

Baling and Compacting Work Meeting Kit

Compactors and balers are used in industries such as wholesalers, retailers, manufacturing, garbage and recycling facilities, and other public entities to compress waste materials into smaller, more manageable loads. Using powered rams, waste materials such as garbage, paper, cardboard, cotton, metals, and plastic can be compressed and packed into containers or baled for transport. Workers can get seriously injured or killed if they reach inside or fall into a compactor or baler.

WHAT BALERS AND COMPACTORS DO: Functionally, balers and compactors do the same thing – take a big pile of material and make it smaller.

Baler: Balers compress and bundle recyclable materials ranging from cardboard and paper to plastics and scrap metal. The machine takes the material and forms it into dense and consistently shaped bales that are easy to store and transport. Most go off to a recycling company for resale and reuse.

One key way to decide on a baler for your operation is by size since the amount of space the machine takes up is limited by how much space you have.

Compactor: A compactor does the same job as a baler, just with non-recyclable materials. This could be food waste, general rubbish, and non-recyclable packaging.

It allows you to compress large volumes of rubbish into a contained space before it gets picked up by the waste haulier and taken to the landfill.

The value of a compactor is directly related to how much waste your company produces and what type. It can cut the size of your waste stream by two-thirds, turning three cubic yards of rubbish into one cubic yard.

They can be quite large, so you do need to have the space to house them.

Which One Is Right For You?: Choosing between balers vs compactors starts with an assessment of your business's waste management plan. Four questions to answer are:

- How much waste do we produce daily?
- What percentage is recyclable?
- How much space do I have for equipment?
- Do I have the staff to run it?

HAZARDOUS BALER/COMPACTOR WORK PRACTICES

These hazardous practices include the lack or failure of safety devices, and failure to develop and implement standard lockout/tagout procedures. Investigations indicates that workers suffered fatal injuries when they entered the compactor to clear a jam, fell into the travel path of the ram, or reached into the machine while performing operational procedures.

Failure of safety devices and lack of instruction and training in the operation of the equipment may have contributed to some of these deaths.

SAFETY DEVICES ON COMPACTORS AND BALERS

The key is to be competent with all safety devices on compactors and balers.

Guards, conveyors, remote chutes, control switches, and safety interlocks for doors and ports are designed to keep workers out of the compression chamber and out of harm's way. Do not try to bypass safety features in order to perform maintenance, clear a jam, or ease the loading process. Use access ladders and platforms, or walk around moving conveyors. Use safe access points and consider fall protection if you are working over gravity-fed chutes or chambers. Watch out for the baling materials because they are under pressure and can snap if they are overloaded.

Follow the safe work practices designed for your machine and job tasks. Always clear the area and account for all workers before you activate a compactor or baler. Never reach into or enter a baler or compactor unless it has been de-energized. Always use lockout/tagout procedures before performing maintenance, inspections, or clearing jams. Jams are a frequent occurrence in baling and compacting operations, so design lockout/tagout procedures to be efficient and effective by marking the power points and wiring the machinery together to reduce the number of lockouts needed.

EMPLOYEE TRAINING

Get Training on the Use of the Compactor or Baler in Your Work Area.

Follow manufacturer's recommendations on the maintenance, inspection, and use of the machine. Never overload the machine beyond the recommended capacity. Do not allow workers younger than 18 to operate a compactor or baler.

Know how the machine at the jobsite works; does it operate manually or on semiautomatic or automatic cycles? Does the machine have capacity sensors and when are they activated? With manual devices, the operator controls the ram; semiautomatic devices turn on and cycle only after a worker hits the switch; while automatic devices trigger the compression ram based on a capacity sensor. These features tell you when and how the machine will activate so you can avoid the powered ram.

BEST WORKER COMPACTING AND BALING PROTECTION PRACTICES

- Never bypass or disable interlocks or control switches.
- Keep all equipment guards in place during operation.
- Before attempting to clear jammed material from a compactor or baler, follow approved standards on lockout/tagout procedures:

1. Disconnect the power from the machine.
2. Isolate the power by locking the disconnect.
3. Tag the disconnect to notify others that the power must remain off.
4. Mechanically block any ram that has the potential to move before accessing the compacting chamber.
5. Test equipment to ensure power has been de-energized before beginning work.
6. Locate all coworkers before activating power to the compactor or baler.

FINAL WORD

Balers compress and bundle recyclable materials and compactors do the same job as a baler except with non-recyclable materials. But the end game is the same with both operations – take a big pile of material and make it smaller.