



Est. 1911
DAVIESWAY
IDEAS TO FARM. EVERYDAY.

Est. 1960
DASCO
HYGIENE • HEALTH • NUTRITION

home of world-class dairy equipment & innovation



WELFARE &

Caring for Calves



NEW

PLATINUM STANDARD IN PROBIOTICS
Promoting strong immunity for healthier calves



NEW PLATINUM STANDARD CALF SUPPLEMENT

“Farming is so intense nowadays that calves are exposed to more harmful bacteria than ever before. The traditional rates of probiotics in milk are no longer relevant in modern calf-rearing practice. That’s why we’ve included more than double the level of probiotics in BioCalf over every other current product on the Australian market. Because healthy calves become highly productive cows.”

Dr Robyn Plunkett BVSc



“To this point everyone has been talking about millions of CFUs (Colony Forming Units per gram) – we’re talking billions.”

**1000
DOSES
PER PACK**



BioCalf – Probiotic Powder includes:

- 5 micro-encapsulated probiotic bacteria – for safe delivery to the gut
- 15.5 billion Colony Forming Units (CFUs)
- 5 digestive enzymes
- Active live yeast
- Yucca Schidigera – plant extract that may aid in the control of Coccidiosis
- 100% active ingredients – no carriers or fillers
- Completely natural

What you can expect:

- Exceptional performance
- Formulated and endorsed by leading professionals and calf specialists
- Best value for money
- Unsurpassed potency within a small daily dose
- 1000 doses per 1Kg pack
- Mixes easily



FREE SHAKER
(with BioCalf purchase only)

40x
Stronger than competing products



Also available

BioBoost – Probiotic Paste

Ideal for animals of any age that are stressed, sick or at weaning

WELCOME

Calf rearing is a subject that is very close to Daviesway/DASCO's heart.

That's why Daviesway remains the only Australian dairy-supply company to employ a specialist calf-rearing team.

We also appreciate that calf rearing has never been so intense, and the pressure on your bottom line is relentless.

But ultimately, there are no second chances when it comes to calf rearing because it does represent the future of your herd.

OUR REASON IN SCIENCE

Our umbrella spans the entire calf-rearing experience: from housing, through to hygiene, nutrition and feeding equipment, and we haven't left a stone unturned.

We have sourced the best products from the best companies around the globe, and, we continue to challenge ourselves to keep pushing forward with innovation here in Australia.

This is the home of Pronto, the market leader in electrolytes. We are also proud to be the sole Australian company to manufacture dried colostrum powder (Kwik Start).

We recently released an exciting new probiotic milk-additive powder. BioCalf sets a new platinum standard in the probiotic arena because it includes billions of colony forming units (CFU), instead of just millions that other products have carried to this point. Our BioBoost paste is perfect for sick, weaned or stressed calves, and is 40 times stronger than its competitors.

PROOF IN THE PUDDING

In this edition, we are excited to include several great reads from some of our clients, who are achieving tremendous results using these products.

WANT TO UPGRADE? NOT SURE HOW TO FINANCE IT?

Daviesway's partnership with global financial solutions company DLL (a fully owned subsidiary of Rabobank) now allows our customers to finance equipment from new installations and upgrades, to auto calf-feeders and milking robots – without impacting their farm's credit requirements.

Don't hesitate to have a chat to us about it.

EXPERT KNOWLEDGE DELIVERED IN A DIGESTIBLE WAY

Don't miss our compelling story from well-known veterinarian Rob Bonanno about calf rearing. It was jarring when I first saw that he likened a newborn calf's immunity to that of a cancer patient. But his reasons are explained with so much clarity and science, that we are proud to share such an important and honest dialogue for the industry.

We've also included Australian nutritionist Ian Sawyer's thought-provoking comments regarding fresh cows, and how blood glucose levels and liver performance have been underestimated. That's why we've got behind the next generation of the fresh-cow energy boost – Keta-go.

THE WHOLE GAMBIT

Your decisions for the next generation remain vital.

Our team is the perfect sounding board when it comes to advice on products, nutritional solutions, shed designs and standard operating procedures.

Please don't hesitate to contact us.



NIKK TAYLOR

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Nikk Taylor has been with Daviesway/DASCO for 23 years, working across all aspects of the business.

WHO IS DAVIESWAY/DASCO?

Daviesway is a family-owned Australian business, which is today home to a team of 70 staff located throughout the country. It has alliances with dealers, resellers and retail rural outlet stores across Australia. Its in-house manufacturing arm in Victoria includes a full service & technical team. Daviesway also includes a calf-rearing specialist department (including Australia's only dried colostrum for calves, kids and foals). Its in-house chemical manufacturing plant, DASCO, introduced pre-mixed teat sprays in Australia. Daviesway's strong networks with many of the industry's leading global industry players remains integral to it keeping step with technology & innovation. Visit daviesway.com.au for more information, videos, stories and feedback.



Safest tube feeder on the market

The smoothest and most practical feeding process for your calves. Designed by a vet and farmer, the Trusti Tuber significantly reduces calf stress and discomfort, giving the operator complete confidence.

It has a soft and flexible tube, which is easily swallowed by the calf.

The flexible tube is advanced through the mouthpiece, so the tube can be easily and safely positioned in the oesophagus



Comes with a Peach teat cap for easy transition between teat and tuber





POTENT NEW PROBIOTIC NEGATES ANTIBIOTIC USE



Pictured from left, Brendan McGrath (Daviesway Manager - Leongatha) and Elly Baranowski, from Hooper Farms, with her 16-month-old son, Arlo, and staff member Tania Hague.

Hooper Farms has eliminated antibiotic use in its calf shed after introducing a potent new probiotic range to its Gippsland operation.

The sizable family operation milks 1500 cows through three dairies on 1416 hectares (3500 acres) at Winnindoo, near Heyfield. Aside from rearing 1300 calves a year, the family grows crops, farms 400,000 chickens, and owns and operates a quarry. The busy group is headed up by John and Chris Hooper, together with their sons, Brendan and Nick, and Nick's partner, Elly Baranowski.

STRUCTURED CALF REARING

The calves are reared in a purpose-built shed that's 21 metres wide x 54m long, with three Holm and Laue automatic calf feeders and 12 feeding stalls. The shed design

allows for new calves to spend their first three days being hand-fed before they join a small group as they learn to master the automatic calf feeders.

The calves' next step is to join a bigger group with indoor/outdoor living and access to lucerne hay and ad *lib* grain. At this point they are separated by breed and size into three groups: Holstein, Angus-Holstein cross, and Jersey and smaller Jersey-cross calves.

The calves in those respective groups will stay together (for continuity and social stability) until they are three years old - when they join the mature herd in the main dairy (a 50-stand rotary), or the Jersey herd on another property.



BIOCALF
Double the strength of standard probiotic powders



BIOBOOST

40 times more concentrated probiotic paste

OPTIMISING FEED - CONVERSION RATES

Elly manages the calf pens and says they started using BioBoost probiotic paste and BioCalf probiotic powder at the end of last spring, because it was a tough season to find quality feed, and they wanted to make the most of the calves' feed-conversion rates.

Of the 300 calves they reared in that batch, just three died.

The H&L automatic calf feeder has the capacity to mix additives (such as probiotics) automatically through a dispenser into the milk, ensuring an accurate dose in the daily milk ration. And, as the daily BioCalf dose is so concentrated [1gm per calf per day] the 1kg capacity dispenser on the H&L holds 1000 doses, before it needs to be refilled.

Elly says their decision to use both products was because she resonated with the science, the progress in the probiotic space and the tightening focus on antibiotic use. BioCalf offered her double the colony forming units (CFUs) of its nearest competitor, along with five

digestive enzymes and active live yeast; it was the only product to include an extract from the plant *Yucca schidigera*, which helps control coccidiosis.

All calves were given an oral dose of BioBoost paste when they entered the calf shed, along with their colostrum, which was tested for quality with a refractometer. They also fed BioCalf probiotic powder in the calves' milk until weaning at 100 days.

ELIMINATING ANTIBIOTICS

"I think they'd been on the probiotics for a week, when I drove past and I really noticed how their coats were starting to shine, and you could just see the difference," Elly says. *"It was crazy.*

"Now we've gone away from using any antibiotics on the calves that have scours, and replaced that protocol with the daily addition of the powder in the milk, supported by an oral dose of the paste if they look unwell.

"Honestly, I can't say a bad word about the two products. We're definitely putting out better calves.

"We shifted a mob of autumn calves the other day, and then went and shifted the late-spring calves that had been raised on the BioCalf, and the younger calves were just as big as the older ones.

"I didn't expect to see such marked growth in that second group [as a result of including BioCalf]."

HAPPIER CALVES

Elly has also noticed several small changes in the calf pens that gave her additional confidence.

"The calves seem to be playing with each other more, because they just seem to have more energy, and they just seem happy within themselves."

The probiotics have completed a circle and given the calf-rearing team confidence on the big operation.

SANITATION KEY

To help sanitise pens during the calf-rearing season, Elly says they use popular Danish sanitiser Stalosan F, which tends to have been underrated in Australia. The product has a pH of below four, and its non-toxic powder works because it includes high levels of copper and iron oxide – well-known antimicrobials. The unique combination of minerals binds up to 100% moisture where ammonia is present.

"Our sanitising products go twice as far for half the price of the competitors and we get the same kill," Elly said.

Hooper Farms is poised to fit cleaning stations to the automatic feeders as the final piece of the hygiene puzzle.

Elly and valued staff member Tania Hague spend roughly two hours a day feeding their calves. It's a welcome change from the physicality of the workload they used to shoulder.

"We wanted to do the best we could for the calves and everything we have in place now requires a lot less physical work, and it's far more rewarding because we're now getting the results we want," Elly says.



STALOSAN F

- Broad spectrum, natural disinfectant powder for animal housing.
- pH below 4, and includes high levels of copper and iron oxide - well-known antimicrobials
- Binds up to 100% moisture where ammonia is present

"Calves grow faster, and appear to have more energy to play and interact with each other since BioCalf and BioBoost was included in their programme." – Elly Baranowski.





NEWBORN CALVES ARE LIKE CANCER PATIENTS

Rob Bonanno

A newborn calf's immunity is similar to that of a cancer patient, according to one of Australia's premier dairy veterinarians, Rob Bonanno.

A former president of Australian Cattle Veterinarians, Rob most recently worked as the head vet at Coomboona Farms in northern Victoria, following positions in the United States and China. He is now a Dairy Herd Health Consultant with Apiam Animal Health to help troubleshoot and solve health issues within Australian herds. Rob has worked in large animal-practice his entire career, as well as owning and operating his own dairy farm.

His comments comparing newborn calves and cancer patients was in response to

recommended numbers coming out of the USA, which state newborns should be fed 10% of their bodyweight in two feeds of colostrum within six hours of birth.

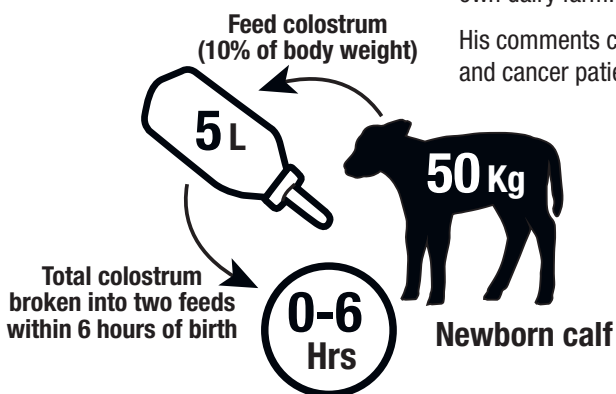
NO IMMUNITY AT BIRTH

He draws the link between a calf and cancer patient's immunity to graphically illustrate just how vulnerable calves are.

That's because for the first two to three weeks of their life, calves have no immunity to disease or bacteria – save for the initial passive immunity transfer (PIT) of antibodies (IgG) they get from their dams' colostrum.

By the time a calf is 12 hours old, that PIT number is as low as 20%. At 24 hours, the percentage has plummeted to just 5%.

"I kind of picture feeding colostrum as a window that is slamming shut from the time the cow calves," Rob says. *"You get one chance to achieve PIT."*



COLOSTRUM STOPS AT CALVING

It is also important to note that a cow stops making colostrum as soon as she calves.

So if the cow is milked late, the colostrum she made before calving is diluted by the milk she made post calving.

And, finally if the dairy producer doesn't harvest, store or feed the colostrum hygienically, the calf's chance of survival takes another big hit.

Rob says suckling is always the best and first choice, and suggests tubing any balance the calf doesn't take voluntarily to achieve the right quantity.

He says there is good reason to target feeding a 50-kilogram newborn calf five litres of colostrum.

"We make up for the vagaries around the quality of colostrum with the quantity we're recommending," Rob says. *"If you feed a calf 10% of its bodyweight with a mediocre or better quality colostrum, it will still get the 100 grams of IgG it needs."*

PROACTIVELY FIGHT EARLY CALF DISEASE

He says one of the easiest suggestions for farms struggling with early calf diseases is to move from once-a-day calf collections to twice-a-day. This tightens the window for harvesting and feeding quality colostrum.

"The reality is that one third of calves left to suckle off their mothers are going to fail to achieve PIT. And, believe it or not, by simply collecting the calves more often, you can have a significant impact on that result."

"I truly believe that the first four to six weeks of a calf's life have been grossly underestimated within predicting the life-long performance of that animal."

"You cannot have high herd performance if you have poor first-lactation performance – and, there is starting to be objective data proving this."

"People who say it doesn't matter what a heifer's performance is because they make up for it as a cow, I call, 'bullshit'."

"The productivity of your first-lactation animals is the key determinant in the whole herd's productivity."

MILK BACTERIA LEVELS DOUBLE EVERY 20 MINS

Ultimately, hygiene across the board, attention to detail and the human factor remain key parts of the equation.

"Bacteria levels double in the milk every 20 minutes that the milk sits in a bucket at 20 degrees Celsius, ambient temperature," Rob says. *"So, if that happens and then you use a dirty bottle, you are potentially feeding newborn calves 'bacteria soup', and calling it colostrum. If you're trying to kill them, that's the way to do it."*

"I work on the theory: if you wouldn't feed your child out of a dirty bottle, why would you feed a calf milk from a dirty bottle?"

GOOD NEWS

The good news is that along the information highway of technology there also travels an equal amount of ongoing solutions and break throughs.

Australian-owned and operated company Daviesway has four time-saving solutions already in the mix for this autumn's calving – aimed directly at calf health. One of them is a potential game changer for the colostrum conversation.

Daviesway manufactures the only dried bovine colostrum in Australia. It means dairy producers can now choose to fortify colostrum with Kwik Start.

Kwik Start carries high levels of immunoglobulins and anti-bacterials – designed to help establish immunity and intestinal protection for newborn calves, kids, lambs and foals. Furthermore, it also contains whey protein, omega-3 and omega-6 fatty acids, vitamins and minerals.

"I will always recommend as a first choice to feed high quality, fresh colostrum," Rob says, *"because there are specific and unique antibodies needed on every property that are produced by the cow. But if you only have poor quality colostrum, then fortifying it may help."*

"Every dairy farmer should have some colostrum booster on hand, because half of something is better than all of nothing."

"So, if there is an issue with the quality of colostrum, or if there are a lot of heifers calving, a colostrum booster is an alternative."

As always, Rob says successful calf rearing comes down to feeding the right quality and quantity of colostrum quickly.

"The human factor is the biggest problem. If there are calf-scour problems, there is always a pathogen involved, but ultimately the cure is more about the management."

"Vaccinations and treatments are not the silver bullet. It's about doing everything right along the way."



Kwik Start is a colostrum supplement which boosts or replaces colostrum for newborn calves. It carries high levels of the immunoglobulins and antibacterials that are needed to give calves a flying start.

MG SERIES

MOBILE GRAVITY FEEDERS

- Manifold made for easy cleaning and milk flow
- Choice of larger tanks at 500L or 1000L
- Larger tank lids with three-way locking system, built to withstand high wind
- Enclosed manifold means no contamination of the milk
- Enhanced stability with lower point of gravity
- Easy to level on uneven surface
- Stronger frame with heavier gauge galvanised steel

Models

MG26 / 26 teat / 250L tank (single axle)
1200H x 1200W x 1250L

MG40S / 40 teat / 500L tank (single axle)
1180H x 1400W x 1900L

MG50S / 50 teat / 500L tank (single axle)
1180H x 1400W x 2500L

MG50LT / 50 teat / 1000L tank (tandem axle)
1390H x 1400W x 2500L

MG60S / 60 teat / 500L tank (single axle)
1180H x 1400W x 3100L

MG60LT / 60 teat / 1000L tank (tandem axle)
1390H x 1400W x 3100L

MG80LT / 80 teat / 1000L tank (tandem axle)
1390H x 1400W x 4800L



ESTABLISHED 1984

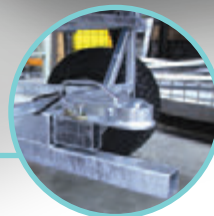
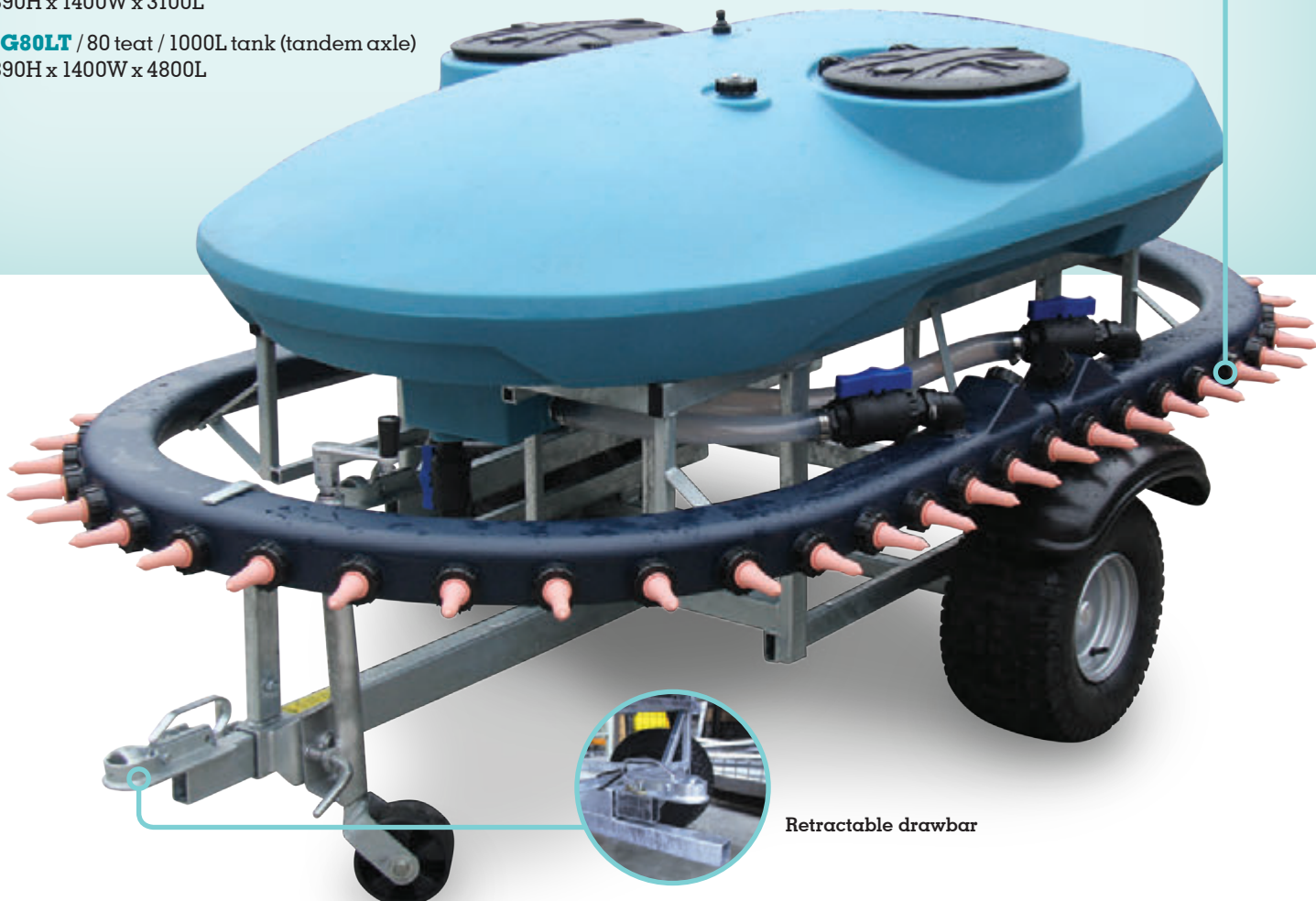


MG80LT



Easy-clean manifold design

MG50S



Retractable drawbar

MTF SERIES



MIXER TANKER FEEDERS

- Mix and feed out milk to calves
- Carry up to 1000 litres
- Available in 50, 60, 70 or 80 teat units
- Self-cleaning. Simply quarter fill the tank with clean water and start the pump. Feeder will self-wash within 3 minutes
- Made by New Zealand's leading calf feeding company, and it comes with a two-year warranty.
- Guaranteed to save you time

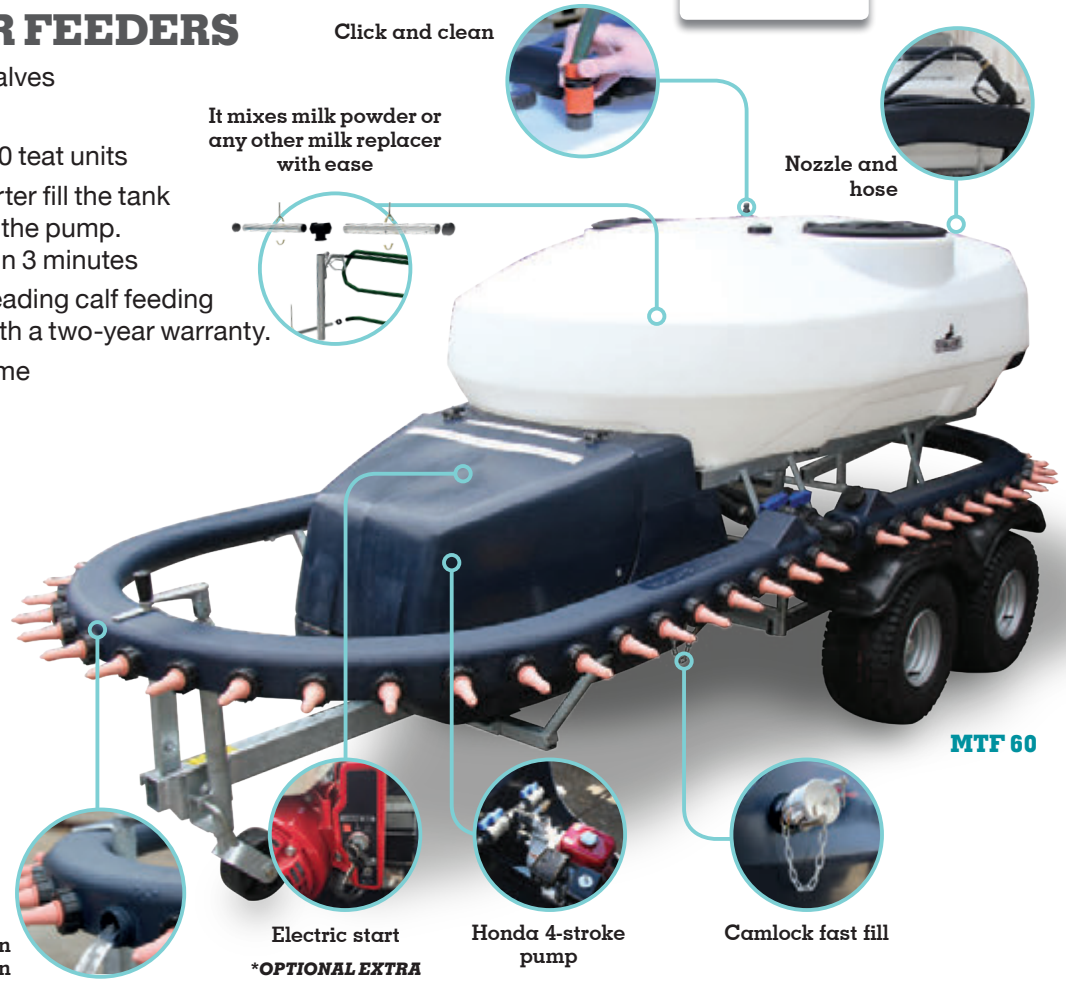
Models

MTF 50 / 50 teat / 1000L tank (tandem axle)
1450H x 1520W x 3520L

MTF 60 / 60 teat / 1000L tank (tandem axle)
1450H x 1520W x 3520L

MTF 70 / 70 teat / 1000L tank (tandem axle)
1450H x 1520W x 4200L

MTF 80 / 80 teat / 1000L tank (tandem axle)
1450H x 1520W x 4800L



OT SERIES

OPEN TROUGH FEEDERS

- Choice of larger tanks at 500L or 1000L
- Larger tank lids with three-way locking system, built to withstand high wind
- Lower inspection point with re-positioned side access. Stronger frame with heavier gauge galvanised steel
- Enhanced stability with lower point of gravity
- Easy click-and-clean system
- Easy turn Hansen milk taps

Models

OT50S / 50 teat / 500L tank (single axle)
1280H x 1850W x 2800L

OT50LT / 50 teat / 1000L tank (tandem axle)
1440H x 1850W x 2800L

OT60LT / 60 teat / 1000L tank (tandem axle)
1440H x 2320W x 3020L



COLLABORATIVE CALF REARING



BRENDAN JOHNSON

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There is no handy “one size fits all” when it comes to rearing calves.

Every farm is different – from its challenges to its advantages, and everything in between. However, there is one thing that remains a constant in this conversation.

And that is, that the “magic silver bullets” we’d all like to find ... don’t exist.

Every successful calf-rearing operation is made up of many small and equally significant decisions.

Those decisions made together, and implemented with sound judgement and science, are the gold ticket to giving producers the ability to dodge most of those bullets being fired out there.

NON-NEGOTIABLE BASELINES

Of course, there are some non-negotiables when we talk calf comfort and health.

We know that calves are born with no immunity, and that it doesn’t start to develop until they are two to three weeks of age. That makes hygiene and colostrum massive subjects. Having the right equipment to test, store, thaw and feed colostrum hygienically is a must – and is the single best investment you’ll make in the your herd’s future.

Make sure you read the story on page 4. It’s an important one for the industry.

Calf housing should include a minimum of 1.5 metres squared of space per calf, and should always be covered with a minimum depth of 150 millimetres of bedding – not just at the start of the season. So, it needs to be replenished regularly.

Draft is the enemy, and yet ventilation is vital, so it’s important that any air disturbance happens above the calves, not directly on them.

With adequate bedding and protection, calves can maintain their body temperature and use the energy from their feed to grow instead of having to sacrifice it to get warm.

NO SELLING AND RUNNING

To help you achieve your calf-rearing goals, our team doesn’t just want to supply you with calf-rearing equipment.

That’s because we believe equipment is just one aspect of a much greater system. A system that includes design, layout and standard operating procedures (SOP), which are specific to your unique circumstances.

Regardless of the type of system – be it an Automatic Calf feeder, Milk Taxi, individual calf hutches or milk mixer/delivery units – we like to work closely with you so we can understand your business and tailor-make a solution.

And, the good news is that we can find the solutions to fit your needs, rather than you having to fit your system to the products.

SOLUTIONS GALORE

To that end, Daviesway either produces or sources what we believe to be the best calf-rearing products from around the globe.

From the Antahi tube feeder (the safest tube-feeder on the market) to the only dried colostrum available in Australia (Kwik Start), through to next generation probiotics, and calf jackets from the USA and New Zealand ... your newborns are covered.

We have an extensive range of pens, individual and group hutches from Calf-Tel, in the USA. These include thermoform moulding with multi layers so they don’t sweat like plastic moulded hutches do. They also use thermal shedding properties and cross-ventilation techniques. This state-of-the-art design keeps calves warm in the winter and cool in the summer.

They are also light-weight, so easily moved and cleaned, making it easier to dodge disease. The modular design also allows for different configurations.

CALF-FEEDING OPTIONS

We have a myriad of ways to feed your calves. From the humble hand-held calf feeder to the

biggest range (26-80-teat units) of strongly built trailer feeders in the southern hemisphere (Stallion Plastics, New Zealand) to automatic calf feeders (Holm & Laue, Germany). The scope is infinite.

DEDICATED TO CALVES

Holm & Laue (H&L) also manufacture the sophisticated Calf Expert Auto Calf Feeder and the ground-breaking, mobile stainless steel Milk Taxi.

We truly believe that H&L are the best in the world at what they do, because they are dedicated to calf rearing. They are not a manufacturer of dairy equipment, who deal in calf rearing as an “add on”. H&L’s team live and breathe calf rearing, and it shows in their innovation, technology and products.

CONFUSED BY DESIGN?

There is so much difference between operations, calf numbers and calving intensity, that any design decisions can sometimes be challenging and/or confusing.

Importantly, you don’t have to do this alone. We specialise in shed design and layout, and can support you in establishing protocols.

Equally, if you know exactly what you want, we’re confident you’ll find it at Daviesway.

And, because we’re an Australian-owned family business, it means all our service and repairs are easily handled by our technical team, right here.

For more information, please feel free to contact me at any stage on 0419 950 044.

Sacrifice on price, not quality

Germidet

Perfect for cleaning and disinfecting animal housing – calves, pigs, poultry... biodegradable and non-irritant.



GERMIDET vs VIRKON S
(Per 100lt solution)

\$15.30* vs \$39.00*



Stalosan F

Broad spectrum, natural disinfectant powder for animal housings.

HYGIENE DIRECTIONS:

1. Clear shed of last season’s bedding (ideally when the season ends to rest the shed)
2. Spray pens, walls, and gates thoroughly with Germidet – mix at 200ml per 10lt water
3. Spread Stalosan F at 50g/mt2 on the ground in pen
4. Bed with a minimum depth of 150mm
5. Spread Stalosan F at 50g/mt2 on the top of bedding once every 7 days (and maintain a minimum depth of 150mm of bedding at all times)
6. Stalosan F is safe to use during the season
7. Repeat process every time a pen is emptied

*prices may vary

CALF-TEL – CALF HUTCHES & PEN SYSTEM



Extremely lightweight & durable design

- Range of sizes available to suit farm requirements
- Superior airflow and ventilation
- Ultimate sun and UV protection
- Maximum strength and durability
- Unparalleled health and biosecurity



CALF-TEL PRO II
HUTCH SIZE:
210CM(L) x 122CM(W) x 138CM(H)



CALF-TEL MULTI-MAX

HUTCH SIZE:
220CM(L) x 273CM(W) x 183CM(H)

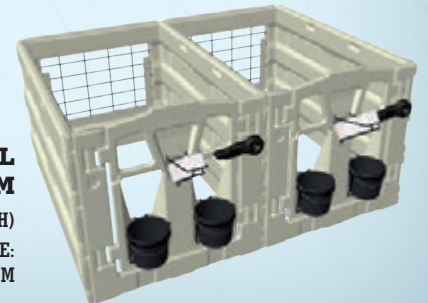


CALF-TEL DELUXE WITH PEN
HUTCH SIZE: 220CM(L) x 122CM(W) x 140CM(H)



CALF-TEL PEN SYSTEM

SIZE: 122CM(W) x 114CM(H)
LENGTHS AVAILABLE:
135CM, 183CM & 213CM



A simple and accurate cassette style test kit, to identify pathogens in calf manure.

- Kit tests for *Rotavirus*, *Coronavirus*, *E.coli (K99)* and *Cryptosporidium*
- Quick and easy to use, with results in less than 10 minutes
- Each kit contains 5 tests





Auto Calf Feeder & Hygiene Station

TOUGH MADE EASY

Dianne is the first to say that nurturing the next generation hasn't always been easy.

She used to manually carry buckets of milk to fill troughs that fed up to 20 calves in a group.

It was a back-breaking and generalised effort. And, even though Dianne cheerfully says it wasn't too bad because she was "younger then", her husband Les and son Russ wanted to ease her workload.

Enter Daviesway/DASCO's Brendan McGrath. The Holm & Laue 100 calf-rearing unit, with two feeding stalls, was subsequently installed. Two more feeding stalls followed, while an extension to the calf shed finished the fine-tuning.

Today, the calves are hand-fed colostrum before being transitioned after the first week on to the Auto Calf Feeders, using a blend of fresh milk and milk powder. They start on 4.8 litres a day, peak at six litres, and are weaned at 90 days – making use of the Auto Calf Feeder's automatic and gradual weaning facility.

QUIET CALVES

Dianne rears 120 calves in the autumn and another 60 in October. The ACM supplier says the move to automate calf feeding regime has been a good one.

"It is pretty easy, really," Dianne said. "Once they're a week old, you don't have to worry about them too much, and it's much quicker to feed the intermediate and older calves during calving when you have new calves coming into the shed."

Son Russ says he has also noticed a welcome advantage in the dairy.

"Some people say the calves aren't as quiet on the automated calf feeders. We've had no problem with them, and what I also particularly like is that when they calve, they're used to walking into a stall, so, it's way easier to break them into the rotary."

"I wouldn't be keen to go back to feeding the old way we did it – and I don't feed the calves that often."

The H&L automatic calf feeder has the capacity to mix additives (such as probiotics) through an automatic dispenser



MAKING LIFE EASIER

The past nine years of rearing calves have probably been the easiest of Dianne White's 50-year career.

That's because today the 70-year-old Leongatha dairy woman has a Holm & Laue 100 Auto Calf Feeder unit on the family's Dilee Holsteins – a 340-cow Master Breeder Holstein herd with a 10,000-litre average (per cow) from 202.5 hectares (500 acres).



Pictured L-R – Brendan McGrath (Daviesway Manager - Leongatha) and Russ White



Calves start on 4.8 litres of milk a day, peak at 6 litres, and are weaned at 90 days

A truly Automatic Calf Feeder feeds calves individually - automatically increasing milk (as the calf grows) or gradually decreasing milk (towards weaning) according to your wishes. And, importantly - it washes itself.

If you have to pull apart your feeder to do a system wash, then it's not automatic.

into the milk, ensuring an accurate dose in the daily ration. And, the daily BioCalf dose is so concentrated [1gm per calf per day] that the H&L feeder can dispense 1000 doses before it needs to be refilled

EXTENDING CAREER

Dianne readily acknowledges the investment has extended her dairying career.

Among the advantages are some big hygiene wins. At 40° Celsius, bacteria in milk doubles every 20 minutes. With the Holm & Laue 100, the milk is freshly mixed for every calf, and no milk residue contaminates the line because the feed stall automatically flushes and cleans the milk pipeline through to the teat after every calf drinks. The Holm & Laue unit's wash and cleaning temperature sits at 65 °C.

Individual feeding regimes are easy to monitor, while giving every calf the chance to reach its potential.

PROBIOTIC SAVING LIVES

The family has also incorporated BioCalf, a potent new probiotic powder additive, which is added to the milk every day. This is the only change they have made to their calf-rearing regime this season, and the results have given Russ food for thought.

BioCalf is a double-strength probiotic powder milk additive for calves, which contains Australia's only all-natural coccidiostat.

"We haven't lost a calf since introducing it, and that doesn't usually happen," Russ said. *"So [for me], it's too risky to go back to not using it."*

The vet behind BioCalf, Dr Robyn Plunkett (BVSc) says the product represents the next generation of probiotics.

"Farming is so intense nowadays that calves are exposed to more harmful

bacteria than ever before," Dr Plunkett said.

"The traditional rates of probiotics in milk are no longer relevant in modern calf-rearing practice. That's why we've included more than double the level of probiotics in BioCalf over every other current product on the Australian market, because there is now no denying that healthy calves become highly productive cows."

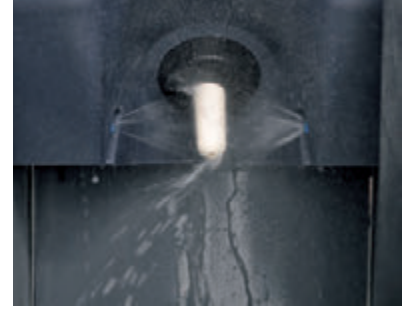
KEEPING IT CLEAN

The White family is also sold on popular European shed sanitiser Stalosan F. The Danish product, which tends to have been underrated in Australia, has a pH below four. Its non-toxic powder works because it includes high levels of copper and iron oxide, which are both well-known antimicrobials; the unique combination of minerals binds up to 100% moisture where ammonia is present.

Combined with biodegradable Germidet detergent and sanitiser – a non-irritant, biodegradable germicidal detergent and general disinfectant for cleaning, sterilising and disinfecting – the calf-rearing circle at Dilee Holsteins is complete.

HIGH QUALITY COMPONENTS

- All milk-carrying components are made of high quality stainless steel or food-grade materials.
- The milk powder system, including its powerful auger, is designed to sustain high loads and strains, therefore can correctly dose nearly all milk powders.
- The whole milk system is extremely effective due to a 7.5-metre-long heat exchanger coil.
- The electronics design has been kept simple and reliable, to withstand the harsh conditions.



The HL100 feeder and new hygiene stations:

- Allow up to 150 calves to be fed individually (or in groups)
- Allows set feeding curves and weaning programmes
- Rinses the milk line after every feed
- Fully Automatic Wash cycle twice daily (acid & alkali)
- Rinses the teat and bowl after every calf visit
- The large powder hopper holds 50kg of milk replacer



STALOSAN F

Broad spectrum, natural disinfectant powder for animal housing



BIOCALF

Double-strength probiotic powder milk additive that supports calf health and growth



STORE & THAW

COLOSTRUM MANAGEMENT SYSTEM – MADE EASY

Complete kit to test, pasteurise, store, freeze & safely re-heat colostrum

Calves achieve passive immunity transfer (PIT) from their dam's colostrum.

Failure to achieve PIT leaves them vulnerable to disease, poor growth and poor performance. One third of calves left to suckle their dam will fail to achieve PIT (see page 4).

More colostrum means:

- Greater immunity
- Less disease
- Faster growth
- More pregnant heifers
- Higher production
- Better lifelong performance



FOR MORE INFORMATION PLEASE CONTACT BRENDAN JOHNSON

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NOT ALL ENERGY IS CREATED EQUAL



Ian Sawyer – BSc., M.B.A., & Adjunct Fellow
– University of Melbourne

Everyone who dairies have struggled with fresh cows that are sluggish, and not achieving enough Dry Matter Intake (DMI) after calving.

It's the nightmare start of a poor transition, and often the gateway to a number of post-calving complications that can end with an unnecessary fatality.

However, Australian nutritionist Ian Sawyer (Feedworks) says there is now well-documented and scientific evidence that explains the reasons why it happens, including an easy way to avoid it.

And, it's so logical that it begs the question, 'why hasn't it been widely shared before now?'....

When half your profit/lactation/cow is generated in the first 100 days post-calving – and the most important time for reproductive performance is three weeks either side of calving – Keta-go may be the easiest decision you make.

WHAT PEOPLE DON'T TALK ABOUT

Historically, Ian says, the two things few people talk about in fresh cows are blood glucose levels and liver performance. The conversation is more commonly about DMI and rumen performance.

However, some of the best animal nutritionists in North America have proven that all four are intricately linked. And, it is the cow's energy status and liver performance that ultimately drives her DMI and rumen health.

It was the HOT theory (Hepatic Oxidation Theory) developed by Professor Mike Allen at Michigan State University, which showed liver metabolic changes post-calving meant most fresh cows weren't achieving enough DMI.

So, although cows weren't physically full, they were unwilling to eat, thus challenging their energy status and making them vulnerable to post-calving complications. It was game-changing data.

Ian says, *"The liver has been grossly underestimated in this whole conversation. It expands 40% during lactation, and the best way I can put it into perspective is that if a cow was a car, the rumen is her fuel tank, but the liver is her engine."*

"And, her appetite limitations as a fresh cow come from her liver."

"If you get that right, the DMI will be right and many, many good things will happen around her health, production and reproduction."

PRE-CALVING TRUTH

When a cow's DMI drops pre-calving, many think it's because they are so heavy in calf that there is no physical room for more feed.

"That's not what's happening," Ian says.

"Their DMI drops because the cow goes into a mild condition not unlike gestational diabetes. Her insulin levels and insulin sensitivity drops away – and this is the same for all female mammals before giving birth. Insulin slows the break-down of fat, and when it goes away, the fat flows off the cow."

"Before she calves, there are large amounts of glucose and amino acids flowing across the placenta and she is giving up body condition to favour the calf. At the same time, she is getting a metabolic satiety signal – which stops her eating."

Any challenges during calving or post-calving can then destabilise her recovery and her appetite, and potentially compromise her whole season. Or cost her her life.

However, blood glucose delivered in the right form at the right rates around calving time, changes that conversation.

UP AND GOING

Ian has formulated a new oral supplement, Keta-go, which is having a significant impact on-farm.

"All energy is not created equal. We want glucose delivered, without it having to be created in the cow's liver post-calving," Ian says, *"because the liver has plenty going on already at that time."*

"The good news, is we can manipulate glucose to manipulate insulin post-calving, and we can slow the rate of body-condition loss. I'm happy for cows to give me body condition, but I want it over six weeks – not in two to three weeks. Body condition is there to help drive the cow to peak production."

The product uses glycerol and propylene glycol (two highly effective tools for raising blood glucose) added to specially targeted vitamins, minerals and a scientifically proven yeast metabolite Diamond V (which supports feed digestibility and efficiency, plus supports recovery from injury or stress by promoting a healthy balance of bacteria in the lower gastrointestinal tract). Diamond V also has a US Food and Drug Administration approval for promoting DMI after calving.

Ian says, *"Does every cow need Keta-go? Probably not. In North America, they'd probably give it to every cow as a matter of course. But every time there is a cow that has some risk, intervention or if she's over-conditioned, they are probably not going to eat, and that can start to cascade and be quite profound."*

"The secret to a cow's health is getting them to eat, and the secret to getting them to eat is giving them the 'right' energy."



"A slower, steadier breakdown of carbohydrates is good for all cows – but it's particularly good for fresh cows. And, with many dairies now having cow collars, it's not as big deal as it used to be to tailor a fresh-cow grain-mix."

BRAIN POWER

Ian says bloody glucose also vital for a cow's cognitive function – easily identified in a downer cow.

"So, those cows that are down with milk fever, that also present disoriented and struggling big-time, need blood glucose [for brain function] as well as calcium [to stand]."

"If they can't get up, yet they are bright and responsive in themselves, that's more solely a milk fever problem."

"However, we know milk fever is the gateway to seven post-calving conditions, so treating them with enough of the right energy at the same time is an insurance worth considering."

Given that half the profit per lactation per cow is generated in the first 100 days post-calving – and the most important time for reproductive performance is three weeks either side of calving – supporting cows with more energy post-calving is certainly food for thought.

REFERENCES

For the scientifically minded, these references cite some of the research behind Keta-go:

Allen Michael S., and Paiantoni Paola 2014. "Physiological mechanisms controlling feeding behaviour". Presentation, Veterinary Clinics of North America: Food Animal Practice.

Allen Michael S., and Paiantoni Paola 2013. Metabolic control of feed intake: implications for metabolic disease of fresh cows. Published by Veterinary Clinics of North America: Food Animal Practice.

Allen Michael S., 1996. "Physical Constraints on Voluntary Intake of Forages by Ruminants". In The Journal of Animal Science 74:3063–3075.

Be part of the next generation in fresh cow treatment

Keta-go is turning fresh cow management on its axis by focussing on energy and liver performance – the cornerstones of metabolic health.



WHEN TO USE KETA-GO

- After a hard calving
- On any vulnerable cows at calving
- In support of Milk Fever treatment (additional energy hit for a quicker, more sustained recovery)
- Overfat cows at calving
- To safeguard against metabolic and rumen challenges post-calving by boosting appetite
- Ketotic hypoglycaemia
- A post-calving boost to encourage cows to cycle and/or hold pregnancy
- Energy boost for flush donor cows to boost embryo production.

WHY USE KETA-GO?

- Recommended dose delivers twice the glucose as first-generation alternatives
- Easily administered oral supplement
- Has a wide range of proven micro-nutrients around metabolising energy
- Supports "downer cows" – Rapid acting.



*Keta-go – Active Constituents:
Prop Glycol, Glycerol, Choline, Betaine,
Cobalt, Chromium, Niacin & Diamond V*



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- **Waterproof, wind block and breathable**
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PLUM

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