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（2020版）

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A02.06电工电器和电子元件冲压件 Electronics & Electrical Appliances

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A01.18燃气用具冲压件 Gas Appliances

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A02.20建筑装修材料 Building & Decorating Materials

A02.21航空、航天及宇航设备冲压件 Aviation/Astronautic and Astronavigation Equipment

A02.22能源与电力设备冲压件 Power and Electricity Equipment

A02.23轻工、包装、纺织和印刷机械冲压件 Light Industry Machinery and Packing, Textile and Printing Machine

A02.24服装鞋帽金属件Clothing, Shoes and Hats

A02.25 箱包家具 Case Bags & Furniture

A02.26环卫设备和配件Environmental Sanitation

A02.27食品机械冲压件 Food Machinery

A02.28锁具Lockset

A02.29医疗器械、制药机械及药品包装机械冲压件 Medical Equipment，Pharmaceutical Machine and Drugs Packaging Machinery

A02.30机床工具冲压件 Machine Tool

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A02.32特种材料冲压件 Special Materials Pressing

A02.33复合材料冲压件 Combined Materials Pressing

A02.34铝合金冲压 Al-alloy Stamping

A02.35不锈钢制品 Stainless Steel Stamping

A02.36 精冲件 Fine Blanking

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*A03.00钣金零部件 Sheet Metal Parts/Fabricating*

A03.01轿车与新能源车钣金制作件 Car & New Energy Vehicle r

A03.02商用车（卡车、客车及农用车等）钣金制作件 Commercial Vehicle

A03.03摩托车和自行车钣金制作件 Motorcycle & Bicycle

A03.04农林牧渔业机械钣金制作件 Agricultural, Forestry, Animal-breeding and Fishery Machinery

A03.05电工电器和电子元件钣金制作件 Electronics & Electrical Appliances

A02.06家用电器、厨具及餐具 Household Appliances, kitchenware & Tableware

A03.07厨卫设备钣金制作件 Kitchen & Toilet Equipment

A03.08烹饪炊具 Cooking Utensils

A03.09计算机、网络及通讯设备钣金制作件 Computer, Internet and Communication

A03.10工程、矿山及起重运输机械钣金制作件 Construction，Mine，Lifting and Transportation Machinery

A03.11军工与国防装备钣金制作件 Military/Defense Industry

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A03.16吸排抽油烟机钣金制作件 Range Hood

A03.17建筑装修材料钣金制作件 Building & Decorating Materials

A03.18航空、航天及宇航设备钣金制作件 Aviation/Astronautic and Astronavigation Equipment

A03.19能源与电力设备钣金制作件 Power and Electricity Equipment

A03.20轻工、包装、纺织和印刷机械钣金制作件 Light Industry Machinery and Packing, Textile and Printing

A03.21服装鞋帽金属件Clothing, Shoes and Hats

A03.22 箱包家具 Case Bags & Furnature

A03.23环卫设备和配件Environmental Sanitation

A03.24食品机械钣金制作件 Food Machinery

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A03.26锁具Lockset

A03.27医疗器械、制药机械及药品包装机械钣金制作件 Medical Equipment，Pharmaceutical Machine and Drugs Packaging Machinery

A03.28机床工具钣金制作件 Machine Tool

A03.29船舶与海洋设备钣金制作件 Shipbuilding and Marine Equipment

A03.30小五金件 Hardware Stampings

A03.31不锈钢制品

A03.32玩具 Toy

A03.33电池 Battery

A03.34机场、车站和码头设备 Airport，Railway Station and Seaport Equipment

A03.35金融机售货设备Financial Equipment & Vending Machine

A03.36 ETC系统 ETC Machine

A03.37超市设备Super Market Equipment

A03.38机箱机柜 Cabinet & Box

A03.39卷制管材Tube/Pipe Rolled

A03.40封头旋压成形 Head Spinning

*A04.00零部件其他 Others in Parts*

1. **锻造装备与技术 Forging Machine & Technology**

*B01.00锻造装备及技术Forging Machine & Technology*

B01.01热模锻压力机与机械压力机 Hot Forging Press and Mechanical Forging Press

B01.02冷锻压力机与温锻压力机 Cold Forging Press and Warm Forging Press

B01.03机械挤压机 Mechanical Extrusion Press

B01.04双盘摩擦螺旋压力机与液压螺旋压力机 Friction Screw Press and Hydraulic Screw Press

B01.05电动螺旋压力机（直驱式螺旋压力机）Direct-Driven Screw Press

B01.06高能螺旋压力机（离合器式螺旋压力机）Clutch Type Screw Press

B01.07液压机、模锻液压机及由锻液压机 Hydraulic Press, Hydraulic Closed-die Forging Press & Hydraulic Open-die Forging Press

B01.08液压挤压机与粉末冶金制品液压机 Hydraulic Extrusion Press and Hydraulic Press for Powder Metallurgy Product

B01.09 卧式与立式液压挤管压力机 Hydraulic Horizontal & Vertical Extrusion Press

B01.10多向模锻压力机 Multi-way Closed-die Forging Press

B01.11液态模锻压力机及曲轴专用成形液压机 Liquid State Closed-die Forging Press and Crankshaft Forming Press(NTR press)

B01.12等温锻造液压机Hydraulic Isothermal Forging Press

B01.13液压对击锤与液气对击锤 Hydraulic Counter-blow Hammer and Pneumatic-hydraulic Counter-blow Hammer

B01.14伺服锻造压力机 Servo Forging Press

B01.15重力（落）锤锻 (夹杆锤、皮带锤和夹板锤) Drop Forging Hammer

B01.16 空气模锻锤与空气自由锻锤 Air Closed-die Forging Hammer and Open-die Forging Hammer

B01.17 全液压锤与液气锤 Hydraulic Hammer and Pneumatic-hydraulic Hammer

B01.18 冷镦机、高速热镦锻机及高速冷镦锻机 Cold Former， High-speed Hot Former and Cold Forming

B01.19 辗环机、旋压机及旋锻机 Ring Rolling Press, Spinning Forging Press and Spinning Machine

B01.20 平锻机、辊锻机、斜轧机及楔横轧机 Upsetter, Rolling Machine, Skew Rolling Machine and Wedge Rolling Press

B01.21 径向锻造机（精锻机）及摆辗机 Radial Forging Press and Orbital Forging Press

B01.22 电镦机Electricity Upsetter

B01.23 搓丝（滚丝）机Thread Rolling Machine, Fastener Forging machine

B01.24 拉拔设备 Drawing Forming Machine

B01.25 弹簧成形设备 Spring Forming Machine

B01.26 增材制造-3D打印 Additive Manufacturing (3D Printer)

*B02.00锻造辅助设备及技术 Auxiliaries and Technology*

B02.01 棒料剪床、带锯床、高速圆盘锯床 Billet Shearing Machine, Band Saw Machine and High-speed Disc Saw Machine

B02.02 切边压力机、精压、校直机及精整压力机 Trimming Press, Coining、Straightening & Sizing Press

B02.03扭拐机、H型钢压力矫直机和管材压力矫直机 Twister Press, H-Steel Straightening Press and Tube & Pipe Straightening Press

B02.04 锻造用火焰切割 Flame Cutting Machine for Forging Production

B02.05 中频感应加热设备及上料设备 Induction Heater and Loader

B02.06 锻后冷却设备及剥皮机 After-forging Cooling System

B02.07 水除氧化皮机与润滑设备 Water Descaling System and Lubrication Device

B02.08 磷化皂化处理设备Phosphate-saponification Coating Machine

B02.09 快速换模系统与步进梁式自动送料机 Quick-Die Change System and Step Transfer Device

B02.10 喷（抛）丸清理设备与内应力消除设备 Blast Cleaning Machine and Relief Machine of Internal or Residual Stress

B02.11 锻件传输装置与系统 Forging Transfer Device or System

B02.12 锻造装取料机、有轨操作机、锻造机械手及无轨操作机 Forging Feeding & Loading Machine, Rail-bound Forging Manipulator and Movable Manipulator

B02.13 锻件打磨设备 Forging Grinding Machine

B02.14 锻件正火、退火、淬火、回火及调质热处理设备 Forging Normalizing, Annealing, Quenching, Tempering and Quenching & Tempering Equipment

B02.15 锻件淬火机床 Forging Hardening Machine

B02.16 设备基础与液压系统 Foundation Element and Hydraulic System

B02.17 锻件存储与搬运设备 Forging Storage & Handling Machine

*B03.00工业炉/窑和节能技术 Furnace and Energy Saving Technology*

B03.01 燃气、燃油锻造加热炉窑与热处理炉窑 Gas(Coal Gas), Fuel Forging Furnace and Heat-treatment Furnace

B03.02 烧嘴、热电偶及耐火材料 Burner, Thermocouple and Refractory

B03.03 燃气、油与电炉电控系统设备 Control System for Gas(Coal Gas), Fuel and Electric Furnace

B03.04 节能和排烟除尘设备 Energy Saving and Smoke Emission & Dust-removal Equipment

B03.05 炉温、压力及流量测量、显示与记录仪 Measurement Device, Display and Record Machine for Furnace Temperature, Pressure and Fuel Flow Rate

B03.06 燃气、燃油锻造炉窑用减速机、鼓风机及送风机等机械 Gear Box, Air-blower and Forced-draft Blower for Gas( Coal Gas) and Fuel Forging Furnace

*B04.00锻造检测检验设备与技术 Forging Test/Inspection Equipment and Technology*

B04.01 金相显微镜、电子扫描显微镜及深孔内窥镜 Metallurgical Microscope, SEM (Scanning Electron Microscope and Deep-hole Endoscopy)

B04.02 机械性能试验机及记录与数据处理设备 Mechanical Property Test Machine, Recorder and Dada Processing

B04.03 硬度检测 Hardness Test

B04.04 锻件尺寸检测设备与自动检测线 Forging Size Measurement and Automatic Test/Inspection System

B04.05 温度激光检测 Laser Temperature Detector

B04.06 着色检验装置、荧光磁粉探伤机、超声波探伤及磁力探伤机 Dye Inspection Device, Fluorescent Magnetic Flaw Detector, Ultrasonic Flaw Detector & Magnetic Flaw Detector

B04.07 γ射线、渗透探伤机、X射线与同位素检测γ-ray, Penetration Flaw Detector and X-ray & Isotope Detector

B04.08 疲劳与蠕变试验机 Fatigue and Creep Text Machine

B04.09 三坐标测量设备 3D Measurement System

B04.10 卡尺、千分尺等尺寸与位置测量设备 Caliper, Micrometer and Other Measuring Equipment

*B05.00 锻造装备与技术其他 Others in Forging Machine & Technology*

1. **冲压装备与技术 Stamping Equipment & Technology**

*C01.00冲压/拉深成形装备及技术Pressing/Drawing Equipment &Technology*

C01.01 开式可倾机械压力机与半闭式固定台压力机 C-type Tilting Press and Fixed Bed Press

C01.02 开式单点机械压力机、开式双点机械压力机及冲床 C-type Single-point and Two-Point Press

C01.03 闭式单点机械压力机、闭式双点机械压力机及机械压力机 Single-point and Two-point Mechanical Prress

C01.04 开式单点多连杆压力机、开式双点多连杆压力机及双点高性能压力机 C-type Single-point and Multi-rod Press and Two-point Multi-rod Press

C01.05 开式高速压力机、开式高速精密压力机及超高速精密压力机C-type High-speed Press, C-type Precision High-speed Press & Super-speed Press

C01.06 闭式双点、三点、四点及肘节式高速精密压力机Two-point, three-point, Four-point and Toggle Press

C01.07 闭式单动、双动压力机 Single and Double Action Press

C01.08 闭式单点单动、双点单动、四点单动、四点双动及双点多连杆、四点多连杆压力机 One-point and One Action, Two-point and one Action, Four Point and One Action and Four-Point and Two Action Press and Two-point and Multi Rod, Four-point and Multi Rod Press

C01.09 多工位压力机与精密冲裁压力机 Multi-station Press and Precision Punch Press

C01.10 伺服压力机与专用压力机 Servo Press and Special Press

C01.11 精冲压力机与深拉深压力机 Fine Blanking Press and Deep Drawing Press

C01.12 闭式双点高速精密冲压线 Precision High-Speed Two-point Press

C01.13 空调翅片高速冲压自动线Automatic High-speed Stamping Press Line for the Fins of Air-conditioner

C01.14 级进模冲压生产线 Progressive Stamping Line

C01.15 多工位压力机与多工位自动冲压生产线 Mult-station Press and Line

C01.16 制造罐压力机与机器人自动冲压生产线 Can Forming Press and Robot Pressing Line

C10.17 单臂快速柔性冲压生产线 Flexible and Speed Single-Arm Pressing Line

C01.18 双臂高速柔性冲压生产线 Flexible and High-speed Double-Arm Pressing Line

C01.19 热冲压成形设备与热冲压加热设备 Hot Stamping Press and Heating Equipment

C01.20复合材料成形机械压力机 Combined-Material Forming Press

*C02.00液压成形装备及技术Hydraulic Press and Technology*

C02.01 手动液压机与台式液压机 Manual Hydraulic Press and Hydraulic Bench Press

C02.02 单柱与双柱冲裁、拉深、校正与压装液压机 Hydraulic Single, Two Column Punch, Drawing, Calibrating and Press Fitting Press

C02.03 龙门移动式液压机与四柱上移式液压机Hydraulic Movable-Gantry-frame Press and Hydraulic Four-Column Push Press

C02.04 单动与双动冲裁、拉深液压机 Single-action and Two-action Punch, Drawing Press

C02.05 精密冲裁液压机与精冲液压机 Precision Hydraulic Pressing Press and Hydraulic Fine Blank Press

C02.06 切边液压机与金属打包液压机 Hydraulic Trimming Press and Hydraulic Packing Press

C02.07 汽车重梁压制液压机、金属压印液压机、轮轴压装液压机及模具研配液压机 Hydraulic Truck Beam Forming Press, Hydraulic Stamp or Emboss Press, Hydraulic Wheel-axle Assemble Press and Hydraulic Die Contacting Press

C02.08 车门包边液压机、汽车内饰件成形液压机、封头成形液压机及造船用移动回转压头框式液压机 Hydraulic Car’s Doors Bending Press Hydraulic Interior Trims Press, Hydraulic Container Head Forming Press and Hydraulic Moving-rotary-Head and Frame-type Press

C02.09 冷等静压、热等静压液压机、内高压成形液压机及高强钢板热成形液压机 Cold and Hot Hydraulic Static-pressure Press, Hydraulic Hydroforming Press and Hydraulic Hot Stamping Press

C02.10 数控伺服液压机、钢丝缠绕液压机及充液拉深液压机 Hydraulic Servo Press，Hydraulic Steel Winded Frame Press and Hydraulic Hydro-mechanical Deep Drawing Press

C02.11 单动与双动薄板冲压液压机生产线与船体板材成形数控液压机生产线 Hydraulic Single-action and Two-action Pressing Press Line and CNC Hydraulic Ship-building Body Parts Forming Press Line

C02.12 大型蒙皮拉深机、橡皮囊成形设备、渐进成形设备、电磁成形及多点成形设备 Hydraulic Aircraft Skin Stretch-forming Press, Hydraulic Rubber Diaphragm Forming Press, Hydraulic Incremental Forming Press, Hydraulic Electromagnetic Forming Press and Hydraulic Multi-point Forming Machine

C02.13 复合材料成形液压机、薄板波纹成形液压机及深拉深液压机 Hydraulic Combined-Material Forming Press, Hydraulic Corrugating Machine and Hydraulic Deep Drawing Press

C02.14 张拉捆扎液压机、冲锻液压机及超塑成形液压机 Hydraulic Stretching and Binding Press, Hydraulic Pressing and Forging Press and Hydraulic Super-plastic Forming Press

*C03.00 旋压与其他特种成形装备及技术 Spinning and Other Special Machine and Technology*

C03.01 普通旋压机Spinning Machine

C03.02 双轮变薄旋压机与三轮变薄旋压机 Two-Roll Spinning Machine and Three-Roll Spinning Machine

C03.03 封头旋压机与加热旋口机 Container Head Thinning Machine and Hot Necking Machine

C03.04 带轮与带齿旋压机、轮辐轮辋旋压机及油桶波纹旋压机 Belt Wheel and Teeth Spinning Machine, Spoke Rim Spinning Machine and Oil Drum Corrugated Spinning Machine

C03.05 热双辊增厚旋压机、折叠机及弯曲折边压力机 Hot Roll Thickening Spinning Press , Folding Press and Bending & End-folding Press

C03.06 薄板辊压成形机床、辊花机床、圆形垫片机及管头成形机Sheet Rolling Forming Machine, Roll Embossing Machine, Round Gasket Forming Machine and Tube/Pipe End-forming Machine

C03.07 辊压成形生产线与型材机组 Rolling Forming Line and Sections Forming Line

*C04.00 冲压辅助设备及技术*

C04.01 闭式单动落料压力机生产线 Single-action Blanking Line

C04.02 开卷纵剪生产线、开卷横剪生产线、开卷飞剪生产线及开卷落料线 Un-coiler and Steel Trip Lengthwise Shearer Line, Un-coiler and Steel Trip Cross Shearer Line, Un-coiler and Steel Trip Flying Shearer Line and Un-coiler and Blanking Line

C04.03 拉伸与矫平压力机和生产线 Drawing and Flattening Line

C04.04 冲压产品、板料及模具立体存储设备 Tridimensional Storehouse for Stampings, Sheet/Plate and Tools

C04.05 冲压抛丸设备与切边机 Blast Machine and Trimming Press for Stamping

C04.06 冲压件清洗设备、打磨设备 Cleaning and Grinding Machine for Stamping

C04.07高速冲上料（给料）系统 High-speed Feeding System

*C05.00 冲压装备与技术其他 Others in Stamping Equipment & Technology*

1. **钣金制作装备与技术 Sheet Metal/Fabricating Machine & Technology**

*D01.00薄板、管材、型材及线材成形设备及技术 Forming Machine and Technology for Sheet/Plate, Tube/Pipe, Sections/Shaped and Wire*

D01.01 型材弯曲机、型材卷弯机与折弯机Section Bending Machine and Sheet/Plate Bending Machine

D01.02 卷板机、型材板材冷（热）成形 Rolling Machine and Cold and Hot Sections Forming Machine

D01.03 数控砖塔冲床、自动冲槽机及数控液压冲剪复合机床 CNC Turret Press, Automatic Slot Punching Machine and CNC Hydraulic Punching-Shearing Press

D01.04 激光切割与成形复合机床、板材加工柔性制造单元和制造系统 Laser Cutting-forming Machine/ System and Flexible Sheet Metal Production Unit

D01.05 板料折弯剪切机 Bending-Shearing Machine

D01.06 拉形机和拉弯机Stretch Forming Press and Stretch Bending Machine

D01.07 型材和管砖孔机与端头成形机 Drilling Machine and End-forming Machine for Sections and Tube/Pipe

D01.08 弯管、弯形单元 Tube/Pipe Bending Unit

*D02.00切割技术及设备*

D02.01 激光切割机与等离子切割机 Laser Cutter and [Plasma Cutting](http://www.baidu.com/link?url=fIhtxqIsYmdWBT4GrehMSbiv8H7z8pVzGe78IVwqeKtJ_cQNqG23ubHWOUmtJKkuhwrJ5IvBgAiWtEgX7Mbg0Alk6jNVHFyq60n2lj6QBk6OOqgcXvBdjYcsLfrc2bLV) Machine

D02.02 火焰切割设备与水切割系统 Flame Cutting Machine and Water-jet Cutting Machine

D02.03 砂轮切割机和板料切割剪床Grinding Wheel Cutter and Shearing Machine

D02.04 型材和管材剪切机床 Cutter for Sections and Tube/Pipe

*D03.00板材表面处理技术*

D03.01 机械、化学剂电解表面处理 Surface Treatment by Mechanical and Chemical Way

D03.02 表面去氧化、浸涂、清理、清洗、蒸发、电刷及干燥设备 Surface De-oxidation, Coating, Conditioning, Cleaning, Evaporation, Brush and Drying Machine

D03.03 润滑、腐蚀、侵蚀、表面电解、镀锌、镀锡及电泳处理 Surface Treatment such as Lubrication, Corrosion, Erosion, Surface Electrolysis, Galvanizing, Tin Plating and Electrophoretic Treatment

D03.04 砂带磨床、容器磨床及抛光、磨削及抛丸（喷丸）处理 Abrasive Belt Grinder, Container Grinder and Polishing, Grinding and Shot Blasting

D03.05 静电喷粉设备、静电喷漆系统、火焰（激光）喷涂设备、电镀设备、烧结涂层设备及粉末回收设备 Electrostatic Powder Spraying Machine, Electrostatic Spraying-Coating System, Flame (Laser) Spraying- Coating Machine, Electroplating Machine, Sintering Equipment and Powder Recovery Unit

D03.06 扩散、扩散退火和强化处理 Diffusion, Diffusion Annealing and Strengthening Treatment

*D04.00 钣金制作装备与技术其他 Others in Sheet Metal/Fabricating Machine & Technology*

1. **模具与工装 Die & Tool**

*E01.00锻造模具 Forging Die*

E01.01热锻模具（含自由锻、胎膜锻）Hot Forging Die ( Anvil and Mold Forging)

E01.02温锻模具及冷锻模具 Warm Forging Die and Cold Forging Die

E01.03挤压、拉拔、精整、精压及锻造旋压模具 Extrusion, Drawing, Sizing, Coining and Orbital Forging Die

E01.04 锻造切边模具 Trimming Tool

E01.05 辊锻模具、楔横轧模具 Rolling and Wedge Rolling Die

E01.06模座 Die Holder

*E02.00冲压模具与钣金制作模具 Stamping Tooling and Sheet Metal Tool*

E02.01多工位（连续）模具 Multi-station (Continuous) Stamping Tooling

E02.02级进模具、旋压模具及压印模具 Progressive Tooling, Spinning Die and Coining/Embossing Die

E02.03冲裁模、落料模、修边模、成形模和弯曲模 Punch Tooling, Blanking Tooling, Trimming Tooling, Forming Tooling and Bending Tool

E02.04拉深（延）模具、深拉深模具 Drawing Tooling Deep Drawing Tooling

E02.05内高压成形模具及热冲压成形模具 Hydroforming Tooling and Hot Stamping Tooling

E02.06覆盖件模具、厚板件模具及高速冲压模具 Panel Tooling, Thick Plate Forming Tooling and High-speed Pressing Tooling

E02.07切割头,数控冲模具与折弯刀具（模具）Cutting Head, CNC Turret Tool and Bending Tool

E02.08钣金辊压模具Roller

*E03.00模具辅助设备与技术 Tooling Auxiliaries and Technology*

E03.01模具修复设备及技术Die, Tooling and Tool Repair and Renewing Machine and Technology

E03.02模具加工设备及技术Tool and Die Machining Machine and Technology

E03.03模具润滑、冷却设备与技术 Lubrication and Cooling System and Technology

E03.04模具检验、检测设备与技术 Test & Inspection Machine and Technology

E03.05模具表面处理设备与技术 Surface Treatment Machine and Technology

E03.06模具标准件 Fastener and Common Elements of Tooling and Die

*E04.00 模具其他 Others in Die & Tool*

1. **连接与焊接Joint & Welding Machine & Technology**

*F01.00弧焊设备 Arc Welding Processing*

F01.01 电弧焊机与埋弧焊机 Arc Welder and SAW Welder

F01.02 MIG/MAG/TIG焊机 MIG/MAG/TIG Welding Machine

F01.03 气刨设备 Gouging Machine

*F02.00 电阻焊设备 Resistance Welding Plant*

F02.01 电焊、凸焊及缝焊机 Electric Welding, Projection Welding and Seam Welding Machine

F02.02 闪光焊机及高频电阻焊设备 Flash Welder(NMW) and High-Frequency Resistance Welding Machine (ERW)

*F03.00高能束焊接设备 High Energy Beam Welding Plant*

F03.01 激光焊接、等离子焊接及电子束焊接 Laser Welding, Plasma Welding and Electro-beam Welding

*F04.00 其他焊接设备 Other Welding Plant*

F04.01 螺柱、电渣、超声波焊机 Stud Welder, Electroslag Welder and Ultrasonic Welding Machine

F04.02 摩擦、搅拌摩擦焊机 Friction Welder, Stir Friction Welder

F04.03 高频感应焊机 High-frequency Induction Soldering Machine

F04.04 气焊设备 Gas Welding Device

F04.05 软硬钎焊、微型焊接设备 Solder & Hard Brazing, Micro-welding Machine

F04.06 焊材生产设备与H型钢焊接生产线 Weld Materials Production Line and H-Steel Welding Line

*F 05.00 连接 Joint*

F05.01冲压连接、铆接、粘接及螺接 Pressing Joint, Rivet, Splice and Screwing

F05.02 压接（无铆连接）Crimping

*F06.00 辅助设备与工具 Auxiliaries and*

F06.01 变位机械、工装夹具 Welding Positioner, Fixture Tools

F06.02 坡口加工设备 Edge Preparation Machine

F06.03 焊接清理与热处理设备 Welding Cleaning and Heat Treatment Machine

F06.04 预热与冷却设备 Pre-heating and Cooling Machine

F06.05 空气净化设备、呼吸防护设备 Air Cleaner, Respiratory Protective Device

F06.06 头部防护、面罩、防护玻璃、眼镜及头盔Pedestrians Protection, Face Mask, Protective Glass, Eyeglass and Helmet

*F07.00连接与焊接其他 Others in Joint & Welding Machine & Technology*

1. **数据处理（硬/软件）、智能化、信息化及自动化系统以及板材成形件、模具及焊接与连接检测与检验Data Processing (Hardware & Software), Intelligent, Informationzing and Automation, Test & Inspection of Sheet Metal Forming Parts, Die & Tool ,as well as Welding and Joint Pats**

*G01.00 数据处理、智能化、信息化及自动化系统Data. Intelligent, Informationzing and Automation*

G01.01 机械电子控制系统（CNC）、自动化成套解决方案 Mechanical and Electronic Control System （CNC）， Full Automatic System & Package Solution

G01.02 自动装模、快速夹具和卡具 Automatic Die/Tooling Positioning, Quick-Fixture and Clamp

G01.03 无轨转运车、板料翻转机、板料校平机、板料自动清洗和自动涂油设备 Trackless Transfer, Sheet/Plate Reverse Device, Flattening Machine, Automatic Sheet/Plate Cleaning and Oil Painting Machine

G01.04 废料自动传输和处理设备、模具、板料和工件转运设备 Automatic Scraps Transfer and Handling Machine, Transfer Machine for Tool/Die/Tooling, Sheet/Plate and Parts

G01.05 数控拉深垫、冲压防噪和降噪设备 CNC Drawing Pad, Noise Protection and Reduction Device

G01.06 设备减振装置、无线识别设备 Shock Absorber, Wireless Recognition Device

G01.07 机器人、机械手、机械臂、端拾器和输送皮带系统 Robot, Manipulator, Mechanical Arm, End Pick-up Device and Belt Transportation System

G01.08 给料和上料装置、顶出装置、拉深垫及堆垛设备 Feeder and Loading Device, Ejector System, Deep Drawing Pad and Stacker

G01.09 料库和分拣装置、智能控制与感知设备 Storage and Sorting Device. Intelligent Control System and Sensing Device

G01.10 ERP系统、MES系统、CAD/CAM系统及数字工艺模拟软件、工厂与设备在线模拟分析系统 ERP, MES, CAD/CAM and Simulation Software, Plant & Equipment On-line Simulation and Analysis System

G01.11 焊缝检测设备、焊接机器人、点焊机器人、切割机器人、磨削机器人以及焊缝传感与跟踪设备 Welding Detector, Welding Robot, Spot Welding Robot, Cutting Robot, Grinding Robot and Welding Sensing Device and Track Instrument

G01.12 自动换模、机器人快换装载设备、冲压步进送料及输送机构 Automatic Die/Tooling/Tool Change System, Quick Loading and Un-loading Robot, Stamping Step Transfer Beam and Transportation System

*G02.00 板材成形件、模具及焊接与连接检测/检验 Test & Inspection of Sheet Metal Forming Parts, Die & Tool ,as well as Welding and Joint Pats*

G02.01 标识和测量机床、划线台，标识、读取和跟踪装置 Mark and Measuring Machine, Marking-off Table, and Marking, Reading and Tracking Device

G02.02 精密测量仪器仪表、数控测量、检测和标定机 Accuracy Measurement Instruments, CNC Measurement, Test/Inspection and Calibration Device

G02.03 探测器、探伤剂、耦合剂、测温仪、传感器、流量计、应力应变测量仪。Detector, Inspection Agent, Coupling Agent, Pyrometer/Thermometer, Sensor, Flowmeter, Tress-Strain Measuring Device

1. **材料与辅助材料Materials & Auxiliary Materials**

*H01.00焊接材料 Welding Materials*

H01.01 焊条 Welding Rod/Wire Solder

H01.02 实心焊丝 Solid Welding Wire

H01.03 焊剂、衬垫材料 Welding Flux, Gasket Materials

H01.04 堆焊材料、软硬钎料及钎剂 Surface Materials, Soft and Hard Brazing Alloys and Flux

*H02.00模具钢及模具焊补材料 Die/Tooling/Tool Materials and Repairing Materials*

*H03.00钢锭、钢坯及金属棒材，有色金属 Ingot, Billet and Steel Bar, Nonferrous Materials*

*H04.00金属板材、管材、型材和线材 Sheet/Plate, Tube/Pipe, Sections and Wire*

*H05.00锯片、锯条、金属板材表面清理材料 Saw Blade and Band, Sheet/Plate Surface Cleaning Materials*

*H06.00 润滑、冷却和防护材料 Lubricant, Coolant and Protection Materials*

*H07.00 材料与辅助材料其他 Others in Materials & Auxiliary Materials*

1. **工厂设备和仓储设备Plant Facilities and Storage Equipment of Sheet Metal Forming**
2. **工艺控制、质量保证、安全生产与环境保护 Process and Quality Control, Safety and Environment Protection**
3. **媒体、行业组织、进出口服务与企业管理服务 Media, Organization (Association) and Service Suppliers**
4. **其他 Others**