

— Henrik Döhrmann

# **Technologies and services** enabling DeLaval Flow-Responsive™ Milking:



#### **DeLaval Advisory services**

DeLaval-certified trainers will provide up of your system. Our advisory teams are nere to help you get the most out of your



#### **DeLaval DelPro**™

The latest DeLaval DelPro™ provides more control than ever before. By offering faster and more accurate information, analysis, reports, and alerts, it enables you to make more informed decisions on



#### **DeLaval milk meter**

The ICAR-approved MM27 milk meter employs IR technology to measure milk flow precisely, with no moving parts. This design enables low-maintenance yield monitoring.



#### **DeLaval Evanza**™

The DeLaval Evanza™ cluster, featuring DeLaval TopFlow™ technology and DeLaval Clover™ artridges, optimises milk flow to ensure milking is quick, comfortable, and efficient. With a particular emphasis on maximising yield, it represents our most innovative cluster to date



#### Vacuum regulation and monitoring

DeLaval's vacuum regulation technology applies the correct vacuum at the right time and monitors each milking point throughout



#### DeLaval InService™ **All-Inclusive**

With DeLaval InService™ All-Inclusive, we carry out routine maintenance, scheduled servicing, and the eplenishment of consumables—all for one agreed orice and with a payment structure that suits you.



UP TO 0% **REDUCTION IN MILKING TIME** WITH NO NEGATIVE **IMPACT ON MILK YIELD** 





to extract more milk in

labour than a conventional

Monovac system offers

significant advantages, especially on large farms.

# Farm profitability

#### Work efficiency

Flow-Responsive Milking Milking you can make every streamlines your milking second count. The capability processes, creating simple, worker-friendly routines that save labour. Milk more cows per session or reduce milking and productive herd. time, all while using less energy and reducing stress



#### Animal welfare

Shorter milking times mean less stress on teats. Flow-Responsive Milking may improve teat condition and



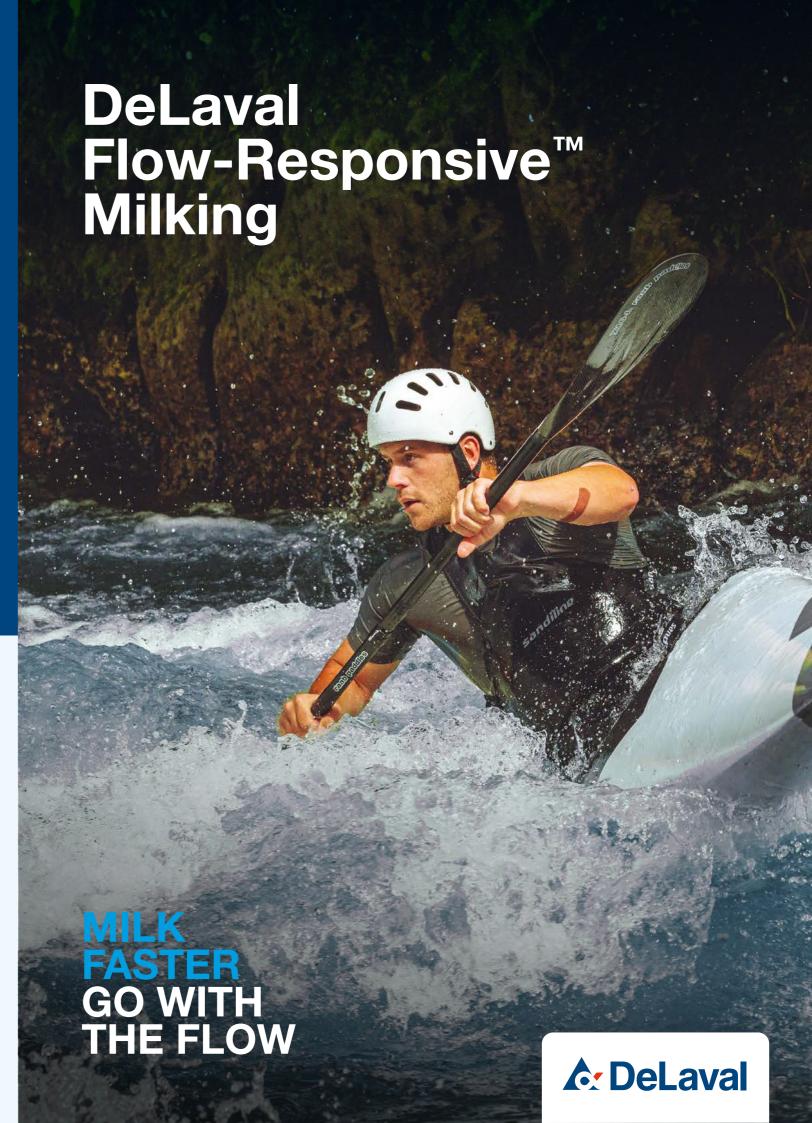
#### Food safety

All materials used with Flow-Responsive Milking are food safety approved. Additionally, shorter milking times reduce mastitis incidence, leading to higher production of quality

# **Put DeLaval Flow-Responsive**™ Milking to work for you

To take the next step in your milking journey, speak with your trusted DeLaval representative or visit us at www.do





# WHY IS IT **BETTER?**

In the past, most milking systems operated at a single pulsation and vacuum level throughout each milking session. This MonoVac approach involved setting an "average" vacuum level to bridge the gap between the cow's milk flow and the system's ability to extract it.

Now, with DeLaval Flow-Responsive™ Milking, there is a new way. By more precisely matching the milk flow of your cows, Flow-Responsive Milking adjusts key parameters - vacuum and pulsation - during each milking session. The result is a steeper, shorter milk flow profile.

forced

take-offs

Last cow ready with Flow-Adjusted

**Positive** 

effect on

teat-end



ast cow ready

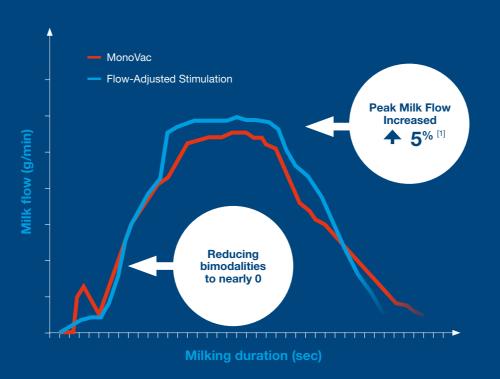
>10% faster (1) -50 sec (1)

## **DeLaval Flow-Adjusted Milking™**

Flow-Adjusted Stimulation Flow-Adjusted Vacuum Valid for both stimulation and vacuum

## **FLOW-ADJUSTED STIMULATION**

Under a MonoVac system, the vacuum and pulsation levels are set to be effective during the peak milk flow. This means that there always needed to be a delay between stimulation and attachment to avoid the damage caused by high vacuum before oxytocin release and milk let-down. With DeLaval Flow-Responsive™ Milking that waiting period is no longer required. It means you can attach sooner and let the system manage the stimulation process for you, reducing bimodalities, assisting udder health, and in many cases making one-person milking a reality.



During the Stimu Phase, the applied vacuum is 34 kPa, with a pulse of 30/70 at 50 bpm. In the Main Phase, the vacuum level is set to 42-44 kPa, with a pulse of 65/35 at 60 bpm. The take-off level ranges from 300 to 1000 g/min.

# IT'S ALL ABOUT THE FLOW

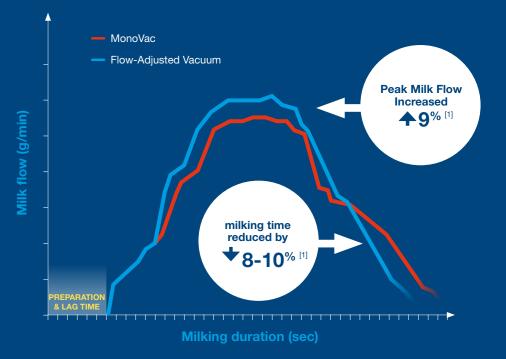
A milking system that doesn't adapt to the milk flow of cows misses the opportunity to milk faster while protecting teat condition and animal welfare. With DeLaval Flow-Responsive™ Milking, your system can now automatically adjust key parameters to better match and enhance your cows' milk flow. Avoid the MonoVac efficiency gap by harnessing milk flow and going with the flow.

DeLaval Flow-Responsive<sup>™</sup> Milking can be implemented with all DelPro-connected DeLaval Rotaries and Parlours\*.



## **FLOW-ADJUSTED VACUUM**

DeLaval Flow-Adjusted Vacuum accelerates milk extraction by increasing the vacuum level after stimulation is complete and high milk flow is achieved, then reducing the level once high flow subsides. This capability to adjust vacuum levels helps avoid the trade-off between udder health and productivity that is created by a fixed vacuum level that is either too high or not high enough at different stages of





In the Start Phase, after proper stimulation, vacuum levels are set to 42 kPa with a pulse of 65/35 at 60 bpm. Once the milk flow reaches >2 kg/ min, the Main Phase is initiated. During this phase, vacuum levels are increased to 47-49 kPa, while maintaining a pulse of 65/35 and 60 bpm.

# FLOW-ADJUSTED STIMULATION + FLOW-ADJUSTED VACUUM

#### **DeLaval Flow-Adjusted Stimulation**

is the ideal choice for both new and existing systems, suitable for rotary and static parlours alike.

Stimulation is performed with cups-on, allowing for faster milking and more efficient routines that may save labour and place less stress on milkers.

#### **DeLaval Flow-Adjusted Vacuum**

is designed to get the most from your herd. With improved milk flow, cows milk out faster without compromising udder health, making it an ideal solution for larger operations.

By combining Flow-Adjusted Stimulation and Flow-Adjusted Vacuum you can achieve the best of both solutions:

- More efficient routines
- Faster milking times
- Improved processes for milkers
- Reduced preparation times

- - Positive effects on teat

Higher peak milk flow

- end condition
- [1] These results were achieved by producers on test farms. Actual results may vary and are not guaranteed. Variations can depend on the number of milkings per day, [2] Data recorded in a static parlour.
- \*Compatible with DeLayal milking point MPC580 and onwards, An internet connection is required for Flow-Adjusted Vacuum