

Round Bale Handling Hazards

The basic principles of equipment safety apply to large round bale harvest and handling. The major new risk encountered when switching to this system of hay handling is the forage package itself. These bales can roll, and their weight is sufficient to crush a human body.

Far too many serious injuries have occurred when improperly secured round bales rolled down front loader arms. Equipment used to handle the big bales should be fitted with 4-post roll over protective structures (ROPS). However, while ROPS will “cushion the blow”, bales shouldn’t be rolling down loader arms in the first place!

Never attempt to carry a round bale in a loader bucket. All loaders should be equipped with a spear or grapple that is specifically designed for the size(s) of round bales being handled. Most importantly, a loader should incorporate a restraining device that will prevent a bale that has come loose from sliding backward.

Loaders must be large enough and equipped with sufficient counterweight to handle bales safely. Set wheels at maximum width to increase stability.

Try to avoid steep slopes and rough terrain when moving bales with a loader. If it is impossible to avoid sloping land, approach bales from the downhill side.

As with any loader operation, avoid sudden stops, starts, or changes of direction. Be extremely cautious, and travel at low speed only when carrying a bale. Always keep bales as low as possible for maximum stability. A one ton bale puts the center of gravity at a precarious level when a loader is raised high.

The risk of a bale breaking free is also greater when loader arms are raised.

See to it that other workers and bystanders stay well clear of bale handling operations.

Use good judgment when stacking bales in storage. High stacks make efficient use of available space, but subsequent removal could be very hazardous.

If bales are to be handled with a 3-point hitch attachment, the tractor must have sufficient front counterweight for stability and safe handling. Practice extreme caution when backing up to bales. Keep everyone away from the bale and the forks.

Round Bale Transporters

A variety of wagons, truck frames, etc. have been developed for transporting loads of round bales. Some of these units are quite sophisticated, with provisions for automated loading and unloading.

Such purpose-designed equipment is safer for round bale transport. However, many farmers will continue to load the big bales on flatbed wagons that were originally built for conventional square bales. If the majority of a farm’s harvest is likely to be in the form of large round bales, the owner should consider replacing at least one rack with a platform designed to carry round bales. Make sure that the round bale platform won’t encourage the building of loads that exceed capacity of the running gear.

It is very important for round bales to be well secured on a flat rack. They should be tied down if a load is to be transported on a public roadway. An innocent bystander was killed by round bales that jolted loose from a flat rack at the top of a hill on a township road.

Following are some key points to consider before transporting loads of large round bales:

- The load to be pulled should be no heavier than the pulling unit.
- Lock tractor brake pedals.
- Inspect the transporting unit thoroughly before going on the road.
- Take advantage of “engine braking.” Use the same gear going down a hill that you would going up. And remember, most tractors only have 2-wheel brakes.
- Wagons used to haul bales should be of sufficient width and have end racks, to prevent bales from moving off the ends or sides during transport.
- Hitching must be secure. Use a top quality draw pin and safety chain.
- Make sure you can signal your intention to turn on the roadway. Use escort vehicles, if necessary.
- SMV (slow moving vehicle) sign should be clearly visible on the rear of the wagon or trailer.
- Never carry a large bale on the front end loader while pulling a loaded wagon.

