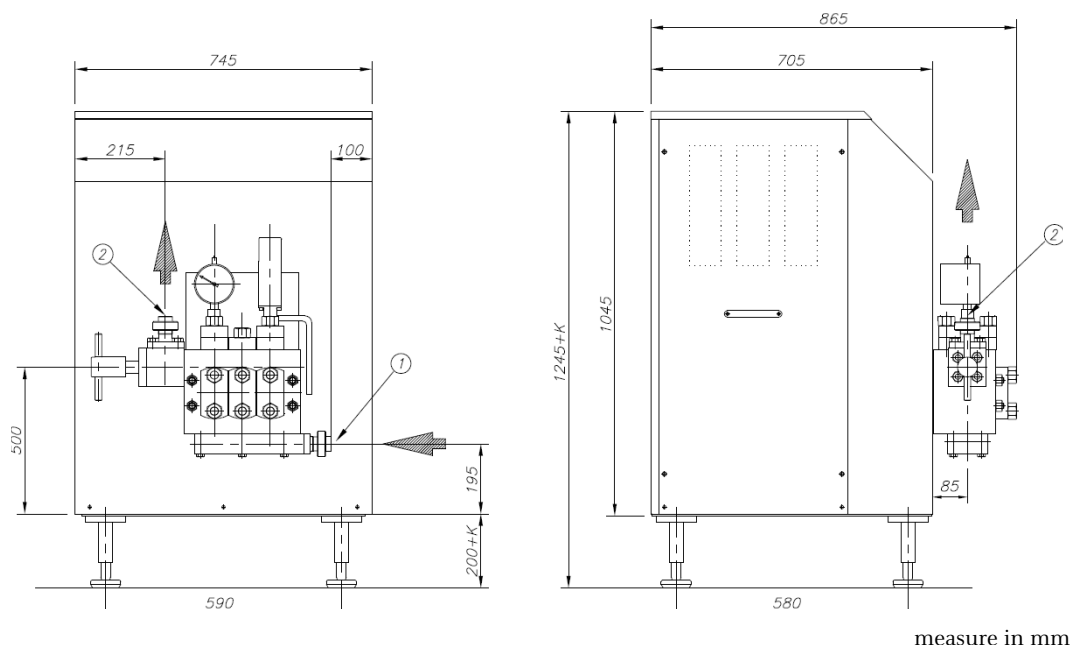
- High wear resistant Stellite™ alloy removable seats
- Ball type (PVB) or poppet type (PVP) in solid Stellite™
- Ceramic or tungsten carbide materials available as option

Plungers

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

Ariete NS3006

Dimensional drawing



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

Pressure measurement & control

- Sanitary design analog high pressure gauge
- Pressure transmitters and transducers available as option
- Overpressure relief valve installed on compression block

Product line connections

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

Power end

- Cast iron power frame
- Splash lubrication, forced as option
- Polished SS machine casing on stainless steel frame

Main options on request

- High pressure pump version
- 2nd stage homogenizing valve
- Electric power board for fixed or variable capacity
- Machine automation and remote controls
- Aseptic execution
- 3-A execution, FDA approved gasket and cGMP documentation

PERFORMANCE

Pressure (bar)	Max Flow Rate (l/h)
150	1000
180	750
200	750
250	600
400	350
600	220
1000	120
1200	120
1500	50

Each line refers to a different machine, which is designed for the specific maximum pressure and the specific maximum capacity.

TECHNICAL DATA

Number of plungers	3
Stroke	40-50 mm
Absorbed motor power up to	5.5 kW
Net weight	500 kg
Gross weight	650 kg
Lubricating and cooling water	60 l/h
Lubricating oil ISO VG 150	3 l

GEA Mechanical Equipment

GEA Niro Soavi

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