

ECLA EUROPEAN CLASSIFICATION

B28D WORKING STONE OR STONE-LIKE MATERIALS

- B28D1/00** Working stone or stone-like materials, e.g. brick, concrete [N: or glass], not provided for elsewhere; machines, devices, tools therefor (fine working of gems, jewels, crystals [B28D5/00](#); working by grinding or polishing [B24](#); devices or means for dressing or conditioning abrasive surfaces [B24B53/00](#))
- [B28D1/00B](#) . [N: Cleaning bricks (by milling [B28D1/18D](#))]
- [B28D1/00C](#) . [N: Multipurpose machines; Equipment therefor]
- [B28D1/00S](#) . [N: Cutting sheet laminae in planes between faces (splitting easily splittable material [B28D1/32B](#))]
- [B28D1/00W](#) . [N: Artificial ageing of stones; Providing stones with an antique appearance] [N1201]
- [B28D1/00W2](#) . . [N: by means of a tumbler] [N1201]
- [B28D1/02](#) . by sawing
- [B28D1/02B](#) . . [N: Use, recovery or regeneration of abrasive mediums ([B28D5/00H3](#) takes precedence; for grinding and polishing in general [B24B57/00](#))] [C0102]
- [B28D1/04](#) . . with circular [N: or cylindrical] saw-blades or saw-discs ([B28D1/10](#) takes precedence)
- [B28D1/04A](#) . . . [N: with cylinder saws, e.g. trepanning; saw cylinders, e.g. having their cutting rim equipped with abrasive particles]
- [B28D1/04B](#) . . . [N: the saw blade being carried by a pivoted lever ([B28D1/04C](#) and [B28D1/04D](#) take precedence)]
- [B28D1/04C](#) . . . [N: Gantry type sawing machines]
- [B28D1/04D](#) . . . [N: the saw blade being movable on slide ways ([B28D1/04C](#) takes precedence)]
- [B28D1/04E](#) . . . [N: Sawing grooves in walls; sawing stones from rocks; sawing machines movable on the stones to be cut]
- [B28D1/04F](#) . . . [N: Sawing in a plane parallel to the work table]
- [B28D1/04G](#) . . . [N: with the work mounted on a carriage]
- [B28D1/04P](#) . . . [N: with a plurality of saw blades ([B28D1/04F](#) takes precedence)]
- [B28D1/06](#) . . with reciprocating saw-blades ([B28D1/10](#) takes precedence)
- [B28D1/06A](#) . . . [N: the saw blade rotating about its longitudinal axis]
- [B28D1/06B](#) . . . [N: Sawing grooves in walls; portable sawing machines]
- [B28D1/06C](#) . . . [N: the workpieces being moved in a horizontal plane, e.g. with vertically or oblique movable saw-blades]
- [B28D1/06H](#) . . . [N: Components, e.g. guiding means, vibrations damping means, frames, driving means, suspension]
- [B28D1/08](#) . . with saw-blades of endless cutter-type, e.g. chain saws [N: i.e. saw chains], strap saws ([B28D1/10](#) takes precedence)
- [B28D1/08B](#) . . . [N: consisting of chain saws]
- [B28D1/08B1](#) [N: the saw chains being mounted on a pivotingly adjustable arm]

- B28D1/08C . . . [N: consisting of strap saws]
- B28D1/08D . . . [N: Sawing in situ, e.g. stones from rocks, grooves in walls]
- B28D1/10 . . with provision for measuring
- B28D1/12 . . Saw-blades [N: or saw-discs] specially adapted for working stone [N: [B28D1/04A](#) takes precedence]
- B28D1/12B . . . [N: Circular saw blades]
- B28D1/12B2 [N: with exchangeable cutter bits or cutter segments] [N9809]
- B28D1/12C . . . [N: Saw chains; rod-like saw blades; saw cables]
- B28D1/12C2 [N: with exchangeable cutter bits or cutter segments] [N9809]
- B28D1/12D . . . [N: Straight, i.e. flat, saw blades; strap saw blades]
- B28D1/12D2 [N: with exchangeable cutter bits or cutter segments] [N9809]

- B28D1/14 . . by boring or drilling (rotary drilling machines [B23B](#); [N: tools for drilling machines [B23B51/00](#)]; portable percussive machines [B25D](#); [N: rotary drilling machines for mining or quarrying [E21C1/00](#)])
- B28D1/14B . . [N: lens-drilling machines]
- B28D1/14C . . [N: Tools therefor (drill bits for earth or rock drilling [E21B10/00](#))]

- B28D1/16 . . by turning

- B28D1/18 . . by milling, e.g. channelling by means of milling tools
- B28D1/18B . . [N: using cutters loosely mounted on a turning tool support]
- B28D1/18C . . [N: Hand tools, e.g. portable, motor driven]
- B28D1/18D . . [N: for brick cleaning]
- B28D1/18E . . [N: Tools therefor, e.g. having exchangeable cutter bits ([B28D1/18B](#) takes precedence; bits for picks or pick-holders for mining or quarrying [E21C35/18](#))]
- B28D1/18E2 . . . [N: with exchangeable cutter bits or cutter segments]

- B28D1/20 . . by planing, e.g. channelling by means of planing tools

- B28D1/22 . . by cutting, e.g. incising
- B28D1/22B . . [N: by thermic methods]
- B28D1/22C . . [N: by pressing, e.g. presses]
- B28D1/22C1 . . . [N: Hand-held or hand-operated tools for shearing or cleaving]
- B28D1/22D . . [N: for scoring or breaking, e.g. tiles]
- B28D1/22D2 . . . [N: with plural scoring tools]
- B28D1/22E . . [N: for cutting tubes]
- B28D1/22F . . [N: Hand-held or hand-operated tools ([B28D1/22C](#), [B28D1/22D](#) take precedence)]
- B28D1/24 . . with cutting discs

- B28D1/26 . . by impact tools, e.g. by chisels or other tools having a cutting edge (portable percussive tools [B25D](#))
- B28D1/26B . . [N: Scabbling machines or scabbling tools]
- B28D1/28 . . without cutting edge [N: e.g. chiseling machines]

- B28D1/30 . . to form contours, i.e. curved surfaces, irrespective of the method of working used (for artistic purposes [B44B](#))

- B28D1/32 . Methods and apparatus specially adapted for working materials which can easily be split, e.g. mica, slate, schist
- B28D1/32B . . [N: Splitting of the working materials]
- B28D1/32C . . [N: for making holes in easily splittable working materials]
- B28D1/32D . . [N: for cutting or shearing easily splittable working materials]

- B28D3/00** **Dressing mill discs or rollers** (dressing the tools of sawing machines or sawing devices [B23D63/00](#); treating the cutting members of cutting machines to facilitate cutting [B26D7/08](#))

- B28D3/00B . [N: Tools therefor]

- B28D3/02 . Machines
- B28D3/04 . . for grooving rollers

- B28D5/00** **Fine working of gems, jewels, crystals, e.g. of semiconductor material; apparatus or devices therefor** (working by grinding or polishing [B24](#); for artistic purposes [B44B](#))

- B28D5/00B . [N: by breaking, e.g. dicing]
- B28D5/00B1 . . [N: with preliminary treatment, e.g. weakening by scoring]
- B28D5/00B2 . . [N: using moving tools]
- B28D5/00B2A . . . [N: rectilinearly]
- B28D5/00B2B . . . [N: rotating]
- B28D5/00B2B1 [N: cooperating with a straight breaking edge]
- B28D5/00B3 . . [N: the workpiece being brought into contact with a suitably shaped rigid body which remains stationary during breaking]
- B28D5/00B3B . . . [N: using fluid or gas pressure]
- B28D5/00B4 . . [N: Means for supporting or holding work during breaking (means for conveying work to or discharging work from the breaking machine [B28D5/00H](#))] [C9805]

- B28D5/00H . [N: Accessories specially adapted for use with machines for fine working of gems, jewels, crystals, e.g. of semiconductor material ([B28D5/00B](#), [B28D5/02C3](#) take precedence)] [N9805]
- B28D5/00H2 . . [N: Devices for the automatic drive or the program control of the machines] [N9805]
- B28D5/00H3 . . [N: Use, recovery or regeneration of abrasive mediums (for grinding and polishing in general [B24B57/00](#))] [N0102]
- B28D5/00H4 . . [N: for removing dust, e.g. by spraying liquids; for lubricating, cooling or cleaning tool or work] [N9805]
- B28D5/00H6 . . [N: for supporting, holding, feeding, conveying or discharging work] [N9805]
- B28D5/00H6B . . . [N: the supporting or holding device being angularly adjustable] [N9805]
- B28D5/00H6D . . . [N: the supporting or holding device being of the vacuum type] [N9805]

- B28D5/02 . by rotary tools, e.g. drills [N: ([B28D5/00B](#) takes precedence)]
- B28D5/02B . . [N: by drilling]
- B28D5/02C . . [N: by cutting with discs or wheels]
- B28D5/02C2 . . . [N: with a cutting blade mounted on a carriage]

- B28D5/02C3 . . . [N: with the stock carried by a movable support for feeding stock into engagement with the cutting blade, e.g. stock carried by a pivoted arm or a carriage]
- B28D5/02C3B [N: with the stock carried by a pivoted arm]
- B28D5/02C4 . . . [N: with a cutting blade carried by a movable arm, e.g. pivoted ([B28D5/02C2](#) and [B28D5/02C8](#) take precedence)]
- B28D5/02C6 . . . [N: with a cutting blade arranged underneath a stationary work table]
- B28D5/02C8 . . . [N: with a ring blade having an inside cutting edge] [C1201]
- B28D5/02C10 . . . [N: with a plurality of cutting blades]

- B28D5/04 . . . by tools other than rotary type, e.g. reciprocating tools [N: ([B28D5/00B](#) takes precedence)]
- B28D5/04B . . . [N: by cutting with blades or wires mounted in a reciprocating frame]
- B28D5/04C . . . [N: by cutting with wires or closed-loop blades ([B28D5/04B](#) takes precedence)]
- B28D5/04D . . . [N: by ultrasonic cutting (using abrading substances or abrading tools subjected to a bouncing action by ultrasonic energy [B24B1/04](#))]

- B28D7/00** **Accessories specially adapted for use with machines or devices of the preceding groups** [N: ([B28D5/00H](#) takes precedence)] [C9805]

- B28D7/00B . . . [N: Devices for the automatic drive or the program control of the machines]

- B28D7/02 . . . for removing or laying dust, e.g. by spraying liquids; for cooling work

- B28D7/04 . . . for supporting or holding work [N: or conveying or discharging work ([B28D1/04G](#), [B28D5/00B3](#), [B28D5/00B4](#) take precedence)]
- B28D7/04B . . . [N: the supporting or holding device being angularly adjustable]
- B28D7/04D . . . [N: the supporting or holding device being of the vacuum type]