

## **Federal Supply Class (FSC) — 3400 Metalworking Machinery**

### **FSC 3405 – Saws and Filing Machines**

**Includes:** Cutoff Machines; Saw Blade Dressing Machines; Retooling Machines; Saw Setting Machine; Power Hack Saw; Retooling 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**

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 is capable of performing 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; Electrolytic Grinding Machines; Electrochemical Etcher; Van Tube Electrode; Spark Eroder; Electric Polisher Etcher; Stencil Paper; Neutracleaner; Electrolyte Etcher.

### **FSC 3411 – Boring Machines**

**Includes:** Electrochemical Etcher; Van Tube Electrode; Spark Eroder; Electric Polisher Etcher; Stencil Paper; Neutracleaner; Electrolyte Etcher.

### **FSC 3412 – Broaching Machines**

**Includes:** Broaching Machine; Vertical; Horizontal; with Pneumatic, Hydraulic, or Mechanical Drives; Single or Dual Rams; Push or Pull Type.

### **FSC 3413 – Drilling and Tapping Machines**

**Includes:** 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:** 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:** 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:** Speed Lathes; Metal Spinning Lathes; Cartridge Case; Shell Lathes; Lathe Fixture; Bench Engine Lathe; Jeweler's Lathe; Floor Standard Duty Engine Lathe; 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:** Pantograph Engraving Machine; Engraving Cutter; Beveling Edge Machine; Diamond Engraver; Diamond Tip Cutter; Engraving Cutter Bit and Holder; Vertical Milling Machine; Horizontal Milling Machine; Aluminum Engraving Sheet; Milling Taper; Tag Engraving Kit; Engraving Jig; Spindle End Mill; Chip Removal System.

### **FSC 3418 – Planers and Shapers**

**Includes:** Combination Shaper-Planers.

**Excludes:** Gear Shapers; Planer Type Milling Machines.

### **FSC 3419 – Machine Tools, Miscellaneous**

**Includes:** Gun Rifling Machines; Speed Lathes.

### **FSC 3422 – Rolling Mills and Drawing Machines**

**Includes:** 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:** Hardening, Annealing, Tempering, Normalizing, Cyaniding and Carbonizing Equipment; and, Furnaces. Flue Welding, Non-Thermal Stress Relieving Systems.

### **FSC 3426 – Metal Finishing Equipment**

**Includes:** Galvanizing, Tinning, Oiling, Pickling; Electroplating and Anodizing Equipment.

### **FSC 3431 - Electric Arc Welding Equipment**

**Includes:** Gas Shielded Arc Welding Machines; Arc Bonding Machines; Semi-Automatic and automatic Arc Welding Machines.

**Excludes:** Welding Supplies, and Associated Equipment such as: Flux Recovery Machines; Flux Dispensers; Tacker Panels; Welding Panels.

**FSC 3432 - Electric Resistance Welding Equipment**

**Includes:** Electric Resistance Brazing Machines; Band Saw Brazers; Stored Energy Resistance Welding Machines.

**Excludes:** Electric Induction Brazing and Soldering Machines.

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

**Includes:** Metal Spray Guns; Arc Cutting Machines; Torches and Tips; Gas Brazing Machines; Flame Cutting Machines; Vacuum Metalizers; Spark Discharge Metalizers.

**Excludes:** Welding Supplies; Disintegrating Machines.

**FSC 3436 - Welding Positioners and Manipulators**

**Includes:** Welding Tables.

**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; Brazing Fluxes; Soldering Fluxes; Solder.

**FSC 3441 – Bending and Forming Machines**

**Excludes:** Wire and Metal Ribbon Forming Machines.

**FSC 3442 – Hydraulic and Pneumatic Presses, Power Driven**

**Includes:** Metal Powder Compacting presses.

**FSC 3443 – Mechanical Presses, Power Driven**

**Includes:** Metal Powder Compacting presses.

**FSC 3444 – Manual Presses**

**Includes:** Arbor, Straightening, Forcing and Assembly Presses.

**FSC 3445 – Punching and Shearing Machines**

**Includes:** Shearing Machine, Thin; Shear Notching Machine; Shear Machine Blade; Punching and Shearing Machine; Adapter Arbor Hole; Shearing Machine, Mechanical; Lower Blade; Upper Blade; Barcutter Knife; Punch Notcher; Die Notcher; 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:** Metal Spinning Lathes.

**FSC 3450 - Machine Tools, Portable**

**Includes:** Portable Abrasive Cutting Machines; Portable Drilling Machines, Portable Slotters and Shapers.

**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; 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**