



BY AMERICAN MEAT SCIENCE ASSOCIATION

Proper Saw Maintenance (Beef Splitting Saws and Bandsaws)

The bandsaw is a hard working and often misused piece of meat processing equipment that requires proper maintenance to work effectively. Beef splitting saws are especially vulnerable to wear and misuse. Proper operation of bandsaws and awareness by saw operators and line supervisors of correct maintenance reduces the probability of saw breakdown. Proper bandsaw maintenance is the responsibility of the saw operators, supervisors, plant maintenance, management, and the sanitation.

Operator Responsibility:

- Inspect bandsaw prior to start-up to ensure proper assembly, the blade is set correctly on the wheels, and the proper amount of tension (torque), and the wheels move smoothly. The blade should run in the middle of the wheels on a properly set up saw. If the blade is running too close to the front of the wheels it could fall off the wheels, too far to the back and it can start to turn causing the saw to not cut effectively. The blade should never run on the ridges on the front or back of the wheels.
- Check the switches or triggers to make sure they are working properly, and especially safety switches!
- Beef splitting saws must be examined to ensure the balancer is operating smoothly, allowing for easy lifting and dropping of the saw.
- Awareness of correct saw operation. Operators can push product through the saw faster than it was designed to cut. This can lead to blade wandering, causing crooked cuts and excessive blade wear. The saw should run easily as the product is pushed through with minimal amounts of whining or shudder.
- Troubleshooting problems. A well-trained operator also will be able to diagnose problems that may arise during operation. Typical problems include bad or uneven splits, premature blade breakage, discoloring of bone, blade slippage, and excessive pull on the motor. These problems usually have a simple solution such as reinstalling the blade properly, cleaning out blade guides, or replacing a dull or worn out blade.

Supervisor/Management Responsibility:

- Proper training of saw operators. Operator error can result in premature wear of blades, uneven cutting, and saw failure if the misuse is severe.
- Ensuring regularly scheduled maintenance is being properly completed.
- Management should obtain quality equipment and purchase the proper blades for the saw being operated.

Maintenance Responsibility:

- Routine maintenance. The bandsaw requires surprisingly little routine maintenance as most bearings are sealed and there usually are not fluids to be replaced. However, bandsaws may need to be periodically lubricated, and may need to have the drive wheels checked for correct torque.
- Bearing inspections. From time to time the bearings should be inspected to make sure they aren't out of alignment.
- Inspection of guides and other parts. Over time the blade guides may become worn or damaged, these parts are usually easy to replace.
- Periodically ensuring the wheels of a beef splitting saw are being torqued correctly.

Clean-up Responsibility:

- Proper cleaning and sanitizing of saw. Saw manufacturers recommendations for cleaning and sanitizing should be followed closely. Typically, cleaning bandsaws involves completely breaking down the saw, including removal of the blade, washing down the interior and exterior of the saw to remove any particles and bone dust. Some saw parts may need to be oiled to prevent rusting as wheels are often not made of stainless steel.
- Proper cleaning and sanitizing of blades. If the blade is to be reused it should be removed, cleaned, sanitized and oiled.

Even though bandsaws are essentially two wheels, a motor and a blade, several factors are involved in ensuring long lasting and proper performance. It is important all plant personnel that are involved in the use, maintenance, or cleaning of the bandsaw are aware of proper operation and maintenance practices.

