

## Hand hammers

Hand hammers in metal work are generally used to strike pins, punches, rivets, cold chisels and 'dollies'. Light hammers are used for stamping job numbers on structural steel work or marking drill points on metal.

Heavy hammers, also known as sledgehammers, long - handle hammers or double - handed hammers, have hardened steel heads weighing up to 12 kg. Often they are used to hammer a pin into a hole while another person holds either the pin or the dolly to take the shock between two hard metal surfaces.

### **Did you know?**

- Hand hammers are among the top five causes of injury in the manufacturing metal products industry.
- Most injuries are broken or badly bruised fingers and thumbs.
- A badly broken finger or thumb can result in more than a month off work, and leave lasting disabilities.
- Other injuries, especially to eyes, are caused by chips of metal flying off damaged hammer faces or burred punch and chisel heads.

The following questions are to help toolbox meetings to identify workplace hazards and to reduce the risks.

## Working with light hammers safety checklist

check	yes	no	n/a
Are all users of light hammers trained in safe work procedures and know how to:			
<ul style="list-style-type: none"> <li>• grasp the hammer a little down the handle, so the butt stands out less than 25 mm past the little finger?</li> </ul>			
<ul style="list-style-type: none"> <li>• choose a hammer with a striking face diameter approximately 25 mm wider than the face of the tool being struck?</li> </ul>			
<ul style="list-style-type: none"> <li>• strike a hammer blow squarely, with the striking face parallel to the surface being struck?</li> </ul>			
<ul style="list-style-type: none"> <li>• avoid making glancing blows?</li> </ul>			
<ul style="list-style-type: none"> <li>• use only the striking face for hammering, never the side or flat of the hammer?</li> </ul>			
<ul style="list-style-type: none"> <li>• never use one hammer to strike another hammer? The hardened steel on both can shatter.</li> </ul>			
Do safe work procedures for light hammers cover such safety devices as:			
<ul style="list-style-type: none"> <li>• screens to guard bystanders from flying metal fragments?</li> </ul>			
<ul style="list-style-type: none"> <li>• a sponge rubber pad or solid rubber hand-guard to be fitted on the shaft of striking tools?</li> </ul>			
<ul style="list-style-type: none"> <li>• gloves for the non-hammer hand on specific heavy striking tool jobs?</li> </ul>			
<ul style="list-style-type: none"> <li>• a chisel-holder handle to keep the hand clear of glancing blows?</li> </ul>			
Use automatic punches wherever possible.			

## Working with heavy hammers

Holding the pin or dolly while another person strikes it with a sledgehammer is extremely hazardous, and should be strictly forbidden under safe work procedures.

ALWAYS use long-handled tongs or grips to hold the pin or dolly.

*NEVER shorten the handle of a heavy hammer; you may strain your back.*

Working with heavy hammers safety checklist			
check	yes	no	n/a
Do safe work procedures for heavy hammers cover:			
• ensuring the correct weight hammer is used for the job?			
• ensuring the hammer operator has the skills and strength for the weight of hammer and the task?			
• avoiding striking hardened metal objects or tools, which may chip or shatter, sending particles flying at high speed?			

## Personal protective equipment

Personal protective equipment safety checklist			
check	yes	no	n/a
Is appropriate protective equipment provided and used, for example:			
• goggles, safety glasses or faceshield for operators and others nearby? Metal fragments can injure the eyes of others working nearby if safety glasses do not have adequate side - protection.			
• safety boots to protect the feet against dropped metal and tools?			
• personal hearing protectors, earmuffs or earplugs?			

## Instruction, training and supervision

Instruction, training and supervision safety checklist			
check	yes	no	n/a
Are all workers new to any job with light or heavy hammers given instruction and training about:			
• safe work procedures for the work they do?			
• likely hazards in the work they do?			
• hazardous practices to be avoided?			
• how to identify faults in hammers and striking tools?			
• how to report faults?			
• how to grind off burrs and mushrooming on striking tools?			
• use of protective equipment?			
• reporting of both injury and non - injury incidents?			
Are all workers new to hammering jobs given:			
• one-to-one supervision by a person who is both skilled and experienced in the hammering tasks involved until they have learned safe work procedures?			
• regular supervision after they have learned safe practices?			

*Special training and skills are required to use a sledgehammer safely.*

## Maintenance

Hazards increase when flaws or faults develop in the hammerhead or the handle.

*Metal handles which do not incorporate a shock absorbing handle should not be used.*

<b>Maintenance</b> safety checklist			
check	yes	no	n/a
Are all hand hammers, punch and chisel heads regularly checked to ensure:			
• the head is firmly fixed to the handle and the wedge is tight?			
• striking faces of the head are smooth and free from oil?			
• striking faces are free from chips or burrs?			
• handles are free of sharp edges, splinters and surface roughness?			
• wooden handles are varnished or waxed to give a smooth non-slip finish? Avoid painting handles that may obscure defects.			
Are all chipped, scored or damaged hammerheads thrown out - never redressed, ground, welded or reheat-treated?			
Are cracked, chipped, splintering or loose handles replaced - never bound, glued, taped or repaired in any way?			
Are burred, chipped or mushroomed heads on cold chisels, punches and other striking tools always ground back to their original shape before re - use.			
Are metal handles NEVER welded to a hammerhead? It may make the head brittle causing it to chip or shatter during use.			

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