

 DeLaval

## Money back in your bank

DeLaval Vacuum Pump  
VSD100 Controller



Sustainable  
Dairy  
Farming

Your solution – every day



DeLaval's Vacuum Pump VSD100 range can not only cut your energy costs by up to 70%, but also dramatically reduce noise levels at the same time. The VSD100 is highly efficient and suitable for a large range of vacuum pumps used throughout the dairy industry.

#### **Energy Savings of up to 70%**

Studies show that by maintaining a constant vacuum level, and only producing the necessary amount of airflow, energy cost savings of up to 70% can be made. Your initial investment can therefore be paid off in a relatively short period.

In fact, one happy customer called to say that he estimated his return on investment to be less than one year.

To calculate your return on investment, just fill in the table on the back page. We think you will be pleasantly surprised.

#### **Gentler on you, your cows and your equipment**

DeLaval VSD100 utilises advanced technology to create a more gentle milking environment.

You will appreciate the lowered noise levels, and so will your cows.

More accurate vacuum control can also mean improved udder health and milking performance.

The VSD100 will reduce wear and tear and extend the life of your vacuum pump and motor by quickly and smoothly responding to the fluctuating vacuum demands of every day milking.





**GREG AND MARGARET SCHUMACHER  
OHAAKI, NEW ZEALAND**

*"DeLaval and our local dealer have an impressive track record and high level of expertise which made our installation decision easy.*

*The VSD100 maintains a steady vacuum level and is saving us a substantial amount of electricity as well as lowering noise levels. Installation was effortless and everyday operation is simple and easy."*

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### **So quiet, you can hear problems before they happen**

DeLaval VSD100 lowers the noise level in your shed dramatically.

It reduces the overall speed of your vacuum pump, matching the pump output to the exact needs of your milking system. This reduces noise to a level where you can hear any problems that may occur (e.g a vacuum leak) before they start costing you money.

### **No electrical interference**

Some variable speed drives can interfere with electrical equipment such as herd management and cow identification systems. DeLaval's VSD100, on the other hand, completely conforms to the New Zealand and Australian EMC (Electromagnetic Compatibility) emission standards and will not interfere with any other componentry in your shed.

Independent testing has also confirmed the VSD100 range passes all stray voltage testing requirements.

## The way of the future

For more than a century we have been helping dairy farmers the world over to enhance their milking routine. DeLaval's Vacuum Pump VSD100 range of variable speed drives continues this tradition.

- Easy to Install.
- Reduced pump wear and therefore less maintenance.
- One controller can operate multiple motors.
- Optional remote manual switch allows remote starting and wash cycle operation.
- Automatic return from 'wash' to 'milk ready' for the next milking.
- Single phase, 2 phase or 3 phase supply voltage options.
- For vacuum pumps from 5.5kW (7.5 Hp) to twin 15kW (40 Hp) installations.
- Trouble shooting fault diagnostics.
- Suitable for oil, rotary lobe and water ring vacuum pumps.

Many factors (liner slip, cluster fall off, etc) can affect the vacuum level in your parlour. DeLaval's VSD100 is simple to install and easy to use, quickly responding to any changes in airflow by varying the speed of the pump. The result? Unprecedented control and the steadiest, most accurate vacuum level.



## Data

Calculate the return on investment	
With VSD price information from your local DeLaval representative, you can fill in the figures below.	
	Amount
Vacuum pump motor (kW)	
Number of vacuum pumps	x
Running hours per day	x
Electricity cost per kW	x
Electricity cost per day	=
Savings factor* x (0.4 or 0.6)	
<b>Saved electricity cost per day</b>	=
	x 365
<b>Saved electricity cost per year</b>	= **
VSD investment	
<b>Saved electricity cost per year</b>	÷ **
Time for return on investment (years)	=
<b>Key</b> * Savings factor based on reduction of motor speed. Use 0.4 for systems dimensioned according to ISO standards, and 0.6 for systems dimensioned according to ASAE standards. ** Use the same figure.	