

*Statutory Instrument No. 51 of 1974*

FACTORIES ACT, 1973  
(31 of 1973)

**FACTORIES (WOODWORKING) REGULATIONS, 1974**

*(Published on the 11th April, 1974)*

**ARRANGEMENT OF REGULATIONS**

**REGULATION**

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IN EXERCISE of the powers conferred by section 55 (1) of the Factories Act, 1973, the Minister of Health, Labour and Home Affairs hereby makes the following Regulations –

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| Citation                   | <b>1.</b> These Regulations may be cited as the Factories (Woodworking) Regulations, 1974.   |
| Application and obligation | <b>2.</b> (1) These Regulations shall apply to all sawmills, and all other factories and building operations and works of engineering construction undertaken by way of trade or business or for the purpose of any industrial or commercial undertaking in which any woodworking machine is used.<br>(2) The provisions of these Regulations shall, in their application to any such building operations or works of engineering construction, have effect as if any place where such operations or works are carried on were a factory and any person undertaking or carrying on any such operations or works were the occupier of a factory.<br>(3) A printed copy of these Regulations shall be kept posted in every factory or place to which they apply. |

- 3.** In these Regulations, unless the context otherwise requires – Inter-pretation
- “circular saw” means a circular saw working in a bench (including a rack bench) for the purpose of ripping, deep-cutting or cross-cutting but does not include a swing saw or other saw which is moved towards the wood;
- “gauge” means the Imperial Standard Wire Gauge;
- “plain band saw” means a band saw, other than a log saw or band re-sawing machine, the cutting portion of which runs in a vertical direction;
- “planing machine” includes a machine for overhand planing or for thick-nessing;
- “swing saw” means a revolving saw mounted in a frame, column or chassis which is suspended from a pivot above a table, bench or other support, on which the stock is placed and which is operated by being pulled across the table, bench or other support on which stock is placed;
- “underground room” means a room any part of which is so situated that half or more than half the whole height thereof measured from the floor to the ceiling is below the surface of the ground adjoining or nearest to the room;
- “woodworking machine” means a circular saw, swing saw, plain band saw, planing machine, vertical spindle moulding machine, overhead routing machine or chain mortising machine, operating on wood.
- 4.** Every woodworking machine shall be provided with an efficient Machine controls stopping and starting appliance, and the control of this appliance shall be in such a position as to be readily and conveniently operated by the person in charge of the machine; such control shall be so arranged as to avoid as far as is reasonably practicable accidental or inadvertent operation.
- 5.** A clear, unobstructed space shall be maintained for at least two metres Working space around every woodworking machine while in motion:
- Provided that this requirement shall not apply to –
- (i) any stock necessarily placed within that area; and
  - (ii) the backs of swing saws and the side of any machine (not being a working side) adjacent to a wall.
- 6.** (1) The floor of every mill, room or place in which timber or wood is Floors sawn or worked by machines shall –
- (a) be firm, sound and level; and
  - (b) be constructed of wood or of concrete or in any other manner approved by the chief inspector:
- Provided that in sawmills the requirements of this subregulation shall apply only to any part of the floor where men work or pass and to those parts of the floor which are within two metres of any part of a machine used for working or cutting timber or wood.
- (2) Boards or other covers of pits or trenches shall be level with the adjoining floor and shall not shift or move when trodden upon.
  - (3) Any holes in the floor which it is impracticable to cover securely shall be securely fenced all round to a height of at least one metre.

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| Lighting                 | <p>(4) The floor surrounding every woodworking machine shall be maintained in good and level condition, free from chips or other loose material as far as practicable, and shall not be allowed to become slippery.</p> <p><b>7.</b> (1) The lighting at any woodworking machine shall be sufficient and suitable having regard to the machine and the nature of the work.</p> <p>(2) Without prejudice to the generality of the foregoing requirement, in any joinery, woodworking or cabinet making workshop the level of illumination at the point of operation of the blade or tool of any handfed machine operating on wood shall be sufficiently adequate to ensure safe operation of the machine blade or tool.</p> <p>(3) Where the natural light at a woodworking machine is inadequate and can be improved by the provision of additional or better windows not involving serious structural alteration, or by whitening the walls or the inside roof of the factory, or by any other reasonable means, the occupier shall take such steps as may be necessary to improve the natural light at such machine.</p> <p>(4) The means of artificial lighting for every woodworking machine shall be adequate and shall be so placed or shaded as to prevent direct rays of light from impinging on the eyes of the operator while he is operating such machine.</p> |
| Underground rooms        | <p><b>8.</b> No woodworking machine shall be worked in any underground room which is certified by the chief inspector to be unsuitable for the purpose as regards construction, light, ventilation or in any other respect.</p>   |
| Wet sawing               | <p><b>9.</b> Whenever water is applied to the cutting blade of a machine in motion –</p> <p>(a) the water shall be applied only by means of a fine spray; and</p> <p>(b) all practical steps shall be taken by means of baffles, hoods and screens or other methods to prevent the outsplash of water and wet waste, and, in particular, the floor immediately surrounding the machine shall not be allowed to become slippery.</p>   |
| Training and supervision | <p><b>10.</b> (1) Every person while being trained to work a woodworking machine shall be fully and carefully instructed as to the dangers arising in connexion with such machine and the precautions to be observed.</p> <p>(2) No person shall be employed at a woodworking machine unless he has been sufficiently trained to work that class of machine or unless he works under the adequate supervision of a person who has a thorough knowledge of the working of the machine.</p>   |
| Circular saws            | <p><b>11.</b> Every circular saw shall be fenced as follows –</p> <p>(a) the part of the saw below the bench table shall be protected by two plates of metal cheek plates or other suitable material, one on each side of the saw; such plates shall not be more than one hundred and fifty millimetres apart and shall extend from the axis of the saw outwards to a distance of not less than fifty millimetres beyond the teeth of the saw; metal plates if not beaded shall be of a thickness at least equal to fourteen gauge, or, if beaded, be of a thickness equal to twenty gauge;</p>   |

- (b) behind and in direct line with the saw there shall be a suitable riving knife, which shall be slightly thicker than the blade of the saw and slightly thinner than the saw kerf, and which shall have a smooth surface, shall be strong, rigid, and easily adjustable, and which shall also conform to the following conditions -
  - (i) the edge of the knife nearer the saw shall form an arc of a circle having a radius not exceeding the radius of the largest saw used on the bench;
  - (ii) the knife shall be maintained as close as practicable to the saw, having regard to the nature of the work being done at the time, and at the level of the bench table the distance between the front edge of the knife and the teeth of the saw shall not exceed fifteen millimetres;
  - (iii) for a saw of a diameter of less than six hundred millimetres. the knife shall extend upwards from the bench table to within twenty-five millimetres of the top of the saw, and for a saw of a diameter of six hundred millimetres or over shall extend upwards from the bench table to a height of at least two hundred and twenty-five millimetres;
- (c) the top of the saw shall be covered by a strong and easily adjustable guard, with a flange at the side of the saw farthest from the guide fence; such guard shall be kept so adjusted that the said flange shall extend below the roots of the teeth of the saw; and such guard shall extend from the top of the riving knife to a point as low as practicable at the cutting edge of the saw;
- (d) the bench of every circular saw shall be smooth and flat.

**12.** A suitable push stick shall be kept available for use at the bench of every circular saw which is fed by hand, so as to enable the work to be carried out without unnecessary risk.

Push stick  
to be  
provided  
with  
circular saw

**13.** The following provisions shall apply to every swing saw -

Swing saws

- (a) the top half of the blade shall be completely and securely covered as far as is practicable without fouling the stock being worked;
- (b) the worktable, bench or support shall be firm, level and smooth, provided that no account shall be taken of any rollers in any table or bench; the table, bench or support shall be at right angles to the swing of the saw; a back rail against which the stock may be rested shall be fitted along the back of the bench, table or support; the rail shall be as high as is practicable compatible with not fouling any part of the machine;
- (c) there shall be provided and maintained an effective device which automatically returns the saw to the back position when released at any point of its travel; such device shall not depend for its proper functioning on any rope, cord or spring; the saw shall not be deemed to be in the back position until the front edge of the saw is at least twenty-five millimetres behind the front edge of the back rail; if the device includes a counterweight effective means shall be provided for preventing the fall of the counterweight;

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|   | (d) as much as practicable of the teeth of the saw shall be securely guarded whenever the saw is in the back position;   |
|   | (e) all practical steps shall be taken by the provision of soft buffer pads or otherwise to prevent the saw rebounding from the back position;   |
|   | (f) limit chains or other effective devices shall be provided and maintained to prevent the front edge of the saw from being pulled beyond the front edge of the work table.   |
| Bandsaws  | <b>14.</b> Every plain bandsaw shall be guarded as follows –   |
|   | (a) both sides of the bottom pulley shall be completely encased by sheet metal or other suitable material;   |
|   | (b) the front of the top pulley shall be covered with sheet metal or other suitable material;  |
|   | (c) all portions of the blade shall be enclosed, or otherwise securely guarded, except the portion of the blade between the bench table and the top guide.   |
| Planing machines  | <b>15.</b> No planing machine which is not mechanically fed shall be used for overhand planing unless it is fitted with a cylindrical cutter block.  |
| Overhand planing  | <b>16.</b> Every planing machine used for overhand planing shall be provided with a substantial metal bridge guard capable of covering the full length and breadth of the cutting slot in the bench and so constructed as to be easily adjusted in a vertical and horizontal direction.          |
| Thickening  | <b>17.</b> In every planing machine used for thickening, except a combined machine for overhand planing and thickening, –  |
|   | (a) the feed roller shall be provided with an efficient guard; and   |
|   | (b) the blades shall be effectively guarded by hoods, chip chutes or other enclosures so, however, that no regard shall be had of any exposure of the blades necessary for working the stock or material.  |
| Vertical spindle moulding machines and over-head routing machines | <b>18.</b> The cutter of every vertical spindle moulding machine and of every over-head routing machine shall, where practicable, be provided with an efficient guard having regard to the nature of work being performed.   |
| Work performed without guard                                      | <b>19.</b> For such work as cannot be performed with an efficient guard for the cutter, the wood being moulded at a vertical spindle moulding machine shall, if practicable, be held in a jig or holder of such construction as to reduce as far as possible the risk of accident to the worker. |
| Push-stick to be provided   | <b>20.</b> A suitable spike or push-stick shall be kept available for use at the bench of every vertical spindle moulding machine.   |
| Chain mortising machines  | <b>21.</b> The chain of every chain mortising machine shall be provided with a guard which shall enclose the cutters as far as practicable.  |
| Tools and blades  | <b>22.</b> All tools, blades and cutting instruments of woodworking machines and other machines operating on wood shall be free from patent defect, properly maintained, and kept clean, properly ground and sharpened, and  |

properly set. Without prejudice to the generality of this requirement no saw which is cracked shall be used in any circular saw.

**23.** The guards and other appliances required by these Regulations shall be maintained in an efficient state and shall be constantly kept in position while the machinery is in motion, except when, owing to the nature of the work being done, the use of the guards or appliances is rendered impracticable. The guards shall be so adjusted as to enable the work to be carried on without unnecessary risk.

Use of  
guards and  
appliances

**24.** Regulations 11, 13, 14, 16 and 17 of these Regulations shall not apply to any woodworking machine in respect of which it can be shown that other safeguards are provided and maintained which render the machine equally safe as it would be if guarded in the manner prescribed by these Regulations.

Other  
safeguards

- 25.** Every person employed on a woodworking machine shall –
- (a) use and maintain in proper adjustment the guards provided in accordance with these Regulations; and
  - (b) use the spikes or push-sticks and holders provided in compliance with regulations 12, 19 and 20, except when, owing to the nature of the work being done, the use of the guards or appliances is rendered impracticable.

Duties of  
persons  
employed

MADE this sixth day of March, 1974.

M.T.M. KGOPO,  
*Permanent Secretary,*  
*Ministry of Health, Labour and Home Affairs.*

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