

Appendix L: Proposed Exclusions for Certain Solar Manufacturing Equipment

Exclusion Product Description
Silicon growth furnaces, including Czochralski crystal growth furnaces, designed for growing monocrystalline silicon ingots (boules) of a mass exceeding 700 kg, for use in solar wafer manufacturing (described in statistical reporting number 8486.10.0000).
Band saws designed for cutting or slicing cylindrical monocrystalline silicon ingots (boules) of a mass exceeding 700 kg into square or rectangular ingots (boules), for use in solar wafer manufacturing (described in statistical reporting number 8486.10.0000).
Machines designed to align and adhere monocrystalline silicon ingots (boules) of a mass exceeding 400 kg to plastic support boards on metal mounting plates to provide support during diamond wire sawing, for use in solar wafer manufacturing (described in statistical reporting number 8486.10.0000).
Diamond wire saws designed for cutting or slicing silicon ingots (boules) of a mass exceeding 400 kg into solar wafers of a thickness not exceeding 200 micrometers (described in statistical reporting number 8486.10.0000).
Wire guide roller machines, presented with diamond wire saws designed for slicing monocrystalline silicon ingots (boules) of a mass exceeding 400 kg into solar wafers of a thickness not exceeding 200 micrometers, all of the foregoing for use in solar wafer manufacturing (described in statistical reporting number 8486.10.0000).
Coolant fluid recycling machines, presented with diamond wire saws designed for slicing monocrystalline silicon ingots (boules) of a mass exceeding 400 kg into solar wafers of a thickness not exceeding 200 micrometers, all of the foregoing for use in solar wafer manufacturing (described in statistical reporting number 8486.10.0000).
Degumming machines designed to remove adhesives from solar wafers (described in statistical reporting number 8486.10.0000).
Texturing and cleaning machines designed to repair, clean, and texture the solar wafer substrate, whether or not containing automation equipment for transferring solar wafers from one process station to the next, for use in solar wafer manufacturing (described in statistical reporting number 8486.20.0000).
Thermal diffusion quartz-tube furnaces and boat loading machines, designed to diffuse dopant impurities into square or rectangular silicon wafers, for use in solar cell manufacturing (described in statistical reporting number 8486.20.0000).
Plasma enhanced chemical vapor deposition machines designed to deposit amorphous or nanocrystalline layers on one or both surfaces of a solar wafer, whether or not containing automation equipment for transferring solar wafers from one process station to the next, for use in solar cell manufacturing (described in statistical reporting number 8486.20.0000).
Physical vapor deposition (PVD) machines, designed to deposit a thin film of transparent conducting oxide on one or both surfaces of a solar wafer, whether or not containing automation equipment for transferring solar wafers from one process station to the next, for use in solar cell manufacturing (described in statistical reporting number 8486.20.0000).

Exclusion Product Description
Screen printing line machines, including sintering furnaces for printing conducting contacts on both surfaces of a solar wafer, whether or not containing automation equipment for transferring solar wafers from one process station to the next, and whether or not containing equipment for solar cell testing, for use in solar cell manufacturing (described in statistical reporting number 8486.20.0000).
Cell interconnection machines designed to electrically solder solar cells to each other to form a complete electrical circuit, for use in solar module manufacturing (described in statistical reporting number 8486.20.0000).
Module encapsulant preparation machines designed for encapsulant cutting and placement, butyl dispensing equipment, and equipment for the transport of encapsulant materials, all the foregoing for use in solar module manufacturing (described in statistical reporting number 8486.20.0000).
Machines designed to laminate an interconnected cell string and to attach junction boxes, all the foregoing for use in solar module manufacturing (described in statistical reporting number 8486.20.0000).
Frame attachment machines designed for attaching metal frames to the perimeter or rear surface of solar modules (described in statistical reporting number 8486.20.0000).
Machines designed for transporting polysilicon material to growth furnaces and machines designed for transporting monocrystalline ingots (boules) and wafers throughout the solar wafer manufacturing process, including machines for loading or unloading solar wafers during the diamond wire slicing process (described in statistical reporting number 8486.40.0030).
Machines designed for lifting, handling, loading, or unloading of solar wafers of a thickness not exceeding 200 micrometers, for use in solar wafer manufacturing (described in statistical reporting number 8486.40.0030).
Machines designed for lifting, handling, loading, or unloading in the assembly of solar modules (described in statistical reporting number 8486.40.0030).