

# FACT SHEET

# **RADIAL ARM SAWS**

A radial arm saw is a circular saw mounted on a sliding horizontal arm. It is often used for cutting long pieces of timber to length. It may be fitted with a dado blade to create cuts for dado, rabbet (a recess or groove cut into the edge of a piece of material) or half lap joints. A dado blade is usually one of a pair, mounted on the spindle and separated by spacers to set the width of a groove in timber. When a radial arm saw is used for cross cutting, the timber remains stationary on the saw's table, and the blade is pulled through the timber. Some radial arm saws allow the blade to turn parallel to the back fence, using a rip cut.

#### **FIGURE 1: RADIAL ARM**



# HAZARDS:

> Contact with blade

- > Noise
- > Dust
- Slips, trips and falls
- > Unexpected movement (during maintenance, cleaning & adjustments)



PPE:

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#### TASK - FEED AND GUIDE TIMBER THROUGH THE CUT

#### Hazard

with



Contact cuts or blade amputation

A riving knife is attached to the hood guard, and must extend so that it touches the top of the bench.

Harm

#### **OTHER (NON-MECHANICAL) HAZARDS**



A safe noise level over an eight hour day is 85dB(A). A radial arm saw may exceed the noise intensity.

Dust	•	<ul> <li>&gt; Eye irritation or damage</li> <li>&gt; Breathing problems, lung damage or cancer</li> <li>&gt; Worsening of existing health problems</li> </ul>	•	<ul> <li>&gt; USE dust extraction equipment to minimise dust getting in the operator's breathing zone.</li> <li>&gt; ALWAYS WEAR eye protection.</li> <li>&gt; ALWAYS USE respiratory protection.</li> </ul>
Slips, trips and falls	•	<ul><li>&gt; Trapping</li><li>&gt; Cuts</li><li>&gt; Bruising</li></ul>	•	<ul> <li>&gt; KEEP up-to-date housekeeping procedures.</li> <li>&gt; KEEP the area around saws clear of slip and trip hazards.</li> </ul>



# TASK - MAINTENANCE, CLEANING & REPAIRS

## **RIPPING WITH A RADIAL ARM SAW**

**FIGURE 2: CORRECT** 

Radial arm saws can be used above the bench for ripping.

Timber MUST be fed so the saw revolves upwards at the front and towards the timber (see Figure 2). If the timber is fed from the other side with the saw revolving down and in the direction of the feed, the teeth will likely "dig-in" or "climb".

### **FIGURE 3: INCORRECT**





References, current standards and further information can be found on the Safe Use of Machinery project page at: **www.worksafe.govt.nz** 

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