

Grinding Wheel Machine Safety Policy



“Grinding wheels,” or machines that power a wheel constructed of abrasive materials to spin at rapid speeds for grinding, smoothing, cutting, cleaning or shaping a fixed object are commonly found in maintenance and machine shops. Some grinding wheels are fixed in place; others are portable and handheld. All are potentially dangerous. Hazards include:

- Eye injuries caused by sparks, chips, dusts or flying objects from the object being grinded;
- Inhalation of dusts generated during grinding;
- Contact with moving parts of the machine;
- Shattering or rupturing of the wheel causing parts to fly in all directions; and
- Excessive vibration.

Here’s a template for a Policy you can adapt to prevent these hazards and ensure compliance with OHS grinding wheel requirements.

GRINDING WHEEL SAFETY POLICY

1. PURPOSE

ABC Company has adopted this Policy to ensure the safe use of grinding wheels and abrasive wheels (which this Policy will refer to collectively as “grinding wheels” unless the context requires otherwise) in accordance with [province] Occupational Health and Safety Regulations (“OHS Regulations”), the

Occupational Health and Safety Act ("Act"), the ABC Company Occupational Health and Safety Program ("OHS Program"), and other applicable requirements and standards.

2. SELECTION OF GRINDING WHEELS

Safe design and construction will be primary criteria that ABC Company will apply in selecting grinding wheels to be used by workers.

3. MACHINE GUARDING OF GRINDING WHEELS

Grinding wheels may not be used unless they are appropriately safeguarded as required by OHS Regulations

- [Add if you're federally regulated] and mounted in accordance with CSA B173.5-1979.
- [Add if you're in B.C. or Newfoundland] in accordance with ANSI B7.1-1988.
- [Add if you're in Yukon] in accordance with ANSI B7.1-2000.

4. PROTECTIVE HOOD

All abrasive wheels must have a protective hood enclosing the wheel to contain fragments of the wheel should it rupture or break apart while turning, EXCEPT for: (i) an abrasive wheel used for internal work, (ii) a mounted wheel of any shape or type which is 50 mm (2 in) or less in diameter; (iii) a threaded-hole, cone or plug type of wheel if the nature of the work provides protection; or (iv) a portable grinder when it's used for grinding root passes in welded pipe, provided it has a protective hood covering at least 120° of the wheel periphery and the operator wears adequate eye and face protection.

5. GRINDING WHEEL WORK RESTS

A work rest for a grinding wheel must: (a) Be securely installed; (b) Have a maximum clearance of 0.003 m (1/8 in.)

from the grinding wheel; (c) Not be installed below the centre line of the wheel; and (d) Not be adjusted by a worker while the wheel is in motion.

6. SPEED

The maximum speed for safe use of a grinding wheel specified in the manufacturer's specifications, expressed in number of revolutions per minute, must be clearly marked on the grinding wheel. No worker may operate the grinding wheel at a speed above the marked maximum.

7. MOUNTING OF GRINDING WHEELS

Grinding wheels must be mounted in accordance with the manufacturer's specifications and the mounting flanges must have an equal and correct diameter for the wheel. Before mounting and installation of a grinding wheel, a competent person must check the wheel to verify that it is not cracked, split, chipped or unbalanced.

8. SAFE WORK PROCEDURES

ABC Company will create and implement written procedures to ensure that grinding wheel operations are carried out safely and in accordance with manufacturer's specifications, OHS requirements and other applicable standards, including but not limited to procedures making it clear that:

- Grinding wheels must not be operated at above the marked maximum speed referred to in Section 6 above;
- Workers must not grind material using the side of a grinding wheel unless the wheel has been designed for that purpose;
- Before applying any material to the wheel, workers must run the grinding wheel at full operating speed in accordance with the manufacturer's specifications; and
- Workers operating handheld grinding wheels must ensure that the object they're grinding is firmly secured and

can't move.

9. REQUIRED PPE

ABC Company will furnish and workers who operate or work near grinding wheels must use appropriate personal protective equipment, including an industrial eye or face protector, hand or arm protection, [*list other required PPE*].

10. STORAGE OF GRINDING WHEELS

Grinders wheels must be stored in compliance with manufacturer's recommendations in dry areas, protected from sudden temperature changes and, if necessary protected from impact in chests or drawers.

11. TRAINING AND EDUCATION

All workers required or permitted to operate grinding wheels will receive instruction and training from a qualified person in the potential hazards and safe uses of the grinding wheel.