

## Pre-installation Check List for Herringbone Dairies

The reason for asking these questions is obvious. There is no point automating a process that isn't working or a plant that hasn't been kept up to date with the changes that have been made to yield, udder size and teat shape of the cow. With less human input and more automation, an efficient milking machine is required. Milk left in the udder is not measured, by the Automilker, or any other system.

- \* Do any cows have uneven Quarters or slow milking quarters?
- \* A copy of the last milking machine test including Pulsation Graph wave forms needs to be returned with this form
- \* Do you think the cows are getting electric shocks or are affected by stray voltage?

Ask your milking machine dealer to help you evaluate your milking system and complete this check list.

---

The Pre-automation Test is - after you have put the cups on and the cows do they milk out cleanly and evenly without further input from the milker? If you have to machine strip, reposition the teat cups and continually check the cows – then a lot of things need to be fixed before you can even consider Automation.

### ◆ Question to determine milking rate

No. Cows  Milking time  Hr, min  = Cows/hr  
(First cup on last cup off)

No. Milkers  = Divide Cows/hr =  = Cows/man/ hr

No. Bails  = Divide Cows/hr =  = Rows/hr

Distance between milk line nozzles  mm

### ◆ Question to check Herringbone cow spacing + alignment

Width of Pit  Any wider than 1.8 meter puts too much pull by the dropper pipes on the teats. In a one man pit, width is not required. However a swing over-arm can be made for wide pits. Are the clusters attached from behind and between the back legs? Y/N

Zigzag or Straight rail

Is the zigzag spacing same on both sides Y/N

Dimension between centres of zigzag?

Is the alignment of nozzle, dropper & back bone of the cow in the first bail correct?  
y/n

The LMT holder (used installing the Automilkers) can be used to reposition the dropper pipe to overcome this problem to some extent.

**Milking Plant**

|   |                      |
|---|----------------------|
| Brand of milking plant e.g. Alfa NuPulse, Reid. -other    | <input type="text"/> |
| Brand of Pulsator _____                                   | <input type="text"/> |
| Type of Pulsation, <u>2x2 // 4x0</u>                      | <input type="text"/> |
| Milk line, <u>Highline // Loline</u>                      | <input type="text"/> |
| Size of milk line   | <input type="text"/> |
| Size of Pulsator line                                     | <input type="text"/> |
| <u>Full</u> MPTA Machine Test Report attached. <u>y/n</u> | <input type="text"/> |

**Milk Flow**

Milk should be removed from the cow while the let down hormone oxytocin is at a maximum. Restrictive claw bowls and liner stems can slow milking. Teat cup crawl can be a problem because the cluster is too light.

|   |                      |
|---|----------------------|
| <b>Type of Claw Bowl</b> _____<br><i>Volume of Claw Bowl (Fill with water to measure this).</i> | <input type="text"/> |
| <b>Size of Nipples</b> 11mm or 13mm   | <input type="text"/> |
| <b>Are cut off nipples too restrictive?</b> Y/N   | <input type="text"/> |
| <b>Type of liners</b> Same front & back?  | <input type="text"/> |
| <b>Length of Shell</b> _____ <b>(Heavy or light)</b> (      )                                   | <input type="text"/> |
| <b>How often you change the liners?</b>   | <input type="text"/> |

Farmers need to be aware that restrictive liners and claws can work when there is plenty of time + people to machine strip the cow and even induce second letdowns but are not good enough, when the cow has to milk by herself. Restrictive cut off nipples can cause the liner to flood e.g. this can be seen in silicon – or clear liners and shells.

New types of cut-off liners and claws with straight nipple entries are now available.

Animal Health

Faulty equipment and milking technique is associated with mastitis and high somatic cell counts

**Method of Teat spraying**

Now .....

After automation .....

**No. of cows treated for clinical mastitis**

Last season (up to 1in5 is average 20%)

So far this season

**How many cows were culled last season for mastitis?**

**Number and main types of milk grades last season**

**Somatic Cell Count**

(400,000 = 20% glands and  
40% of cows are infected)

Current:

Highest last season:

**Average production/cow**

**Breed of cow** \_\_\_\_\_

**Do the cows kick the cups off during milking? How many /milking**

**Do they walk in by themselves? y/n**

**Does the milker go out into the yard to get cows in?**

**Do you think the system is good enough to be Automated?**

*Explain what you think needs to be improved*

**We don't apologise for collecting all this information. Even if a perfect milking machine installation exists the operator would still have to provide the management and operational skills needed to make the perfect machine work.**

**What you do or leave undone can prove to be vital to success.**

**SIGNED BY** .....