

**CPC****COOPERATIVE PATENT CLASSIFICATION****B24C****ABRASIVE OR RELATED BLASTING WITH PARTICULATE MATERIAL****NOTE**

This subclass covers: - the use of a blast of any particles or pellets dispersed in air, gas, or liquid for the treatment of surfaces or cutting of materials, the particles usually being of abrasive material; - the equivalent use of a jet of particles or pellets projected or energised by means other than a stream of air { - the equivalent use of material without particles or pellets for deburring, removal of extended surface areas or jet milling of local recessions, e.g. grooves } In this subclass, the following terms are used with the meanings indicated: - "abrasive" covers any material used in the manner mentioned in Note (1) above; - "blast" covers any equivalent jet of material mentioned in Note (1) above

**Guidance heading:****B24C 1/00**

**Methods for use of abrasive blasting for producing particular effects; Use of auxiliary equipment in connection with such methods**

- B24C 1/003 . { using material which dissolves or changes phase after the treatment e.g. ice, CO<sub>2</sub> }
- B24C 1/006 . { using material without particles or pellets for deburring, removal of extended surface areas or jet milling of local recessions, e.g. grooves }
- B24C 1/02 . for sharpening or cleaning cutting tools, e.g. files
- B24C 1/04 . for treating only selected parts of a surface, e.g. for carving stone or glass
- B24C 1/045 . . { for cutting (energy dissipating devices therefor [B26F 3/008](#)) }
- B24C 1/06 . for producing matt surfaces, e.g. on plastic materials, on glass
- B24C 1/08 . for polishing surfaces, e.g. { smoothing a surface } by making use of liquid-borne abrasives
- B24C 1/083 . . { Deburring }
- B24C 1/086 . . { Descaling; Removing coating films }
- B24C 1/10 . for compacting surfaces, e.g. shot-peening (for deforming sheet metal, tubes or profiles [B21D 31/06](#); as a metallurgical treatment [C21D 7/00](#), [C22F 1/00](#))

**B24C 3/00**

**Abrasive blasting machines or devices; Plants**

- B24C 3/02 . characterised by the arrangement of the component assemblies with respect to each other ([B24C 3/08](#), [B24C 3/18](#) take precedence)
- B24C 3/04 . . stationary
- B24C 3/06 . . movable; portable
- B24C 3/062 . . . {for vertical surfaces }

- B24C 3/065 . . . {with suction means for the abrasive and the waste material }
- B24C 3/067 . . . . {Self-contained units for floorings }
  
- B24C 3/08 . essentially adapted for abrasive blasting of travelling stock or travelling workpieces
- B24C 3/081 . . { for travelling bundles of wires }
- B24C 3/083 . . {Transfer or feeding devices; Accessories therefor }
- B24C 3/085 . . { the travelling workpieces being moved into different working positions during travelling }
- B24C 3/086 . . . { whereby the workpieces are turned through a rotational arc of about 180 degrees }
- B24C 3/088 . . {using a vibratory transfer mechanism }
- B24C 3/10 . . for treating external surfaces
- B24C 3/12 . . . Apparatus using nozzles
- B24C 3/14 . . . Apparatus using impellers
- B24C 3/16 . . for treating internal surfaces
  
- B24C 3/18 . essentially provided with means for moving workpieces into different working positions ([B24C 3/08](#) takes precedence)
- B24C 3/20 . . the work being supported by turn-tables
- B24C 3/22 . . . Apparatus using nozzles
- B24C 3/24 . . . Apparatus using impellers
- B24C 3/26 . . the work being supported by barrel cages, i.e. tumblers; Gimbal mountings therefor
- B24C 3/263 . . . {using refrigerating means }
- B24C 3/266 . . . {for continuously travelling workpieces }
- B24C 3/28 . . . Apparatus using nozzles
- B24C 3/30 . . . Apparatus using impellers
  
- B24C 3/32 . designed for abrasive blasting of particular work, e.g. the internal surfaces of cylinder blocks ([B24C 3/08](#), [B24C 3/18](#) take precedence)
- B24C 3/322 . . {for electrical components }
- B24C 3/325 . . {for internal surfaces, e.g. of tubes }
- B24C 3/327 . . . { by an axially-moving flow of abrasive particles without passing a blast gun, impeller or the like along the internal surface (polishing or abrading surfaces using plastically deformable grinding compound, moved relatively to the workpiece under the influence of pressure [B24B 31/116](#)) }
- B24C 3/34 . . for cleaning sparking plugs

**Guidance heading:** Accessories or equipment for abrasive blasting machines or devices

## **B24C 5/00      Devices or accessories for generating abrasive blasts**

- B24C 5/005 . { Vibratory devices, e.g. for generating abrasive blasts by ultrasonic vibrations (sonic cleaning in general [B08B 3/12](#)) }
  
- B24C 5/02 . Blast guns, e.g. for generating high velocity abrasive fluid jets for cutting materials { (perforating by fluid jet [B26F 1/26](#)) }

- B24C 5/04 . . . Nozzles therefor (nozzles in general [B05B](#) )
- B24C 5/06 . Impeller wheels; Rotor blades therefor
- B24C 5/062 . . { Rotor blades or vanes; Locking means therefor }
- B24C 5/064 . . { One-piece wheels; Integral impeller units, e.g. made by casting }
- B24C 5/066 . . { Housings; Accessories therefor, e.g. liners }
- B24C 5/068 . . { Transferring the abrasive particles from the feeding means onto the propeller blades, e.g. using central impellers }
- B24C 5/08 . Devices for generating abrasive blasts non-mechanically, e.g. of metallic abrasives by means of a magnetic field { or by detonating cords }
- B24C 7/00** **Equipment for feeding abrasive material; Controlling the flowability, constitution, or other physical characteristics of abrasive blasts**
- B24C 7/0007 . { the abrasive material being fed in a liquid carrier }
- B24C 7/0015 . . { with control of feed parameters, e.g. feed rate of abrasive material or carrier }
- B24C 7/0023 . . . { of feed pressure }
- B24C 7/003 . . { with means for preventing clogging of the equipment }
- B24C 7/0038 . . { the blasting medium being a gaseous stream }
- B24C 7/0046 . { the abrasive material being fed in a gaseous carrier }
- B24C 7/0053 . . { with control of feed parameters, e.g. feed rate of abrasive material or carrier }
- B24C 7/0061 . . . { of feed pressure }
- B24C 7/0069 . . { with means for preventing clogging of the equipment or for preventing abrasive entering the airway }
- B24C 7/0076 . . { the blasting medium being a liquid stream }
- B24C 7/0084 . { the abrasive material being fed in a mixture of liquid and gas ([B24C 7/0038](#), [B24C 7/0076](#) take precedence; blasting medium with additives [B24C 11/005](#)) }
- B24C 7/0092 . { the abrasive material being fed by mechanical means, e.g. by screw conveyors }
- B24C 9/00** **Appurtenances of abrasive blasting machines or devices, e.g. working chambers, arrangements for handling used abrasive material**
- B24C 9/003 . { Removing abrasive powder out of the blasting machine }
- B24C 9/006 . { Treatment of used abrasive material }
- B24C 11/00** **Selection of abrasive materials { or additives } for abrasive blasts (polishing compositions [C09G](#) )**
- B24C 11/005 . { of additives, e.g. anti-corrosive or disinfecting agents in solid, liquid or gaseous form }