

HEATWAVE BY POON

PRODUCTS

www.heatwavemilkwarmer.com

INSTRUCTIONS



- Feeds up to 30 calves or 50 lambs
- Suitable for milk powder or whole milk feeding
- Hygienic, milk is stored cold
- No moving parts - reliable
- Thermostatically controlled
- Fast growing stock
- Healthy stock
- Labour saving

THE FACTS

- Young ruminants prefer warm milk
- Early in life their ability to convert milk into growth is at its most efficient
- Frequent small meals improve digestion
- Lifelong performance is improved when colostrum feeding is followed by an accelerated milk feeding program
- Ad lib feeding saves labour
- The animal is larger at weaning time so the cost per kg of liveweight gain is similar to once a day feeding

CONTENTS LIST

1 Heatwave Milk Warmer® Storage Box	10 cable ties for the feeder plates
1 Heatwave Milk Warmer®	2 Feeder bars, pre drilled
4 Suckler plate C/W calf teats	1 Hand pump for cleaning
1 x 5M length of silicone tube, to be cut to length - as required	1 Instructions booklet (also on the website)
2 x 1.2M inlet tube C/W 4 metal connectors and 2 filters	1 x 400g Heatwave cleaning powder
4-Lamb teats, 4 Non return valves, 2-“Y” connectors with short silicone tube and metal connectors and 14 stainless screws.	

SPECIFICATION

Water tank capacity 25L
Number of independent milk lines - 2
Number of Supersuckler units - 4
Heating element - 3Kw
Power Supply - 240v
Capacity - 10 calves/teat, or 12 lambs/kids/teat

Cut out safety switches - 2
The thermostat in the Heatwave Milk Warmer® is pre-set to heat water at approximately 42°C. Milk temperature should be 32-39°C depending on ambient temperature.

HEATWAVE MILK WARMER® OPTIONAL EXTRAS

Wydale Mobile Mixer 110L on wheels
Wydale connector plug
Whole Milk Sieve

CLEANING

The Heatwave must be cleaned daily with diluted dairy circulation cleaner, then flushed with water. If using Hypochlorite then additional detergent will be needed. Straight Hypochlorite will not remove milk fat.

SAFETY

Do not operate if the power cord becomes damaged or cracked
Always disconnect the Heatwave Milk Warmer® from the main supply, when carrying out maintenance
Use of a power breaker/circuit breaker is recommended

WARRANTY

The Heatwave Milk Warmer® is covered against manufacturing defects, under normal usage conditions for a period of 12 months from purchase.

The warranty is void if the Heatwave Milk Warmer® is not cleaned daily, misused, modified or tampered with.

Defective products returned within this period will be repaired or replaced if deemed defective.

Any injury to livestock, people or property, will not be covered under this warranty. Pyon Products shall have no liability for death or personal injury, loss or damage to any building, machinery, or other property. Neither will they have liability for loss or injury to any stock, or any other loss or damage, costs, or expenses resulting from the use of this appliance.

HEATWAVE MILK WARMER®

Heatwave Milk Warmer® will feed up to thirty calves or fifty lambs or goat kids with milk replacer or whole milk. The milk is drawn from a reservoir into the Heatwave Milk Warmer® where it is warmed. Animals then draw the warm milk through to the teats. All ad-lib systems require a well drained floor.

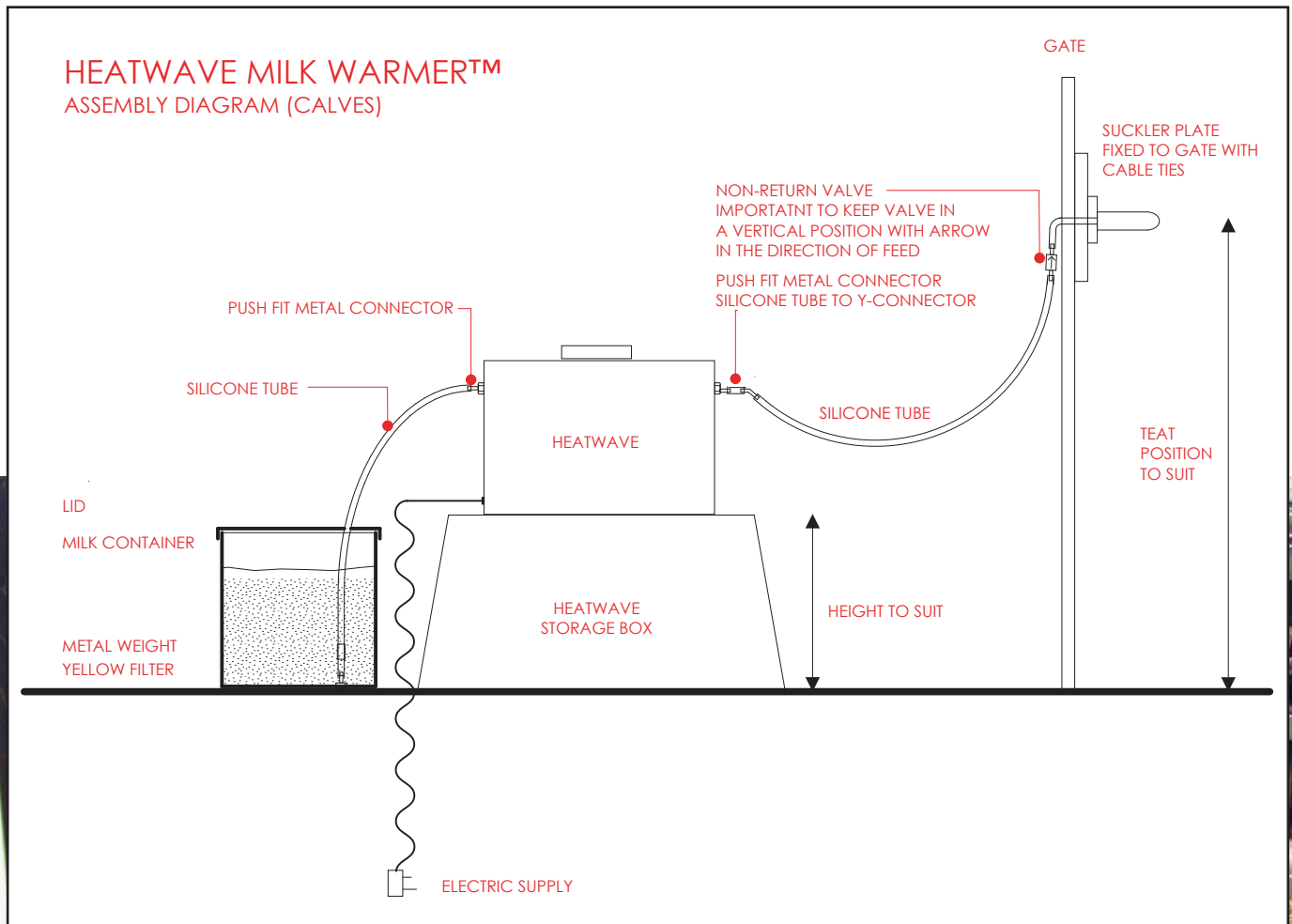
Setting up the Heatwave Milk Warmer®

1. The Heatwave® can be setup either way left/right or right/left.
2. Put the Heatwave Milk Warmer® outside the lamb/calf pens. Either place on a dry level floor for lambs or use the storage box as a plinth for calves. **Fill the Heatwave Milk Warmer® with just enough water to cover the heat exchange coils.** Push the four metal connectors into the glands on the tank inlets and outlets.
3. Fill up a container with reconstituted milk powder or cold milk. Whole milk lasts longer with a preservative added *.
4. Attach two silicone tubes with the weighted ends and filters to one end of the Heatwave® tank then drop weighted ends into the cold milk container.
5. At the other end of the Heatwave Milk Warmer®, connect a “Y” piece to the metal connector using a short piece of silicone tube. *If a small number of animals are to be fed, leave the “Y” piece out and just use two teat sucklers.* See diagram 1. Cut the tubes a little shorter if necessary.
6. Connect the other end of the silicone tube to the suckler bar keeping the Non Return Valve (NRV) about 15 cms (6ins) from the suckler bar. Check the NRV is correct way (see arrow) to allow flow to the teats. See diagram 1.
7. Fix the Supersuckler teat units to the plates provided as shown in diagram 1. Attach to the side of the pen with cable ties. **Make sure the animals can't reach through the gates and pull the tubes off.** Weldmesh makes a good guard.
8. Connect the Heatwave Milk Warmer® to the mains electric supply, making sure the plug is kept dry. Use of a circuit breaker is recommended. Switch the Heatwave Milk Warmer® on, set the thermostat, and allow 20 minutes for the water to heat up.
9. Tighten the teats on to the feed plate, and prime by squeezing them. Once milk has been drawn into the teat it will be held there by the NRV.

* Ask your supplier for a recommended preservative

ASSEMBLY DIAGRAM 1

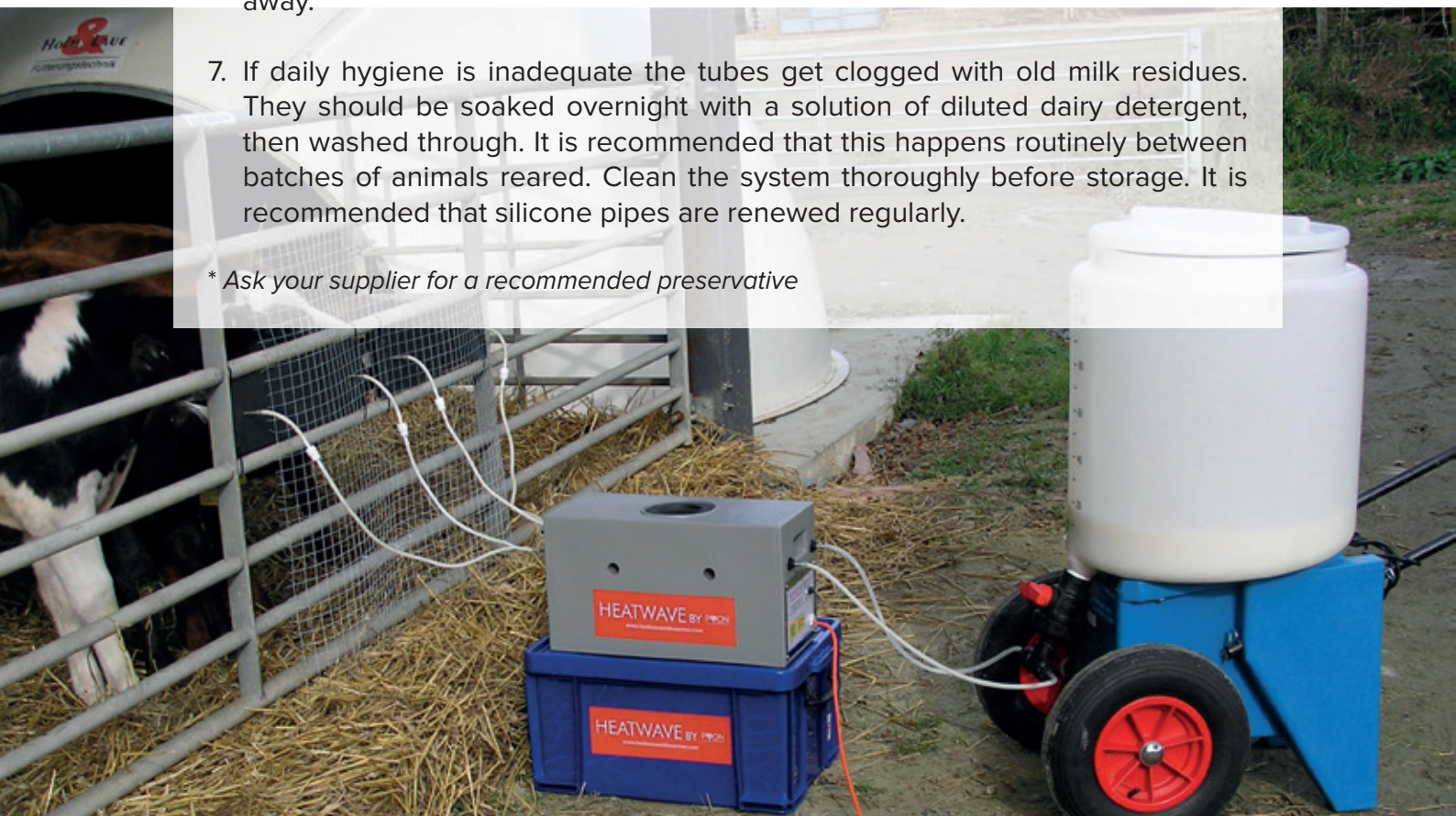
(CALVES)



DAILY MAINTENANCE

1. Scrub out the milk storage container, flush milk tubing, Heatwave Milk Warmer® coils, and teats every day. Use warm water and dairy circulation solution and pump through the pipes with the priming pump provided. Flush through thoroughly with cool clean water.
2. When using the hand pump, take the metal weight out of the silicone tube and connect to the hand pump spout. Pull the pipe off the back of the teat unit and pump cleaning fluid through. Rinse with water.
3. Fill up the milk bucket with enough milk to last 24hrs. **DO NOT MIX NEW MILK WITH OLD** or it will go stale very quickly. Whole milk works better with preservative added.* Discard any milk over 24hrs old.
4. Check that the milk at the teat is at the desired temperature. 39°C for very young animals and cooler, around 20°C as animals get older.
5. Replace worn teats. **Do not let the milk supply run out when feeding ad-lib.** Animals tend to chew the teats when empty and will gorge when eventually fed.
6. Check the water level in the Heatwave Milk Warmer® every day. Water should be changed at least once a month. The tank should be emptied when stored away.
7. If daily hygiene is inadequate the tubes get clogged with old milk residues. They should be soaked overnight with a solution of diluted dairy detergent, then washed through. It is recommended that this happens routinely between batches of animals reared. Clean the system thoroughly before storage. It is recommended that silicone pipes are renewed regularly.

** Ask your supplier for a recommended preservative*



CALF REARING PROGRAMME

Calves are best introduced to ad lib milk after their routine feed.

1. Calves should receive an adequate intake of colostrum in the first 6 hours of life (4 litres for a 40kg calf) and continue to receive colostrum in an individual pen for up to 5 days thereafter. Teach the calf to suck a teat under gravity before introducing to the group pen.
2. Calves should be penned in groups of up to 10 and if possible matched for age, weight and aggressiveness.
3. The Supersuckler should be fitted at a height of 60cm (24inches) above ground level. Allow 8-10 calves/teat.
4. Pay attention to dry bedding and adequate drainage.
5. Reconstitute milk powder according to the manufacturer's instructions. Instantised formulations will mix cold. Set thermostat to feed at a max of 39°C (new born) or 20°C or less for older calves.
6. The calves should have access to ad-lib starter nuts and water from Day 3.
7. Calves should have ad lib milk for a minimum of 5 weeks and as weaning approaches the temperature can be reduced.
8. Alternatively, to encourage weaning, the calves can have access to milk during the day and the intake pipes can be dipped into cold water at night. If calves get progressively more access to water and less access to milk they will wean on to dry feed successfully.
9. Aim to double their birth weight by weaning. A weigh band is a useful tool. To facilitate weaning the temperature can be reduced and milk can be fed cold for the final week. Weaning can take place when the calves are consuming 1.5 kg of cake/head/day.



LAMB REARING PROGRAMME

1. Assemble as seen in diagram 1, but there is no need for the plinth, the tank can sit on the floor. Place teats at 30-38cm (12-15 ins) from ground level.
2. Create a starter pen with an infra red lamp where lambs receive a first feed of colostrum. 50ml/kg bodyweight/feed.
3. Connect Supersuckler teats to the pen, with the milk reservoir and warmer outside the pen.
4. Teat height should be 30-38cm (12-15 ins from ground level) One teat will serve 10-12 lambs. Maximum of 25 per pen.
5. Mix milk powder cold according to manufacturers instructions. DO NOT MIX NEW MILK WITH OLD.
6. Introduce lambs to ad lib milk when they are warm and hungry.
7. The temperature of milk can be as high as 39°C on introduction but can soon be turned down to 20°C once the lambs are feeding well. Ad lib fresh starter pellets, clean straw and water should always be available.
8. Wean lambs abruptly at 35 days old. When they are 2.5 times birth weight and they are eating 250g (0.5 lbs) of starter feed. Make sure they always have access to ad lib starter pellets straw and clean water. Weaning abruptly is the best way to avoid the digestive problems associated with gradual weaning.
9. All ad-lib systems require a well drained floor.



HINTS & TIPS ON AD LIB FEEDING

WHOLE MILK

Whole milk should be chilled as soon as possible.

Remove clots and lumps in milk with a plastic sieve. For a large barrel sieve see **Heatwave Milk Warmer® Optional Extras**.

In warm weather whole milk will go stale quickly, keep the milk reservoir cool and add a preservative to keep fresh for 24hrs. *Ask your supplier

Wash barrels daily with detergent and hot water.

Never mix new milk with old.

MILK POWDER

Choose a milk powder recommended for long life feeding, and ideally one which mixes easily in cold water (instantised).

Whey based milk powders with a high inclusion of dairy protein work well, those with a high inclusion of wheat, soya or pea protein may produce sediment. Ask your feed merchant for a recommendation.

MIXING LARGE QUANTITIES:

When mixing large quantities of milk the use of a submersible pump and return pipe can be used as a 'mixer'. This can also be used for distribution to bulk containers. For further information on pumps email info@pyonproducts.com.

Economical Option:

A modified 200L barrel, or domestic dustbin makes a good bulk storage bin and a plaster stirrer can be used as a whisk on a 12v battery drill.

Labour Saving Option:

A Wydale Mobile mixer with impeller and wheels allows you to mix 110L. Wheel it into position next to the calves/lambs, and using the outlet tap (see optional extras) can be directly plugged into the Heatwave Milk Warmer® system forming a continuous flow from Wydale mixer to the teat. The mixer barrel becomes the cold milk reservoir.