

# Custom ABS (acrylonitrile) CNC Machining from China

## Specifications :

Price	Contact us
Brand Name	Baetro
Place of Origin	China
Min.Order Quantity	1
Payment Terms	L/C,D/P,T/T
Supply Ability	1000
Delivery Detail	3-7
Packaging Details	Wooden case or wooden pellets depended on clients' requireme

## Detail Introduction :

**Custom ABS CNC machining from China** offers precision manufacturing solutions tailored to meet diverse industry needs. ABS (Acrylonitrile Butadiene Styrene) is a versatile thermoplastic known for its excellent balance of strength, durability, and ease of machining, making it ideal for a variety of applications.

### Key Features:

**Durability and Strength:** ABS offers high impact resistance and structural integrity, making it suitable for parts that require both toughness and flexibility.

**Lightweight:** Despite its strength, ABS is a lightweight material, making it ideal for applications where weight is a concern.

**Cost-Effective:** ABS is relatively inexpensive compared to other engineering plastics, offering a cost-effective solution for high-precision parts.

**Good Machinability:** ABS machines easily with CNC processes, allowing for detailed and complex parts to be manufactured efficiently.

**Heat and Chemical Resistance:** ABS offers moderate heat and chemical resistance, suitable for environments where exposure to these factors is limited.

**Customizable:** ABS can be easily modified for custom colors and finishes, making it ideal for aesthetic and functional parts.

### Material Properties Comparison:

#### ABS vs. Acrylic (PMMA):

While both materials are easy to machine, ABS is more impact-resistant and tougher than acrylic. Acrylic, however, offers superior clarity and is preferred for applications requiring a clear, glass-like finish.

#### ABS vs. PEEK:

PEEK offers significantly higher heat and chemical resistance compared to ABS, making it more suitable for extreme environments. However, ABS is more affordable and easier to machine, making

it ideal for less demanding applications.

**ABS vs. Nylon:**

Nylon is generally stronger and more resistant to wear than ABS, but ABS offers better impact resistance and is more cost-effective. Nylon is often used in high-friction parts, whereas ABS is favored for its versatility in everyday applications.

**ABS vs. Polycarbonate (PC):**

Polycarbonate is much stronger and more heat resistant than ABS but comes at a higher cost. ABS, on the other hand, is more flexible and impact-resistant, making it better for certain types of consumer products.

**Applications:**

**Consumer Electronics:** Ideal for housings, panels, and enclosures due to its strength and ease of customization.

**Automotive Parts:** Used for interior components, dashboards, and structural elements where durability and impact resistance are needed.

**Prototyping:** Commonly used in rapid prototyping because of its machinability and cost-effectiveness.

**Toys and Appliances:** ABS is widely used in the production of durable consumer goods and toys due to its safety and toughness.

In summary, **Custom ABS CNC machining from China** provides a high-precision, cost-effective solution for a wide range of industries, offering versatility in both functionality and design. The material's balanced properties make it a top choice for products that require strength, durability, and ease of manufacturing.