FSC 3405— Saws and Filing Machines

Includes: Cutoff Machines; Saw Blade Dressing Machines; Retoothing Machines; Saw Setting Machine; Power Hack Saw; Retoothing Machine; Band Saw Wheel Tire; Metal Cutting Band Saw; Saw Filing Machine; Blade Insert; Roller Adjuster; Saw Guide Insert; Saw Setting Machine; Saw Circular Blade; Abrasive Cutoff Machine; Saw Cartridge Seal Kit

FSC 3408- Machining Centers & Way -Type Machines

Includes Manual and CNC: The following definitions apply to 'machining centers' and "way-type machines".

Machining Center refers to multipurpose numerically controlled machine tools for the
complete and automatic machining of parts requiring multiple operations such as
milling, drilling, tapping, boring and reaming, having an intricate tool storage device,
and an intricate means for positioning various faces of the work piece. It must have
facilities for automatic interchanging of varied cutting tools between successive
operations.

Excluded from this class are multipurpose numerically controlled machine tools, such as Boring-Drill Milling Machines, which require the use of an attachment or accessory for tool storage and/or to position the various faces of a work piece. These types of equipment are classified in other appropriate classes within group 34.

• Way-Type Machine refers to a special machine tool of station type design consisting of individually mounted self-contained machine units and facilities for indexing the work piece to each station in a predetermined sequence. The machining unit(s) may be disassembled and rearranged to accommodate different work piece configurations. The machine can perform single or multiple operations on the work piece simultaneously or in sequence to each station.

FSC 3410— Electric and Ultrasonic Erosion Machines

Includes: Electrical Discharge Machines (EDM); Electrolytic Grinding Machines; Electrochemical Etcher; Van Tube Electrode; Spark Eroder; Electric Polisher Etcher; Stencil Paper; Neutra cleaner; Electrolyte Etcher.

FSC 3411 — Boring Machines

Includes Manual and CNC: Electrochemical Etcher; Van Tube Electrode; Spark Eroder; Electric Polisher Etcher; Stencil Paper; Neutra cleaner; Electrolyte Etcher.

FSC 3412- Broaching Machines

Includes Manual and CNC: Broaching Machine; Vertical; Horizontal; with Pneumatic, Hydraulic or Mechanical Drives; Single or Dual Ram; Push or Pull Type.

FSC 3413— Drilling and Tapping Machines

Includes Manual and CNC: Multiple Spindle Drilling-Tapping Machines; Upright Drilling Machine; Radial Drilling Machine; Tapping Machine Vertical; Drill Press Assembly; Drill Press Spindle; Milling Spindle Quill; Spindle Pulley; Router Attachment Morse Taper Spindle; Spindle Jacobs Tape; Spline; Spindle and Bearing; Drill Quill Assembly; Quill Drilling Machine.

Excludes: Way-Type Machines.

FSC 3414 – Gear Cutting and Finishing Machines

Includes Manual and CNC: Helical; Herringbone; Bevel; Planetary; Worm; Double Enveloping Worm; Epicyclical; Induction Hardening; Involute Formed Type; Straight Tooth; Head and Finish Cutting.

FSC 3415 – Grinding Machines

Includes Manual and CNC: Grinding Machine UT, EN, SA, and DR; Grinding and Buffing; Surface Grinder; Punch Die Grinder; Tool Grinder; Grinding Eye Shield; Pneumatic Cap Grinder; Ice Skate Sharpener; Grinding Machine for Mowers; Post Tool Grinder (Hager Assembly); Wheel Guard Grinder; Grinding Machine for High-Speed Rotor Blades; Outer Flange Wheel Grinder; Combo Wet/Dry grinder with built in collector; Bench Grinder Tool Rest.

Excludes: Electrolytic Grinding Machines.

FSC 3416 – Lathes

Includes Manual and CNC: Speed Lathes; slant bed/vertical Metal Spinning Lathes; Cartridge Case; Shell Lathes; Lathe Fixture; Bench Engine Lathe; Jeweler's Lathe; Floor Standard Duty Engine Lathe; tool room lathes Wiper Felt Lathe; Collet Sets; Head Drill; Lathe Exhaust Unit; Spacing Collar; Belt Guard; Screw Machine; Turning Head; Wiper Lathe; Oil Pump Eccentric; Carriage Wiper.

FSC 3417 – Milling Machines

Includes: Manual and CNC Pantograph Engraving Machine; Engraving Cutter; Beveling Edge Machine; Diamond Engraver; Diamond Tip Cutter; Engraving Cutter Bit and Holder; Vertical Milling Machine; Horizontal Milling Machine; Tool Room Milling machines Aluminum Engraving Sheet; Milling Taper; Tag Engraving Kit; Engraving Jig; Spindle End Mill; Chip Removal System.

FSC 3418 – Planers and Shapers

Includes: Manual and CNC Combination Shaper-Planers. **Excludes:** Gear Shapers; Planer Type Milling Machines.

FSC 3419 - Machine Tools, Miscellaneous

Includes: Manual and CNC Gun Rifling Machines; thread rolling tube benders, end finishers, flare End Finishing

FSC 3422 - Rolling Mills and Drawing Machines

Includes Manual and CNC: Slip Roll; Rolling Mill Machine; Roll Shaft; Bearing Retainer; Feed Roll Box; Block Tie Pin; Slide Guide; Cradle Roll Chock; Connection Screw; End Plate; Detent Plunger; Side Guide; Edger Roll; Upper Roll Coil; Gate Shoe; Hydraulic Plunger; Spindle Expansion Block.

FSC 3424 – Metal Heat Treating and Non-Thermal Treating Equipment

Includes Manual and CNC: Hardening, Annealing, Tempering, Normalizing, Cyaniding and Carbonizing Equipment; ovens and Furnaces. Flue Welding, Non-Thermal Stress Relieving Systems shot peening.

FSC 3426 – Metal Finishing Equipment

Includes Manual and CNC: Galvanizing, Tinning, Oiling, Pickling; Electroplating and Anodizing Equipment abrasive blast booths, paint booths.

FSC 3431 - Electric Arc Welding Equipment

Includes Manual and CNC: Gas Shielded Arc Welding Machines; Arc Bonding Machines; Semi-Automatic and automatic Arc Welding Machines. Saw blade welding machines. MIG and TIG machines

Excludes consumables as in: Welding rods, wire spools, and Associated Equipment such as: Flux Recovery Machines; Flux Dispensers; Tacker Panels; Welding Panels.

FSC 3432 - Electric Resistance Welding Equipment

Includes Manual and CNC: Electric Resistance Brazing Machines; Band Saw Braziers; Stored Energy Resistance Welding Machines and laser welders.

Excludes: Electric Induction Brazing and Soldering Machines.

FSC 3433 - Gas Welding, Heat Cutting, and Metalizing Equipment

Includes manual and CNC: Metal Spray Guns; Arc Cutting Machines; Torches and Tips; Gas Brazing Machines; Flame Cutting Machines; Vacuum Metallizers; Spark Discharge Metallizers, Plasma and laser cutters. oxyfuel welders and cutters.

Excludes consumables as in Welding rods and wire spools, supplies for Disintegrating Machines.

FSC 3436 - Welding Positioners and Manipulators

Includes Manual and CNC: Welding Tables and rotary positioners.

FSC 3438 - Miscellaneous Welding Equipment

Includes: Thermal Welding Equipment; Flux Recovery Machines; Flux Dispensers; Arc Converters; Welding Panels.

FSC 3439 Miscellaneous Welding, Soldering, and Brazing Supplies and Accessories

Includes: Soldering Irons; Welding Electrodes and Rods; wire spools, Brazing Fluxes; Soldering Fluxes; Solder.

FSC 3441 – Bending and Forming Machines

Includes Manual and CNC: Mechanical or Hydraulic wire and Metal Ribbon Forming Machines, tubing and pipe bending machines, brake presses,

FSC 3442 – Hydraulic and Pneumatic Presses, Power Driven

Includes Manual and CNC: Metal Powder Compacting presses, Composite/bonded metal, bladder presses

FSC 3443 – Mechanical Presses, Power Driven

Includes Manual and CNC: Metal Powder Compacting presses.

FSC 3444 – Manual Presses

Includes: Arbor, Straightening, Forcing and Assembly Presses.

FSC 3445 – Punching and Shearing Machines

Includes Manual and CNC: Iron workers, shearing machine, Thin; Shear Notching Machine; Shear Machine Blade; Punching and Shearing Machine; Adapter Arbor Hole; Shearing Machine, Mechanical; Lower Blade; Upper Blade; Bar cutter Knife; Punch Notch cutter; Die Notch cutter; Coper Punch; Slide Blade Set; Table Blade; Nibbling Machine; Punching Machine; Shear Cylinder; Movable Blade; Upper Chisel Blade; Upper Turret; Upper Notching Blade; Shear Hydraulic; Gibb Shear Hydraulic; Plain Bearing Die Set.

FSC 3446 – Forging Machinery and Hammers

Includes: Arbor, Straightening, Forcing and Assembly Presses.

FSC 3447 – Wire and Metal Ribbon Forming Machines

Excludes: Roll Forming Machines.

FSC 3448 – Riveting Machines

Excludes: Power Driven Hand Riveting Machines.

FSC 3449 - Miscellaneous Secondary Metal Forming and Cutting Machines

Includes Manual and CNC: Metal Spinning Lathes, water jets,

FSC 3450 - Machine Tools, Portable

Includes: Portable Abrasive Cutting Machines; Portable Drilling Machines, Portable Slotters and Shapers portable Plasma cutting machines

Excludes: Stationary Type Machine Tools mounted on portable devices such as wheel or leg type stands.

FSC 3455 - Cutting Tools for Machine Tools

Includes: Broaches; Files; Milling Cutters; shell mills, all Category tool holders Reamers; Saws. **Excludes:** Flame Cutting Tools.

FSC 3456 - Cutting and Forming Tools for Secondary Metalworking Machinery

FSC 3460 - Machine Tool Accessories

Excludes: Abrasive Wheels, Cones, and other Abrasive Attachments for use only on Hand Held Power Tools.

FSC 3461 - Accessories for Secondary Metalworking Machinery

Excludes: Parts Feeders.

FSC 3465 - Production Jigs, Fixtures, and Templates

NOTE: This class includes jigs, fixtures, and templates used in conjunction with the metal-working machinery classified in group 34. Jigs, fixtures, and templates used in conjunction with maintenance and repair shop specialized equipment are classified in group 49.

FSC 3470 - Machine Shop Sets, Kits, and Outfits

Includes: Parallel, Tie down block's rods and bars.