



## **EV Charging Infrastructure Prototyping Rapid Prototype Machined Parts Painting Anodizing**

#### **Basic Information**

· Place of Origin: China Shenzhen

Brand Name: EV Charging Infrastructure Prototype

· Certification: Polishing, Anodizing, Painting, Chrome Plating,

Silkscreen

• Model Number: ABS, PC, PMMA, POM, PA, PTFE, PEEK

Minimum Order Quantity: 1 piece • Price: USD 30 piece

 Packaging Details: Carton, Plywood Box

. Delivery Time: 3 - 5 Days Payment Terms: T/T, Paypal . Supply Ability: 1 piece per day



### **Product Specification**

Model: Prototype

 Surface Finish: Polishing, Anodizing, Painting, Chrome Plating,

Silkscreen

Payment Options: T/T, Paypal

. File Format: Step, Igs, X\_T, Sldprt

• Material: ABS,PC,PMMA,PTFE,PVDF,Aluminum,Copp

• Production Method: CNC Machining, Vacuum Casting,

SheetMetal Fabrication

• Type: EV Charging Infrastructure Prototype • Highlight: rapid prototype machined parts painting,

painting rapid prototype casting, anodizing rapid prototype casting



#### **Product Description**

#### EV Charging Infrastructure Prototype: Powering the Future with Barana Rapid CNC Manufacturing

Welcome to Barana Rapid CNC Manufacturing, where we are at the forefront of supporting the electric vehicle (EV) revolution with our advanced prototyping services for EV charging infrastructure. Our expertise and state-of-the-art technology equip us to deliver high-quality prototypes that drive innovation and practicality in the burgeoning EV market.

#### Manufacturing Principle: High Precision for High Performance

At Barana, we operate on a foundation of precision engineering, utilizing cutting-edge CNC technology to create components for EV charging stations with exacting accuracy. Our manufacturing processes start with your detailed designs, which are meticulously transformed into physical parts through our advanced computer numerical control (CNC) systems. This technology allows for the rapid production of prototypes with complex geometries and tight tolerances, essential for the reliable operation of EV charging stations.



#### Advantages of Partnering with Barana:

**Rapid Development**: Speed is crucial in the fast-paced EV market. Our CNC technology enables quick turnaround from design to prototype, reducing development cycles and helping you get to market faster.

**Scalability**: Whether you need a single prototype for testing or a series for pilot deployment, our processes are designed to scale seamlessly with your project requirements.

Material Versatility: We work with a range of materials, including metals and advanced polymers, to ensure durability and compliance with environmental standards for outdoor use.

**Integrated Solutions**: Beyond prototyping, we offer design optimization, small-scale production, and post-processing services, providing a comprehensive solution from concept to final prototype.



#### **Capabilities That Drive Innovation**

Barana's capabilities extend well beyond traditional prototyping:

**Customization**: Tailored components that fit specific requirements for various types of EV charging stations, including Level 1, Level 2, and DC fast charging.

**Precision Machining**: High-precision machining capabilities that meet the stringent requirements of the EV industry. **Electrical Component Integration**: Assembly and integration of electrical systems, ensuring that prototypes are fully functional for real-world testing.

**Quality Assurance**: Rigorous testing and quality control measures to guarantee that each prototype meets global standards and performs flawlessly in all conditions.

Plastic	Acrylonitrile butadiene styrene	ABS	
Plastic	Acrylonitrile butadiene styrene	ABS Hight Temp	
Plastic	Acrylonitrile butadiene styrene	ABS Anti Static	
Plastic	Acrylonitrile butadiene styrene + Polycarbonate	ABS + PC	
Plastic	High-density polyethylene	HDPE, PEHD	
Plastic	Nylon 6	PA6	
Plastic	Nylon 6 + 30% Glass Fill	PA6 + 30% GF	
Plastic	Nylon 6-6 + 30% Glass Fill	PA66 + 30% GF	
Plastic	Nylon 6-6 Polyamide	PA66	
Plastic	Polybutylene terephthalate	PBT	
Plastic	Polycarbonate	PC	
Plastic	Polycarbonate – Glass fill	PC + GF	
Plastic	Polycarbonate + 30% Glass fill	PC + 30% GF	
Plastic	Polyethere-ther-ketone	PEEK	
Plastic	Poly-ethe-rimide	PEI	
Plastic	Polyethylene	PE	
Plastic	Polyethylene terephthalate	PET	
Plastic	Polymethyl methacrylate – acrylic	PMMA Acrylic	
Plastic	Polyoxybenzylmethylenglycolanhydride	Bakelite	
Plastic	Polyoxymethylene	POM	
Plastic	Polyphenylene sulfide	PPS	
Plastic	Polyphenylene sulfide + Glass Fill	PPS + GF	
Plastic	Polypropylene	PP	
Plastic	Polytetrafluoroethylene	PTFE	
Plastic	Polyvinylidene fluoride	PVDF	

#### Service Quality: Excellence at Every Step

Barana is committed to the highest standards of service quality. Our ISO 9001 certification is a testament to our dedication to maintaining superior quality management systems and ensuring customer satisfaction. Our team consists of skilled engineers and technicians who specialize in rapid prototyping and are committed to providing exceptional, personalized service to each

client.



Our company offers a comprehensive range of professional finishing services to enhance the appearance, performance, and durability of parts. Here are the major finishing services we provide:

Anodizing: Anodizing is an electrochemical process primarily used for aluminum parts. It creates a protective oxide layer on the surface, improving corrosion resistance and providing a decorative finish. Anodizing can also be combined with dyeing to add color options.

Painting: Our painting services allow for the application of various paint types to achieve desired colors, textures, or protective layers. Spray painting and powder coating are commonly used methods to enhance the appearance and surface qualities of parts.

Pad and Silk Screen Printing: Pad and silk screen printing techniques are employed to apply custom designs, logos, or labels onto parts. This service facilitates branding, product identification, or the addition of instructional information to enhance the visual appeal.

Sanding and Polishing: Our sanding and polishing services utilize abrasive materials to remove roughness and imperfections from surfaces, resulting in a smoother and more refined finish. This process enhances the appearance and feel of the parts.

#### Our Surface Finishing Specifications

Part surface finishing techniques can improve the aesthetics and function of your parts. Each surface treatment process has requirements, such as material, color, texture, and price. Below are the specifications of the surface treatment technologies offered by Barana Rapid

Pic	Name	Description	Materials	Color	Texture
	Anodizing	Anodizing improves corrosion resistance, enhancing wear resistance and hardness, and protecting the metal surface. Widely used in mechanical parts, aircraft, and automobile parts, precision instruments, etc.	Aluminum	Clear, black, grey, red, blue, gold	Smooth, matte finish
	As Machined	, -	All materials	N/A	Stain

	Band Blasting	Visual applications and can be followed by other surface treatments.	Aluminum, Brass, Copper	N/A	Matte
		Powder coating is a type of coating that is applied as a free-flowing, dry powder. Unlike conventional liquid paint which is delivered via an evaporating solvent, powder coating is typically applied electrostatically and then cured under heat or with ultraviolet light.	All metal materials	Custom	Gloss or semi-gloss
	Electroplating	Many industries use the process, including the automotive sector,	Aluminum, steel, Stainless Steel	Gold, silver, nickel, copper, brass	Smooth, Glossy finish
		Polishing is the process of creating a smooth and shiny surface, either through physical rubbing of the part or by chemical interference. The process produces a surface with significant specular reflection, but in some materials is able to reduce diffuse reflection.	All materials	Smooth, glossy finish	Glossy
	Brushing	Brushing is a surface treatment process in which abrasive belts are used to draw traces on the surface of a material, usually for aesthetic purposes.	ABS, Aluminum, Brass, Stainless Steel, Steel	N/A	Satin
	Painting		Aluminum, Stainless Steel, Steel		Gloss, semi-gloss, flat, metallic, textured
	Black Anodized	coating is similar to Alodine that is used for steel and stainless steel. It is used mainly for appearance and for mild corrosion resistance.	Steel, Stainless Steel	Black	Smooth, matte
	Alodine	corrosion. It is also used as a base layer before priming and painting parts.	Aluminum	Clear, Gold	Same as before
12 <mark>4259-03</mark>	Laser Carving	laser carving is a cost-effective way to add logos or custom lettering to your designs and is often used for custom part tagging during full-scale production.	All materials	Custom	N/A

Vapor Polishing: Vapor polishing is a technique used for plastic parts. It employs solvents or chemicals to melt the surface, eliminating imperfections and creating a glossy, transparent finish. Vapor polishing enhances the overall quality and visual appeal of plastic components.

Powder Coating: Powder coating is a dry finishing process where a fine powder is electrostatically applied to the surface of the part. The coated part is then heated, allowing the powder to melt and form a durable and protective layer. Powder coating provides excellent resistance to corrosion, chemicals, and UV rays.

Blasting: Blasting involves directing high-velocity particles or beads onto the surface of parts. This process effectively removes imperfections, burrs, and sharp edges, resulting in a more uniform and matte finish. Blasting improves the overall surface quality and prepares the parts for subsequent treatments or applications.

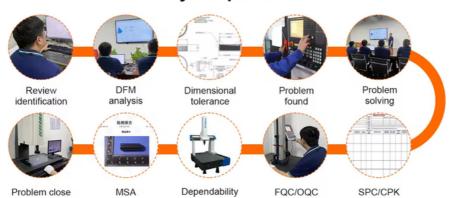
By utilizing our full suite of finishing services, you can ensure that your parts not only meet functional specifications but also have an enhanced appearance, improved performance, and increased durability. Our skilled team will work with you to

#### Our First Article Inspection Process

When Barana Rapid receives your order requirements, we will carry out the first article inspection service. According to our company's regulations, Barana Rapid will provide the first article inspection service to ensure better completion of your machining project if the order demand reaches 3,000 US dollars or the minimum order quantity is 300 pieces.

	Step 1	Step 2	Step 3	Step 4
Barana Rapid	inspection We offer first article inspection services for	We review the project and contact customers for detailed	We produce sample parts according to the FAI agreement and	Full-scale production The full-scale production starts and finishes production within lead time.
Client	You request inspection You request first article inspection for a project that meets our EAI requirements	agreement provided by us and agree on	You receive and examine the parts,	Receive products You receive your prototypes or production parts on the required lead time.

# **Quality Inspection**



# **Packing**





