

### High Pressure Homogenisers: The Ariete Range

Moody plc have been appointed as the Niro Soavi representative for the UK, serving the Dairy and Food Industries.

The Niro Soavi high pressure homogenisers feature the latest in design concepts, contributing to excellence in performance and reliability. The relationship between capacity and operating pressures for twelve models is given in the table (next page). For special applications, homogenising pressure up to 2000 bar can be achieved at low capacities.

The Ariete machines can handle both cold and hot (up to 180°C) fluids. Special operating requirements can be met, i.e. operation to sanitary and aseptic specifications or need to handle abrasive, viscous or corrosive fluids.



New

High Pressure

# Homogenisers & Pumps for the Food & Dairy, Chemical, Petrochemical, Cosmetic & Pharmaceutical Industries.

- Designed according to the EU safety rules(CE Standards), engineered, manufactured and tested according to ISO EN 9001 Quality System.
- Sanitary and aseptic execution, designed for CIP and SIP.
- Suitable for abrasive and viscous products.
- Homogenising pressure up to 1500 bar.
- Monoblock compression head design upto 600 bar pressure.
- Multiblock VHP compression head design for operation over 600 bar, to avoid stress concentration and block failure.
- Easy implementation in remote control systems and complete process lines.



ARIETE  
NS3110Energy

### High Pressure Pumps: The Ariete Range

Niro Soavi supplies a range of high pressure positive displacement pumps suitable for the handling the toughest of industrial applications, i.e. those involving high viscosity and abrasive feedstocks on the one hand, and those meeting sanitary operating standards on the other.

Pumps are available in sizes covering capacities from 100-100.000 litres/h. Operating pressures of 1000 bar can be achieved. Pump construction is similar to the homogeniser. Various designs of valves are available, and specific valve types are selected according to the feedstock properties and operational specifications. Pumps are ideal for spray dryers with nozzles atomizers. Pump control systems are similar to those provided with the homogeniser.

## Specifications

### Liquid end

- High quality stainless steel and special high wear resistance materials for best mechanical and corrosion resistance performances.
- 3A and electropolished versions available.
- Ball (PVB) and poppet valves (PVP) interchangeable into the same block design for maximum product handling flexibility.
- Aspect version compression block available with sterile condensate packing flushing.
- Various materials for pumping plungers.

### Homogenising valve

- One stage (standard on homogenisers) with pneumatic adjustment from the machine's control panel.
- High efficiency design valve Nanovalve®(see page 4), based on advanced fluid dynamics concepts, available as option.
- Engineered for easy maintenance and cleaning.
- Second stage option.

### Power end

- Heavy duty and reliable power frame.
- AC motor drive.
- Forced lubrication with gear pump and low oil pressure switch.
- "V" belts drive train and gearbox speed reduction unit.

### Casing

- Made in polished stainless steel with sound proof lining.
- Easy access and maintenance with removable panels.
- Noise reduction execution ( $\geq 75$ dB) available.

### Tools and spares parts

- Special tools and one set of emergency spare parts supplied with the machine.
- Two copies of detailed O&M manual.



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NS3018Energy



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**ARIETE HOMOGENISERS & HIGH PRESSURE PUMPS - STANDARD PROGRAM**

Model	Capacity l/h						Max. Kw
	150 bar	250 bar	400 bar	600 bar	1000 bar	1500 bar	
NS 1003	300	180	100	/	/	/	3,0
NS 2006	700	400	200	150	80	40	5,5
NS 3006	1000	550	300	225	120	/	5,5
NS 3011	2000	1200	700	400	250	/	11,0
NS 3018	4000	2500	1500	1000	400	300	18,5
NS 3037	8000	5000	3000	2000	1000	700	37,0
NS 3075	15000	9500	5500	3500	1700	1000	75,0
NS 3110	20000	15000	9000	5000	3000	2000	110,0
NS 4132	25000	18000	11000	7000	4000	/	132,0
NS 5160	34000	20000	13000	8000	4500	3250	160,0
NS 6200	40000	25000	15000	10000	6000	4000	200,0
NS 8315	50000	36000	22000	14000	8000	/	315,0

**ARIETE**  
NS3075Energy



**ARIETE**  
NS5160Energy

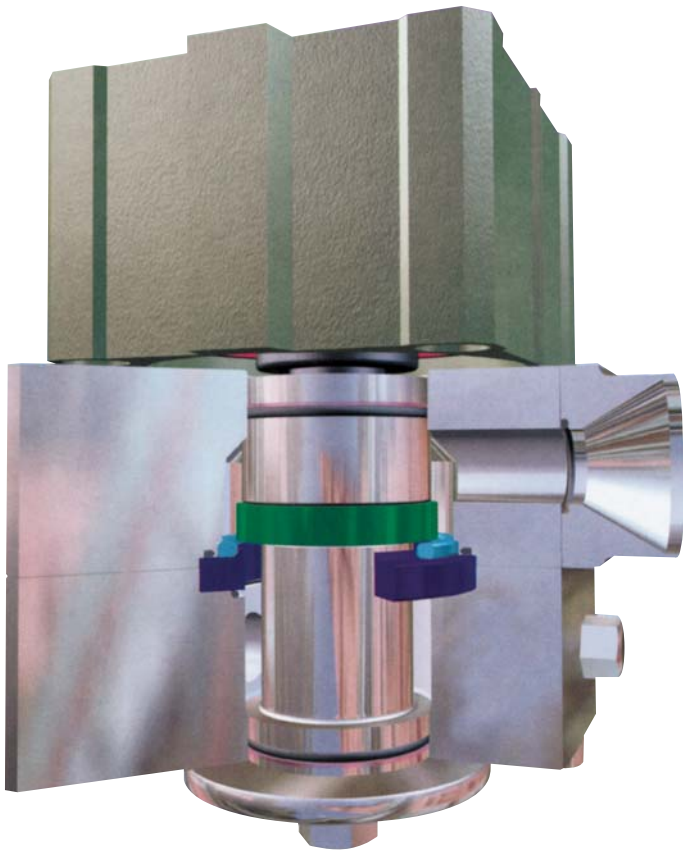


**ARIETE**  
NS6200Energy



**ARIETE**  
NS8315Energy





**Homogenisers for laboratory use**

Although Niro Soavi homogenizers are renowned for their industrial performance, there is available a range of low capacity homogenisers designed for laboratory and pilot plants. Even 10 litres/hour can be handled at pressures upto 1500 bar. Higher pressure (2000 bar) are possible in a batch processing mode, homogenising samples of volume as low as 0.1 litre. Instrumentation is supplied according to individual requirements.

NS 1001L - PANDA



**NanoValve®**

This new conception homogenising group allows, at the same time homogenising pressure, to reduce the particles size of the product in comparison with the traditional valves.

The improvement does not only involve the performances: the wear of parts and the operative noise are also noticeably reduced. NanoValve® can easily be installed both on old and new machines, also in aseptic execution.

NanoValve® is supplied with a simple pneumatic control system that allows an easy use also in case of remote control systems. All these characteristics, together with the reduced maintenance, make NanoValve® a winning improvement.

NS 2006L - PONY

Two stage laboratory homogeniser (up to 1500 bar) with tank and feed pump.



**Moody direct also offer a comprehensive range of OEM Niro Soavi homogeniser and high pressure pump spare parts.**

**Just contact us and we will send you a full quotation for the necessary parts.**