84.30 - Other moving, grading, levelling, scraping, excavating, tamping, compacting, extracting or boring machinery, for earth, minerals or ores; pile-drivers and pile-extractors; snow-ploughs and snow-blowers (+).

8430.10 - Pile-drivers and pile-extractors

8430.20 - Snow-ploughs and snow-blowers

- Coal or rock cutters and tunnelling machinery :

8430.31 - - Self-propelled

8430.39 - - Other

- Other boring or sinking machinery :

8430.41 - - Self-propelled

8430.49 - - Other

8430.50 - Other machinery, self-propelled

- Other machinery, not self-propelled :

8430.61 - - Tamping or compacting machinery

8430.69 - - Other

This heading covers machinery, **other than** the self-propelled machines of **heading 84.29** and agricultural, horticultural or forestry machinery (**heading 84.32**), for "attacking" the earth's crust (e.g., for cutting and breaking down rock, earth, coal, etc.; earth excavation, digging, drilling, etc.), or for preparing or compacting the terrain (e.g., scraping, levelling, grading, tamping or rolling). It also includes pile-drivers, pile-extractors, snow-ploughs, and snow-blowers.

SELF-PROPELLED AND OTHER "MOBILE" MACHINES

In general, the heading covers not only fixed or stationary machines, but (with certain **exceptions** referred to below concerning machines mounted on transport equipment of the type falling in Section XVII) also mobile machines, whether or not self-propelled.

The **exceptions** are :

(a) **Machines mounted on vehicles proper to Chapter 86.**

Excavating, etc., machines are classified in **heading 86.04** if they are mounted on wagons or trucks, of a kind suitable for coupling into a train running on a railway network of any gauge. Railroad ballast excavator-screening machines are often mounted on wagons or trucks complying with this condition. On the other hand, excavating, etc., machines mounted on trucks or platforms **not** meeting the specifications of true railway rolling stock remain classified in this heading. Self-propelled vehicles for the servicing and maintenance of railway tracks also fall in **heading 86.04**.

(b) **Machines mounted on tractors or motor vehicles proper to Chapter 87.**

(1) **Machines mounted on tractor type bases.**

Certain working parts (e.g., levelling blades) of the machines of this heading may be mounted on tractors which are constructed essentially for hauling or pushing another vehicle, appliance or load but, like agricultural tractors, are fitted with simple devices for operating the working tools. Such working tools are subsidiary equipment for occasional work. In general, they are **relatively light** and can be mounted or changed at the working site by the user himself. In such cases, the working tools remain in this heading **provided** they constitute machines of this heading, or in **heading 84.31** if they are parts of those machines, even if presented with the tractor (whether or not mounted thereon), while the tractor with its operating equipment is classified **separately** in **heading 87.01**.

On the other hand, this heading covers self-propelled machines in which the propelling base, the operating controls, the working tools and their actuating equipment are specially designed for fitting together to form an integral mechanical unit. This applies, for example, to a propelling base resembling a tractor, but specially designed, constructed or reinforced to form an integral part of a machine performing one or more of the functions mentioned in this heading (excavating, levelling, etc.). Presented separately, such propelling bases also fall in this heading, as incomplete machines having the essential features of complete machines of the same kind. Propelling bases potentially classifiable in several of the headings 84.25 to 84.30 because they can be equipped with several different working parts, are classified in accordance with Note 3 to Section XVI or by application of Interpretative Rule 3 (c).

For more detailed criteria for distinguishing between the tractors of heading 87.01 and the propelling bases of this Chapter see Explanatory Note to heading 87.01.

(2) **Machines mounted on automobile chassis or lorries.**

Certain machines of this heading (e.g., pile-drivers, oil well drilling machines) are often mounted on what is in fact an essentially complete automobile chassis or lorry in that it comprises at least the following mechanical features : propelling engine, gear-box and controls for gear-changing, and steering and braking facilities. Such assemblies are classified in **heading 87.05** as special purpose motor vehicles.

On the other hand, this heading includes self-propelled machines in which one or more of the propelling or control elements referred to above are located in the cab of a machine mounted on a wheeled chassis, whether or not the whole can be driven on the road under its own power.

The heading further includes self-propelled wheeled machines in which the chassis and the working machine are specially designed for each other and form an integral mechanical unit. In this case, the machine is not simply mounted on an automobile chassis like the machines described in the first paragraph above, but is completely integrated with a chassis that cannot be used for other purposes and may incorporate the essential automobile features referred to above.

(c) **Machines on floating structures proper to Chapter 89.**

All machines (e.g., dredgers) mounted on pontoons or other floating structures, whether or not self-propelled, are classified in **Chapter 89**.

MULTI-FUNCTION MACHINES

Many machines, in addition to carrying out the functions described in heading 84.29 or 84.30 (excavating, levelling, boring, etc.), can also perform the functions described in heading 84.25, 84.26, 84.27 or 84.28 (lifting, loading, etc.). These machines are classified in accordance with Note 3 to Section XVI or by application of Interpretative Rule 3 (c). Examples are combined coal-cutting and loading machines, combined trenching and pipe lifting and lowering machines, etc.

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The heading includes :

(I) PILE-DRIVERS AND PILE-EXTRACTORS

Pile-drivers consist of a heavy hammer weight, usually operated in a tall vertical guiding framework. The weight is raised by mechanical power and then allowed to fall on to the head of the pile either under gravity (single-acting machines) or under power (double-acting hammers).

The heading also covers pile-extractors.

(II) SNOW-PLOUGHS AND SNOW-BLOWERS

Snow-ploughs and snow-blower vehicles of Section XVII with built-in equipment are **excluded**. The heading, however, covers snow-ploughs designed to be pushed or pulled (blade types), e.g., those designed to be attached to lorries or tractors.

(III) EXTRACTING, CUTTING OR DRILLING MACHINERY

This is mainly used in mining, well-drilling, tunnelling, quarrying, clay cutting, etc.

(A) **Coal or rock cutters** for cutting or breaking down coal, ores, etc. They consist of a bar or disc fitted with picks, or, more often, of an endless cutting chain running round a metal jib which may be adjustable for level and angle of cut (universal cutters). They may be mounted on self-propelled wheeled or tracklaying chassis, and some (cutter loaders) may be very large, incorporating a number of cutting chains and a built-in conveyor for loading the cut material on to the face conveyor, tubs, etc.

(B) **Tunnelling machinery**. Tunnelling shields have smooth outer surfaces and sharp front cutting edges which are pushed forward into the soil by a hydraulic jacking system.

(C) **Machines for boring drill holes in rock, coal, etc., and percussion type cutters** in which the drill can be swung to make linear cuts. But the heading **excludes** such tools for working in the hand, pneumatic, hydraulic or with self-contained motor (**heading 84.67**).

(D) **Well sinking or boring machines** for the extraction of petroleum, natural gases, sulphur (Frasch process), etc., for raising strata samples in mining and oil well prospecting, for the sinking of artesian wells, etc. These machines are of two main types :

(1) **Rotary well sinking machinery** consisting essentially of a derrick fitted with pulley tackle, a hoist drum with transmission and control gear (draw-work), a swivel and a rotary table or gear-wheel.

The power-driven draw-work imparts a rotary movement to the drill pipes by means of the rotary table or gear-wheel, the drill pipes being suspended from the rotary swivel. The draw-work also raises and lowers the drill pipes, when required, by means of the pulley tackle.

(2) **Percussion machines** consisting of an eccentric-driven rocker beam, the see-saw action of which causes the bit to strike continually into the well floor.

It should be noted that this heading covers **only** drilling machines as such. Other quite distinct machines normally used therewith are **excluded** even if presented with the drilling machines, e.g., pumps and compressors to force mud, stone, etc., out of the drilling (**heading 84.13** or **84.14**).

Fixed platforms used for the discovery or exploitation of off-shore deposits of oil or natural gas are also classified here. Floating or submersible platforms fall in **heading 89.05**.

(E) **Augering machines**, hand or power operated, for boring holes in the ground (e.g., for setting trees or fencing posts), but **not including** hand tools of **Chapter 82**.

(F) **Hydraulic wedges** consist of a long barrel with a number of pistons set laterally at intervals along the length. They are placed in a fissure or drill hole and the pistons are forced out by pumping water into the barrel, thus breaking down the rock or coal.

(G) **Ploughs, strippers, etc.**, consist of cutter blades, ploughs, picks, wedges, etc., which are forced along the face, slicing off the coal, clay, etc., and loading it directly on to face conveyors, etc.

(IV) TAMPING OR COMPACTING MACHINES

This group includes :

(A) **Road rollers designed to be pushed or towed**. This group includes "sheep's-foot" tamping rollers studded with metal feet which press into the soil, and tamping rollers made up of a series of lorry type wheels with heavy grade pneumatic tyres mounted on a common axle.

However, the heading **excludes** self-propelled road rollers, whether or not fitted with "sheep's-feet" or with solid or pneumatic tyres (**heading 84.29**) and agricultural rollers (**heading 84.32**).

(B) **Tamping machines** as used in road making, for packing rail-road ballast, etc., not self-propelled. Tools for working in the hand, pneumatic, hydraulic or with self-contained motor, are, however, **excluded** (**heading 84.67**).

(C) **Machines, usually pneumatic, for compacting the sides of embankments, etc**.

(V) EARTH EXCAVATING, SCRAPING OR LEVELLING MACHINERY

This group includes :

(A) **Digging or excavating machines** described in Explanatory Note to heading 84.29, not self-propelled.

(B) **Dredgers** (bucket or shovel type), similar to the multibucket excavators of heading 84.29.

Floating dredgers are **excluded** (**heading 89.05**).

(C) **Railroad ballast excavator-screening machines**, consisting essentially of a continuous chain of buckets which dig the ballast from under the railway tracks. They also incorporate mechanisms for screening and discharging the ballast. But see paragraph (a) at the beginning of this Explanatory Note regarding machines mounted on vehicles of Chapter 86.

(D) **Rippers, rooters and scarifiers** fitted with cutting teeth which loosen the top soil, break up old road surfaces, etc., prior to re-laying.

(E) **Skimmers**, a type of excavating shovel similar to those of heading 84.29 with a horizontal boom; used for "skimming" off the top soil.

PARTS

Subject to the general provisions regarding the classification of parts (see the General Explanatory Note to Section XVI), parts of the machines of this heading are classified in **heading 84.31**.

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The heading also **excludes** :

(a) Hydraulic guns designed for dislodging minerals (e.g., gold bearing sands) from hill sides, etc., by projecting powerful water jets (**heading 84.24**).

(b) Agricultural rollers, consisting of a relatively long light land roller of small diameter, in some cases propelled by a small internal combustion engine (**heading 84.32**).

(c) Power tools (e.g., picks, tampers and drills) for working in the hand, of **heading 84.67**.

(d) Apparatus for cutting or piercing rock or concrete, using the high temperature produced by burning iron or steel in a jet of oxygen (**heading 84.79**).

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Subheading Explanatory Note.

Subheadings 8430.31 and 8430.39

These subheadings cover the machines described in paragraphs (A), (B) and (G) of Part (III) of the Explanatory Note to heading 84.30.