





## 320**HP** MILKING CLUSTER

## ALL ROUND BETTER MILKING

The 320HP Milking Cluster is ergonomically designed for optimum fit and healthier udders to elevate the value of your dairy operation through precision dairy farming

## **ERGONOMICALLY DESIGNED** FOR OPTIMUM FIT AND ANIMAL COMFORT

## The 320HP Milking Cluster allows for an all round better, more efficient milking.

The 320HP Milking Cluster has been ergonomically designed to provide a reduced cluster weight to minimize operator fatigue. Teat condition and udder health is improved for teats of all sizes. The perfect fit of the vented inflation provides you with unsurpassed milk extraction and even milk flow from all quarters.





#### **Ergonomically designed**

For the optimum fit for teats of various sizes, animal comfort, and easy handling for operators of all hand-sizes



The 320HP Milking Cluster achieves best-in-class teat end and vacuum performance



#### **Enhanced flow rates**

Higher capacity ensures peak flow rate performance and enhanced flow rates when combined with the specified inflation and shell combination



#### Reduces Repetitive Strain Injuries

The 320HP Milking Cluster is super lightweight, significantly reducing the operator's risk to RSI



10.8fl.oz Claw Bowl

Weighs only **3Ib**   $\bigvee \downarrow \downarrow \downarrow$ 

 $\rightarrow$ 

Impact Resistant

Narrow Rear Cluster Nipple

### Best suited for latest cow genetics

The unique design of the claw is suited for the latest cow genetics, with narrow rear inlets to improve milk flow through the teat canal and a high-capacity 5/8" and 3/4" outlet to effectively and efficiently move milk away from the teat end. With the specified inflation and system setup, the 320HP Milking Cluster design ensures maximum milk flow while minimising vacuum level changes during the opening and closing of the inflations. Optimum teat health is promoted through innovative inflation design.

With its robust, lightweight and ergonomic design, the 320HP Milking Cluster allows the vacuum, pulsation, inflation, and the milking unit to work together to optimise the milk harvesting process. TRIANGULAR INFLATION BORE

> NARROW REAR NIPPLE PLACEMENT

STAINLESS CLAW BASE UNVENTED

> HIGH VISIBILITY TO MILK FLOW



VENTED INFLATION TAIL

> 10.8FL.OZ CAPACITY

AUTOMATIC SHUT-OFF VALVES AVAILABLE

WAIKATO MILKING SYSTEMS « 320HP MILKING CLUSTER » waikatomilking.com



### The complete high performance cluster system



#### Shorter milking time

Immediate let down and continuous fast milk flow is encouraged through the triangular inflation design. The air vent in the inflation tail rapidly moves the milk away from the teat end. As a result, the milking time is reduced.



#### **Reduced cluster weight**

Reduced cluster weight is beneficial for both cows and operators. Cows' benefit from having better udder health, through improved milking performance, while lighter clusters contribute to reducing the leading cause of on-farm repetitive strain injuries in operators.



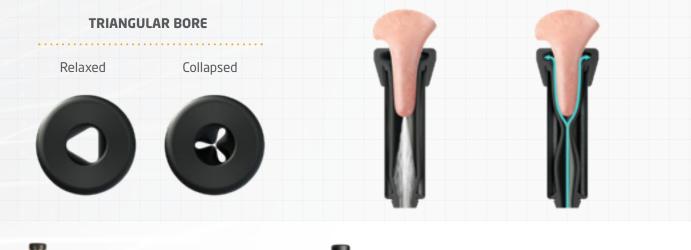
#### **Reduced cup-slip**

Cup slip and fall-off is significantly reduced with the triangular inflation design. Less cup slip improves teat condition and adds to milking speed. A slipping cluster leaves the cow uncomfortable and may result in lower milk quality.



#### **Better teat alignment**

The narrow rear claw nipple spacing fits the natural placement of the teats. Faster milk flow is promoted as the teat canal is not restricted. Better alignment also means less inflation slip.





# SelectT42

With cows and operator in mind we combined many outstanding features into a high performing milking inflation.

- The vented inflation tail quickly transports the milk away from the teat end and results in a more stable teat end vacuum. This largely eliminates backsplash and cross contamination of the teats. The reduced splash back aids with froth reduction.
- The triangular bore has a superior massaging effect on the teat. A gentle massage leads to better milk flow by relieving teat congestion. Unlike round inflations, triangular inflations do not pinch the teats.
- The collapsed inflation allows vacuum to bleed into the reduced vacuum chamber in the inflation head. Inflation slips, fall-off and squawking are largely eliminated. The reduced vacuum chamber promotes animal comfort and health through less ringing of teats.
- The 7/8" mouthpiece is a perfect fit for a large range of teat sizes

#### VENTED INFLATION TAIL

Vented inflation tail improves milking speed, lowers teat end vacuum and reduces cross contamination

#### TRIANGULAR BORE

Gently massages teats. Better fit for a large range of teat sizes

#### SHUT OFF RELIEF

Shut-off groove for positive vacuum shut off. No unnecessary vacuum inlet during cluster attachment

#### TRIANGULAR BORE

Triangular bore reduces inflation slip and squawking. Improves milking speed

#### **REDUCED VACUUM CHAMBER**

Better animal comfort and teat health

#### 7/8" MOUTHPIECE

7/8" mouthpiece for optimal teat fit

# **HPPlastic Shell**

The smaller internal volume of the shell improves the pulsation performance. The extremely durable material withstands even the harshest treatment, while being lightweight and comfortable for the operator.

REDUCED VOLUME

LIGHTWEIGH

# HPClaw Base

The narrow rear nipple arrangement on the claw base aligns much better with the rear teat placement on the cow. This significantly reduces sideways tension on the teats and allow for improved milking performance and better teat health.



#### 320HP MILKING CLUSTER Series

Product Name	Outlet Size (ID)	Pulsation Type	Vacuum Shut-off Valve	Vented Claw Base
MC5600	5/8″	2x2	Yes	No
MC5610	5/8″	2x2	Yes	Yes
MC5620	5/8″	2x2	No	Yes
MC5630	3/4″	2x2	No	Yes
MC5640	3/4″	2x2	No	No
MC5650	5/8″	SmartD-TECT	No	Yes
MC5660	5/8″	SmartD-TECT	No	No
MC5670	3/4″	SmartD-TECT	No	Yes
MC5680	3/4″	SmartD-TECT	No	No

## Reducing operator fatigue, while improving teat condition and health

When Fraser Storey redeveloped the infrastructure on his farm and replaced his two older rotaries with one 70-point Orbit Concrete Rotary Milking System, it was the perfect opportunity to trial the new Waikato 320HP Milking Cluster.

Fraser had heard about the new lightweight cluster during the construction of his new rotary and contacted Waikato Milking Systems, saying "The clusters we had in the old sheds were the Waikato 320 model which are still current and very similar, however the biggest difference is the weight". With the new cluster being 1.1kg lighter, the feedback from staff has been positive with Fraser saying "Over the course of milking there's a lot less fatigue on the operator".

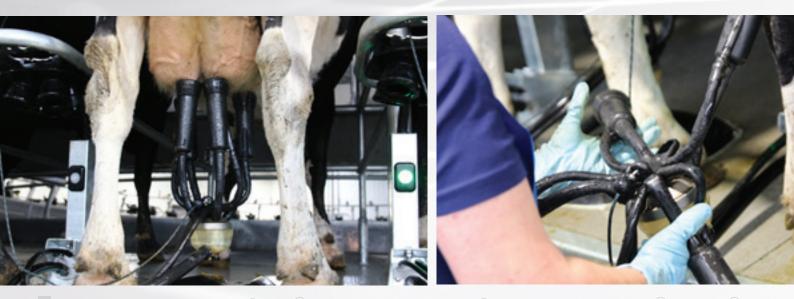
It was noticeable in the old sheds that his staff were tired from working with the heavier clusters, and they had to work harder to get through milking. "Whereas now, I can see that it's so much easier for our staff" says Fraser, who has noticed his staff were happier at the end of each milking session. While it took a little time to adapt to applying the new clusters, "The lightweight nature of the cluster makes it easier to cup the cows and in turn makes it easier on staff, and lowers the stress on their bodies at milking time".



... we've had a lot less cup slip than we did with the heavier clusters.

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The new clusters have also had a positive effect on Fraser's animals as the vented inflation minimises milk back-splash, which helps to improve teat health. Cup alignment, good teat condition and how well cows are



The lightweight nature of the cluster makes it easier to cup the cows and in turn makes it easier on staff, and lowers the stress on their bodies at milking time.

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Fraser Storey Farm Owner

milked out "were the top factors farmers would always look for from a high-performing cluster" says Fraser. "The other real positive about the 320HP is that we've had a lot less cup slip than we did with the heavier clusters".

As well as being designed to be lightweight, the Waikato 320HP Milking Cluster has also been constructed to be strong and robust enough to handle the knocks at milking time. "Occasionally a cow will stand on it, or catch the detacher rope as she backs off, but we haven't had any issues with the shells or the cluster at all".

Fraser recommends the Waikato 320HP to other farmers looking for advantages around milking time. "In terms of the new shells, inflations and clusters, they've been a positive addition and I would recommend them.

Farm name: Longreach Dairies
<b>Owner:</b> Fraser Storey
<b>System type:</b> 70-point Orbit Concrete Rotary Milking System
Herd size: 1020
<b>Location:</b> Te Awamutu, Waikato, NZ

**Farm name:** Waitui Family Trust

#### Owner:

- Stephen Uhlenberg
- Kevin Uhlenberg
- Karen Uhlenberg

**Sharemilker:** Miho Sataka

#### System type:

24 Steel Rotary platform with Waikato Detachers

Herd size: 300

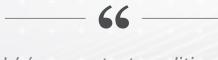
Location: Inglewood, Taranaki, NZ

### Removing a cup slip problem, and improving teat condition

For some time cup slip had been a problem at the Waitui Family Trust farm in Taranaki. Sharemilker Miho Sataka had trialled a number of clusters from various manufacturers, saying "None of them solved the problem, and some even slowed down milking and made things worse".

After assessing the herd, it was established that the cause of the cup slip problem was mostly due to the wide range of teat sizes and shapes in combination with very heavy clusters. Finding a conventional inflation that would fit the variation in teat sizes was difficult, and upon hearing about the new Waikato 320HP Milking Cluster, it was decided to trial it in the shed. The triangular inflation has the ability to accommodate a wide range of teat sizes, and proved to provide the perfect solution and fit for Miho's cows.





We've seen teat condition improve significantly.

Miho Sataka Sharemilker

"Our cup slip problem disappeared immediately when we started using the cluster," said Miho, "We see the benefit for the cows as well as the operator because of the reduced weight of the cluster."

"We've seen teat condition improve significantly. The 320HP Cluster is milking faster, as most cows now milk out on the first rotation".

As someone who has worn an elbow brace to reduce the strain of lifting heavy cups, Miho's repetitive strain injury has improved since using the lightweight 320HP Cluster. "I've stopped using the brace, and the new cluster is comfortable to use and makes milking a lot easier. I would not want to go back to what we were using before".



#### **GLOBAL HEADQUARTERS**

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Growing the value of precision dairy farming