



Precision Progressive Die Stamping Manufacturer Engineered for Micro-Tolerance Complex Shapes

Our Product Introduction

Basic Information

- Place of Origin: Shenzhen China
- Brand Name: Xianheng
- Certification: ISO9001:2015
- Model Number: PMS-XG-083
- Minimum Order Quantity: 1 pcs
- Price: USD \$0.1-\$1.99
- Packaging Details: Carton, As Customers' packaging requirements
- Delivery Time: Samples 7-10 days, Mass production 20-25 days
- Payment Terms: T/T, Western Union, MoneyGram
- Supply Ability: 50000 pcs per week



Product Specification

- Material: Copper, Stainless Steel, Aluminum, Brass, Etc.
- Surface Treatment: Hot Galvanized, Zinc Plating, Nickel Plating, Powder Plating, Anodize
- Process: Stamping, Punching, Bending, Punching Of Stamping Blanks, Stamping + CNC
- Application: Construction, Industrial, Used Widely Industry Auto, Mechanical Equipment, Auto Parts
- Service: OEM/ODM, OEM ODM Metal Stamping, Customized OEM OEM ODM, OEM Service
- Tolerance: 0.01mm, 0.05 Mm, +/-0.005, 0.003-0.05mm
- Oem: Available
- Quality: ISO9001
- Keywords: Custom Stamping Metal
- Packing: As Customers' Requirement



More Images



Product Description

What We Can Provide

Precision Progressive Die Stamping Manufacturer Engineered for Micro-Tolerance Complex Shapes

Description of Precision Progressive Die Stamping Manufacturer Engineered for Micro-Tolerance Complex Shapes

A Precision Progressive Die Stamping Manufacturer specializes in producing intricate metal components with ultra-tight tolerances (often $\pm 0.005\text{mm}$ or finer) through a multi-stage progressive die process. This method involves a series of stamping operations—such as blanking, bending, piercing, and forming—conducted sequentially in a single die set. The process is engineered to handle complex geometries (e.g., nested features, variable wall thicknesses, micro-scale details) while maintaining dimensional consistency across high-volume production runs. Key technologies include precision die design with CNC-machined tooling, real-time quality monitoring via optical or laser inspection systems, and material optimization (e.g., high-strength steels, copper alloys, or pre-plated substrates) to ensure structural integrity and surface finish.

Specification of Precision Progressive Die Stamping Manufacturer Engineered for Micro-Tolerance Complex Shapes

Name	Custom OEM Laser Cutting Sheet Metal Fabrication Services Copper Stainless Steel Anodised Aluminum Metal Stamping bending Parts
Material	Zn-plating, Ni-plating, Cr-plating, Tin-plating, copper-plating, the wreath oxygen resin spraying, the heat disposing, hot-dip galvanizing, black oxide coating, painting, powdering, color zinc-plated, blue black zinc-plated, rust preventive oil, titanium alloy galvanized, silver plating, plastic, electroplating, anodizing etc.
Applications	Automotive, instrument, electrical equipment, household appliances, furniture, mechanical equipment, daily living equipment, electronic sports equipment, light industry products, sanitation machinery, market/ hotel equipment supplies, artware etc.
Packaging	Regular: Paper, Foam, OPP bag, Carton; Other: According to customers' requirements
Testing Equipment	Projecting apparatus, Salt Spray Test, Durometer, and Coating thickness tester
Tolerance	$\pm 0.01\text{--}0.05\text{mm}$
Drawing	JPG, PDF, CAD, DWG, STP, STEP

Quality Control

1. Checking the raw material after they reach our factory----- Incoming quality control (IQC)
2. Checking the details before the production line operated
3. Have full inspection and routing inspection during mass production---In process quality control(IPQC)
4. Checking the goods after they are finished---- Final quality control(FQC)
5. Checking the goods after they are finished-----Outgoing quality control(OQC)

Application Of Precision Progressive Die Stamping Manufacturer Engineered for Micro-Tolerance Complex Shapes

1. Auto Components Hardware Parts Auto Parts
2. Communication Equipment
3. Industrial Equipment
4. Medical EquipmentsMechanical Parts
5. Ship Accessories
6. Electrical Equipment
7. Mechanical Equipment

Why Choose Us

Advantages

Micro-Tolerance Precision

Achieves tolerances as tight as $\pm 0.002\text{mm}$ (± 2 microns) for critical features like hole diameters, bend angles, or flatness, ensuring compatibility with high-precision assemblies (e.g., medical devices, aerospace sensors).
Example: Consistent production of micro-connectors with 0.1mm pitch contacts for PCB integration.

Complex Geometry Capability

Enables the fabrication of parts with multi-axial bends, stepped profiles, or embedded functional elements (e.g., threaded inserts, snap-fit tabs) in a single pass.
Reduces secondary operations (e.g., welding, machining) by 30–50%, lowering overall production costs.

High-Volume Efficiency & Consistency

Progressive dies allow for continuous, high-speed stamping (up to 500 strokes/minute) with minimal downtime between cycles.

Statistical Process Control (SPC) systems monitor critical dimensions in real time, ensuring first-article-to-last-article consistency even at volumes exceeding 1 million parts/month.

Material Optimization & Waste Reduction

Utilizes advanced material handling (e.g., servo-feed systems) and die design (e.g., nested layouts) to maximize material yield—reducing scrap by 15–40% compared to single-stage stamping.

Supports sustainable manufacturing through recyclable materials (e.g., aluminum alloys) and energy-efficient presses (e.g., servo-driven machines consuming 20% less power than hydraulic presses).



Multiple Machines

5-Axis CNC & Imp Professional machines, skillful workers, machines, skillful with accuracy of guarantee the quality and lead time.



Strictly Confidential

We will protect the customers' design and the customer can request a confidentiality agreement



Quality Inspection

We have a strict quality inspection process to ensure the quality of our products

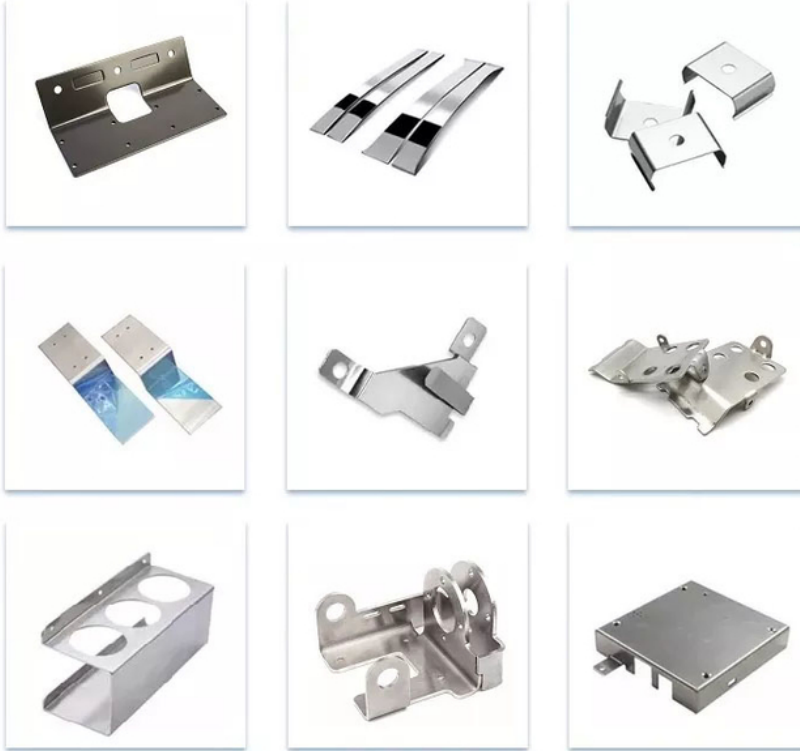
Stainless Steel Material

Material:

Stainless Steel 201
Stainless Steel 430
Stainless Steel 304
Stainless Steel 316

Finish:

Mirror Polishing
Brush Polishing
Electro Polishing
Vibration Polishing



FAQ

Q1: Where can I get product & price information?

A1: Send us inquiry e-mail, we will contact you as we receive your mail.

Q2: How long can I get the sample?

A2: Depends on your specific items, within 3-7 days is required generally.

Q3: What kinds of information you need for quote?

A3: Kindly please provide the product drawing in PDF, and will be better you can provide in STEP or IGS.

Q4: What are the payment terms?

A4: We accept 50% as payment deposit, when the goods is done, we take photos for your check and you then pay the balance.

Q5: Are you a trading company or factory?

A5: We are direct factory with 10 experienced engineers and more than 650 employees as well approximate 2,000 square ft. workshop area.

Q6: What shall we do if we do not have drawings?

A6: Please send your sample to our factory, then we can copy or provide you better solutions. Please send us pictures or drafts with dimensions (Length, Height, Width), CAD or 3D file will be made for you if placed order.



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