84.29 - Self-propelled bulldozers, angledozers, graders, levellers, scrapers, mechanical shovels, excavators, shovel loaders, tamping machines and road rollers.

- Bulldozers and angledozers :

8429.11 -- Track laying

8429.19 -- Other

8429.20 - Graders and levellers

8429.30 - Scrapers

8429.40 - Tamping machines and road rollers

- Mechanical shovels, excavators and shovel loaders :

8429.51 -- Front-end shovel loaders

8429.52 -- Machinery with a 360° revolving superstructure

8429.59 -- Other

The heading covers a number of earth digging, excavating or compacting machines which are explicitly cited in the heading and which have in common the fact that they are all self-propelled.

The provisions of Explanatory Note to heading 84.30 relating to self-propelled and multi-function machines apply, *mutatis mutandis*, to the self-propelled machinery of this heading, which includes the following:

- (A) **Bulldozers and angledozers**. These consist of a propelling base, often track-laying, with a large blade mounted in front, and forming an integral mechanical unit. They are used, in particular, for removing debris and for rough levelling. Certain types are designed mainly for grubbing or for land clearing.
- (B) **Graders and levellers**. These are machines designed for earth levelling or smoothing (on flat surfaces or banks) by means of an adjustable grading blade, usually mounted within the wheel base.
- (C) **Scrapers**. These incorporate a sharp cutting edge designed to slice off a layer of top soil which is then passed into the scraper body or discharged by a conveyor.

It should be noted that this heading covers only those scrapers in which the motor propulsion unit and the scraper form an integral mechanical unit, for example, track-laying scrapers in which the scraper body incorporating the cutting edge is situated between the two tracks. This heading also includes articulated scrapers which consist of a motor propulsion unit (even with only a single axle) and a scraper proper equipped with a fixed blade or a mobile attachment with several blades.

- (D) **Tamping machines** as used in road making, for packing rail-road ballast, etc. (but see paragraph (a) of the introduction to Explanatory Note to heading 84.30 regarding machines mounted on vehicles of Chapter 86).
- (E) Self-propelled **road rollers** as used in road building or other public works (e.g., for levelling the ground or rolling the road surface).
 - These machines are fitted with heavy cast iron or steel cylinders of large diameter, smooth or studded with metal feet which press into the soil ("sheep's-foot" rollers), or with wheels and heavy grade solid or pneumatic tyres.
- (F) Mechanical shovels (boom, jib or cable type) which dig into the soil, above or below machine level, by means of an excavating bucket, grab, etc., operated either directly from the end of a boom or jib (shovel excavators, drag shovels, etc.) or, to increase the working range, on a cable or by means of a hydraulic jack suspended from the jib (draglines). In long range excavators (slackline draglines), the bucket is operated on a cable running between two movable structures set some distance apart.
- (G) Multi-bucket excavators in which the digging buckets are fitted on endless chains or on rotating wheels. These machines often incorporate conveyors for discharging the excavated soil, and they are mounted on wheeled or track-laying chassis. Special models are designed for digging or cleaning out trenches, drainage channels, ditches for use in open-cast (open-pit) mines, etc.
- (H) Self-propelled shovel loaders. These are wheeled or crawler machines with a front-mounted bucket which pick up material through motion of the machine, transport and discharge it.
 - Some "shovel-loaders" are able to dig into the soil. This is achieved as the bucket, when in the horizontal position, is capable of being lowered below the level of the wheels or tracks.
- (IJ) Loader-transporters used in mines. These machines, the main function of which is handling and not transport, are equipped with a front-mounted bucket which picks up bulk materials and discharges them into the body of the machine.

This heading also covers self-propelled shovel loaders having an articulated arm with a bucket, mounted on the rear.

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, in particular, working tools (blades, buckets, etc.), whether or not fitted with booms and pneumatic or hydraulic cylinders, suitable for mounting directly onto the propelling base, are classified in heading 84.31.