

## Occupational Safety, Health and Welfare (Woodworking Machines)

### Regulations 1989

#### GN No. 66 of 1989

**THE OCCUPATIONAL SAFETY, HEALTH AND  
WELFARE ACT 1988**  
**Regulations made by the Minister under section 80(1) of the  
Occupational Safety, Health and Welfare Act 1988**

1. These regulations may be cited as the Occupational Safety, Health and Welfare (Woodworking Machines) Regulations 1989.

2. 2. In these regulations—

‘Act’ means the Occupational Safety, Health and Welfare Act 1988;

‘circular’ sawing machine’—

(a) means a sawing machine comprising a saw bench (including a bench in the form of a roller table and a bench incorporating a travelling table) with a spindle situated below the machine table to which a circular saw blade can be fitted for the purpose of dividing material into separate parts;

(b) does not include—

- (i) a multiple rip sawing machine;
- (ii) a straight line edging machine; or
- (iii) any sawing machine in the operation of which the blade is moved towards the material which is being cut;

‘cutter’ includes saw blade, chain cutter, knife, boring tool, detachable cutter and solid cutter;

‘machine table’ includes, in relation to a circular sawing machine, any frame which supports the material being cut;

‘narrow band sawing machine’—

(a) means a sawing machine designed to be fitted with a blade not exceeding 50 millimetres in width in the form of a continuous band or strip the cutting portion of which runs in a vertical direction;

(b) does not include a log band sawing machine or a band re-sawing machine;

‘planing machine’—

- (a) means a machine for surfacing or for thickening or a combined machine for both those operations;
- (b) does not include a multi-cutter moulding machine having two or more cutter spindles;

'vertical spindle moulding machine' includes a high-speed routing machine;

'woodworking machine' includes any—

- (a) sawing machine designed to be fitted with one or more circular blades;
- (b) sawing machine designed to be fitted with a blade in the form of a continuous band or strip;
- (c) chain sawing machine;
- (d) mortising machine;
- (e) planing machine;
- (f) vertical spindle moulding machine;
- (g) multi-cutter moulding machine having two or more cutter-spindles;
- (h) tenoning machine;
- (i) trenching machine;
- (j) boring machine;
- (k) sanding machine,

for use on wood, cork, fibre, bagasse board or any material composed partly of any of those materials.

## PART I

### WOODWORKING MACHINES (GENERAL)

- 3. The cutters of every woodworking machine shall be enclosed by a guard or guards, of substantial construction, to the greatest extent that is practicable having regard to the work being done on or by the machine, unless the cutters are in such position as to be as safe to every employee as they would be if so enclosed.
- 4. No person shall, while the cutters of a woodworking machine are in motion, make any adjustment to any guard or any part of the machine unless the adjustment can be made without danger.
- 5.
  - (1) Whenever the cutters of a woodworking machine are in motion, the guards and devices required by these regulations shall be kept constantly in position and properly secured and adjusted except when and to the extent to which, owing to the nature of the work being done, the use of any such guard or device is rendered impracticable.
  - (2) All guards, devices and appliances required by these regulations shall be properly maintained at all times.
- 6. Every woodworking machine shall be provided with an efficient device for starting and stopping the machine and the control of the device shall be in such a position

and of such design and construction as to be readily and conveniently operated by the person operating the machine.

7. There shall be provided around every woodworking machine adequate and unobstructed working space to enable work at the machine to be done without risk of injury to employees.
8. The floor or surface of the ground around every woodworking machine shall be maintained in good and level condition and, so far as is reasonably practicable, free from chips or other loose material and shall not be allowed to become slippery.
9. (1) No person shall be employed on any kind of work at a wood-working machine unless—

- (a) he has been sufficiently trained at machines of a class to which that machine belongs in the kind of work on which he is to be employed; and
- (b) he has been sufficiently instructed in accordance with paragraph

(2) of this regulation,

except where he works under the adequate supervision of a person who has a thorough knowledge and experience of the working of the machine and of the matters specified in paragraph (2) of this regulation.

(2) Every person, while being trained to work at a woodworking machine, shall be fully and carefully instructed as to the dangers arising in connection with such a machine, the precautions to be observed, the requirements of those regulations which apply and, in the case of a person being trained to operate a woodworking machine, the method of using the guards, devices and appliances required by these regulations.

10. Every employee shall, while operating a woodworking machine—

- (a) use the spikes, push-sticks, jigs, holders and back stops; and
- (b) use and keep in proper adjustment the guards and devices,

provided in accordance with these regulations.

11. (1) Every woodworking machine and every part thereof, including cutters and cutter blocks, shall be of good construction, sound material and properly maintained.

(2) Every woodworking machine, other than a machine which is held in the hand, shall be securely fixed to a foundation, floor, or a substantial part of the structure of the premises, and where this is impracticable, other arrangements shall be made to ensure its stability.

12. (1) Every woodworking machine shall be inspected at least once a week by the person in general charge of machinery, appointed under section 5 of the Act, to ensure that all machines are maintained and all

guards, devices and appliances required by these regulations are provided and maintained.

- (2) The employer shall keep a register in which shall be recorded any remarks made following every inspection.
13. Every employer shall ensure that while any work is being done at any woodworking machine—
    - (a) the lighting, whether natural or artificial, for every wood-working machine shall be sufficient and suitable for the purpose for which the machine is used;
    - (b) the means of artificial lighting for every woodworking machine shall be so placed or shaded as to prevent glare and so that direct rays of light do not impinge on the eyes of the operator while he is operating the machine.
  14. Where a place of work is used for work carried out on wood-working machines, and where on any day an employee is likely to be exposed continuously for 8 hours to a sound level of 90 dB(A) or is likely to be subject to an equivalent or greater exposure to sound—
    - (a) measures as are reasonably practicable shall be taken by the employer to reduce the noise to the greatest extent possible; and
    - (b) suitable and personal ear protectors shall be provided and made readily available for the use of every such employee.
  15. Effective exhaust appliances shall, so far as is reasonably practicable, be provided and maintained to collect and remove chips, particles and dust produced by woodworking machines and for discharging them into a suitable receptacle or place.

## PART II Circular Sawing Machines

16. (1) There shall be provided for every circular sawing machine a riving knife which shall—
  - (a) be securely fixed by means of a suitable device situated below the machine table;
  - (b) be behind and in direct line with the saw blade;
  - (c) have a smooth surface;
  - (d) be strong, rigid and easily adjustable.
- (2) (a) The edge of the knife nearer the saw blade shall form an arc of a circle having a radius not exceeding the radius of the largest saw blade with which the saw bench is designed to be used.
- (b) The knife shall be capable of being so adjusted and shall be kept so adjusted that it is as close as practicable to the saw blade, having regard to the nature of the work being done, and so that at the level of the machine table the distance between the edge of the knife nearer

to the saw blade and the teeth of the saw blade does not exceed 12 millimetres.

- (c) The riving knife shall extend upwards from the machine table—
    - (i) in the case of a saw blade of 600 millimetres or more in diameter, to a height of 225 millimetres;
    - (ii) in the case of a saw blade of less than 600 millimetres in diameter, to a height not more than 25 millimetres below the highest point of the saw blade.
17. (1) The part of the saw blade of every circular sawing machine which is above the machine table shall be guarded with a strong and easily adjustable guard.
- (2) The guard shall be capable of being so adjusted and kept so adjusted that it extends from the top of the riving knife to a point above the upper surface of the material being cut which is as close as practicable to the surface.
- (3) The guard shall have a flange of adequate depth on each side of the saw blade and kept so adjusted that the flanges extend beyond the roots of the teeth of the saw blade.
- (4) Where the guard is fitted with an adjustable front extension piece, that extension piece shall have along the whole of its length a flange of adequate depth on the side remote from the fence and the said extension piece shall be kept so adjusted that the flange extends beyond the roots of the teeth of the saw blade.
18. No circular sawing machine shall be used for—
- (a) cutting any rebate, tenon, mould or groove, unless that part of the saw blade or other cutter which is above the machine table is effectively guarded;
  - (b) a ripping operation (other than any such operation involved in cutting a rebate, tenon, mould or groove) unless the teeth of the saw blade project throughout the operation through the upper surface of the material being cut; or
  - (c) cross-cutting logs or branches unless the material being cut is firmly held by a gripping device securely fixed to a travelling table.
19. (1) A suitable push-stick shall be provided and kept available for use at every circular sawing machine which is fed by hand.
- (2) Except where the distance between a circular saw blade and its fence is so great or the method of feeding material to the saw blade is such that the use of a push-stick can safely be dispensed with, the push-stick so provided shall be used—
- (a) to exert feeding pressure on the material between the saw blade and the fence throughout any cut of 300 millimetres or less in length;

- (b) to exert feeding pressure on the material between the saw blade and the fence during the last 300 millimetres of any cut of more than 300 millimetres in length; and
  - (c) to remove from between the saw blade and the fence pieces of material which have been cut.
- 20. The blade of a sawing machine shall not be cleaned by hand while the blade is in motion.

### PART III

#### PLANNING MACHINES

- 21. No planing machine shall be used for cutting any rebate, recess, tenon or mould unless the cutter is effectively guarded.
- 22. (1) Every planing machine for surfacing which is not mechanically fed shall be—
  - (a) fitted with a cylindrical cutter block; and
  - (b) provided with a bridge guard and a cutter block guard.
- (2) (2) The bridge guard shall—
  - (a) be strong and rigid;
  - (b) have a length not less than the full length of the cutter block;
  - (c) have a width not less than the diameter of the cutter block;
  - (d) be so constructed as to be capable of easy adjustment both in a vertical and horizontal direction;
  - (e) be mounted on the machine in a position which is approximately central over the axis of the cutter block;
  - (f) be so constructed as to prevent its being accidentally displaced from the position specified, in the preceding subparagraph; and
  - (g) be so adjusted as to prevent any risk of injury to any employee working at the machine.
- (3) The cutter block guard shall-
  - (a) be provided for that part of the cutter block which is on the side of the fence remote from the bridge guard; and
  - (b) be strong, effective and easily adjustable.
- 23. That part of the cutter- block of a combined machine used for thicknessing which is exposed in the table gap shall, when the said machine is used for thicknessing, be effectively guarded.

24. Every planing machine used for thickening shall be provided on the operator's side of the feed roller with sectional feed rollers, or other suitable devices which shall be of such a design and so constructed as to restrain, so far as is practicable, any work piece ejected by the machine.

#### PART IV

##### VERTICAL SPINDLE MOULDING MACHINES

25. (1) Every detachable cutter for any vertical spindle moulding machine shall—
- (a) be of the correct thickness for the cutter block or spindle on which it is to be mounted; and
  - (b) be so mounted as to prevent it, so far as is practicable, from becoming accidentally detached therefrom.
- (2) Where straight fences are being used for the purposes of the work being done at a vertical spindle moulding machine, the gap between the fences shall be reduced, so far as is practicable, by a false fence or otherwise.
- (3) Where by reason of the work being done at a vertical spindle moulding machine it is impracticable to provide a guard enclosing the cutters of the said machine to such an extent that they are effectively guarded, but it is practicable to provide, in addition to the guard, a jig or holder of such a design and, so constructed as to hold firmly the material being machined and having suitable handholds which afford the operator a firm grip, the machine shall not be used unless such a jig or holder is provided.
26. Every guard provided in pursuance of regulation 4 for the cutters of any vertical spindle moulding machine shall be of such a design and so constructed as to contain, so far as is reasonably practicable, any part of the cutters or their fixing appliances or any part thereof in the event of their ejection.
27. Where the work being done at a vertical spindle moulding machine is work in which the cutting of the material being machined commences otherwise than at the end of a surface of the said material and it is impracticable to provide a jig or holder in pursuance of regulation 25(3), the trailing end of the said material shall, if practicable, be supported by a suitable back stop where this would prevent the said material being thrown back when the cutters first make contact with it.
28. No work shall be done on a vertical spindle moulding machine, being work in which the cutting of the material being machined commences otherwise than at the end of a surface of the said material and during the progress of the cutting the material is moved in the same direction as the movement of the cutters, unless a jig or holder provided in pursuance of regulation 25(3) is being used.
29. Where the nature of the work being performed at a vertical spindle moulding machine is such that the use of a suitable spike or push-stick would enable the work to be carried on without unnecessary risk, such a spike or push-stick shall be provided and kept available for use.

PART V  
NARROW BAND SAWING MACHINES

30. (1) The saw wheels of every narrow band sawing machine and the whole of the blade of every such machine, except that part of the blade which runs downwards between the top wheel and the machine table, shall be enclosed by a guard or guards of substantial construction.
- (2) That part of the blade of every such machine as aforesaid which is above the friction disc or rollers and below the top wheel shall be guarded by a frontal plate which is as close as is practicable to the saw blade and has at least one flange at right angles to the plate and extending behind the saw blade.
- (3) The friction disc or rollers of every such machine shall be kept so adjusted that they are as close to the surface of the machine table as is practicable having regard to the nature of the work being done.

PART VI  
MULTIPLE RIP SAWING AND STRAIGHT LINE EDGING MACHINES

31. (1) Every multiple rip sawing machine and straight line edging machine shall be provided on the operator's side of the in-feed pressure rollers with a suitable device which shall be of such design and so constructed as to contain, so far as is practicable, any material accidentally ejected by the machine and every such device shall extend for not less than the full width of the said pressure rollers.
- (2) Every multiple rip sawing machine and straight line edging machine on which the saw spindle is mounted above the machine table shall, in addition to the device required to be provided under paragraph (1), be fitted on the side remote from the fence with a suitable guard, which shall extend from the edge of the said device along a line parallel to the blade of the saw at least 300 millimetres towards the axis of the saw and shall be of such a design and so constructed as to contain, so far as is practicable, any material accidentally ejected from the machine.

PART VII

32. For the purposes of section 80(4) of the Act, those parts of woodworking machines required by these regulations to be guarded, shall be exempted from the provisions of section 29 of the Act.
33. These regulations shall come into operation on 1 May 1989.

Made by the Minister on 26 April 1989.