



## Heavy Equipment Safety

Operation of heavy equipment such as excavators, loaders, graders, rollers, and bulldozers, should always be done by highly skilled operators who have demonstrated the ability and necessary skills to operate safely. Ground-based workers should be trained in how to work safely around the equipment, and how to stay clear. Unsafe practices by either the operator or those around the equipment can create very dangerous situations. Serious injuries can occur if the equipment strikes a worker, or if the equipment is rolled over.

Here are a few common safety rules for operators and ground-based workers to consider:

- 1) *Good communication is essential.* A standardized set of hand signals should be used by the operator and signal person. Operators should always know exactly where all ground-based workers are located, and the wearing of high visibility vests will help the operator to locate them quickly. The equipment should have a backup warning alarm that can be heard by all nearby workers. Two-way radios are also valuable communication tools.
- 2) *Heavy equipment must have a rollover protective structure (ROPS) meeting OSHA requirement.* The ROPS is designed to protect the operator if the machine tips over. A seat belt must be worn so that the operator will not be thrown out of the seat during a rollover or upset situation. If working on slopes, try to avoid moving across the face of the slope. Try to operate up and down the slope face if possible. Use extreme caution when operating near open excavations.
- 3) *Wear hearing protection when required.* If it has been determined that noise levels around the equipment could potentially cause hearing loss, always use protective plugs or muffs when working on or around the equipment.
- 4) *Never jump onto or off the equipment.* Operators should always use the three-point contact rule when climbing onto or off heavy equipment. The three-point rule means having both feet and one hand, or one foot and both hands in contact with the ladder access at all times.

5) *Inspect and service the equipment regularly.* Complete equipment service in accordance with the manufacturer's recommendation. Periodic safety inspections on all components of the equipment should be done regularly by qualified personnel. Inspect the steering system and brake systems carefully. A pre-shift walk around inspection by the operator is highly recommended.

Injury accidents involving heavy equipment on construction sites have a higher probability of resulting in a fatality than many other types of accidents. It is critical to follow all of your company's safety rules and procedures when operating or working on or around heavy equipment.