



Food mixer guarding

Employers and people who are self-employed have a range of general duties under the Occupational Safety and Health Act 1984 (OSH Act).

What the law says

One of the duties is to guard dangerous parts of machinery.

Injuries like cuts, fractures and amputations, occur when workers get their hands or parts of the body, clothing or jewellery caught in mixing bowls during operation. Most injuries can be prevented if the food mixer is fitted with guarding.

Workers also have responsibilities under the OSH Act. They must protect their own safety and health at work and avoid putting others at risk by anything they do or don't do.

Dangers of an unguarded food mixer

Dangerous tasks when using food mixers include:

- reaching into the bowl to remove food or scrape the sides;
- cleaning the mixer; and
- adding ingredients during the mixing.

Attachments like whisks, dough hooks and flat beats can be dangerous when the mixer is working. Hands and fingers can come into direct contact with the rotating attachments and aprons, gloves, hair and ties can tangle themselves around the moving parts. This can cause serious injury by dragging the worker into the mixer. Spoons, spatulas or other tools can make contact with the moving parts causing them to eject or draw the workers hand into the moving parts.

Guarding

Fitting a guard to the food mixer is the most effective way to prevent access to rotating shafts and attachments.

1. Interlocked guarding system

An interlocked guard is a movable guard which is connected to either the power or control system of the machine. The interlock prevents the machine from operating unless the guard is closed.

Can the mixer attachments operate normally when the bowl is not fitted to the mixer or when the bowl is not in contact with the guard?

If the bowl needs to be raised into its operating position, the interlocked guarding system must prevent the attachments from moving, until the bowl is in the raised position and/or the bowl and guard meet. A practical solution is to install an interlock switch on the mixer frame or guard so that the bowl activates the switch when it is in the correct position.

Do the attachments keep moving for a time after the mixer is switched off?

The interlocked guarding system must prevent the guard from separating from the bowl until the moving parts have stopped.

If there is a loss of power, is the mixer capable of re-starting automatically when power comes back on?

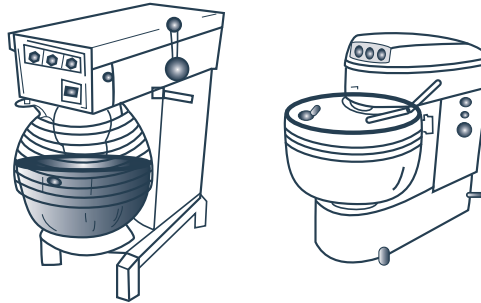
To prevent this risk of unintentional start-up, a practical solution could be the installation of a re-set button on the mixer that must be activated after power is lost.

2. The design and construction of a physical guard

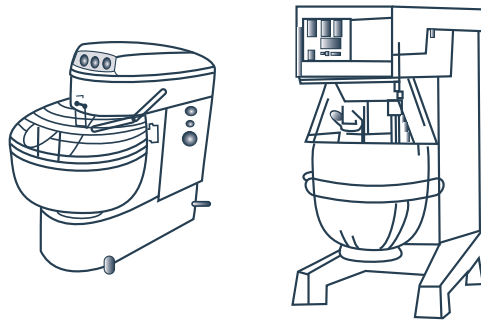
A physical guard must:

- prevent body parts and hair, or items such as clothing or jewellery, coming into contact with the rotating attachments;
- be solidly constructed and securely mounted;
- follow the contour of the machinery to prevent access;
- not be able to be by-passed or disabled;
- not allow the build-up of product;
- not create hazards associated with maintenance and cleaning; and
- not cause an injury in itself.

If ingredients must be added without stopping the mixer, the guarding must have a chute or similar device that prevents fingers coming into contact with the moving parts.



Example of mixers with wire solid guarding.



Example of mixers with chutes for adding ingredients.

For more information on food mixer guarding contact WorkSafe on 9327 8777.