# Metal Cutting Guillotine - Safe Operation



| Document no. | Work description |
|---|---|
| SMS-06-SW-0810 | This SWI outlines the safe work practices for the use of a Metal Cutting Guillotine |
| | **Scope**<br>This SWI applies to all metal cutting guillotines with in Rolling Stock Division |
| **Review date**<br>08/06/12 | **References**<br>• NSW OHS Act 2000<br>• NSW OHS Regulation 2001, Part 5.4<br>• AS4024.1 Safeguarding of Machinery<br>• SMS-06-PR-0225 Plant<br>• SMS-06-GD-0403 Plant Risk Assessment<br>• SMS-06-GD-0001 Guide to Manual Handling<br>• SMS-06-PR-0173 Plant and Equipment Lock-out Tag-out<br>• SMS-06-GD-0323 Personal Protective Equipment<br>• SMS-16-SR-0057 Inspection and testing<br>• SMS-05-SR-0027 Records management |

| Responsible supervisor | PPE and precautions | Competencies or qualifications | Licences or permits required |
|---|---|---|---|
| Line Manager | • Safety Eyewear or full face protection<br>• Protective Gloves (for handling sheets of metal **only)**<br>• Hearing Protection<br>• Long sleeved shirt or overalls<br>• Safety Footwear<br>• Operate according to the manufacturer's instructions | • Competent in the use of a Metal Cutting Guillotine<br>• Site specific induction<br>• Manual Handling training<br>• Electrical Safety Awareness | Nil additional |

**Tools and equipment required**

Clamps

IF CONTROL MEASURES ARE NOT SUITABLE AND MAJOR CHANGES ARE NEEDED, CONDUCT A RISK ASSESSMENT AND DEVELOP NEW CONTROLS ACCORDING TO SMS-06-SR-1479 OHS RISK MANAGEMENT.

**Warning**

*The following warnings apply throughout this SWI*:

- *This machine presents a serious crush and amputation hazard. Under no circumstances are you to place any part of your body under the blade or moving parts. Never make repairs, remove or adjust the guarding unless trained and authorised to do so. The machine must be isolated, by unplugging from the wall outlet (where possible) or switching power off at the wall outlet and at the Guillotine.*
- *To prevent an incident never use a Guillotine that is outside its electrical testing and tagging dates*
- *To prevent injury hand, wrist or neck jewellery as well as loose clothing must not be worn and long hair must be contained while operating this machine*
- *Using this machine requires manual handling. To prevent injury use a firm grip, keep back straight, bend knees and avoid twisting, bending or overreaching. Seek assistance as required*
- *It is an unsafe practice for two people to work at a guillotine unless both operators are provided with interlocked actuating devices (usually a foot control)*
- *To prevent injury always wear safety eyewear and hearing protection during the operation of this machine*
- *If the guillotine is damaged or any guards are missing or damaged do not proceed with the work. Tag the equipment out, in accordance with SMS-06-PR-0173 Plant and Equipment Lock-out Tag-out, and notify your Line Manager as soon as practicable*

| | |
|---|---|
| **Site / Job Planning** | Follow all worksite procedures, e.g. induction, Pre-Work Brief<br>Ensure immediate environment is safe for work e.g. adequate lighting, loose materials, chemical spills, housekeeping |

| | |
|---|---|
| **Pre-operational Checks** | Ensure fixed guards are in place to prevent hands or other parts of the body from entering the trapping space<br>Ensure the equipment does not have any "Out of Service" tags and that the electrical lead is within test date<br>Ensure the immediate area is clear of other personnel before using equipment<br>Ensure cutting table is clear of scrap and tools<br>Familiarise yourself with and check all machine operations and controls<br>Avoid working in isolated situations, while using this machine |
| | ***Warning***<br>• *If any guards are missing or damaged do not proceed with the work, tag the equipment out, in accordance with SMS-06-PR-0173 Plant and Equipment Lock-out Tag-out, and notify your Line Manager as soon as practicable*<br>• *Guards or safety devices must never be removed or adjusted, except by an authorized person for maintenance purposes and only under the protection of isolation* |
| **Test** | Once the above checks have been carried out, turn the machine on and test as follows:<br>• Ensure emergency stop(s) function<br>• Guillotine cuts smoothly<br>• Clutch and brake operate correctly<br>• Ensure power and other indicators are illuminated |
| **Operation of Guillotine** | Take extreme care during the initial feeding of the sheet of metal into the machine<br>The metal sheet should always be held sufficiently far back from the edge being fed into the guillotine<br>Ensure fingers and limbs are clear before actuating the guillotine<br>Adjust the rear fence and hold the material firmly to prevent inaccurate cutting due to creep. Use a clamp to secure the sheets firmly<br>When cutting, ensure feet are positioned to avoid contact with the foot operated lever or switch on powered models |
| | ***Warning***<br>• *Gloves must not be worn during the operation of the guillotine. However, cut metal is razor sharp, to prevent cuts ensure protective gloves are worn when handling sheets of metal*<br>• *It is an unsafe practice for two people to work at a guillotine unless both operators are provided with interlocked actuating devices (usually a foot control)*<br>• *Do not cut small sheets of metal that cannot be safely secured and handled as they can be ejected from the machine causing serious injury*<br>• *Do not place hands under the sheet of metal being cut as serious hand injuries can occur*<br>• *Do not attempt to cut material beyond the capacity of the machine or cut rod, strap or wire as this may result in a serious incident* |
| **Inspection and Maintenance** | Conduct a post work inspection for any damage that may have occurred during the machines use and report it to your Line Manager as soon as practicable<br>Never undertake any maintenance, unless trained and authorised to do so and the equipment has been isolated, by unplugging from the wall outlet (where possible) or switching power off at the wall outlet and at the guillotine<br>Conduct maintenance as per the Manufacturer's specifications and recommendations<br>Get an authorised maintenance person to do any repairs or checks / alterations to the tools settings<br>Maintain inspection and test records in accordance with SMS-16-SR-0057 Inspection and Testing and SMS-05-SR-0027 Records Management |
| **Housekeeping** | Remove all off cuts and place them in either in the storage rack or waste bin<br>Leave the work area in a safe, clean and tidy state |
| | ***Warning***<br>• *Metal off cuts can be sharp. To prevent injury always wear protective gloves when cleaning the machine*<br>• *If you identify damage after using the lathe, affix an "Out of Service" tag, in accordance with SMS-06-PR-0173 Plant and Equipment Lock-out Tag-out. Never leave a damaged or malfunctioning piece of equipment without applying a tag and notifying the relevant Line Manager as soon as practicable* |


© RailCorp