68.04 - Millstones, grindstones, grinding wheels and the like, without frameworks, for grinding, sharpening, polishing, trueing or cutting, hand sharpening or polishing stones, and parts thereof, of natural stone, of agglomerated natural or artificial abrasives, or of ceramics, with or without parts of other materials (+)**.**

6804.10 - Millstones and grindstones for milling, grinding or pulping

- Other millstones, grindstones, grinding wheels and the like :

6804.21 - - Of agglomerated synthetic or natural diamond

6804.22 - - Of other agglomerated abrasives or of ceramics

6804.23 - - Of natural stone

6804.30 - Hand sharpening or polishing stones

This heading covers, in particular :

(1) **Millstones and grindstones**, often of considerable size, **for crushing, grinding, pulping,** etc., (e.g., for milling grain (upper or lower stones); pulping wood, asbestos, etc.; paper-makers' or paint mixers' grindstones).

(2) **Grindstones for sharpening cutlery, tools, etc.**, and designed for mounting on hand, pedal or power operated machines.

The grindstones and millstones described in the two categories above are usually flat, cylindrical or in the shape of truncated cones.

(3) **Grinding wheels, heads, discs, points, etc.**, as used on machine-tools, electro-mechanical or pneumatic hand tools, for the trimming, polishing, sharpening, trueing or sometimes for the cutting of metals, stone, glass, plastics, ceramics, rubber, leather, mother of pearl, ivory, etc.

Except for some cutting discs, which may be of considerable diameter, these goods are usually much smaller than those described above, and they may be of any shape, (e.g., flat, conical, spherical, dished, ring-shaped, recessed or stepped); they may also be planed or profiled at the edges.

The heading covers such tools not only when they are predominantly of abrasive materials, but also when they consist of only a very small abrasive head on a metal shank, or of a centre or core of rigid material (metal, wood, plastics, cork, etc.) on to which compact layers of agglomerated abrasive have been permanently bonded (e.g., cutting discs of metal, etc., fitted with rims or with a series of peripheral inserts of abrasive material). The heading also covers abrasive elements for hones, whether or not they are mounted in the carriers required for their fixation in the body of the hone.

It should, however, be noted that certain abrasive tools are **excluded** and fall in **Chapter 82**. The latter Chapter, however, covers **only** those tools with cutting teeth, flutes, grooves, etc., which retain their identity and function even after application of the abrasive material (i.e., tools which, unlike those of this heading, could be put to use even if the abrasive had not been applied). Saws with cutting teeth covered with abrasive therefore remain in **heading 82.02**. Similarly crown drills as used for cutting discs from sheets of glass, quartz, etc., are classified in this heading if the working edge is smooth apart from the abrasive coating, but in **heading 82.07** if toothed (whether or not coated with abrasive).

(4) **Polishing stones, whetstones, oilstones, hones and the like**, with or without handles, **used directly in the hand for sharpening, whetting, scouring or polishing** metals or other materials.

They may be of various shapes (e.g., rectangular, trapezoidal, sectors or segments of a circle, in the form of a knife blade, oblong with tapered ends), and may be square, triangular, round, half round, etc., in cross-section. They may also consist of prismatic plates, generally of agglomerated boron carbide, used in the hand, for whetting or sharpening grindstones of artificial abrasives, and, as a secondary use, for sharpening metal tools.

These stones are used, in particular, for sharpening tools and cutting instruments (e.g., cutlery, blades for harvesting machines, sickles, scythes, mowers, etc.), or for polishing metal, etc.

Tools with a fine cutting edge (e.g., razors or surgical instruments) are sharpened with oilstones or hones made of specially fine-grain stone or slate; these stones are usually moistened with water or oil before use. Certain stones (e.g., pumice) are also used for toilet, manicure and pedicure purposes, and also for the cleaning up, polishing, etc., of metals, etc.

Grinding stones, grinding wheels, etc., **must** be made essentially of natural stone, agglomerated or not, (e.g., sandstone, granite, lava, flint, molasse, dolomite, quartz, trachyte), of agglomerated natural or artificial abrasives (e.g., emery, pumice, tripoli, kieselguhr, crushed glass, corundum, silicon carbide, garnet, diamond, boron carbide) or of ceramics (of fired or refractory earths, or of porcelain).

Agglomerated grinding wheels, etc., are made by mixing ground abrasive or stone with binders such as ceramic materials (for example, powdered clay or kaolin, sometimes with added feldspar), sodium silicate, cement (especially magnesian cement) or less rigid cementing materials (such as rubber, shellac or plastics). Textile fibres such as cotton, nylon or flax are sometimes incorporated in the mixtures. The mixtures are moulded to shape, dried, and then heated (if necessary to the stage of vitrification in the case of ceramic binders) or cured (in the case of the rubber, plastics, etc., binders). The articles are then trimmed to size and shape.

In making certain polishing stones (oil stones), washed abrasive powders are used.

Grinding stones of this heading, and especially those for granary use or for pulping, sometimes have a ribbed surface. They may be in one piece or made up of assembled segments, be fitted with sockets, internal or external hoops, balancing weights or cavities; they may also be fitted with axles or spindles, but they must be **without** frameworks. Grinding stones with frameworks are classified in **heading 82.05** if hand or pedal operated or in **Chapter 84** or **85** if power operated.

In addition to the complete millstones, grindstones, etc., described above, the heading also covers identifiable blanks; segments and finished parts of such goods, if essentially of stone, agglomerated abrasives or ceramics are also included.

The heading **does not include** :

(a) Perfumed pumice stone put up in blocks, tablets or similar prepared forms of **heading 33.04**.

(b) Natural or artificial abrasive powder or grain coated on to textile material, paper, paperboard or other materials (**heading 68.05**), whether or not the textile material, paper, etc., is subsequently glued on to supports such as discs or strips of wood (buff-sticks for use in the clock and watch industry, mechanical engineering, etc.).

(c) Dental burrs (**heading 90.18**).

°
° °

Subheading Explanatory Note.

Subheading 6804.10

The products of this subheading are designed for use in reducing the particle size of materials such as grain, pulp, pigments, etc., as opposed to trimming, polishing, sharpening, trueing or other discriminate removal of material.

Millstones and grindstones for milling or grinding

These products are generally put up in pairs and have a conical surface (one stone is concave and the other convex) which is channelled towards the centre to allow crushed grain to flow via the centre of the stone.

Millstones and grindstones for pulping

These products are of considerable size generally weighing several tonnes and manufactured either in a single piece or from several blocks assembled together by glueing. They exceed 1,200 mm in diameter and 500 mm in thickness.