

Pre-installation Check List for Rotary 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 as it has 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.

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.

Milking Plant

Brand of milking plant e.g. Alfa NuPulse, Reid. –other type

Brand of Pulsator _____

Type of Pulsation, 2x2 // 4x0

Milk line, Midline // Loline

Size of milk line

Size of Pulsator line

Full MPTA Machine Test Report attached. y/n

1. Question to determine milking rate

No. cows Milking time Cows milked / hr

◆ **Type of Rotary**

Rotary Herringbone No. of Bails

Back off turn style type

◆ **No. of Milkers**

Total:

How many putting cups on?

Set platform rotation timeAM mins/sec

.....PM mins/sec

◆ **Milking Rate Calculation**

Average per man cows/hr/man

- ◆ Describe how the LMT has been installed. (*Sketch*)
- ◆ Does the LMT require positioning after the cups are put on?
- ◆ Do the cows have rotary udder? i.e. one rear quarter uneven in size
- ◆ Do the milkers have enough time to do anything about the above problems?
- ◆ Is the claw bowl the best one for this rotary?

Type _____ Size (bowl & claw)

(*Fill with water to measure*)

Size of Nipple 11 or 13mm

- ◆ Are the cut off nipples restricting the flow and even causing uneven quarter size and different milking rates?

◆ Type of Liner _____

- ◆ Length of shell_____
- ◆ Does the cluster get tangled up with the cows when they back off?
- ◆ Can a swing arm be installed?
- ◆ Can LMT tubes pass through the deck or down the Bail post?

Many turnstyle type Rotaries were never designed for automation in the first place.

Before automating a Rotary you need to have a successful milking system **FIRST**

The first thing to do is reduce the risk of mastitis caused by:

- ◆ Poor milking hygiene and technique.
- ◆ Ineffective teat spraying.
- ◆ Malfunctioning milking machines, particularly plants with a loline milk pipe.
- ◆ Poor nutrition & dry cow methodology.
- ◆ Herds too big to handle with the available labour.

The Second thing to do is to comply with OSH regulations and code of practice for the operation of rotary dairies. Milking in a rotary has OSH implications.

The employer has the responsibility to make the rotary milking work place safe and to ensure the health and safety of those working in or visiting the work place the farmer controls.

To achieve this you are expected to:

- ◆ Systematically identify hazards (that means in written form).
- ◆ Systematically manage those hazards.
- ◆ Manage hazards by eliminating them or isolating them or minimizing them, in that order of preference.
- ◆ Provide suitable protective clothing and equipment to staff.
- ◆ Provide safety information to staff.
- ◆ Provide training & supervision so work can be done safely.
- ◆ Monitor the health of employees to ensure that their work is not having a detrimental effect on them.
- ◆ Provide opportunities for employees to participate in all of the above.
- ◆ An industry code of practice for rotary dairies is currently being formatted

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 1 in 5 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 (litres/AM milking)

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?

Have you had a stray voltage test done recently? y/n

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 -----