

MILKLINE VACUUM LINE

THE **HEART** OF MILKING



MILKLINE®

MILKLINE®

THE VACUUM PRODUCTION SYSTEMS ARE
THE **HEART OF THE MILKING PLANT.**
MILKLINE'S VAST EXPERIENCE
IN THE PRODUCTION OF VACUUM PUMPS
ENSURES **TOTAL RELIABILITY**



Minimum
maintenance



Maximum
performance



Eco-
sustainability



Minimum
noise

In any milking plant, **vacuum production** is certainly a basic aspect and of great importance as it ensures the health of the udder. Vacuum also determines the efficiency of the system's cleaning cycles.

Milkline has been designing and manufacturing vacuum pumps directly for more than 30 years.

Our experience allows us to offer **a truly complete range** of vacuum pumps for every type of installation.

From the small 140 l/min PM3 to the 3,000 l/min PM 30, we can guarantee **an accurate and extremely precise processing.**

This leads to **high reliability**, **low noise**, **energy savings** and low lubricant consumption.



THE HPU LINE

PUMP BODY DESIGN FOR BETTER HEAT DISSIPATION

The **HPU MILKLINE LUBRICATED** vacuum units are characterised by a belt drive and by the particular design of the pump body which allows a better heat dispersion.

Its capillary oiler also ensures precise oil dosing, avoiding unnecessary waste.



THE HPU LINE

HPU VACUUM UNITS WITH BELT DRIVE TRANSMISSION ON TANK

- Lubricated vane vacuum pump with belt drive transmission, on horizontal tank
- Flow rate [at 50 kPa]: 330 to 3000 l/min
- Rpm: from 970 to 1500
- Motor power: from 0.75 to 7.5 kW
- Hot-dip galvanised tank: from 22 to 100 litres
- Complete with: safety valve for accidental entry of liquids, oiler, belt tension plate, protective cover and silencer

OPTIONS

- Cyclone oil recovery system
- PTO reducer
- Combustion engine



HPU VACUUM UNITS WITH BELT DRIVE TRANSMISSION ON PLATE

- Lubricated vane vacuum pump with belt drive transmission, on plate
- Flow rate [at 50 kPa]: from 330 to 3000 l/min
- Rpm: from 970 to 1500
- Motor power: from 0.75 to 7.5 kW
- Complete with: oiler, belt tension plate, protective cover and silencer

OPTIONS

- Cyclone oil recovery system
- PTO reducer
- Combustion engine



THE PVU LINE

THE “EVERGREEN” RANGE FOR MAXIMUM PERFORMANCE AND MINIMUM CONSUMPTION

For the same power, the **PVU MILKLINE** vacuum units guarantee higher flow rates compared with standard productions without compromising reliability and durability.



THE PVU LINE

PVU VACUUM UNITS WITH BELT DRIVE TRANSMISSION ON TANK

- Lubricated vane vacuum pump with belt drive transmission, on horizontal tank
- Flow rate [at 50 kPa]: from 280 to 3000 l/min
- Rpm: from 970 to 1500
- Motor power: from 0.55 to 7.5 kW
- Hot-dip galvanised tank: from 30 to 100 litres
- Complete with: safety valve for accidental entry of liquids, oiler, belt tension plate, protective cover and silencer

OPTIONS

- Cyclone oil recovery system
- PTO reducer
- Combustion engine



PVU FLANGED VACUUM UNITS ON TANK

- Lubricated and/or dry electrical pump on horizontal tank
- Flow rate [at 50 kPa]: from 140 to 450 l/min
- Pump rotations: 1400
- Motor power: from 0.75 to 1.3 kW
- Hot-dip galvanised tank: from 15 to 22 litres
- Complete with: switch, electric wire, vacuum gauge, silencer, non-return valve and oiler (if the pump is lubricated)

PVU VACUUM UNITS WITH BELT DRIVE TRANSMISSION ON PLATE

- Lubricated vane vacuum pump with belt drive transmission, on plate
- Flow rate [at 50 kPa]: from 280 to 3000 l/min
- Rpm: from 970 to 1500
- Motor power: from 0.55 to 7.5 kW
- Complete with: oiler, belt tension plate, protective cover and silencer

OPTIONS

- Cyclone oil recovery system
- Combustion engine



PVU VACUUM UNITS WITH BELT DRIVE TRANSMISSION FOR PTO REDUCER

- Lubricated vane vacuum pump with belt drive transmission, on plate
- Flow rate [at 50 kPa]: from 330 to 1500 l/min
- Rpm: from 1200 to 1500
- Motor power: from 0.75 to 4 kW
- Complete with: oiler, belt tension plate, protective cover and silencer

OPTIONS

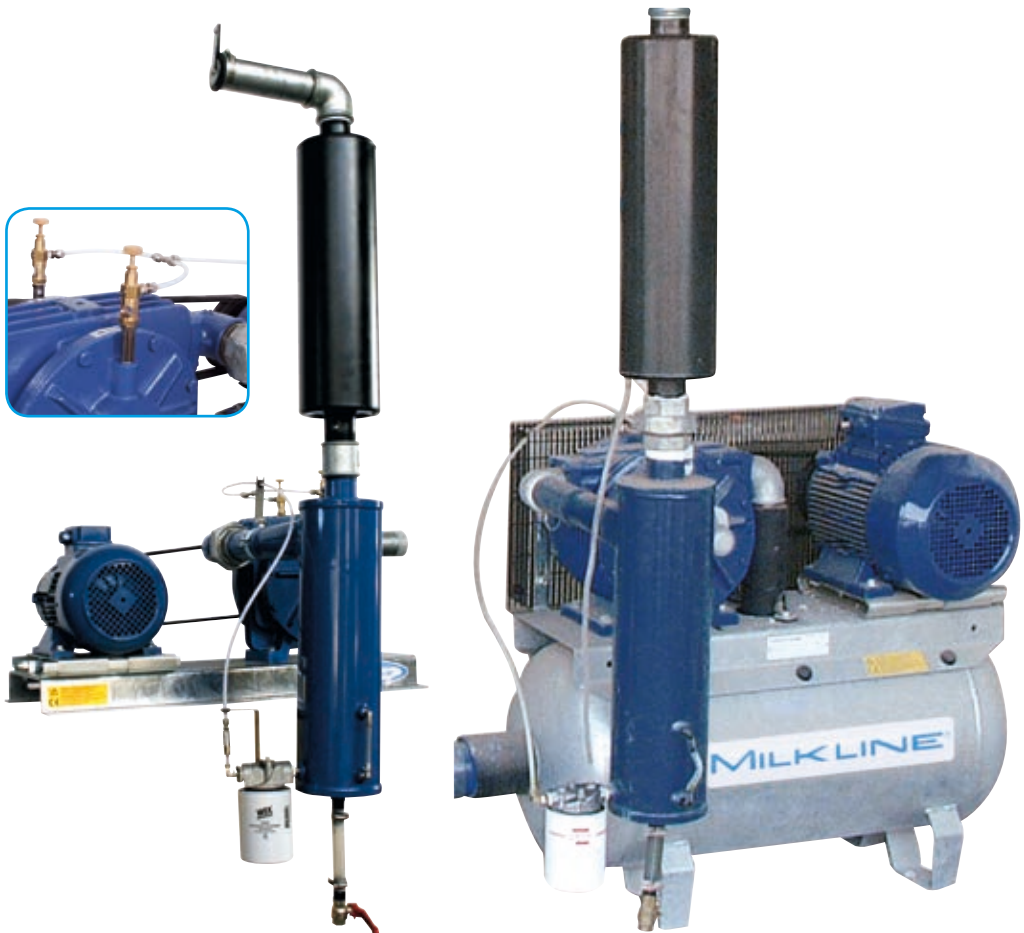
- Cyclone oil recovery system



CYCLONE OIL RECOVERY SYSTEM FOR HPU AND PVU PUMPS

The Cyclone oil recovery system allows automatic oil recovery, filtration and recirculation. This system avoids any oil wastage and **considerably reduces oil consumption, fully respecting the environment.**

- Dropper for precise and accurate oil release
- Significant reduction in oil consumption
- Respect for the environment, reduced amount of oil dispersed in the air
- Visual indicator for easy oil level check
- Suitable for PVU and HPU vacuum units, on plate or on tank
- 46 ISO viscosity turbine-specific is recommended



THE LPU LINE

VACUUM TECHNOLOGY FOR THE MOST DEMANDING USERS

The **LPU MILKLINE** vacuum units are high-performance and reliable solutions for advanced milking systems. Thanks to the lobe pump technology, no oil is required and maintenance is reduced to a minimum.



THE LPU LINE

VACUUM UNITS WITH LPU LOBE PUMPS ARE DESIGNED AND MANUFACTURED TO ENSURE HIGH OPERATING PERFORMANCE, RELIABILITY OVER TIME AND RESPECT FOR THE ENVIRONMENT

Thanks to **rotary lobe technology** and to dry running, no oil is required and rotation takes place without any vibration at all.

ADVANTAGES

- NO OIL CONSUMPTION
 - RESPECT FOR THE ENVIRONMENT
 - DURATION OVER TIME
 - REDUCED MAINTENANCE
-
- Dry running
 - Ultra-compact silencer with dB Killer device
 - Robust and compact design for installations in even the smallest of spaces
 - **3 models available with nominal flow rate between 2,100 and 4,300 l/min at 50 kPa**
 - To be combined with the Variospeed VCU EASY Drive



OPTIONS

- **Automatic rotor and pump body cleaning system (Lobe Cleaner)**

LPU 230		LPU 300		LPU 430	
Vacuum pump	WN50	Vacuum pump	WN65	Vacuum pump	WN80
Flow rate [l/min at 50 kPa]	2100	Flow rate [l/min at 50 kPa]	3000	Flow rate [l/min at 50 kPa]	4300
Motor power [kW]	5,5 400/690	Motor power [kW]	7,5 400/690	Motor power [kW]	11,0 400/690

THE SILENT LINE

INCREDIBLY EFFICIENT AND SILENT

The MILKLINE technology with direct coupling, without belts and pulleys, ensures a very quiet operation and increases the efficiency of our pumps: higher flow rates at the same power consumption.



THE SILENT LINE

THANKS TO THEIR DIRECT-COUPLED TECHNOLOGY, THE **SILENT VANE** VACUUM UNITS ENSURE MAXIMUM NOISE REDUCTION AND GUARANTEE HIGH PERFORMANCE WITH A REDUCED ENERGY CONSUMPTION

ADVANTAGES

- MAXIMUM NOISE REDUCTION
- MAXIMUM EFFICIENCY
- COMPACTNESS
- EASE OF MAINTENANCE
- LOWER OPERATING COSTS



SILENT version



SILENT VARIO version

- Motor-pump coupling via flexible joint
- New horizontal drain with integrated waste oil recovery system
- The specially designed cooling fan **for the SILENT VARIO model**, allows the pump to be cooled even at low speeds, ensuring longer life and better performance
- Use with the **Variospeed VCU EASY Drive** ensures stable and constant vacuum levels under all operating conditions
- Reduced maintenance thanks to the absence of transmission belts
- 5 different models with nominal flow rates from 430 to 2100 l/min at 50 kPa
- Rotations/min: 1,400
- Motor power: from 1.1 to 5.5 kW

OPTIONS

- Possibility of wall installation thanks to special supports
- Hot-dip galvanized vacuum tank from 50 to 100 l
- Variospeed VCU EASY Drive

ACCESSORIES FOR VACUUM

SPECIFICALLY DESIGNED TO GUARANTEE A LONG LIFETIME AND IMPROVED PERFORMANCE TO THE VACUUM SYSTEM



VARIOSPEED VCU AND DVC100

The system consists of a **DVC100** control box and a vacuum level sensor combined with the Variospeed VCU Drive.

DVC100 combined with the **MILKLINE Variospeed VCU Drive** provides **stable, safe and precise adjustment of the vacuum level in the milking plant.**

- Drastic reduction in energy consumption
- Quieter operation
- Simple installation
- Easy to program



LOBE CLEANER

LOBE CLEANER is the automatic cleaning system for **LPU lobe pumps specifically developed by MILKLINE**. The cleaning cycle can be programmed or managed manually and the detergent is dosed automatically.

- Compact design for wall installation
- Detergent dosing pump
- Wash start-up automatically or in manual mode
- Specific detergent available
- On request: Lobe cleaner 2P with two peristaltic pumps
- Simple adjustment



BLU POWER OIL

The original **BLU POWER** oil by **MILKLINE** ensures the correct operation and long lasting performance of lubricated vacuum pumps and prevents premature wear of moving parts.

- **Two versions available: standard and winter for colder seasons**
- Low vapour pressure (even at high temperatures)
- Exceptional lubricating capabilities
- Minimal oxidation



VACUUM CONTROL SYSTEMS

MILKLINE offers a wide range of vacuum control systems, whose task is **to instantly compensate any change in vacuum in the system**, ensuring vacuum stability and preserving the health of the udder.

From the simple spring valve, suitable for installation on milking trolleys and small plants, to the servo-assisted models, ideal for all plants with different milking units.

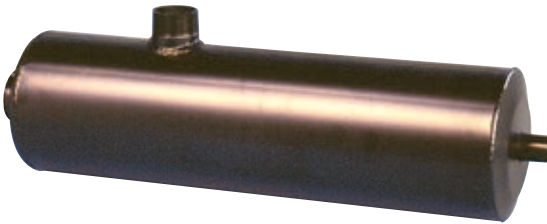
Our control valves always offer a good response in terms of **maintaining the set vacuum level**.



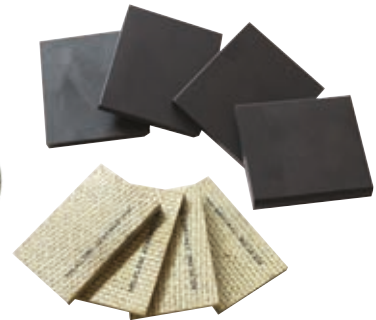
1/2"	ø 100 mm
1/2"	ø 80 mm
1/4"	ø 63 mm



OILERS AND SILENCERS

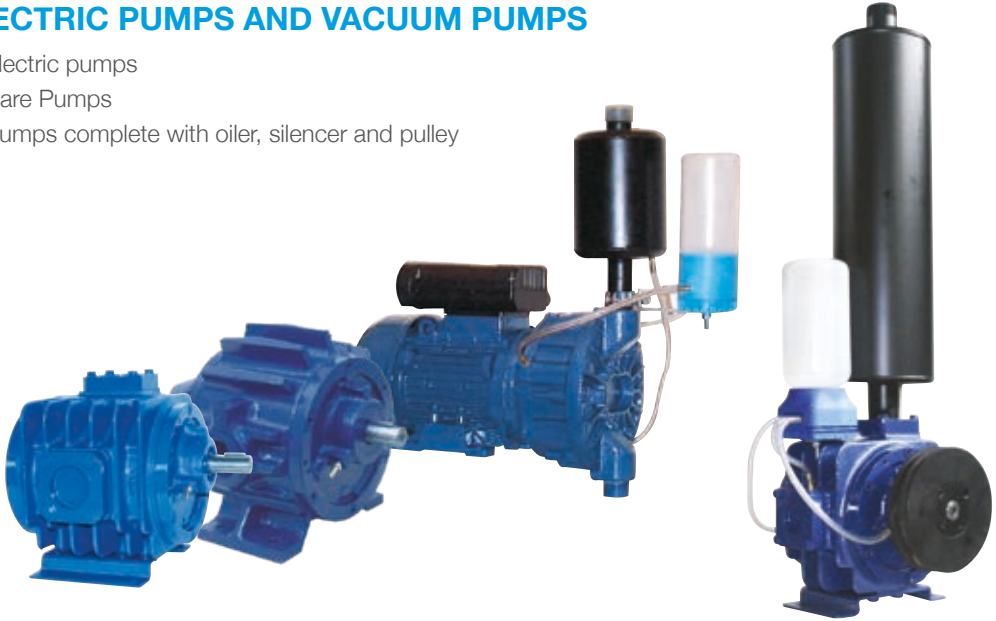


VANES, PULLEYS AND BELTS



ELECTRIC PUMPS AND VACUUM PUMPS

- Electric pumps
- Bare Pumps
- Pumps complete with oiler, silencer and pulley



TANKS AND PRE-FILTERS

- Galvanised vacuum tanks complete with rubber lids and drain valves, safety valve for accidental entry of liquids and rubber sleeves for connection to the vacuum pipeline
- Horizontal PVC balancing tanks from 115 to 380 litres
- 33 litre suspended PVC balancing tanks
- Vertical galvanised balancing tanks, from 50 to 100 litres
- 4" PVC pre-filters, with wall support





A STABLE AND CONSISTENT VACUUM LEVEL IS ONE OF THE MOST IMPORTANT ASPECTS IN RUNNING A MILKING PLANT AND IN ENSURING THE HEALTH OF THE UDDER.

MILKLINE®

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