

《Common Machining Material Specification Table》

Aluminum Alloy

- **6061**: Medium hardness, good machinability, excellent anti-corrosion, widely used for structural parts, fixtures and equipment shells.
- **6063**: Soft texture, super anodizing effect, suitable for appearance parts and profile processing.
- **7075**: High strength and high hardness, wear-resistant, applied to high-precision mechanical and aerospace parts.

Carbon Steel

- **Q235**: Low cost, good welding performance, used for brackets, frames and ordinary structural parts.
- **45# Steel**: Good toughness and hardness, suitable for shafts, pins, gears and mechanical transmission parts.

Stainless Steel

- **201**: Economical rust-proof material, used for ordinary structural parts and non-high anti-corrosion scenarios.
- **304**: Excellent corrosion resistance, widely used for automation parts, food machinery and daily accessories.
- **316**: Acid and alkali resistant, seawater corrosion resistant, suitable for chemical and environmental equipment.

Copper Alloy

- **H62 Brass**: Good cutting performance, wear resistance and conductivity, used for fasteners and conductive parts.
- **T2 Red Copper**: High thermal conductivity, suitable for heat sink and conductive components.

Engineering Plastics

- **POM**: High hardness, wear-resistant, low friction, used for gears, sliders and wear-resisting parts.
- **PA66**: High toughness and impact resistance, suitable for insulating brackets and structural parts.
- **ABS**: Good surface finish, suitable for appearance shell parts.

Mold Steel

- **Cr12MoV / SKD11**: High hardness after heat treatment, high wear resistance, used for precision molds and fixture parts.