



SILAGE SUCCESS – REDUCING SHRINK AND SPOILAGE WITH EFFECTIVE FERMENTATION

Silage shrink and spoilage during fermentation can significantly impact both the quality of your feed and your bottom line. By understanding these losses and implementing the right practices, you can preserve more nutrients, reduce dry matter losses, and ensure your silage remains stable and highly nutritious for your herd. Here's a breakdown of key factors that contribute to shrink and spoilage during fermentation and how oxygen barriers can help.



1. Shrink During Fermentation – A Natural but Manageable Loss:

During fermentation, some shrink is inevitable as sugars and moisture are lost. However, excessive shrink occurs when fermentation is slow, or oxygen is present, promoting undesirable microbial growth. The right management techniques, including proper packing density and ensuring anaerobic conditions, can help minimize these losses.

2. Spoilage Due to Oxygen Exposure – The Silent Culprit:

Oxygen is the enemy of silage preservation. Even a small amount of oxygen can lead to spoilage, reducing feed quality and increasing losses. Oxygen exposure fosters the growth of aerobic bacteria and fungi, causing silage to spoil faster. This is where oxygen barrier films can make a significant difference in preserving your silage and reducing shrink.





3. The Role of Oxygen Barrier Films – Keeping Your Silage Fresh:

Using an oxygen barrier film can drastically reduce spoilage and shrinkage by limiting the oxygen that penetrates the silage. Studies show that silage stored under oxygen barrier films experiences significantly less dry matter loss and improved aerobic stability. With an oxygen barrier, your silage stays fresh longer, reducing losses and ensuring higher feed quality for your herd.

4. Effective Packing and Moisture Management – Key to Preventing Shrink:

Achieving a proper packing density of at least 15 pounds of dry matter per cubic foot is critical to minimizing air pockets and shrink. Additionally, managing moisture content ensures the right conditions for fermentation, preventing excessive shrink and maintaining nutrient density.

5. Shrinkage Calculators – Tools for Accurate Estimations:

To better manage shrink and spoilage, several useful calculators are available to estimate and track losses in your silage: Silage Pile Sizing Calculator – Helps you determine the right size for your silage pile based on your herd's daily feed requirements and desired removal rates, ensuring better control over shrinkage

- Silage Density Calculator – Evaluates the packing density of your silage, helping ensure that oxygen is excluded effectively to prevent spoilage and minimize shrink.
- Using these calculators can provide valuable insights, guiding you in making adjustments to your silage management practices for optimal results.

FINAL THOUGHTS:

By taking control of fermentation, using effective oxygen barrier films, and leveraging helpful shrinkage calculators, you can reduce shrink and spoilage, enhancing the nutritional value of your silage and protecting your investment. Don't hesitate to reach out if you need expert advice on improving your silage management. We're here to help you maximize your silage's potential and improve your bottom line.

For more insights and expert recommendations, feel free to contact our team. Happy harvesting!