

Ocean and Oil Wells

Core advantages of CNC machining of Marine and oilfield parts: dual-phase stainless steel/titanium alloy precision milling for deep-sea high pressure, surfacing welding tungsten carbide to strengthen the wear resistance of drilling tools, IP68 grade sealing structure processing, support corrosion resistance, high pressure components rapid prototyping to mass production.

Marine and Oil Well Parts Manufacturing

Get real-time Quotes

- 
- Valve Components
 - Turbine Blades
 - Flanges & Pipe Fittings
 - Pipeline Flanges
 - Subsea Connectors
 - Navigation & Positioning Systems
 - Drilling Tools
 - Bearing Seats
 - Subsea Sensor Housings
 - Pump Housings & Valves
 - Drilling Fluid Nozzles
 - Pressure-Resistant Cabin Assemblies

Automobile Parts

XCM has extensive experience in the prototyping and manufacturing of automotive parts through IATF16949, including servicing leading automotive companies such as BMW, Aston Martin, Bentley, Ford, Tesla, Magna, etc. We utilize rapid prototyping techniques to produce high-performance physical prototypes that can be designed and built to pass some of the most rigorous validation and testing procedures.

Automotive Prototype CNC Manufacturing

Get real-time Quotes

·Engine

·Differential Housings

·Crankshafts

·Steering Gears

·Transmission
Gears

·Wheel Hubs

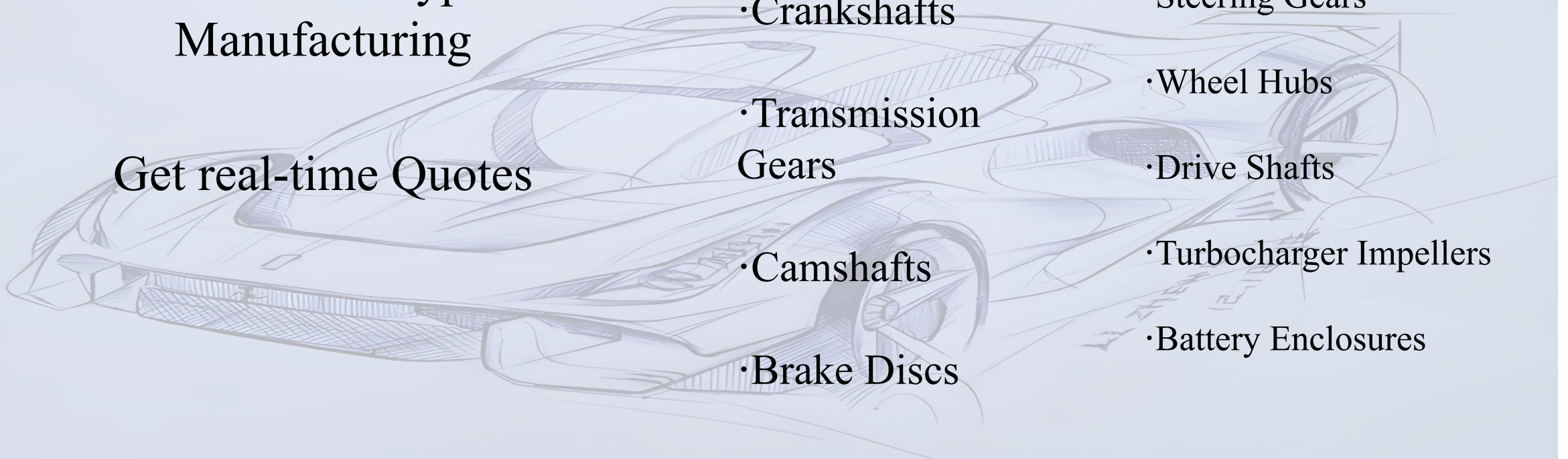
·Drive Shafts

·Camshafts

·Turbocharger Impellers

·Brake Discs

·Battery Enclosures



Medical Apparatus and Instruments

XCM With ISO13485 we are able to meet the complex construction needs of minimally invasive devices, custom rapid prototyping and mass production services. We provide fast response times at every stage of the manufacturing process, rigorous substance validation and strict quality control to ensure fast delivery of aseptic processing.

Cutting of Medical Device
Components

Get real-time Quotes

- Artificial Hip Replacement Components
- Knee Replacement
- Guide Rails
- Bone Plate Fixation Screws
- Dental Implants
- Endoscope Snake Bone Tube Assemblies
- Centrifuge Components
- Ultrasound Device Housings
- Ventilator Valve Assemblies
- Dialysis Machine Roller Pump Heads
- Surgical Instruments

Robotics and Automation

The core advantages of CNC machining of robot and automatic parts, $\pm 0.005\text{mm}$ precision fit high dynamic load structure, multi-axis linkage to achieve precision joint and harmonic reducer processing, to meet the lightweight, low inertia, XCM through ISO 9001 certification, support rapid mass production of industrial sensor components.

Robotics and Automation

Get real-time Quotes

- Frock Clamp
- Harmonic Generators
- Sensor Housings
- Controller Enclosures
- End Effectors
- Joint Modules Speed Reducers
- Lead Screws & Guide Rails
- Servo Motor Components
- RV Reducer Gears
- Harmonic Drive Components
- Grippers
- Connector Housings

Renewable Energy

Core advantages of CNC machining of renewable energy parts: high-carbon steel/aluminum alloy five-axis topology optimization to reduce weight 30%, laser cladding weather-resistant coating up to ASTM B117 standards, wind power blades, energy storage components, surface accuracy $\pm 0.1\text{mm}$, support rapid prototyping of photovoltaic brackets and precision machining of energy storage components.

Renewable Energy Components Prototype

Get real-time Quotes

- Wind Turbine Blades
- Pitch Bearings
- GearBox Planetary Rack
- Spindle Flange
- Photovoltaic Support Connection
- Solar Tracker Gears
- Motor Sealing Rings
- Gearbox
- Condenser support Brackets
- Inverter Heat Dissipation Housing
- Pressure Pipe Flange
- Module Cooling Plate
- Hydrogen Tank Connection Flange
- Biomass Boiler Nozzle

Aerospace Industry

Aerospace and UAV parts foreign trade with high precision $\pm 0.005\text{mm}$, multi-axis linkage processing complex surface capabilities, titanium alloy, nickeloalloy and other special materials to meet the lightweight thin-wall structure processing needs, support rapid prototyping solutions to ensure part consistency and reliability under extreme condition.

Aerospace Prototyping

Get real-time Quotes

- Seat
- Engine
- Fuselage Components
- Turbines
- Fasteners (e.g., screws)
- Tire Parts
- Electrical Component

- Radar Systems
- Air Conditioning Units
- Vacuum Pumps
- Fuel Pumps
- Lighting Systems
- Sensors
- Braking Systems

