



# **ORBIT** CONCRETE

**ROTARY MILKING SYSTEMS** 

# A ROBUST SYSTEM FOR EFFICIENT MILKING

A clean, efficient milking environment, maximising parlour throughput to elevate the value of your dairy operation through precision dairy farming.

# THE ROBUST MILKING SYSTEM FOR INCREASED EFFICIENCY, AND RELIABLE PERFORMANCE

Orbit Concrete Rotary Milking Systems have been serving dairy farms around the world for nearly quarter of a century and continue to be a popular choice among family orientated farms as well as commercial dairy operations.

The strength and integrity of an Orbit Concrete Rotary Milking System have earned it a reputation for reliability, longevity and proven technology. This makes it an ideal foundation system, delivering an excellent return on investment.

The Orbit is designed to provide a safe, clear, and efficient milking environment for both animals and operators. The stall work allows easy access to the milking equipment, and the overall design works together to enhance milking efficiency.

Orbit Rotary Milking Systems are designed to integrate seamlessly with the range of Waikato Milking Systems' automation technology. The Orbit System is fully upgradable, allowing for the addition of new automation options when needed, whether to accommodate herd expansion or when the budget allows.





# **ADVANTAGES**



# Easy to install, easy to use

The Orbit's SmartFIT mounting systems allows the milking machine equipment to be quickly and accurately attached to the rotary platform. Bolting on instead of welding reduces chance of corrosion.



# Superior protection of milking equipment

The 2.7m width of the Orbit platform provides excellent protection for milking and electronic equipment. The deck slopes outward, ensuring that effluent runs to the outside of the platform, keeping the equipment clean.



# Smooth, quiet and efficient milking

The Orbit features a unique design with deck ports integrated into the stall work, ensuring optimal cluster alignment and easy application. Its Multi-Roller system evenly distributes weight to reduce wear, minimise maintenance, and eliminate the need for costly consumables like wear strips.



# **Full compatibility**

The Orbit is compatible with the range of Waikato Milking Systems automation technology to help optimise your dairy operation. Our Research and Development team continues to develop new automation equipment to make further advances in efficiency and productivity for dairy farms.



# **ORBIT CONCRETE**

A standard installation includes...

### WHAT'S INCLUDED:

# **PLATFORM**

- Concrete Deck
- Standard Domestic Stall Work
- Drive Unit
- Multi Roller Undercarriage
- Entry Crush Switch
- D-Gate
- Platform Operator Console Cups On
- Overhead Radial Water Line

# WHAT'S INCLUDED:

# **MILKING POINT**

- Automatic Cup Removers (ECR-S)
- Waikato Milking Systems Milking Cluster
- Cluster Washer (G2)
- SmartPULS Pulsation
- PulseGuard

### WHAT'S INCLUDED:

# **MILK ROOM**

- Milk Filter
- Plate Heat Exchanger
- Vacuum System
- Vacuum System Variable Speed Drive

# WHAT'S INCLUDED:

# MILK / CIP HANDLING

- Air Injector
- Rolled Filtered Air
- Rolled Jetter Wash Lines
- Main Air Lines
- Milkline
- Milk Delivery Lines
- **Pulsator Airlines**
- Receiver and Sanitary Trap
- Centre Gland
- Milk Pump
- Milk Pump Controller
- Milk Recovery System



# **ENHANCE AND IMPROVE**

Adding additional features to your rotary milking system platform can significantly enhance your dairy's operational efficiency and overall convenience.

Designed to improve animal handling, optimise feeding, and streamline operator workflows, these upgrades help to reduce downtime and boost productivity. With a focus on safety, comfort, and hygiene, these upgrades allow for easier animal treatment, better drainage, and improved operator control, ultimately leading to a more efficient, comfortable, and safe working environment for both your herd and staff.

SOME OF WHAT YOU CAN ADD TO YOUR:

# **PLATFORM**



Heavy Duty Stall work - Galvanised For large scale 24/7 dairies with larger stock



Heavy Duty Stall work - Stainless Steel For dairies with larger stock, easier to clean



Feed Bins
Enabling feeding during milking



Head Dividers

Prevents "feed robbing" between stalls



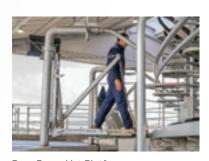
Dry Edge / Stainless Perimeter Rail Allows water to drain away from the operator



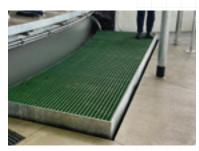
Platform Operator Console - Cups Off Second console for convenience at cups off



Platform Operator Console - E-Stop Can be activated in case of an emergency



Drop Down Vet Platform Used for when treating animals on platform



OperatorLIFT

Electronic, height adjustable floor

# **FUTURE-PROOFING WITH AUTOMATION**

Upgrading your milking point automation, animal management tools and hygiene equipment, within your dairy system, can significantly boost operator efficiency and cow health.

With faster, more reliable attachments, you'll reduce milking time and increase throughput, allowing you to milk more cows in less time. Modern equipment is gentler on your cows, helping prevent injuries and reduce mastitis, leading to healthier cows and better milk quality. You'll also benefit from real-time milk yield data, allowing you to make adjustments for optimal performance.

SOME OF WHAT YOU CAN ADD TO YOUR:

# MILKING POINT AUTOMATION



Automatic Cup Remover - ECR Plus Advanced milking communications data



Vortex Shut Off Valve High performance milk shut off value



Cow Restraints Restrain cows automatically within the stall



Electronic Milk Meter Real-time milking data to monitor performance



**WMS Sampler** Takes samples for accurate milk analysis



**User Display** Monitor animal status real-time at each stall



320HP Milking Cluster Ergonomically designed, lighter weight cluster



SmartD-TECT Stimulation and udder health detection



SOME OF WHAT YOU CAN ADD TO YOUR:

# **ANIMAL MANAGEMENT TOOLS**



CowTRAQ<sup>TM</sup> Cow Collars Heat and health monitoring 24/7



DairyHQ<sup>™</sup> Parlour Management System Real-time data for better milking decisions



Platform Positioning System
Precise data on location of milking platform



SortGATE (2600 or 5500)
Sort animals accurately and automatically

SOME OF WHAT YOU CAN ADD TO YOUR:

# **HYGIENE EQUIPMENT**



SmartSPRAY Automated in-bail teat spraying



Waikato Spray Arm Automatic teat spraying for fast rotaries



WalkoverSPRAYER
Automated in-race teat spraying



Wash Sytem Automated programme wash sytem

# A solution that revolves around their operational requirements

When Kiwitahi Pastoral were looking for a new rotary milking system for one of their four dairy farms in the Waikato, they began researching platform options. The company had purchased the 303-hectare, Oreipunga Road dairy farm near Cambridge in 2018, and began planning its redevelopment the following year. The aim was to replace an old 33-aside Herringbone system with a modern rotary milking plant, located more centrally on the property to manage the farm's 700 cows.

As a part of the company's research, co-owner Jason Trower said they were focussed on the types of platforms that were available on the market. "The driving factor for us was the concept of having a platform that offered a total solution for the way we wanted to operate the dairy farm." says Jason, "We shortlisted two providers and Waikato Milking Systems were one of them".

After Jason Trower and Duncan Enersen visited various dairy farms to compare the design and performance of the two shortlisted platform options, the decision was made to install a Waikato Milking Systems 54-point Orbit Concrete Rotary Milking System.

"There was a marked difference in the visibility across the Orbit platform deck because of the design of the bail."

says Jason. With two steel legs from the bail on the platform "rather than something solid sitting on the deck" Jason says it was a bonus from a health and safety perspective. "It makes the platform more open, so you're able to see across the deck and spot potential problems that might occur with animals getting into difficulty and address them immediately".

In Jason's view the Waikato Milking Systems shed they visited was "significantly cleaner" than the competitor, "which is also due to the open bail design. It just makes the deck more accessible and easier to clean, and to keep clean during milking". These were big consideration factors for the company, as they wanted to make the milking routine as easy as possible for their staff.

Jason and Duncan were also impressed with how all the key components of the milking system were housed under the Orbit platform, but easily accessible from the centre. "So if we ever had service or maintenance issues, it would be easier to access everything".

One of the common weak points the company has on their other existing rotary milking systems, has been the platform track and roller systems. "So our choice of platform system for the Orbit was the Waikato Milking Systems multi roller - because of its increased durability and how the design







allows you to change a roller out without having to lift the platform or jack it up" says Jason. "That got a big tick from me, a lot of thought has gone into that design aspect".

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The open bail design helps makes the deck more accessible and easier to clean, and to keep clean during milking.

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The Orbit system was commissioned in November 2020, with Jason saying, "From an operational perspective the platform has performed seamlessly, and we haven't had an issue with it from the moment it started turning".

# Farm name:

Kiwitahi Pastoral

# Co-Owner:

Jason Trower

# System type:

54-stall Orbit Concrete Rotary Milking System

# Herd size:

700

# Location:

Cambridge, Waikato, NZ

# **How NZ Dairy Manager of the** Year reduced labour costs.

2023 National Dairy Industry Awards Manager of the Year Jack Symes manages a 640 cow family farm in Dunsandel, Canterbury.

Heading into his third season at the farm, but first as manager, the 25 year old and parents Brian and Judy Symes had decided to upgrade their milking system and began shopping around to see what was available.

"What stood out for us was the uniqueness of Waikato Milking Systems and how smooth they ran when we went around those sheds, compared to others." says Jack.

The Symes had been running a 30 aside herringbone in a 30-year-old shed and settled on a Waikato Milking Systems 54 Bail Orbit Concrete Rotary Parlour with Multi-Service Gland, ECR-S Automatic Cup Removers, SmartSPRAY In-Bail Automatic Teat Sprayers and Cow Restraints.

One of the main things the Symes were looking to achieve was an increase in productivity by reducing milking time. "In the old shed we could be milking for 7 - 8 hours. Now we're running between 5 - 5.5 hours."

"When you compare our old system, which was very labour intensive and required each staff member to work two milkings per day, now they just milk once a day. Working hours have decreased as well, so it's made us a very attractive workplace." As well as reducing labour costs Jack has also seen an increase in milk production "I suppose there's a range of things that helped things this year, but our milk production is up 7% up on the previous season."

"Our cows are now only spending 1.5 - 2 hours on concrete waiting to be milked and then they're straight back out in the paddock grazing or sitting down, so yeah, there's an increase in production and we're looking for a decrease in lameness as well, as the cows aren't standing and walking as much there's more time in the paddock to eat and rest."

The one component that really stood out for Jack was the SmartSPRAY In-Bail Automatic Teat Sprayer. "That has gotten a big tick of approval, having dropped our Somatic Cell Count down considerably. During peak we're operating at around 70,000, compared to 120,000 - 130,000 in the old shed. It has the auto mixer as well, that makes sure that you're getting the correct application every time the cups comes off the cow." Jack is seeing improvements in udder health too. "And then we







have had the ECR-S Automatic Cup Removers set to the milk flow that we want, so we haven't had any problems with teat damage or over milking."

On whether he might add more components in future Jack said "after having had a season in there and looking at what could be done a wee bit better, I would add the automatic SmartWASH system. Then you'd get away from having to go back and forth between the hot water cylinders and wash down area to change taps all the time."

Jack says "I will definitely be recommending Waikato Milking Systems to other farmers. Being innovators at the cutting edge of milking technology means the constant technology upgrades that Waikato has to offer, for us, keeps it in front of the competition." Jack Symes.

# Farm name:

Zeldon View

# Farm Manager:

Jack Symes

# System type:

54-stall Orbit Concrete Rotary Milking System

# Herd size:

640

# Location:

Dunsandel, Canterbury, NZ



# **GLOBAL HEADQUARTERS**

T: +64 7 849 8755 F: +64 7 849 5923

29 Innovation Way | Northgate Business Park, Horotiu | Hamilton, New Zealand PO Box 20325, Hamilton 3241 | New Zealand | customerservice@waikatomilking.com

### **AUSTRALIAN OFFICE**

exports@waikatomilking.com

### **UK OFFICE**

Waikato Milking Systems UK Limited, C/- MR Dean Ltd Unit 1 & 2 Bloomsbury, Weston Heath, Shifnal, Shropshire, TF1 1 8RT ukwarehouse@waikatomilking.com

# **IRELAND OFFICE**

Unit 26, North Point Business Park, New Mallow Road, Cork City, Ireland, T23 X9R7 ireland.warehouse@waikatomilking.com Phone: +353 21 2290823

# **USA OFFICE**

Waikato Milking Systems USA 5601 Manufacturers Drive, Madison WI, 53704 USA Phone toll free: +1 866 648 6455

# **CHINA OFFICE**

Waikato Milking Systems China 3rd. Floor, Building 7, No. 1515 North Huifeng Road, Fengxian District 201401 Shanghai, China exports@waikatomilking.com

waikatomilking.com













Growing the value of precision dairy farming