

Corn Silage Recommendations

Chopping corn and packing bunkers can be dangerous work. Powerful equipment, hasty workers, and long hours are a perilous combination. Careful operators give priority to properly maintained equipment, making certain all guards and shields are in place. Equipment should always be turned off when making adjustments or diagnosing problems. It is wise to space tractor and equipment wheels as far apart as possible to increase stability. Silage should not be packed too high or too steep, increasing the likelihood of rolling the packing tractor. Accidents happen quickly and workers cannot be too careful.

Most growers or silage contractors have the ability to chop corn at a faster rate than it can be properly packed, and slowing the delivery rate is not a realistic option. Adequate packing at the bunker to achieve the minimum recommended density of 15 to 18 pounds dry matter per cubic foot can be a challenge. Feed quality is reduced in loosely packed bunkers because of increased dry matter and nutrient losses from aerobic decay. One commonly used guideline to maximize silage density is the minimum need of 800 pounds of packing weight per ton of silage delivered per hour. Packing density can be improved if workers limit pushup layers to 6 to 12 inches and have plenty of tractor power. The heavier the packing tractors, the better will be the density of the corn silage. Tractor weight can be increased by adding weight to the front of the tractor or to the 3-point hitch on the back. Filling tires with fluid is also helpful. Dual wheels can provide additional tractor weight and stability.

Silos not properly sealed immediately after harvest will have significant losses of feed quality. The average losses of dry matter vary depending on moisture and feeding rates, but it is not uncommon to show an average dry matter loss of 30 percent from the top three feet of the bunker. Professionals recommend the use of 4 to 6 mm black or black/white plastic, overlapped by 4 to 6 feet, and secured with uniform weights such as 15 to 20 used tires per 100 square feet. Some areas have professional crews that specialize in covering and uncovering bunker silos in a timely manner. Protecting chopped corn from exposure to oxygen, sunlight, rain and snow is always cost effective.

Corn silage needs at least 45 to 60 days to become uniformly preserved and for the kernels to reabsorb moisture and soften, making them easier to digest. Feeding unfermented or partially fermented silage will not provide the full economic or production benefits possible from properly fermented corn silage. Silage chopped today will be ideal to feed about the first of December.

Silo face management is another important consideration in managing aerobic deterioration in silage. Loose silage is more porous and allows greater air infiltration, increasing the rate of aerobic growth and growth of molds and yeasts. Maintaining a firm face and cleaning up loose silage that has fallen to the floor of the silo on feedout will help minimize aerobic losses. At feedout, silage should be removed from the whole silage face at a minimum rate of 6 inches per day. Feedout rate is a function of the number of animals being fed and the amount of silage fed in the diet. Thus, silo design and size should be matched with the feeding rate in order to minimize silage losses during feedout. Workers must always be careful around the feedout face of silage bunkers since cave-ins can bury workers with no warning.