

Milking Liners

Skellerup milking liners are designed to fit the diverse milking equipment setups found on New Zealand dairy farms. Serving as the primary interface between the milking system and cow teats, choosing the correct liner is vital for improving milking performance and maintaining teat health.

CHOOSING THE RIGHT MILKING LINER

When selecting a Skellerup milking liner, it's essential to consider the following performance attributes:



- Mouthpiece size aligns with the cow breed in the herd
- Round or square barrel
- Liner tailpiece size to match milk claws
- Vacuum shut-off option

A GOOD MILKING LINER WILL



- Provide an airtight seal at both ends of the shell
- Mouthpiece and barrel size fits a range of teat shapes and sizes, reducing cup slip and teat end damage that may cause mastitis
- Provide efficient and complete milk out, minimising teat congestion, discomfort, and injury
- Be easily cleaned

HERD FIT GUIDE



- **Jersey cow herds** typically have smaller teats – choose a 21mm mouthpiece liner
- **Cross breed/mixed cow herds** typically have medium teats – choose a 22mm mouthpiece liner
- **Friesian cow herds** typically have larger teats – choose a 23mm mouthpiece liner



Round versus square milking liners on milking performance

In a recent study from Lincoln University, that included more than 60 milkings per cow in each phase, square liners were found to improve milk flow rates and shorten milking times. Notably, cows milked with square liners exhibited no signs of discomfort, as reported through behavioural observation, compared to those milked by round liners.

Herath, G., & Al-Marashdeh, O. (2022). Effect of milk liners geometry (round vs square) on milking performance [Research paper]. Lincoln University.

Skellerup milking liners

Skellerup milking liners have two types of barrel shapes: VacPlus with a square barrel and Reflex with a round barrel.

VACPLUS



Mouthpiece

Vacuum shut-off

Product	Claw size	Product code
Square M22 SO	Fit 13-14 mm claws	RIL1194
Square M22	Fit 13-14 mm claws	RIL1193
Square M23	Fit 13-14 mm claws	RIL1091
Square ST22	Fit 10-12 mm claws	RIL149
Square SQH	Fit Grommet bowl	RIL1247

REFLEX



Tension ring

Tailpiece

Product	Claw size	Product code
Liner M21	Fit 13-14 mm claws	RIX1195
Liner M22	Fit 13-14 mm claws	RIX1092
Liner M22 SO	Fit 13-14 mm claws	RIX1008
Liner M23	Fit 13-14 mm claws	RIX1196
Liner LT 22W	Fit 13-14mm claws	RIX815
Liner RH	Fit Grommet bowl	RIX1248

Dairy shed maintenance

Regular maintenance checks and timely replacement of milking liners are essential for achieving optimal milking performance, milk quality, and cow health. Here are best practices and helpful tips for troubleshooting common issues.

2,500 LINER CHANGE

Liner shape, elasticity, and inner surface condition deteriorates over time affecting milking performance.

- **Flex cracking in the barrel** increases the risk of liners splitting and bacteria growth, leading to milk contamination, risk of grades, and contributing to new mastitis infections by spreading bacteria between cows.
- **Mineral deposit build-up** creates an abrasive liner surface, leading to teat damage and an increased risk of infection.
- **Liner mouthpiece and barrel distortion** can arise from swelling caused by milk fat and chemical absorption, affecting liner mounting tension critical for pulsation and maintaining a high milk flow rate. Performance of worn liners diminishes over time, resulting in cup slip and increased average milk out time. Worn liners increase the risk of mastitis infections due to incomplete milk out.
- **Inelastic, swollen, or cracked liners** cannot apply the massage pressure required to stimulate milk let down. As a result, the milk yield from a worn liner is consistently lower compared to that of a new one. Worn liners have the potential to cause losses of up to 5% in milk yield due to under-milking.



Use our liner change calculator

Our liner change calculator indicates when liners are due for change and sets a calendar reminder.

Scan the QR code or visit www.skellerup.co.nz/dairy/when-to-change-liners

LINER FITTING

When assembling the liner and shell, make sure to align the indicator marks on the liner head and short milk tube to prevent barrel twisting in the shell. Use a quick, sharp pull to check liners are fully pulled through to the tension ring.

AVOID CUP SLIP

Ensure proper cluster alignment to prevent cup slip by checking that the cluster sits squarely under the udder during lactation. Secondly, confirm the correct liner mouthpiece size to fit the herd, ensuring an airtight seal for effective milk out.

DISTORTED LINER MOUTHPIECES

To prevent distortion of liner mouthpieces, promptly remove clusters from jettors after the plant wash. This measure safeguards liner condition, prevents cup slip, and facilitates airflow for drying.

LINERS SLIPPING OFF CLAWS

Check the liner tailpiece matches the claw size. If liners are slipping off the claws, it could signal an oversized tailpiece, or the liner hasn't been fully pushed onto the claw.

DAMAGED LINER TAILPIECES

Splits: This occurs when the liner tailpiece is too small for the claw, or when liners are not fully pushed onto the claw. Additionally, protein buildup on the claw can enlarge it, putting strain on the tailpiece and causing splits.

Holes: Check claws for sharp edges and burrs, as this can exacerbate any impact damage to the liner tailpiece.



DairyNZ recommends changing liners after 2,500 milkings. As milking liners are the only component of the milking system in direct contact with the cow's teat during milking, adhering to this regular replacement schedule can mitigate animal health issues and maintain optimal milking hygiene.



Book a farm visit

Scan the QR code or visit www.skellerup.co.nz/book-a-farm-visit