



EN

MAC Protocol

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**PROCESS FOR STATES TO PROPOSE THE ADDITION OF HARMONIZED SYSTEM
CODES TO THE ANNEXES OF THE DRAFT MAC PROTOCOL**

(Prepared by the UNIDROIT Secretariat)

Introduction

1. At its recent 97th session (2–4 May 2018), the UNIDROIT Governing Council approved the preliminary draft MAC Protocol¹ as prepared by the Committee of Governmental Experts over its two sessions in 2017, and agreed that a Diplomatic Conference should be convened in 2019 to adopt the draft MAC Protocol. The exact date and location of the future Diplomatic Conference are currently being determined.
2. In advance of the Diplomatic Conference, the Secretariat has established a process for States to propose Harmonized System (HS) codes which they believe should be added to the 42 HS codes currently in the annexes to the draft MAC Protocol. This process has been established pursuant to a request by the Committee of Governmental Experts (CGE) at its second session (Rome, 2–6 October 2017).²
3. This document describes how the draft MAC Protocol annexes are used to delineate the scope of the Protocol in relation to certain types of MAC equipment. It then explains the process for States to propose additional HS codes, including the information that needs to be provided by States in making a proposal, and provides a template form for use by States in making their proposals.
4. States are encouraged to submit additional codes for consideration by **30 November 2018**, to allow for the Secretariat to consult with the MAC Working Group³ and prepare recommendations on each proposed code for submission to the Diplomatic Conference in 2019.

¹ Formally known as the 'future fourth Protocol to the Convention on International Interests in Mobile Equipment on Matters specific to Mining, Agricultural and Construction Equipment'.

² <https://www.unidroit.org/english/documents/2017/study72k/cge02/s-72k-cge02-report-e.pdf>, paragraph 166.

³ Created in 2015, the MAC Working Group is a not-for-profit entity consisting of companies operating in the mining, agricultural and construction manufacturing and financing sectors. It is primarily responsible for representing private sector interests during the negotiation of the MAC Protocol.

The MAC Protocol Project

5. The MAC Protocol is an international treaty currently being negotiated that will increase global productivity in the mining, agriculture and construction sectors. The treaty will provide an international legal framework for the financing of MAC equipment. Cheaper financing and access to modern MAC equipment will allow parties involved in the mining, agriculture and construction sectors to optimise their productivity and profitability.

Use of the Harmonized System to establish the scope of the MAC Protocol

6. The draft MAC Protocol uses the Harmonized Commodity Description and Coding System (HS System) to identify the types of mining, agricultural and construction equipment which will be covered by its scope. The HS System is a global nomenclature system developed by the World Customs Organisation (WCO) to achieve uniform classification of commodities and merchandise in international trade. States also use it to monitor controlled goods, calculate and collect internal excise and sales taxes and compile transport statistics. The HS System is utilised by more than 200 countries and covers 98% of all international trade.

7. The annexes to the draft MAC Protocol list the 6-digit HS codes that cover the types of MAC equipment which fall within its scope (HS System codes for mining equipment are listed in Annex 1, agricultural equipment in Annex 2 and construction equipment in Annex 3). Use of the HS System assists in limiting the scope of the Protocol to predominantly high value equipment used primarily in the mining, agriculture and construction industries. Further, the listing of the HS codes covering equipment from the different industries (mining, agriculture and construction) in separate annexes will allow Contracting States to apply the MAC Protocol to only one or two of the mining, agricultural or construction categories if they so wish.⁴

8. Further documentation which explains the use of the HS codes in the MAC Protocol (as prepared for the Committee of Governmental Experts in 2017) is available on the UNIDROIT website.⁵

The HS codes currently included in the annexes of the draft MAC Protocol

9. The HS codes listed in the draft MAC Protocol annexes were first proposed by the Working Group in 2015. Following analysis by the Study Group over its four sessions (2015–2016), the HS codes in the annexes were considered and approved by the Committee of Governmental Experts in 2017 and the UNIDROIT Governing Council in 2018.

10. The WCO released a new sixth edition of HS codes (hereafter the “2017 edition”), which entered into force on January 2017. All 42 HS codes currently contained in the annexes to the draft Protocol are consistent with the 2017 edition of the HS System.⁶

11. The spreadsheet at Appendix II to this document (which is intended to be printed in A3 format) provides some analysis on the 42 HS codes currently listed in the draft MAC Protocol annexes. The first part of the spreadsheet (shaded in green) contains a list of 42 HS codes, identified in

⁴ For example, under Article 2(3) of the draft Protocol Contracting States are permitted to make a declaration applying the Protocol to only mining equipment in Annex 1 and construction equipment in Annex 3, but not agricultural equipment in Annex 2.

⁵ <https://www.unidroit.org/english/documents/2017/study72k/cge02/s-72k-cge02-04-e.pdf>, paragraphs 6–27.

⁶ At its second session (Rome, 2–6 October 2017), the Committee of Governmental Experts agreed that the HS codes in the annexes should be based upon the 2017 edition of the HS system. Accordingly, the codes from the 2012 edition in the annexes were updated to the 2017 edition, which resulted in the number of HS codes increasing from 36 to 42. <https://www.unidroit.org/english/documents/2017/study72k/cge02/s-72k-cge02-report-e.pdf>, paragraph 173.

ascending numerical order, covering equipment identified by the Study Group and approved by the Committee of Governmental Experts as appropriate for possible inclusion in the future MAC Protocol. The spreadsheet contains a second section (shaded in orange) covering other HS codes previously proposed by the private sector that the Study Group deemed as unsuitable for inclusion in the future MAC Protocol. Should States wish to re-propose an HS code previously deemed unsuitable by the Study Group (i.e. a code in the shaded orange section of the spreadsheet), the Secretariat recommends that additional information be provided addressing the Study Group's original rationale for excluding the HS code, as provided in the eleventh column of the shaded orange section of the spreadsheet.

12. Further information on the spreadsheet (as prepared for consideration by the Committee of Governmental Experts in 2017), is available on the UNIDROIT website.⁷

Process for States to propose additional HS codes

13. States are invited to formally submit additional 6-digit HS codes for inclusion in the annexes to the future MAC Protocol.

14. In submitting HS codes, States are requested to provide certain additional information in relation to the submitted codes in order for the Secretariat to consider whether the proposed codes cover MAC equipment which is appropriate for inclusion in the scope of the future MAC Protocol.

15. In submitting HS codes, States are reminded of Article 51 (1) of the Cape Town Convention, which provides that the Convention may be extended through additional Protocols relating to other categories of (i) high-value, (ii) mobile and (iii) uniquely identifiable equipment. The Secretariat will take the Article 51 criteria into account when evaluating HS codes proposed by States.

16. In particular, States are requested to consider the following points in proposing additional HS codes:

- (i) **Proposed HS codes should cover equipment that is predominantly used in the mining, agricultural and construction sectors.** Proposed HS codes should not cover general use equipment commonly used outside the MAC sectors. This is because Article II(1) provides that the Protocol will apply to MAC equipment covered by HS codes listed in the annexes, irrespective of any intended or actual use of the equipment. As such, HS codes in the annexes must not cover general use equipment to avoid unduly expanding the operation of the Protocol outside the MAC sectors.
- (ii) **Proposed HS codes should cover equipment that is predominantly high value.** The Cape Town Convention is designed to regulate interests in certain categories of high value equipment. It would be inappropriate for the Cape Town Convention to apply to mainly low value equipment. Generally, an HS code covering MAC equipment that is separately financed or leased for commercial use will cover equipment that is sufficiently high value for inclusion in the annexes. For example, an HS code covering only low value lawnmowers for domestic use, even if it exclusively applies to MAC equipment, should not be included in the annexes.
- (iii) **Proposed HS codes should cover equipment that is individually serialised.** Article XVII of the draft Protocol provides that equipment will be registered on the basis of a manufacturer's serial number. As such, equipment without a manufacturer's serial number is incapable of being registered in the international

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<https://www.unidroit.org/english/documents/2017/study72k/cqe02/s-72k-cqe02-05-e.pdf>.

registry. HS codes covering predominantly un-serialised equipment should not be included in the annexes.

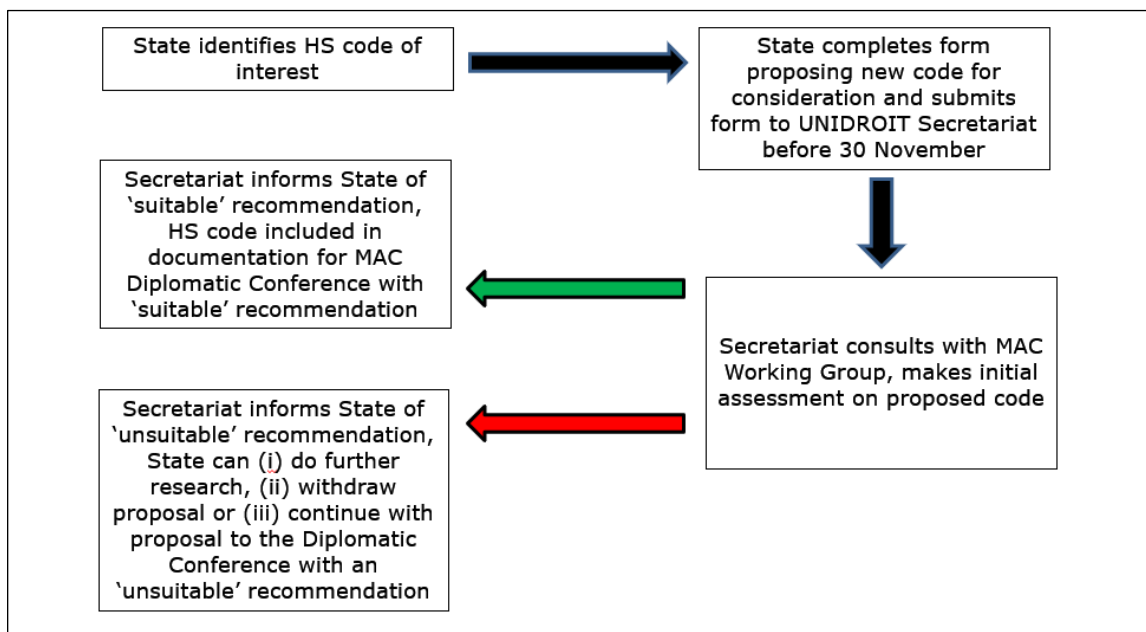
- (iv) **Proposed HS codes should cover complete equipment rather than parts.** Article I(2)(a), (b) and (k) provide that MAC equipment includes all installed, incorporated or attached accessories components and parts which do not fall within a separate listed HS code. As such, the MAC Protocol applies to parts insofar as they are installed in equipment within the scope of the Protocol, but does not contemplate the registration of international interests in parts themselves. This decision was made on advice from the MAC Working Group that parts of MAC equipment were not generally the subject of individual asset-based financing, unlike airplane engines. As such, HS codes explicitly covering parts should not be included in the annexes, unless it can be demonstrated that the parts covered are predominantly high value and are the subject of individual asset-based financing.

17. The process for States to submit additional HS codes for consideration will work as follows:

- (i) States complete the template attached to this document proposing additional codes for addition to the draft MAC Protocol annexes and submit it to the UNIDROIT Secretariat.
- (ii) The UNIDROIT Secretariat, on consultation with the MAC Working Group, will review the proposed HS codes in lights of the four criteria described above, and form a recommendation on the proposed HS code as “suitable” or “unsuitable” for inclusion in the draft MAC Protocol annexes.
- (iii) The UNIDROIT Secretariat will communicate its recommendation to the proposing State. If an HS code is determined to be “unsuitable” by the Secretariat, the State proposing the HS code will be able to withdraw its proposal, submit its proposal with additional information for reconsideration by the Secretariat or request that the HS code be proposed to the Diplomatic Conference with an “unsuitable” recommendation.
- (iv) Once the proposal period ends on 30 November 2018, the Secretariat will compile a list of all additional HS codes proposed by States for inclusion within the draft MAC Protocol annexes and circulate the list to all States.

18. After 30 November, States will still be able to submit additional HS codes in their formal comments on the draft MAC Protocol. However, HS codes that have not been scrutinised by the UNIDROIT Secretariat and MAC Working Group are less likely to be accepted by States for inclusion within the draft MAC Protocol annexes at the Diplomatic Conference.

Figure 1 – Process for proposing additional HS codes



TEMPLATE FOR STATES TO PROPOSE THE ADDITION OF HARMONIZED SYSTEM CODES TO THE ANNEXES OF THE DRAFT MAC PROTOCOL

Please complete the attached template for each HS code being proposed separately for addition to the draft MAC Protocol annexes and submit to the UNIDROIT Secretariat (a.chaunac@unidroit.org) by **30 November 2018**.

State submitting HS code	
Date	
Proposed 6-digit HS code ¹	
Name of 6-digit HS code ²	
Example(s) of MAC equipment covered by proposed HS code ³	
Picture(s) of types of MAC equipment covered by proposed HS code	
Approximate Range of List Prices for New Equipment (\$USD) ⁴	
Annexe(s) in which to list the proposed HS code ⁵	
Is the equipment covered by the proposed HS code predominantly used in the mining, agricultural and construction sectors?	
Is the equipment covered by the proposed HS code predominantly high value?	
Is the equipment covered by the proposed HS code individually serialised by manufacturers? ⁶	
Does the proposed HS code cover parts? ⁷	

¹ For example: HS code 820713. Please use 2017 HS edition.

² For example: agricultural, horticultural or forestry machinery for soil preparation or cultivation; lawn or sports-ground rollers – Plows.

³ For example: Excavators primarily designed for excavation and loading of excavated materials.

⁴ For example: \$USD 31,000 – \$USD 1,100,000.







⁵ Annex 1 – mining equipment, Annex 2 – agricultural equipment, Annex 3 – construction equipment, HS codes may be listed in 1, 2 or all 3 annexes.








⁶ Equipment without a manufacturer's serial number is incapable of being registered in the international registry. HS codes covering predominantly un-serialised equipment should not be included in the annexes.







⁷ HS codes explicitly covering parts should not be included in the annexes, unless it can be demonstrated that the parts covered are predominantly high value and are the subject of individual asset-based financing.


LIST OF HS CODES DEEMED SUITABLE FOR INCLUSION IN THE ANNEXES TO THE MAC PROTOCOL - BASED ON THE 2017 EDITION OF THE HARMONIZED SYSTEM - LAST UPDATED June 2018									
No.	4 Digit HS Code and Name	Additional sub-grouping	6 Digit HS Code and Name	Examples	Images	Approximate Range of List Prices for New Equipment (\$USD)	Comtrade Statistics (\$USD) of 2016	Category	Process for submission of code
	CHAPTER 82 - tools, implements, cutlery, spoons and forks, of base metal; parts thereof of base metal								
1	8207 - Interchangeable tools for hand tools, whether or not power-operated, or for machine tools (for example, for pressing, stamping, punching, tapping, threading, drilling, boring, broaching, milling, turning or screw driving), including dies for drawing or extruding metal, and rock drilling or earth boring tools	Rock drilling or earth boring tools, and parts thereof	820713 -- With working part of cermets			To be confirmed	864,092,664	Construction and Mining	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts
	CHAPTER 84 - Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof								
2	8424 - Mechanical appliances (whether or not hand-operated) for projecting, dispersing, or spraying liquids or powders; fire extinguishers, whether or not charged; spray guns and similar appliances; steam or sand blasting machines and similar jet projecting machines	Other appliances	842482 -- Agricultural or Horticultural	Mechanical appliances used for different agricultural purposes that can be connected and disconnected from tractors.	Agricultural or horticultural appliance (sprayer): 	14,000 - 500,000	3,040,240,507 (2016 data was filed under the code 842481)	Agriculture	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts
3	8426 - Ships' derricks; cranes, including cable cranes; mobile lifting frames, straddle carriers and works trucks fitted with a crane	Other machinery, self-propelled	842641 -- On tires	Crawler cranes, which are self-propelled cranes used to load, unload, and stack cargo containers in shipping ports and terminals.		350,000 - 1,550,000	1,859,864,510	Construction	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts
				Loader Cranes (also called knuckle-boom cranes or articulating cranes) are hydraulically-powered articulated arm fitted to a truck or trailer, and used for loading/unloading.		180,000 - 400,000	Not applicable	Construction	Not applicable
				Telescopic Cranes have booms that consist of a number of tubes fitted one inside the other. A hydraulic or other powered mechanism extends or retracts the tubes to increase or decrease the total length of the boom.		370,000 - 1,500,000	Not applicable	Construction	Not applicable







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No.	4 Digit HS Code and Name	Additional sub-grouping	6 Digit HS Code and Name	Examples	Images	Approximate Range of List Prices for New Equipment (\$USD)	Comtrade Statistics (\$USD) of 2016	Category	Process for submission of code
4	8426 - Ships' derricks; cranes, including cable cranes; mobile lifting frames, straddle carriers and works trucks fitted with a crane	Other machinery, self-propelled	842649 -- Other	Derrick cranes, which have a movable pivoted arm for moving or lifting heavy weights, especially onto a ship. This codes also covers mobile pneumatic conveyors that may be used to transfer grain out of a ship's storage hold and into a hopper located on the dock.	Derrick crane: 	220,000 - 5,500,000	2,200,009,164	Construction	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts
5	8429 - Self-propelled bulldozers, angledozers, graders, levelers, scrapers, mechanical shovels, excavators, shovel loaders, tamping machines and road rollers	Bulldozers and angledozers	842911 -- Track laying	Crawler, caterpillar, or track-laying tractors that run on two continuous tracks consisting of a number of plates or pads pivoted together and joined to form a pair of endless chains, each encircling two wheels on either side of the vehicle.	Track-laying bulldozer: 	295,000 - 650,000	2,318,659,617	Agriculture, Construction and Mining	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts
6	8429 - Self-propelled bulldozers, angledozers, graders, levelers, scrapers, mechanical shovels, excavators, shovel loaders, tamping machines and road rollers	Bulldozers and angledozers	842919 -- Other	Graders, levelers, scrapers, mechanical shovels, excavators, shovel loaders, tamping machines and road rollers.	Bulldozer: 	100,000 - 2,000,000	253,511,642	Agriculture, Construction and Mining	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts
				Angledozer used for handling broken and granular materials, soils and gravel. The moldboard pivots about it's center point to cast materials left or right.		100,000 - 2,000,000	Not applicable	Agriculture, Construction and Mining	Not applicable
				Straight Blade Dozers used for moving large, sharp and abrasive objects.		100,000 - 2,000,000	Not applicable	Agriculture, Construction and Mining	Not applicable
				Semi-U Blade Dozers, built much like Straight Blade Dozers but with a deeper profile and closed ends to help keep granular materials in front for long pushes.		100,000 - 2,000,000	Not applicable	Agriculture, Construction and Mining	Not applicable


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No.	4 Digit HS Code and Name	Additional sub-grouping	6 Digit HS Code and Name	Examples	Images	Approximate Range of List Prices for New Equipment (\$USD)	Comtrade Statistics (\$USD) of 2016	Category	Process for submission of code
				U-Blade Dozers, designed to push large quantities of granular materials over long distances.		100,000 - 2,000,000	Not applicable	Agriculture, Construction and Mining	Not applicable
7	8429 - Self-propelled bulldozers, angledozers, graders, levelers, scrapers, mechanical shovels, excavators, shovel loaders, tamping machines and road rollers		842920 -- Graders and levelers	Graders are commonly used in the construction and maintenance of dirt roads and gravel roads. In the construction of paved roads they are used to prepare the base course to create a wide flat surface for the asphalt to be placed on.	Grader: 	300,000 - 1,200,000	1,397,805,892	Agriculture and Construction	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts
8	8429 - Self-propelled bulldozers, angledozers, graders, levelers, scrapers, mechanical shovels, excavators, shovel loaders, tamping machines and road rollers		842930 -- Scrapers	The scraper is a large piece of equipment used in mining, construction, agriculture for earthmoving.	Elevated scraper: 	100,000 (scraper) - 1,200,000 (scraper tractor)	62,596,512	Agriculture and Construction	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts
9	8429 - Self-propelled bulldozers, angledozers, graders, levelers, scrapers, mechanical shovels, excavators, shovel loaders, tamping machines and road rollers	Mechanical shovels, excavators and shovel loaders	842951 -- Front-end shovel loaders	Loaders (bucket loaders, front loaders, front-end loaders, payloaders, scoop, shovel, skip loaders, or wheel loaders) are used to move aside or load materials such as asphalt, demolition debris, dirt, snow, feed, gravel, logs, raw minerals, recycled material, rock, sand, woodchips, etc.	Front-end shovel loader: 	150,000 - 2,300,000	7,777,179,619	Agriculture, Construction and Mining	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts
				Back hoes are a type of excavators which consists of a tractor, front shovel bucket and small backhoe in the rear. It is the most common excavator used today.		100,000 - 200,000	Not applicable	Agriculture and Construction	Not applicable
				Crawlers and compact excavators are high horsepower excavators used in heavy tasks. Compact excavators are used to lift of soil and debris using hydraulic power mechanisms.		100,000 - 1,100,000	Not applicable	Agriculture and Construction	Not applicable





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No.	4 Digit HS Code and Name	Additional sub-grouping	6 Digit HS Code and Name	Examples	Images	Approximate Range of List Prices for New Equipment (\$USD)	Comtrade Statistics (\$USD) of 2016	Category	Process for submission of code
				Wheel loaders are front-end-loading machines which dig and do secondary loading.		125,000 - 2,300,000	Not applicable	Agriculture, Construction and Mining	Not applicable
10	8429 - Self-propelled bulldozers, angledozers, graders, levelers, scrapers, mechanical shovels, excavators, shovel loaders, tamping machines and road rollers	Mechanical shovels, excavators and shovel loaders	842952 -- Machinery with a 360° degrees revolving superstructure	Excavator with power-operated shovels which have a 360 degree revolving superstructure.		130,000 - 1,100,000	17,354,623,843	Agriculture, Construction and Mining	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts
11	8429 - Self-propelled bulldozers, angledozers, graders, levelers, scrapers, mechanical shovels, excavators, shovel loaders, tamping machines and road rollers	Mechanical shovels, excavators and shovel loaders	842959 -- Other	Excavators primarily designed for excavation and loading of excavated materials.		20,000 - 6,000,000	2,302,374,099	Agriculture, Construction and Mining	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts
12	8430 - Other moving, grading, levelling, scraping, excavating, tamping, compacting, extracting or boring machinery, for earth, minerals or ores; pile-drivers and pile-excavators; snow ploughs and snow-blowers		843010 -- Pile-drivers and pile-extractors	Pile drivers used to drive piles (poles) into soil to provide foundation support for buildings or other structures.	Pile-driver: 	68,698 - 200,000	626,840,797	Construction and Mining	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts
				Diesel Hammers are pile drivers using a diesel engine.		31,000 - 500,000	Not applicable	Construction and Mining	Not applicable
				Hydraulic hammers are powerful percussion hammers fitted to excavators for demolishing concrete structures or rocks, powered by auxiliary hydraulic systems from the excavator.		200,000 - 1,800,000	Not applicable	Construction and Mining	Not applicable
13	8430 - Other moving, grading, levelling, scraping, excavating, tamping, compacting, extracting or boring machinery, for earth, minerals or ores; pile-drivers and pile-excavators; snow ploughs and snow-blowers	Coal or rock cutters and tunneling machinery	843031 -- Self-propelled	Self-propelled machines used to cut rocks and coal as well as machines used for tunneling.	Self-propelled coal cutter: 	200,000 - 3,000,000	904,042,443	Construction and Mining	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts




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No.	4 Digit HS Code and Name	Additional sub-grouping	6 Digit HS Code and Name	Examples	Images	Approximate Range of List Prices for New Equipment (\$USD)	Comtrade Statistics (\$USD) of 2016	Category	Process for submission of code
				Directional boring, commonly called horizontal directional drilling or HDD, is a steerable trenchless method of installing underground pipes, conduits and cables in a shallow arc along a prescribed bore path by using a surface launched drilling rig, with minimal impact on the surrounding area.	Horizontal Directional Drill (HDD). Self Propelled: 	200,000 - 3,000,000	Not applicable	Construction and Mining	Not applicable
14	8430 - Other moving, grading, levelling, scraping, excavating, tamping, compacting, extracting or boring machinery, for earth, minerals or ores; pile-drivers and pile-excavators; snow ploughs and snow-blowers	Coal or rock cutters and tunneling machinery	843039 -- Other	Hammers that are used i) in rock breaking operations and sometimes in tunneling operations and ii) hammers used by backhoe loaders and small excavators in concrete and bituminous/asphalt breaking operations.	Hammer on backhoe: 	10,000 - 62,000	733,183,479	Construction and Mining	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts
15	8430 - Other moving, grading, levelling, scraping, excavating, tamping, compacting, extracting or boring machinery, for earth, minerals or ores; pile-drivers and pile-excavators; snow ploughs and snow-blowers	Other boring or sinking machinery	843041 -- Self-propelled	Mobile seismic drilling units to drill holes in the crust of the earth.	Mobile drilling unit: 	52,000 - 475,000	2,405,998,175	Construction and Mining	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts
16	8430 - Other moving, grading, levelling, scraping, excavating, tamping, compacting, extracting or boring machinery, for earth, minerals or ores; pile-drivers and pile-excavators; snow ploughs and snow-blowers	Other boring or sinking machinery	843049 -- Other	Either stationary and fixed or mobile machinery for attacking the earth's crust (e.g. cutting and breaking down rock and coal, excavation, digging and drilling) or for preparing or compacting terrain.		750,000 - 8,000,000	3,271,996,056	Agriculture, Construction and Mining	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts
17	8430 - Other moving, grading, levelling, scraping, excavating, tamping, compacting, extracting or boring machinery, for earth, minerals or ores; pile-drivers and pile-excavators; snow ploughs and snow-blowers		843050 -- Other machinery, self-propelled	i) hydraulic mine roof shield supports that comprise a longwall mining system used in underground coal mining and ii) trenching machines used to cut through bricks, tree roots and hard ground.	Self-propelled motor grader: 	300,000 - 1,200,000	655,094,724	Agriculture, Construction and Mining	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts
				Terrain leveler surface excavation machines for surface mining, site prep, rock excavation as an alternative to blasting or hammering. Surface Miners are a technology for extracting and crushing material in one continuous process.		2,000,000 - 8,000,000	Not applicable	Construction and Mining	Not applicable







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No.	4 Digit HS Code and Name	Additional sub-grouping	6 Digit HS Code and Name	Examples	Images	Approximate Range of List Prices for New Equipment (\$USD)	Comtrade Statistics (\$USD) of 2016	Category	Process for submission of code
18	8430 - Other moving, grading, levelling, scraping, excavating, tamping, compacting, extracting or boring machinery, for earth, minerals or ores; pile-drivers and pile-excavators; snow ploughs and snow-blowers	Other machinery, not self-propelled	843061 -- Tamping or compacting machinery	Soil compactors.		25,000 - 640,000	340,075,036	Construction and Mining	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts
				Static Smooth Wheeled Rollers used on soils which do not require great pressure for compaction. These rollers are generally used for finishing the upper surface of the soil. These roller are not used for compaction of uniform sands.		100,000 - 300,000	Not applicable	Construction	Not applicable
				Grid Rollers are used for compaction of weathered rocks, well graded coarse soils. These rollers are not suitable for clayey soils, silty clays and uniform soils. The main use of these rollers are in subgrade and sub-base in road constructions.		100,000 - 300,000	Not applicable	Construction	Not applicable
19	8430 - Other moving, grading, levelling, scraping, excavating, tamping, compacting, extracting or boring machinery, for earth, minerals or ores; pile-drivers and pile-excavators; snow ploughs and snow-blowers	Other machinery, not self-propelled	843069 -- Other	Concrete level truss screed machine.		55,582 - 145,000	943,892,618	Construction	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts
20	8432 - Agricultural, horticultural or forestry machinery for soil preparation or cultivation; lawn or sports-ground rollers		843210 -- Plows	It includes plows that are large farming implements with one or more blades affixed to a frame, drawn by a tractor and used for cutting furrows in the soil and turning it over, especially to prepare for the planting of seeds.	Plow: 	10,000 - 125,000	349,626,853	Agriculture	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts







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No.	4 Digit HS Code and Name	Additional sub-grouping	6 Digit HS Code and Name	Examples	Images	Approximate Range of List Prices for New Equipment (\$USD)	Comtrade Statistics (\$USD) of 2016	Category	Process for submission of code
				Chisel plows used for breaking up the soil and deep tillage. Chisel plows disturb the soil below the surface, and try to reduce the amount of top layers disturbed.		5,000 - 100,000	Not applicable	Agriculture	Not applicable
				Disc plows cut soil by using discs instead of a wedge-shaped blade. Disc Plows can generally be divided into 2 categories. They are: Bullock Based and Tractor Based.		17,000 - 72,000	Not applicable	Agriculture	Not applicable
				Subsoiler: The subsoiler, sometimes called a mole plow, attaches rake blades (also named rippers) to a plow frame to dig deep below the surface of the field.		4,000 - 125,000	Not applicable	Agriculture	Not applicable
21	8432 - Agricultural, horticultural or forestry machinery for soil preparation or cultivation; lawn or sports-ground rollers	Harrows, scarifiers, cultivators, weeders and hoes	843221 -- Disc harrows	Disc harrows are used to cultivate the soil where crops are to be planted. It is also used to chop up unwanted weeds or crop remainders. It consists of many iron or steel discs which have slight concavity and are arranged into two or four sections.	Disc harrow: 	10,000 - 140,000	315,174,163	Agriculture	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts
				Spring Harrows use flexible iron teeth that mounted in rows to loosen up the soil to prepare it for planting.		10,000 - 100,000	Not applicable	Agriculture	Not applicable
22	8432 - Agricultural, horticultural or forestry machinery for soil preparation or cultivation; lawn or sports-ground rollers		843231 -- No-till direct seeders, planters and transplanters	It includes no-till equipment i) a seeder which is a machine for sowing seed mechanically; ii) planters which is an implement or machine for planting seeds in the ground; and iii) a seed drill that may be used for pasture overseeding or for use over plowed ground.	Seeder: 	20,000 - 200,000 (Drills) 300,000 (seeding equipment) 500,000 (planters)	1,639,281,482 (2016 data filed under the code 843230 in 2012 HS edition)	Agriculture	New code created by the HS 2017 edition, inserted by Committee of Governmental Experts (October 2018)






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No.	4 Digit HS Code and Name	Additional sub-grouping	6 Digit HS Code and Name	Examples	Images	Approximate Range of List Prices for New Equipment (\$USD)	Comtrade Statistics (\$USD) of 2016	Category	Process for submission of code
23			843239 – Other	Conventional equipment such as i) a seeder which is a machine for sowing seed mechanically; ii) planters which is an implement or machine for planting seeds in the ground; and iii) a seed drill that may be used for pasture overseeding or for use over plowed ground.	Tractor-drawn Planter: 	20,000 - 200,000 (Drills) 300,000 (seeding equipment) 500,000 (planters)	1,639,281,482 (2016 data filed under the code 843230 in 2012 HS edition)	Agriculture	New code created by the HS 2017 edition, inserted by Committee of Governmental Experts (October 2018)
				Air seeders are used to sowing small, round seeds.		60,000 - 200,000 (Air Drills)	Not applicable	Agriculture	Not applicable
				Planters are the most accurate type of seeder available, and they are the most expensive ones.		30,000 - 500,000	Not applicable	Agriculture	Not applicable
24	8432 - Agricultural, horticultural or forestry machinery for soil preparation or cultivation; lawn or sports-ground rollers		843241 – Manure spreaders	Manure spreaders, muck spreaders or honey wagons are agricultural machines used to distribute manure over a field as a fertilizer.	Manure spreader (attached to tractor): 	10,000 - 350,000	486,560,702 (2016 data filed under the code 843240 in 2012 HS edition)	Agriculture	New code created by the HS 2017 edition, inserted by Committee of Governmental Experts (October 2018)
25			843242 – Fertiliser distributors	A fertilizer distributor is a machine used to distribute fertilizer evenly onto crops.	Fertilizer Distributor: 	55,000 to 360,000	486,560,702 (2016 data filed under the code 8432340 in 2012 HS edition)	Agriculture	New code created by the HS 2017 edition, inserted by Committee of Governmental Experts (October 2018)
				Box spreaders such as this spinner discharge box spreader can handle many dry, flowable, high-value materials such as compost, poultry litter, and industrial materials. A heavy-duty metering endgate, effectively controls the movement of materials to the spinners.		250,000 - 350,000 (self-propelled fertilizer spreader)	Not applicable	Agriculture	Not applicable
				Side discharge spreaders provide excellent material breakup and have the widest spread pattern and provide the finest and thinnest application of wet manure.		35,000 - 60,000	Not applicable	Agriculture	Not applicable

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26	8433 - Harvesting or Threshing Machinery, including Straw or Fodder Balers; Grass or Hay Mowers; Machines for Cleaning, Sorting or Grading Eggs, Fruit or other Agricultural Produce; Other than Machinery of Heading 8437		843340 - Straw or fodder balers, including pick-up balers	Straw or Fodder Balers.		14,000 - 800,000	1,027,970,261	Agriculture	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts
27	8433 - Harvesting or Threshing Machinery, including Straw or Fodder Balers; Grass or Hay Mowers; Machines for Cleaning, Sorting or Grading Eggs, Fruit or other Agricultural Produce; Other than Machinery of Heading 8437		843351 -- Combine harvester-threshers	Combine Harvester or Thresher.		300,000 - 1,000,000	3,380,008,956	Agriculture	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts
28	8436 - Other agricultural, horticultural, forestry, poultry-keeping or bee-keeping machinery, including germination plant fitted with mechanical or thermal equipment, poultry incubators and brooders		843680 -- Other machinery	It includes i) an agricultural tractor with a readily-removable wood harvester unit; ii) a tree harvesting machine is a tracked excavator-like propelling base which is specifically designed to be used with a variety of harvesting heads for the first thinning of trees; and iii) a wood chipper designed to chip branches and cuttings from trees and shrubs.		97,000 - 717,000	2,229,944,783	Agriculture	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts
29	8474 - Machinery for sorting, screening, separating, washing, crushing, grinding, mixing or kneading earth, stone, ores or other mineral substances, in solid (including powder or paste) form; machinery for agglomerating, shaping or moulding solid mineral fuels, ceramic paste, unhardened cements, plastering materials or other mineral products in powder or paste form; machines for forming foundry molds of sand	Mixing or kneading machines	847431 -- Concrete or mortar mixers	Machinery of this type is used, mainly in the extractive industries, for the treatment (mixing) of solid mineral products.	Concrete Mixer: 	100,000 - 200,000	929,612,673	Construction and Mining	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts







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30	8474 - Machinery for sorting, screening, separating, washing, crushing, grinding, mixing or kneading earth, stone, ores or other mineral substances, in solid (including powder or paste) form; machinery for agglomerating, shaping or molding solid mineral fuels, ceramic paste, unhardened cements, plastering materials or other mineral products in powder or paste form; machines for forming foundry molds of sand	Mixing or kneading machines	847432 -- Machines for mixing mineral substances with bitumen	Machinery of this type is used, mainly in the extractive industries, for the treatment (mixing) of solid mineral products.	Bitumen Mixer: 	200,000 - 1,000,000	426,631,446	Construction	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts
31	8479 - Machines and mechanical appliances having individual functions, not specified or included elsewhere in this Chapter	Other machines and mechanical appliances	847982 - Mixing, kneading, crushing, grinding, screening, sifting, homogenizing, emulsifying or stirring machines	Machinery of this type has individual function it has been designed for, which can only be performed distinctly from and independently of any other machine or appliance. Example: Paddle blender agitator mixers are ideally suited for applications including feed and grain, non-directional liquid or slurry mixes.	Paddle Blender Agitator: 	50,000 - 5,000,000	3,987,637,136	Construction	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts
32	8479 - Machines and mechanical appliances having individual functions, not specified or included elsewhere in this Chapter		847910 -- Machinery for public works, building or the like	i) Power trowels to float and finish concrete; ii) concrete finishing machines; and iii) ice breakers designed to remove dangerous ice sheets which can form on road surfaces.	Concrete paver: 	160,000 - 550,000	2,453,412,765	Construction	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts

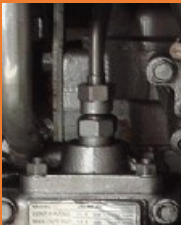





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	CHAPTER 87 - Vehicles other than railway or tramway rolling stock, and parts and accessories thereof								
33	8701 - Tractors (other than tractors of heading 8709)		870130 -- Track-laying tractors	Tractors propelled using a track-laying mechanism (i.e. continuous band of treads driven by two or more wheels).	Track-laying tractor: 	350,000 - 700,000	896,841,503	Agriculture, Construction and Mining	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts
				Half Track Type Tractors generally used for reclaiming barren lands.		260,000 - 450,000	Not applicable	Agriculture and Construction	Not applicable
34	8701 - Tractors (other than tractors of heading 8709)		870191 - Not exceeding 18 kW	i) agricultural tractors, ii) log skidders which are wheeled tractors with front-mounted dozers and either a rear-mounted grapple or a cable winch; and iii) forestry machinery such as feller bunchers, material handlers, skidders, a delimber, harvesters, a log forwarder, felling heads, a mulcher and a street trencher.	Log skidder: 	12,000 - 16,000	20,916,821,413 (2016 data filed under the code 870190 in 2012 HS edition)	Agriculture and Construction	New code created by the HS 2017 edition, inserted by Committee of Governmental Experts (October 2018)
35			870192 - Exceeding 18 kW but not exceeding 37 kW	The same as 870191 except with a larger engine		20,000 - 34,000	20,916,821,413 (2016 data filed under the code 870190 in 2012 HS edition)	Agriculture and Construction	New code created by the HS 2017 edition, inserted by Committee of Governmental Experts (October 2018)
36			870193 - Exceeding 37 kW but not exceeding 75 kW	The same as 870192 except with a larger engine		20,000 - 87,500	20,916,821,413 (2016 data filed under the code 870190 in 2012 HS edition)	Agriculture and Construction	New code created by the HS 2017 edition, inserted by Committee of Governmental Experts (October 2018)
37			870194 - Exceeding 75 kW but not exceeding 130 kW	The same as 870193 except with a larger engine		70,000 - 170,000	20,916,821,413 (2016 data filed under the code 870190 in 2012 HS edition)	Agriculture and Construction	New code created by the HS 2017 edition, inserted by Committee of Governmental Experts (October 2018)







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38			870195 - Exceeding 130 kW	The same as 870194 except with a larger engine		300,000 - 600,000 (Harvesters)	20,916,821,413 (2016 data filed under the code 870190 in 2012 HS edition)	Agriculture and Construction	New code created by the HS 2017 edition, inserted by Committee of Governmental Experts (October 2018)
				Four wheeled tractors.		200,000 - 900,000 (Tractors)	Not applicable	Agriculture and Construction	Not applicable
39	8704 - Motor vehicles for the transport of goods		870410 -- Dumpers designed for off-highway use	Off-highway dump trucks that are used strictly off-road for mining and heavy dirt hauling jobs.	Off-highway dumpers: 	700,000 - 7,000,000	3,768,142,780	Construction and Mining	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts
40	8705 - Special purpose motor vehicles, other than those principally designed for the transport of persons or goods (for example, breakdown lorries, crane lorries, fire fighting vehicles, concrete-mixer lorries, road sweeper lorries, spraying lorries, mobile workshops, mobile radiological units)		870510 - Crane Lorries	It includes i) a mobile crane that is a cable-controlled crane mounted on crawlers or rubber-tired carriers or ii) a hydraulic-powered crane with a telescoping boom mounted on truck-type carriers or as self-propelled models.	Mobile crane: 	115,000 - 2,200,000	3,110,046,379	Construction	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts
41	8705 - Special purpose motor vehicles, other than those principally designed for the transport of persons or goods (for example, breakdown lorries, crane lorries, fire fighting vehicles, concrete-mixer lorries, road sweeper lorries, spraying lorries, mobi		870540 - Concrete-mixer lorries	Includes Motor breakdown lorries, Motor pump vehicles, Lorries fitted with ladders or elevator platform, Lorries used for cleansing streetset, etc..		75,000 - 350,000	901,285,906	Construction	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts
42	8716 - Trailers and semi-trailers; other vehicles, not mechanically propelled; parts thereof		871620 - Self-loading or self-unloading trailers and semi-trailers for agricultural purposes	Includes Self-loading agricultural trailers fitted with automatic loading devices.		80,000 - 300,000	496,570,088	Agriculture, Construction and Mining	Proposed by MAC Working Group, approved by Study Group and Committee of Governmental Experts







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	CHAPTER 82 - tools, implements, cutlery, spoons and forks, of base metal; parts thereof of base metal									
1	8207 - Interchangeable tools for hand tools, whether or not power-operated, or for machine tools (for example, for pressing, stamping, punching, tapping, threading, drilling, boring, broaching, milling, turning or screw driving), including dies for drawing or extruding metal, and rock drilling or earth boring tools	Rock drilling or earth boring tools, and parts thereof	820719 - Other, including parts	Parts of rock drills and earth boring tools.	Part of earth boring machine: 		3,030,359,676	Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers low value parts which may not be individually serialised. The Explanatory Notes to Chapter 82.07 notes that 'this heading covers an important group of tools which are unsuitable for use independently, but are designed to be fitted [into other types of equipment].
	CHAPTER 84 - Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof									
2	8407 - Spark-ignition reciprocating or rotary internal combustion piston engines	Reciprocating piston engines of a kind used for the propulsion of vehicles of chapter 87	840731 -- Of a cylinder capacity not exceeding 50 cc	Includes engines that may be used in the manufacture of other machines (e.g. motorized scooters).	Piston engine: 		46,170,489	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers predominantly low value equipment. This code covers equipment commonly used outside the MAC industries.
3	8407 - Spark-ignition reciprocating or rotary internal combustion piston engines	Reciprocating piston engines of a kind used for the propulsion of vehicles of chapter 87	840732 -- Of a cylinder capacity exceeding 50cc but not exceeding 250 cc	Same as above but higher capacity.	ATV engine: 		695,289,685	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers predominantly low value equipment. This code covers equipment commonly used outside the MAC industries.
4	8407 - Spark-ignition reciprocating or rotary internal combustion piston engines	Reciprocating piston engines of a kind used for the propulsion of vehicles of chapter 87	840733 -- Of a cylinder capacity exceeding 250cc but not exceeding 1,000 cc	Same as above but higher capacity.	Arctic cat engine: 		1,573,063,215	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers predominantly low value equipment. This code covers equipment commonly used outside the MAC industries.
5	8407 - Spark-ignition reciprocating or rotary internal combustion piston engines	Reciprocating piston engines of a kind used for the propulsion of vehicles of chapter 87	840734 - of a cylinder capacity exceeding 1,000cc	Same as above but higher capacity.			33,627,440,000	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers equipment commonly used outside the MAC industries.
6	8407 - Spark-ignition reciprocating or rotary internal combustion piston engines		840790 -- Other engines	Other engines that may be installed in agricultural and horticultural machinery.	Horticultural machine engine: 		3,449,970,308	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers equipment commonly used outside the MAC industries.






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7	8408 - Compression-ignition internal combustion piston engines (diesel or semi-diesel engines)		840810 -- Marine propulsion engines	Marine propulsion engines that power vessels.	CAT marine propulsion engine: 		4,305,072,586	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers equipment commonly used outside the MAC industries.
8	8408 - Compression-ignition internal combustion piston engines (diesel or semi-diesel engines)		840820 -- Engines of a kind used for the propulsion of vehicles of chapter 87 (Tractors and other vehicles):	Includes engines that may be power tractors suitable for agricultural use.	Tractor engine: 		35,404,810,042	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers equipment commonly used outside the MAC industries.
9	8408 - Compression-ignition internal combustion piston engines (diesel or semi-diesel engines)		840890 -- Other engines	Includes engines other than those utilized to power vessels and agricultural/horticultural machinery under the preceding two codes.	Mining equipment engine: 		14,751,315,148	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers equipment commonly used outside the MAC industries.
10	8409 - Parts suitable for use solely or principally with the engines of heading 8407 or 8408	Other	840991 -- Suitable for use solely or principally with spark-ignition internal combustion piston engines	Includes spark ignition engines that may be used to power vessels, vehicles and machinery.	Rotary engine parts: 		32,227,204,501	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers low value parts which may not be individually serialised. This HS code covers parts to engines commonly used outside the MAC industries.
11	8409 - Parts suitable for use solely or principally with the engines of heading 8407 or 8408	Other	840999 -- Other	Includes engines that may be used to power construction machinery.	Construction machinery engine: 		36,328,672,521	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers low value parts which may not be individually serialised. This HS code covers parts to engines commonly used outside the MAC industries.
12	8411 - Turbo-jets, turbo propellers and other gas turbines	Other gas turbines	841181 -- Other gas turbines - Of a power not exceeding 5000kW				2,141,352,311	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers equipment commonly used outside the MAC industries.
13	8411 - Turbo-jets, turbo propellers and other gas turbines	Other gas turbines	841182 - Other gas turbines - Of a power exceeding 5000kW				7,961,500,039	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers equipment commonly used outside the MAC industries.








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14	8412 - Other engines and motors	Hydraulic power engines and motors	841221 -- Linear acting (cylinders)	Includes engines that may be used to provide the force to operate the control valves of a steam turbine.	Steam turbine engine: 		4,939,531,204	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers equipment commonly used outside the MAC industries.
15	8412 - Other engines and motors	Hydraulic power engines and motors	841229 -- Other	Includes hydrojets (thrusters) that are basically high capacity pumps which draw water into through a special intake, and discharge it at enhanced pressure through a steerable nozzle. They are fast becoming an alternative means of vessel propulsion.	Industrial high capacity pump: 		3,867,468,302	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers equipment commonly used outside the MAC industries.
16	8412 - Other engines and motors	Pneumatic power engines and motors	841231 -- Linear acting (cylinders)	Engines that may be used for a wide range of mechanical applications, including machine tools, hoists and davits, farm machinery, construction equipment, robotics, and other industrial machines.	Air car engine: 		1,747,444,348	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers equipment commonly used outside the MAC industries.
17	8412 - Other engines and motors	Pneumatic power engines and motors	841239 -- Other	Engines that include air driven motors used to start an engine on a dump truck.	Air-powered motor: 		756,180,847	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers equipment commonly used outside the MAC industries.
18	8412 - Other engines and motors		841280 -- Other	Engines, including a spring-operated mechanism, which is part of an operating mechanism incorporating several components for use with a high voltage circuit breaker (the spring-operated mechanism is the only part of the operating mechanism at issue herein).	Spring-operated brake: 		862,251,143	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers equipment commonly used outside the MAC industries. This code covers predominantly low value equipment.
19	8412 - Other engines and motors		841290 -- Parts	Parts of engines, including stainless steel distance sleeves that are used in marine propulsion systems.	Distance sleeves: 		6,996,144,163	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers low value parts which may not be individually serialised. This code covers parts commonly used in equipment outside the MAC industries.






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20	8413 - Pumps for liquids, whether or not fitted with a measuring device; liquid elevators		841330 -- Fuel, lubricating or cooling medium pumps for internal combustion piston engines	Pumps, including i) components of the fuel delivery system for a fuel-injected diesel internal combustion engine, and ii) a high pressure fuel pump for use with fuel injected engines of the type used in small unmanned aircraft and are designed to be fitted to small internal combustion engines.	High pressure fuel pump: 		13,355,833,381	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This HS code covers accessions which are commonly used outside the MAC industries.
21	8413 - Pumps for liquids, whether or not fitted with a measuring device; liquid elevators		841350 - Other reciprocating positive displacement pumps	Includes a sucker pump used for pumping the stratum liquid out of an oil well.	Reciprocating positive displacement pump: 		7,398,707,630	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers predominantly low value equipment. This code covers equipment commonly used outside the MAC industries.
22	8413 - Pumps for liquids, whether or not fitted with a measuring device; liquid elevators		841360 -- Other rotary positive displacement pumps	Includes water pumps that are used to provide cooling circulation for the hydraulic pumps. Electric motors are used to provide power to the pumps.	Positive displacement rotary pump: 		6,362,930,227	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers predominantly low value equipment. This code covers equipment commonly used outside the MAC industries.
23	8413 - Pumps for liquids, whether or not fitted with a measuring device; liquid elevators		841370 -- Other centrifugal pumps	Any pump, machinery or appliance utilized for raising or otherwise continuously displacing and transferring volumes of liquids. They can either be operated manually or via any kind of power unit, integral or otherwise.			14,871,955,315	Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers predominantly low value equipment. This code covers equipment commonly used outside the MAC industries.
24	8413 - Pumps for liquids, whether or not fitted with a measuring device; liquid elevators	Parts	841391 -- Of pumps	Parts of Pumps, including those that primary function is to provide reinforcement in the master cylinder of an automobile's brake booster.	Pump part: 		16,295,309,667	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers low value parts which may not be individually serialised. This code covers parts commonly used in equipment outside the MAC industries.
25	8414 - Air or vacuum pumps or other gas compressors and fans; ventilating or recycling hoods incorporating a fan, whether or not fitted with filters	Fans	841459 -- Other	Fans, including heater blowers and heater cores that may be used to distribute heat throughout the vehicle's passenger compartment in the form of heated air.	Tractor fan: 		9,512,447,025	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers predominantly low value equipment. This code covers equipment commonly used outside the MAC industries.




LIST OF HS CODES DEEMED UNSUITABLE FOR INCLUSION IN THE ANNEXES TO THE MAC PROTOCOL - LAST UPDATED JUNE 2018										
No.	4 Digit HS Code and Name	Additional sub-grouping	6 Digit HS Code and Name	Examples	Images	Approximate Range of List Prices for New Equipment (\$USD)	Comtrade Statistics (\$USD)	Category	Process for submission of code	Study Group's rationale for considering code to be "unsuitable"
26	8427 - Fork-lift trucks; other works trucks fitted with lifting or handling equipment		842710 -- Self-propelled trucks powered by an electric motor	It includes i) forklift trucks that consist of a four-wheeled chassis with a front mounted mast assembly to which the forks are attached and ii) automated guided vehicles (AGVs) capable of holding articles weighing up to 3 tons and incorporate lift tables.	Forklift truck: 		6,587,108,594	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers equipment commonly used outside the MAC industries. This code does not cover parts (parts for 8425-8430 are covered by 8431).
27	8427 - Fork-lift trucks; other works trucks fitted with lifting or handling equipment		842720 -- Other self-propelled trucks	It includes i) a wheeled, self-propelled lifting platform generally used to raise and lower produce in a harvesting operation and ii) hydraulic power unit designed to lift the tongue of a trailer from a towing vehicle, usually a heavy-duty pick-up truck, and move the trailer as a portable unit to a parking location.	Hydraulic power unit: 		8,716,572,722	Agriculture and Construction	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers equipment commonly used outside the MAC industries. This code does not cover parts (parts for 8425-8430 are covered by 8431).
28	8427 - Fork-lift trucks; other works trucks fitted with lifting or handling equipment		842790 -- Other trucks	It includes i) pallet trucks that are used to lift and transport palletized loads weighing up to 5000 pounds and ii) mini lifter/skip hoist that can be used in a variety of general purpose lifting and short distance transport activities.	Pallet truck: 		995,701,803	Agriculture and Construction	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers equipment commonly used outside the MAC industries. This code does not cover parts (parts for 8425-8430 are covered by 8431).
29	8428 - Other lifting, handling, loading or unloading machinery (for example, lifts, escalators, conveyors, teleferics)		842890 -- Other Machinery	Includes i) woodland log handling equipment and ii) a pallet lift which handles the vertical transportation of pallets into and out of the warehouse; and retrieving pallets from the various levels as required.	Conveyor system: 		9,969,446,182	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers equipment commonly used outside the MAC industries. This HS code does not cover parts (parts for machinery 8425-8430 are covered by 8431).
30	8430 - Other moving, grading, levelling, scraping, excavating, tamping, compacting, extracting or boring machinery, for earth, minerals or ores; pile-drivers and pile-excavators; snow ploughs and snow-blowers		843020 -- Snowplows and snowblowers	Includes snowblowers mounted on tractors.	Snowblower: 		665,455,092	Agriculture and Construction	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers equipment commonly used outside the MAC industries. The Explanatory notes state that Chapter 84.30 covers not only fixed machinery, but also mobile machines, whether or not self-propelled. This HS code does not cover parts (parts for machinery 8425-8430 are covered by 8431)
31	8431 - Parts suitable for use solely or principally with the machinery of headings 8425 to 8430		843110 -- of machinery of heading 8425	Includes a trailer landing gear designed to be assembled onto trailers. They are composed of hot-rolled, cold-finished non-alloy steel.	Trailer landing gear: 		1,851,641,015	Agriculture and Construction	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers parts for pulley tackle and hoists other than skip hoists; winches and capstans; jacks. This code covers low value parts which may not be individually serialised. This code covers parts commonly used in equipment outside the MAC industries.







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32	8431 - Parts suitable for use solely or principally with the machinery of headings 8425 to 8430		843120 -- Of machinery of heading 8427	It includes i) a forklift set intended for use on or in conjunction with an all-terrain vehicle and ii) a pallet saver that is made of carbon steel in the shape of an inverted T, and is used to prevent damage to wood pallets.	Forklift set: 		4,842,099,586	Construction	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers low value parts which may not be individually serialised. This code covers parts commonly used in equipment outside the MAC industries.
33	8431 - Parts suitable for use solely or principally with the machinery of headings 8425 to 8430	Of machinery of heading 8428	843139 -- Other	Includes i) flight bars and E-bolts are components of armored face chain conveyors used in underground longwall mining applications and ii) items for use with roller conveyors.	Roller conveyor parts: 		8,039,237,615	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> Covers parts for other lifting, handling, loading or unloading machinery (for example, elevators, escalators, conveyors, teleferics). Other covers parts other than those for lifts, skips, hoists or escalators (which are covered by 843131) This code covers low value parts which may not be individually serialised. This code covers parts commonly used in equipment outside the MAC industries.
34	8432 - Agricultural, horticultural or forestry machinery for soil preparation or cultivation; lawn or sports-ground rollers		843290 -- Parts	It includes a i) hub that is specifically designed and marketed for installation on disc harrows, cultivators, rippers and moldboard ploughs, all of which are used in farming and agriculture and ii) two wheel and tire assemblies designed and imported in order to be installed and used on agricultural spreaders.	Agricultural spreader: 		2,898,015,550	Agriculture	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers low value parts which may not be individually serialised.
35	8433 - Harvesting or threshing machinery, including straw or fodder balers; grass or hay mowers; machines for cleaning, sorting or grading eggs, fruit or other agricultural produce, other than machinery of heading 8437	Mowers for lawns, parks or sports grounds	843311 -- Powered, with the cutting device rotating in a horizontal plane	They are always motorized in some way, powered either by gas, petrol or electrically.		2,000 - 9,000	3,778,131,979	Agriculture	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers predominantly low value equipment. This code covers equipment commonly used outside the MAC industries. This code does not cover parts (parts for 8433 is covered by 843390).
				Riding mower (ride-on mower): Instead of walking with the machine, these mowers have a seat and the operator controls and steers the machine while riding it. Suitable for larger lawns with not too many trees or other obstacles on the lawn.				Agriculture		
				Tractor Lawn Mower: This machine is built as a small tractor with a mower mounted between the front and rear wheel axes. A lawn tractor can easily be equipped with e.g. carts or aerators, some even with snow plow blades, so they are more versatile than the riding mower. And usually more expensive.				Agriculture		





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36	8433 - Harvesting or threshing machinery, including straw or fodder balers; grass or hay mowers; machines for cleaning, sorting or grading eggs, fruit or other agricultural produce, other than machinery of heading 8437	Mowers for lawns, parks or sports grounds	843319 -- Other	It includes a push reel lawn mower that is constructed of steel and has two plastic wheels and two foam handle grips.	Push reel lawn mower: 	10,000 - 75,000	566,440,643	Agriculture	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers predominantly low value equipment. This code covers equipment commonly used outside the MAC industries. This code does not cover parts (parts for 8433 is covered by 843390).
37	8433 - Harvesting or threshing machinery, including straw or fodder balers; grass or hay mowers; machines for cleaning, sorting or grading eggs, fruit or other agricultural produce, other than machinery of heading 8437		843390 -- Parts	Parts for the mowers described above under heading 8433.	Grooming mower: 	0.00 - 5,000	5,385,227,013	Agriculture	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers low value parts which may not be individually serialised.
38	8436 - Other agricultural, horticultural, forestry, poultry-keeping or bee-keeping machinery, including germination plant fitted with mechanical or thermal equipment, poultry incubators and brooders	Parts	843699 -- Other	It includes i) bee-keeping machinery; ii) machinery for preparing animal feeds; iii) and forestry machinery.	Food processing machinery: 		1,372,295,075	Agriculture	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers low value parts which may not be individually serialised.
39	8474 - Machinery for sortings, screening, separating, washing, crushing, grinding, mixing or kneading earth, stone, ores or other mineral substances, in solid (including power or paste) form; machinery for agglomerating, shaping or molding solid mineral fuels, ceramic paste, unhardened cements, plastering materials or other mineral products in powder or paste form; machines for forming foundry molds of sand		847490 -- Parts	It includes parts for i) a machine that is used in gold plant slurry screening operations to help remove wood fibers and other foreign objects from the slurry before it goes into the leaching tanks and other refining processes and ii) a glass washing machine and a glass tempering oven of a kind mainly used in the extractive industries.	Glass washing machine: 		7,755,179,711	Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers low value parts which may not be individually serialised.
40	8479 - Machines and mechanical appliances having individual functions, not specified or included elsewhere in this Chapter	Other machines and mechanical appliances	847989 -- Other	It includes i) dehumidifiers used in applications such as water damage restoration and humidity control and are said to be ideal for industrial drying applications; ii) floor polishers designed for commercial use in locations such as hospitals/healthcare facilities; iii) trash compactors for industrial use that compact trash; and iv) floor sweepers for industrial use.	Trash compactor: 		38,019,250,166	Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers equipment commonly used outside the MAC industries. This code does not cover parts (parts for 8479 is covered by 847990).

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41	8479 - Machines and mechanical appliances having individual functions, not specified or included elsewhere in this Chapter		847990 -- Parts	It includes parts related to i) submersible remote operated vehicle (ROV) used in the oil and gas industry to facilitate deepwater repairs on their facilities and ii) fan guards generally attached to the exterior of electromechanical machines with a self-contained motor and fan and are designed to match the sizes of the standard fans used in various appliances/machines and ii) aluminum sunshade blades that may be mounted or welded to the building.	ROV: 		19,668,477,794	Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers low value parts which may not be individually serialised. This code covers parts commonly used in equipment outside the MAC industries.
42	8483 - Transmission shafts (including cam shafts and crank shafts) and cranks; bearing housings and plain shaft bearings; gears and gearing; ball or roller screws; gear boxes and other speed changers, including torque converters; flywheels and pulleys, including pulley blocks; clutches and shaft couplings (including universal joints)		848310 -- Transmission shafts (including camshafts and crankshafts) and cranks	Includes a i) transmission shaft which is a rotating shaft that transmits rotary motion from the engine to the differential; ii) spark plugs and crankshafts for internal combustion engines for motorcycles; and iii) crankshafts used to power chainsaws.	Transmission shaft: 		10,081,944,600	Agriculture	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers predominantly low value equipment. This code covers equipment commonly used outside the MAC industries.
CHAPTER 85 - Electrical Machinery and equipment and parts thereof; sounds recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles										
43	8501 - Electric motors and generators (excluding generating sets)	AC generators (alternators)	850161 -- Of an output not exceeding 75 kVA	It includes i) generators and motors for AC units; ii) alternators used in motor vehicles; iii) fuel cell generators which are inverters used to produce AC power.	AC single phase alternator: 		965,797,220	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers predominantly low value equipment. This code covers equipment commonly used outside the MAC industries.
44	8501 - Electric motors and generators (excluding generating sets)	AC generators (alternators)	850162 -- Of an output exceeding 75 kVA but not exceeding 375 kVA	It includes i) electric generators that include a rotor which is turned by a mechanical device like an internal combustion engine, or steam or water turbines and ii) a cell power plant makes use of a fuel processor to extract hydrogen from natural gas.	AC generator – 250 kVa: 		675,619,523	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers predominantly low value equipment. This code covers equipment commonly used outside the MAC industries.
45	8501 - Electric motors and generators (excluding generating sets)	AC generators (alternators)	850163 -- Of an output exceeding 375 kVA but not exceeding 750 kVA	Same as above but higher capacity.	AC generator – 500kVa: 		322,381,054	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers predominantly low value equipment. This code covers equipment commonly used outside the MAC industries.
46	8501 - Electric motors and generators (excluding generating sets)	AC generators (alternators)	850164 -- Of an output exceeding 750kVA	Same as above but higher capacity.	AC generator – 1000kVA: 		3,779,898,805	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers equipment commonly used outside the MAC industries.
47	8502 - Electric generating sets and rotary converters	Generating sets with compression-ignition internal combustion piston engines(diesel or semi-diesel engines)	850211 -- Of an output not exceeding 75 kVA	It includes power generating sets that may be installed underneath a truck frame between the truck cab and trailer and is fueled by the truck's fuel tank.	Diesel generating set – 50kVa: 		2,216,068,325	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers predominantly low value equipment. This code covers equipment commonly used outside the MAC industries.





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48	8502 - Electric generating sets and rotary converters	Generating sets with compression-ignition internal combustion piston engines(diesel or semi-diesel engines)	850212 -- Of an output exceeding 75 kVA but not exceeding 375 kVA	Same as above but higher capacity.	Diesel generating set – 150 kVa: 		1,792,201,111	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers predominantly low value equipment. This code covers equipment commonly used outside the MAC industries.
49	8502 - Electric generating sets and rotary converters	Generating sets with compression-ignition internal combustion piston engines(diesel or semi-diesel engines)	850213 -- Of an output exceeding 375kVA	Same as above but higher capacity.	Diesel generating set:		6,039,781,626	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers equipment commonly used outside the MAC industries.
50	8502 - Electric generating sets and rotary converters		850220 -- Generating sets with spark-ignition internal combustion piston engines	It includes i) a portable generator for consumer use to supply electrical power and ii) a heat recovery system to the generator set that may be attached to a heat recovery system to produce heat that is captured and used to heat water.	Portable generator: 		4,306,066,129	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers predominantly low value equipment. This code covers equipment commonly used outside the MAC industries.
51	8503 - Parts suitable for use solely or principally with the machines of heading 8501 or 8502		850300 -- Parts suitable for use solely or principally with the machines of heading 8501				19,079,306,988	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers low value parts which may not be individually serialised. This code covers parts commonly used in equipment outside the MAC industries.
52	8526 - Radar apparatus, radio navigational aid apparatus and radio remote control appliances	Other	852691 - Radio navigational aid apparatus					Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers predominantly low value equipment. This code covers equipment commonly used outside the MAC industries.
53	8544 - Insulated (including enameled or anodized) wire, cable, (including co-axial cable) and other insulated electric conductors, whether or not fitted with connectors; optical fiber cables, made up of individually sheathed fibers, whether or not assembled with electric conductors or fitted with connectors.	Other Electrical Conductors for a voltage not exceeding 1000V	854449 -- Other	It includes i) telecommunications cables used with computers and computer equipment to allow for the transfer/communication of information/data and ii) insulated electric cable, used in fire or security alarm applications.	Insulated electric cable: 		28,221,366,064	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers predominantly low value equipment which may not be individually serialised. This code covers equipment commonly used outside the MAC industries.
CHAPTER 87 - Vehicles other than railway or tramway rolling stock, and parts and accessories thereof										
54	8706 - Chassis fitted with engines, for the motor vehicles of headings 8701 to 8705		870600 -- Chassis fitted with engines, for the motor vehicles of headings 8701 to 8705	It includes dump carriers that can be used to haul materials such as earth, gravel, concrete, etc.	Chassis: 		3,383,698,113	Agriculture and Construction	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers equipment commonly used outside the MAC industries.

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55	8707 - Bodies (including cabs), for the motor vehicles of headings 8701 to 8705		870790 - Other	It includes i) a sleeper cab shell that is essentially the sleeper cab structure with cutouts made for the windows, door, speakers, etc. and ii) mobile horseboxes built to house persons and horses when attached to an automotive cab and chassis.	Tractor cabin: 		4,727,041,008	Agriculture and Construction	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers equipment commonly used outside the MAC industries.
56	8708 - Parts and accessories of the motor vehicles of headings 8701 to 8705		870850 -- Drive-axes with differential, whether or not provided with other transmission components, and non-driving axles; parts thereof	It includes i) steel carrier assemblies used in the geared, electric drive system of off-highway dump trucks; ii) a differential that is used with four wheel drive (4 x 4) All Terrain Vehicles (ATV) (Outlander and Renegade) and Side by Side Vehicles (Commander) to constantly monitor wheel speed; and iii) a lift axle assembly used on a heavy duty truck as a steerable, air lift, non-driving axle.	Drive axle with differential: 		22,328,807,506	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers low value parts which may not be individually serialised. This code covers parts commonly used in equipment outside the MAC industries.
57	8708 - Parts and accessories of the motor vehicles of headings 8701 to 8705		870870 -- Road wheels and parts and accessories thereof	It includes i) wheels for undercarriages of tractors that acting as contact points and guides, help to distribute the machine weight evenly across the ground through the tracks; ii) wheel rims used on a railcar mover not designed for public road use but will be used to move the rail car off road while at the job site; and iii) wheel hub and spoke wheel assemblies used on road tractors for semi-trailers.	Road wheels: 		18,590,067,120	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers low value parts which may not be individually serialised. This code covers parts commonly used in equipment outside the MAC industries.

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Codes originally classified in Tier 2 by the Study Group										
CHAPTER 84 - Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof										
58	8413 - Pumps for liquids, whether or not fitted with a measuring device; liquid elevators		841340 -- Concrete Pumps	Includes the concrete pumps below:	Truck Boom Pumps: 		568,363,361	Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers predominantly low value equipment.
				Truck: Truck-Mounted Line Pumps: Truck-mounted line pumps.				Construction and Mining		
				Truck- Mounted Conveyors: Machine such as a chassis mounted concrete pump with a conveyor used to pump concrete through pipes for the construction industry.				Construction and Mining		
59	8426 - Ships' derricks; cranes, including cable cranes; mobile lifting frames, straddle carriers and works trucks fitted with a crane		842620 -- Tower Cranes	The tower crane is a fixed crane that is mounted on-site. It is a vertical metallic structure having a horizontal boom that can turn over an angle up to 360°.	Tower crane: 		1,596,286,425	Construction	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers equipment that is not individually serialised.
60	8426 - Ships' derricks; cranes, including cable cranes; mobile lifting frames, straddle carriers and works trucks fitted with a crane	Other machinery	842699 -- Other	Includes i) the space saver crane is a shop crane, made of steel, capable of lifting up to two tons by means of a hydraulic lifting cylinder and ii) mobile cranes that will operate on tracks within a shipyard and will be used to lift heavy objects.	Hydraulic truck crane (check if applicable): 		814,403,638	Construction	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers equipment commonly used outside the MAC industries. This code does not cover parts (parts for machinery 8425-8430 are covered by 8431).
61	8429 - Self-propelled bulldozers, angledozers, graders, levelers, scrapers, mechanical shovels, excavators, shovel loaders, tamping machines and road rollers		842940 -- Tamping machines and road rollers	A tamping machine or ballast tamper is a machine used to pack (or tamp) the track ballast under railway tracks to make the tracks more durable. A road roller (sometimes called a roller-compactor, or just roller) is a compactor type engineering vehicle used to compact soil, gravel, concrete, or asphalt in the construction of roads and foundations, similar rollers are used also at landfills or in agriculture.	Tamping machine: 		2,058,615,491	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code was excluded by the Study Group because tamping machines are likely to be registerable under the Luxembourg Rail Protocol. This code does not cover parts (parts for machinery 8425-8430 are covered by 8431).

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62	8431 - Parts suitable for use solely or principally with the machinery of headings 8425 to 8430	Of machinery of heading 8426 [e.g. Ship's derricks, cranes, etc.], 8429 [e.g. Self-propelled bulldozers, angledozers, graders, etc.] or 8430 [e.g. Other moving, grading, leveling, etc.]:	843141 -- Buckets, shovels, grabs and grips	Includes cutterheads and buckets that may be attached to backhoes.	Bulldozer shovel: 		2,243,712,707	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers low value parts which may not be individually serialised. This code covers parts commonly used in equipment outside the MAC industries.
63	8431 - Parts suitable for use solely or principally with the machinery of headings 8425 to 8430	Of machinery of heading 8426 [e.g. Ship's derricks, cranes, etc.], 8429 [e.g. Self-propelled bulldozers, angledozers, graders, etc.] or 8430 [e.g. Other moving, grading, leveling, etc.]:	843142 -- Bulldozer or angledozer blades	Includes blades that belong to the class or kind that are principally used on bulldozers and angledozers.	Bulldozer blades: 		229,466,961	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers low value parts which may not be individually serialised.
64	8431 - Parts suitable for use solely or principally with the machinery of headings 8425 to 8430	Of machinery of heading 8426 [e.g. Ship's derricks, cranes, etc.], 8429 [e.g. Self-propelled bulldozers, angledozers, graders, etc.] or 8430 [e.g. Other moving, grading, leveling, etc.]:	843143 -- Parts for boring or sinking machinery of subheading 8430.41 or 8430.49	Includes i) drill collar bars that may be used principally on offshore drilling platforms and ii) non-magnetic drill collars that are solely or principally used on oil and gas well drilling machinery.	Drill collar bars: 		20,902,527,143	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers low value parts which may not be individually serialised.
65	8431 - Parts suitable for use solely or principally with the machinery of headings 8425 to 8430	Of machinery of heading 8426 [e.g. Ship's derricks, cranes, etc.], 8429 [e.g. Self-propelled bulldozers, angledozers, graders, etc.] or 8430 [e.g. Other moving, grading, leveling, etc.]:	843149 -- Other	Includes i) straddle carriers that are self-propelled machines used in container terminals to load, unload, stack, and transport containers over short distances and ii) jarret shock absorbers that absorb energy in order to reduce shock forces, thus protecting equipment against excessive impact loads.	Straddle carrier: 		24,697,891,394	Agriculture and Construction	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers low value parts which may not be individually serialised. This code covers parts commonly used in equipment outside the MAC industries.

LIST OF HS CODES DEEMED UNSUITABLE FOR INCLUSION IN THE ANNEXES TO THE MAC PROTOCOL - LAST UPDATED JUNE 2018										
No.	4 Digit HS Code and Name	Additional sub-grouping	6 Digit HS Code and Name	Examples	Images	Approximate Range of List Prices for New Equipment (\$USD)	Comtrade Statistics (\$USD)	Category	Process for submission of code	Study Group's rationale for considering code to be "unsuitable"
66	8432 - Agricultural, horticultural or forestry machinery for soil preparation or cultivation; lawn or sports-ground rollers	Harrows, scarifiers, cultivators, weeders and hoes	843229 -- Other	It includes a cultivator that may be used for breaking sod, preparing seed beds and for cultivating gardens and flower beds.	Weeder: 	30,000 - 100,000 (cultivators)	1,300,834,313	Agriculture	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers predominantly low value equipment. This code does not cover parts (parts for 8432 is covered by 843290).
67	8432 - Agricultural, horticultural or forestry machinery for soil preparation or cultivation; lawn or sports-ground rollers		843280 -- Other machinery	It includes tow behind spreaders, aerators, and dethatchers used in agriculture.	Dethatcher: 		1,064,251,801	Agriculture	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers predominantly low value equipment. This code does not cover parts (parts for 8432 is covered by 843290).
68	8433 - Harvesting or threshing machinery, including straw or fodder balers; grass or hay mowers; machines for cleaning, sorting or grading eggs, fruit or other agricultural produce, other than machinery of heading 8437		843320 -- Other mowers, including cutter bars for tractor mounting	It includes i) cutter bars for tractor mounting and ii) heavy duty mowers principally designed to cut grass, stubble and other growth.	Cutting bar for tractor mounting: 	15,000 - 35,000 (Cutter) 9,000 - 75,000 (Mowers/Mower-Conditioner)	1,334,494,359	Agriculture	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers predominantly low value equipment. This code does not cover parts (parts for 8433 is covered by 843390).
69	8433 - Harvesting or threshing machinery, including straw or fodder balers; grass or hay mowers; machines for cleaning, sorting or grading eggs, fruit or other agricultural produce, other than machinery of heading 8437	Other harvesting machinery; threshing machinery	843359 -- Other	It includes a tree shaking harvester that applies force to dislodge the tree's produce.	Tree shaking harvester: 		1,483,220,272	Agriculture	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers predominantly low value equipment. This code does not cover parts (parts for 8433 is covered by 843390).
70	8467 - Tools for working in the hand, pneumatic, hydraulic or with self-contained electric or non-electric motors	Pneumatic	846711 -- Rotary type (including combined rotary-percussion):	It includes a i) sanding system; ii) pneumatic die grinder kit; and iii) grinders, polishers and sanders suitable for metal working.	Pneumatic vane gearmotor: 		1,101,696,190	Agriculture, Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers predominantly low value equipment. This code covers equipment commonly used outside the MAC industries. This code does not cover parts (parts for 8467 is covered by 846792).
71	8467 - Tools for working in the hand, pneumatic, hydraulic or with self-contained electric or non-electric motors	Pneumatic	846719 -- Other	It includes i) an air nibbler which is a sheet metal cutting tool; ii) a spring blade that is used to affix drywall to light gauge steel; and iii) pruning tying machine used to tie bundled nursery stock such as fruit trees and grape vines.	Pruning machine: 		901,139,872	Agriculture	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers predominantly low value equipment. This code covers equipment commonly used outside the MAC industries. This code does not cover parts (parts for 8467 is covered by 846792).

LIST OF HS CODES DEEMED UNSUITABLE FOR INCLUSION IN THE ANNEXES TO THE MAC PROTOCOL - LAST UPDATED JUNE 2018										
No.	4 Digit HS Code and Name	Additional sub-grouping	6 Digit HS Code and Name	Examples	Images	Approximate Range of List Prices for New Equipment (\$USD)	Comtrade Statistics (\$USD)	Category	Process for submission of code	Study Group's rationale for considering code to be "unsuitable"
								Agriculture	Proposed by Working Group, deemed unsuitable by Study Group (2016)	
72	8474 - Machinery for sortings, screening, separating, washing, crushing, grinding, mixing or kneading earth, stone, ores or other mineral substances, in solid (including power or paste) for machinery for agglomerating, shaping or molding solid mineral fuels, ceramic paste, unhardened cements, plastering materials or other mineral products in powder or paste form; machines for forming foundry molds of sand.		847420 -- Crushing or grinding machines	It includes i) a crushing machine designed to reduce large rocks into smaller rocks, gravel, or rock dust and ii) a grinding machine that is a power tool used for grinding, which is a type of machining using an abrasive wheel as the cutting tool.	Stone crushing machine: 		3,824,830,389	Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers equipment commonly used outside the MAC industries. This code does not cover parts (parts for 8474 is covered by 847490).
				Hydraulic Crusher: Jaw Crusher: Ideal for mining, surface or underground application. Created to crush hardest materials: rock (hard & soft) gravel; recycling; industrial material, slag foundry waste.				Construction and Mining	Proposed by Working Group, deemed unsuitable by Study Group (2016)	
CHAPTER 87 - Vehicles other than railway or tramway rolling stock, and parts and accessories thereof										
73	8704 - Motor vehicles for the transport of goods	Other, with compression-ignition internal combustion piston engine (diesel or semi-diesel)	870423 -- G.V.W. exceeding 20 metric tons	It includes i) a cargo vehicle equipped with a hydraulically-operated lifting and lowering platform designed for the transport of heavy loads and ii) timberjack forestry forwarders are solely used for loading logs and hauling logs for short distances.	Timberjack forwarded: 		16,877,563,267	Agriculture	Proposed by Working Group, deemed unsuitable by Study Group (2016)	<ul style="list-style-type: none"> This code covers equipment commonly used outside the MAC industries. This code does not cover parts (parts for 8701-8705 are covered by 8708).



INTERNATIONAL INSTITUTE FOR THE UNIFICATION OF PRIVATE LAW
INSTITUT INTERNATIONAL POUR L'UNIFICATION DU DROIT PRIVE

The Secretary General a.i. • Le Secrétaire Général a.i.

Rome, 22 June 2018

UNIDROIT international consultation event

The scope of the future MAC Protocol to the Cape Town Convention

The International Institute for the Unification of Private Law (UNIDROIT), in partnership with the Commercial Law Centre of Harris Manchester College, is pleased to convene an international consultation event in relation to the future fourth Protocol to the Convention on International Interests in Mobile Equipment on Matters specific to Mining, Agricultural and Construction Equipment (the "[MAC Protocol](#)").

The event will be held at Harris Manchester College, University of Oxford on **Tuesday 11 September from 13:00 – 18:00**. A light lunch will be served at 13:00 and the event will begin at 13:30.

The MAC Protocol is a multilateral treaty currently under negotiation that will create an international legal framework for the financing of MAC equipment. Cheaper financing and access to modern MAC equipment will allow parties involved in the mining, agriculture and construction sectors to optimise their productivity and profitability.

At its recent 97th session (2 – 4 May 2018), the UNIDROIT Governing Council agreed that a Diplomatic Conference should be convened in 2019 to formally adopt the draft MAC Protocol. The exact date and location of the future Diplomatic Conference are yet to be finalised.

The Oxford international consultation event has been organised in advance of the Diplomatic Conference to provide States with an opportunity to discuss the scope of the future MAC Protocol, as established by the Harmonized Commodity and Coding System (HS). This event will consider the 42 HS codes currently contained in the draft MAC Protocol's annexes as well as other HS codes States may wish to propose adding to the annexes.

While focused on States, the consultation event will also bring together legal experts and private sector representatives to discuss the scope of the MAC Protocol. This event has been scheduled in conjunction with the [7th annual Cape Town Convention Academic Project Conference](#), which will be held in Oxford on 12 – 13 September. Participants at the MAC Protocol event are encouraged to also register for the Cape Town Conference [here](#).

The preliminary agenda for the consultation event is attached to this document. We would be further grateful if you could confirm your attendance **by 17 August 2018** by emailing the UNIDROIT Secretariat at a.chaunac@unidroit.org. Please be advised that this event will be conducted in English.

Professor Anna Veneziano
UNIDROIT Secretary-General a.i.



**The scope of the future MAC Protocol to the Cape Town Convention
UNIDROIT international consultation event**

11 September 2018

Harris Manchester College, University of Oxford

Preliminary Agenda

Co-Chairs: Ignacio Tirado (UNIDROIT Secretary-General)
Louise Gullifer (Harris Manchester College)

12:30 – 13:00	Registration
13:00 – 13:30	Light lunch provided by Harris Manchester College
13:30 – 13:45	Welcome from co-Chairs
13:45 – 14:05	Introduction to the Cape Town Convention <i>Sir Roy Goode, Author of the Official Commentaries to the Cape Town Convention</i>
14:05 – 14:25	Development of the MAC Protocol <i>Anna Veneziano, UNIDROIT Deputy Secretary-General</i>
14:25 – 14:50	Use of the Harmonized System to establish the scope of the MAC Protocol <i>William Brydie-Watson, UNIDROIT Legal Officer</i>
14:50 – 15:30	Question and Answer session
15:30 – 15:45	Coffee break
15:45 – 16:00	Comments from private sector <i>Marek Dubovec, MAC Working Group</i>
16:00 – 17:30	Comments from regional experts
17:30 – 17:45	Question and Answer session
17:45 – 18:00	Closing of the event by co-Chairs
18:15 – 19:00	Evening drinks hosted by Harris Manchester College