KNIFE & BLADE SAFETY

A case study in risk management

One of the most serious and common occupational hazards in the seafood retail industry are **wounds** caused by sharp knives and blades. The NSW OHS Act & Regulation are very clear that owners, managers and supervisors are **personally** responsible to provide a **safe workplace** (see module 2 in the MFMA OHSMS). *It is no longer enough to say that your use of knives in the workplace is good enough because that's the way it's always been done or that everyone else does it the same way.*

Since legislation is clear that the workplace is to be safe and without risks to health it is important to consider all the safety aspects of running your business. In particular you should consider safe **place,** including the environmental conditions; safe **plant,** i.e. equipment and tools; and safe **processes,** which is the way you organise the work (see module 13 in the MFMA OHSMS).

The best way of reducing risk in each of those areas is to identify what hazards are present, and **eliminate or control them.** There are several ways of doing this: talk to people who are actually doing the job; do a physical inspection with a checklist; get specialist advice from a manufacturer or supplier; or just ask *what if?* (see module 14 in the MFMA OHSMS).

Once the hazards have been identified, they should be dealt with using the *hierarchy of controls* (see module 12 in the MFMA OHSMS). One clear way of controlling the risk from cuts is to look at the use of knives and band saws in your workplace. Below are some strategies for reducing the risks associated with using knifes and blades.

Knife and Blade Risk Management Strategies

1. Hazard Elimination

The most obvious way of controlling the risk is by **eliminating** the hazard, i.e. eliminating knives and band saws from your premises. This would mean that you would purchase filleted fish from another supplier (or only sell whole fish). If you think this is unrealistic then you need to consider a range of **control strategies.**

2. Isolation Control Strategies

A simple control is to **isolate** the hazard. This can be achieved in two ways, either in time or space. Separation in time means that the hazardous activity takes place when there is less of chance of an accident happening, e.g. can the bulk of the filleting take place before the shop opens and it becomes busier? Separation in space can mean locating the hazard some **distance** away from the other staff and customers, e.g. a specially designated filleting room where staff do not have to pass by the band saw, or increasing the space between filleters on the process line so that they do not cut each other by accident. Or it can mean simply a **barrier** to access the hazard, such as a wall or ledge between the filleters or a marked space around the band saw.

3. Engineering Controls Strategies

Engineering controls are the next step in the hierarchy to prevent hazards from causing injuries. **Guarding** of blades plays a critical role in hazard reduction. A band saw requires several types of guards such a height guard which can be raised or lowered to expose the length of the blade; a rail guard on the side of the cutting table to guide the product being cut; and a splash guard in front of the blade to prevent pieces of flesh and bone from striking the operator's eye.

Be aware that it is illegal to operate a hazardous machine if the safety features have been removed or do not function. As a rule of thumb: *if you can access a hazardous part of the machine then it is not sufficiently guarded.*

Band saws also require functional **brakes** so that when it is powered off the blade will stop quickly - accidents have occurred when the operator has turned off the machine, and then turning back, slicing off his fingers when he had thought it had finished moving. **Sensors** attached to both top and bottom doors need to be properly working to stop the blade moving if the doors are opened. In addition to the off-button, there needs to be large **emergency stop** button located at hip-level.

Electrical safety is a priority with band saws. Power leads should be tested and tagged by an electrician at least every 3 months for safe operation. They may not be tested under contract maintenance, so you will need to call in an external electrician. **RCDs (safety switches)** must be installed and regularly tested to prevent electrocution. RCD’s are designed to immediately switch the electricity off when electricity is detected “leaking” at a level that may cause harm to a person. For further information contact a qualified electrician.

Regular **maintenance** is essential, and the servicing records need to be kept in your office in an easily accessible location. Daily or weekly in-house maintenance may involve stripping the machine down and replacing the blade to ensure sharpness, but this will need to be done by someone who is appropriately trained.

During maintenance or when there is a problem, the machine needs to have **lock-outs** to prevent it from starting up and the appropriate **warning labels must be** attached. Even knives and steelers need to be maintained frequently and they should not be used if damaged, even if the damage is minor.

Knives should be **stored** either above benches on **magnetic strips** when not in use (i.e. don't just leave them lying around on benches) or in special pouches worn on a belt. The location where cutting takes place should have **non-slip matting or tiles** placed around and cleaned be cleaned regularly.

4. Administrative Control Strategies

After these engineering controls come administrative controls which consist of information, training, supervision and instruction. Only competent staff should be allowed to use hazardous equipment such as band saws, which means that you must be satisfied that the operator has all the necessary **training** (see module 6 in the MFMA OHSMS).

When using hazardous equipment they must use standard operating procedures (SOPs; and see module 7 in the MFMA OHSMS). When using knives or band saws there must always be at least one other co-worker in the vicinity in the case of a serious accident. Ideally at least one staff member on duty should be trained in **first aid** (certified) and the first aid kit must be easily accessible and kept fully stocked (see module 11 in the MFMA OHSMS). If a staff member is inexperienced they must be closely **supervised** to ensure safe behaviour, and in areas where hazardous activities take place such as the filleting room, **safety signs** must be installed warning other staff members to the danger.

Another organisational or administrative control measure is to consider **job rotation** so that you do not have the same filleter working too long using the same cutting techniques and positions, which can lead to long-term manual handling problems.

A final means of controlling hazards is the use of personal protective equipment (PPE). When filleting, mesh or cut-proof **gloves** should be worn (both hands preferably), and at all times non-slip leather work boots should be worn in the cutting area. **All PPE is required by law to be provided and maintained by the employer.**

More Information

To obtain a copy of the MFMA Occupational Health & Safety Management System Handbook or more information on OH&S please call our office of 02 9552 1611 or email: michael@mfma.com.au.

Also see: www.mfma.com.au