GREAT LIGHT
CNC Machining

Great Light Metal Tech Co., LTD.

5-Axis Simultaneous Machining · Precision Components
Rapid Prototyping · Die Casting Molds

Precision manufacturing is the cornerstone of industrial progress.
GreatLight was founded in 2011 and has focused on precision CNC machining for 15 years. We drive the future of high-end manufacturing with technology as our engine.

glcncmachining.com | greatlight-cnc.com
Room 201, No. 10 Xinrong Street, Chang'an Town, Dongguan, Guangdong, China

CONTENTS

Table of Contents

GREATLIGHT
RAPID MANUFACTURING

01 Company Profile
02 Core Advantage
03 Key Facts
04 Milestones
05 Organization
06 Equipment & Capacity
07 Services
08 Workflow
09 Prototyping & Tooling
10 Materials
11 Quality & Certification
12 Inspection Capability
13 Inspection Process
14 Industries
15 Products
16 Customers & Brands
17 Market
18 Why Us
19 Culture
20 Contact Us

Core Advantage • 5-Axis Simultaneous Machining

GREATLIGHT RAPID MANUFACTURING

Precision • Excellence Achieved — 5-axis simultaneous machining is our core advantage

01

One Setup • Complex Parts Complete

5-axis machining completes multi-face, multi-angle work at a single station, cutting setups and datum-transfer errors. Complex surfaces, deep cavities and angled holes are formed in one pass.

02

Accuracy up to ±0.005 mm

High-precision 5-axis machines + temperature-controlled workshop + CMM inspection loop keep critical dimensions stable at micron level.

03

Solid Assurance for Every Part

Process review → DFM → First article approval → In-process inspection → Final inspection; full-process data traceability; qualified on delivery.

5-Axis Simultaneous Machining • Complex parts in one setup • Accuracy up to ±0.005 mm • Solid assurance for every part

Company Profile

Strength • Built on Quality

Precision manufacturing is the cornerstone of industrial progress.
Founded in 2011, GreatLight has focused on precision CNC machining for 15 years, driving the future of high-end manufacturing with technology.
A 7,600 m² smart manufacturing plant, 150 professional engineers and technicians, 127 precision machines and three wholly-owned factories provide one-stop capacity for CNC machining, sheet metal fabrication, 3D printing and metal die casting.
From micro precision parts to large structural components, we handle it all with confidence.
Located in Chang'an Town, Dongguan — the capital of precision hardware and mold making, adjacent to Shenzhen — we have long served well-known manufacturers in Europe, the US, Japan and China.

Business Scope

1. 5-axis / 4-axis / 3-axis CNC machining
2. CNC turning · Turn-mill machining
3. Metal die casting & die casting molds
4. Sheet metal fabrication · 3D printing
5. Rapid prototyping & surface finishing

KEY FACTS

Company Overview • Key Facts

GREATLIGHT
RAPID MANUFACTURING

7,600 ㎡
Smart Manufacturing Plant

150+
Engineers & Technicians

127
Precision Machines

3
Wholly-owned Factories

15 Years
Focused on Precision CNC

±0.005 mm
5-Axis Machining Accuracy

10+
Industry Sectors

24 Hours
Quotation Response

Milestones

GREATLIGHT
RAPID MANUFACTURING

2011-2013

Founding & Early Growth

2011 Great Light Metal Tech Co., LTD. founded; domestic branch established; entered the CNC machining industry
2013 Hong Kong subsidiary and International Business Division established; HQ moved to Zhifeng Industrial Park, Chang'an

2014-2016

Consolidation & Technical Progress

2014 Certified to the ISO 9001 quality management system
2016 First core high-precision CNC machine developed in-house; guided by "people first, innovation, learning and development", serving 500+ global customers

2017-2018

Regional Expansion

2017 GreatLight Technology (South China subsidiary) founded; imported CNC machine tools and CMM / 2.5D inspection equipment introduced
2018 Recognized as a National High-Tech Enterprise; HQ completed at No. 6 Hongye North Road; Fenggang metal die casting plant invested and built

2019-2022

Technology Breakthrough

2019 Launched the second-generation smart CNC solution
2020 Dedicated headquarters completed at No. 10 Xinrong Street; capacity increased by 50%
2021 Record annual revenue; Italian sales office opened in April (Via Giotto 4, Tradate)
2022 Completed Series B financing with a valuation of over RMB 1 billion

2023-2024

Smart Transformation

2023 Certified high-tech enterprise; in-depth cooperation with a global top-3 aerospace giant; expanded exports to Vietnam
2024 Air-conditioned workshops expanded; 5 large 5-axis machining centers added; equipped with 1.6 m CNC machines, T5 drilling & tapping centers and 5-axis CNC systems

2025-2026

Creating the Future

2025 Singapore subsidiary established (CNC MACHINING PTE. LTD, 3 Joo Koon Circle); certified to IATF 16949 and ISO 13485; nano-level precision machining technology introduced
2026 Many high-precision 5-axis machines added in Plant 1; 5-axis temperature-controlled workshop completed; Plant 2 built; high-tech enterprise qualification maintained

Organization

Equipment & Capacity

GREATLIGHT
RAPID MANUFACTURING

Main Production & Inspection Equipment

- Beijing Jingdiao 5-axis machining center
- DMG MORI 5-axis machining center
- Brother 4-axis machining center
- CNC 3-axis machining centers (multiple units)
- CNC lathes / turn-mill machines
- Coordinate Measuring Machine (CMM)
- Die casting machines (die casting workshop)
- Complete inspection & gauging equipment

Mainly 4-axis / 5-axis high-precision machines • Max. part size 4,000 mm • Accuracy ±0.005 mm • Samples in 3-5 days

Services • Co-creating a Smart Future

GREATLIGHT
RAPID MANUFACTURING

From rapid prototyping to volume production, from CNC machining to surface finishing — GreatLight looks forward to creating the future with you.

CNC Machining

3-axis / 4-axis / 5-axis machining for complex surfaces and high-precision parts

CNC Turning

Turn-mill in one setup; volume production of long-shaft and rotational parts

Die Casting Molds & Casting

Mold design and manufacturing; aluminum / zinc alloy die casting

Rapid Prototyping

From drawing to sample, quickly validating structure and appearance

Surface Finishing

One-stop anodizing, powder coating, plating, brushing, sandblasting and more

Assembly & Integration

Reliable material and finishing partners deliver complete parts

Workflow

GREATLIGHT
RAPID MANUFACTURING

01

Inquiry

Drawings / 3D models / sample shipment

02

Quotation

DFM analysis and process advice, response within 24 hours

03

Sampling

Prototype sampling and first article inspection (FAI)

04

Production

Locked processes, in-process inspection, guaranteed capacity

05

Delivery

Final inspection, shipping reports and international express

Quotation within 24 hours | Samples in 3-5 days | Volume production 7-15 days | Fully traceable

Prototyping & Tooling

GREATLIGHT RAPID MANUFACTURING

From design validation to small-batch trial production

- Fast sampling: upload 2D/3D drawings and receive DFM analysis and a quotation within 24 hours
- Multiple processes: CNC machining, 3D printing, vacuum casting, sheet metal and die-cast parts
- Full material range: aluminum, stainless steel, copper, titanium and engineering plastics (POM / PEEK / ABS / PC)
- Surface finishing: anodizing, powder coating, plating, brushing, sandblasting, silkscreen and more
- Small batch & volume: seamless transition from prototype to small-batch and volume production with identical process parameters
- Delivery assurance: samples in 3-5 days, volume production in 7-15 days

Materials

Metals	Aluminum 6061 / 6063 / 7075, stainless steel 303/304/316, carbon and alloy steel, brass, copper, beryllium copper, titanium and magnesium
Plastics	POM / PEEK / ABS / PC / PMMA / PA (nylon) / PTFE / PP / PEI, etc.
Surface Finishing	Anodizing, hard anodizing, powder coating, plating (nickel / chrome / zinc), brushing, sandblasting, passivation, silkscreen and laser engraving
Heat Treatment	Quenching, tempering, thermal refining, carburizing, nitriding and aging (partner supply chain)
Precision	Standard ±0.01 mm; high precision up to ±0.005 mm; maximum part size 4,000 mm
Quality Standards	ISO 9001:2015 / IATF 16949 / ISO 13485 / ISO 27001; raw materials comply with EU RoHS

Quality & Certification

ISO 9001:2015

Quality Management System · Cert. No. 51324Q3040R0S

IATF 16949:2016

Automotive Quality Management System · ZS86249809256

ISO/IEC 27001:2022

Information Security Management System · ZS86249793895

ISO 13485:2016

Medical Device Quality Management System · ZS86242558626

Standards · Earned Trust — ISO quality management, automotive, information security and medical device certifications; every certificate is our commitment to quality.

Full-process control: drawing review → DFM analysis → first article approval (FAI) → in-process inspection → final inspection → outgoing inspection

Quality policy: skilled technology · superior quality · on-time delivery; continuous improvement · customer satisfaction

Inspection Capability

Coordinate Measuring Machine (CMM)

· Precision CMM measurement: full-dimensional inspection of geometric tolerances, profile and position

· First article inspection (FAI) reports: critical dimensions and datums locked before mass production

· Combined with vision systems and gauges for micron-level, closed-loop verification

· Inspection data supplied with shipment; full traceability for critical parts

Supporting Inspection Equipment

- Vision measuring machine / profile projector (2.5D fast inspection)
- Roughness testers, hardness testers
- Calipers, micrometers, height gauges, plug gauges
- Thread gauges and dedicated fixtures
- Temperature-controlled CMM inspection room

Precision assurance: critical dimensions verifiable to ±0.005 mm

Quality Inspection Process

GREATLIGHT RAPID MANUFACTURING

01

Drawing Review

Technical requirements and critical dimensions identified

02

DFM Analysis

Manufacturability advice and risk alerts

03

First Article Approval

Full-dimensional FAI report

04

In-process Inspection

SPC sampling and process parameter records

05

Final Inspection

100% check by CMM / vision system / gauges

06

Outgoing Inspection

Appearance, packaging and shipping documents

Industries

GREATLIGHT RAPID MANUFACTURING

Craftsmanship · Empowering Everything — micron-level precision for lightweight, high-strength parts in robotics, automotive and aerospace.

Humanoid Robotics

Joint modules, dexterous hands and lightweight body structures

Highly Complex Structures

Multi-face complex cavities, thin walls and high-precision mating parts

Automotive Parts

Engine, transmission, chassis and interior / exterior parts

Aerospace

Lightweight structures, high-precision connectors and impeller-type parts

Robotics

Joints, reducers and body structural parts

Medical Components

Surgical instruments, diagnostic equipment and precision structures

New Energy

Battery structures, electronic control and charging components

Electronics & Electrical

Heat sinks, housings and precision hardware

Sports Equipment

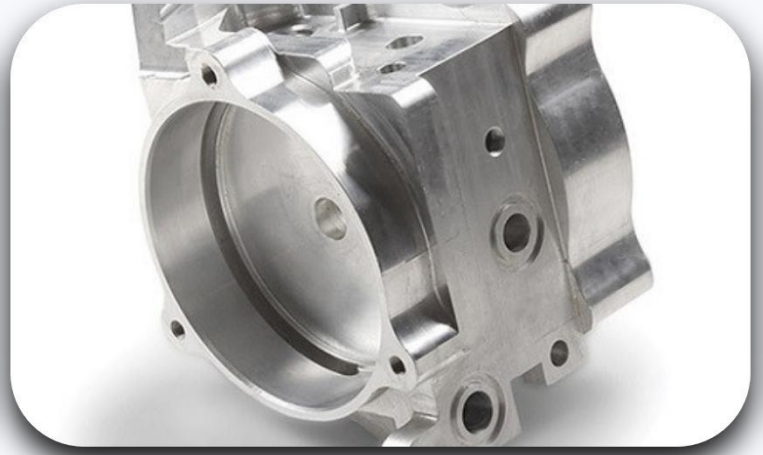
Bicycle, fitness and outdoor equipment parts

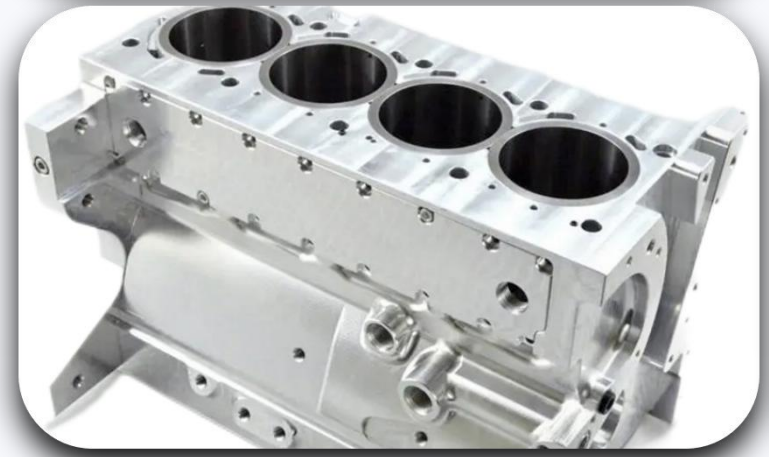
Machinery Parts

Automation equipment, transmission and housing parts

Products

All parts below are 5-axis machined: multi-face complex features in one setup, accuracy ±0.005 mm





Customers & Brands

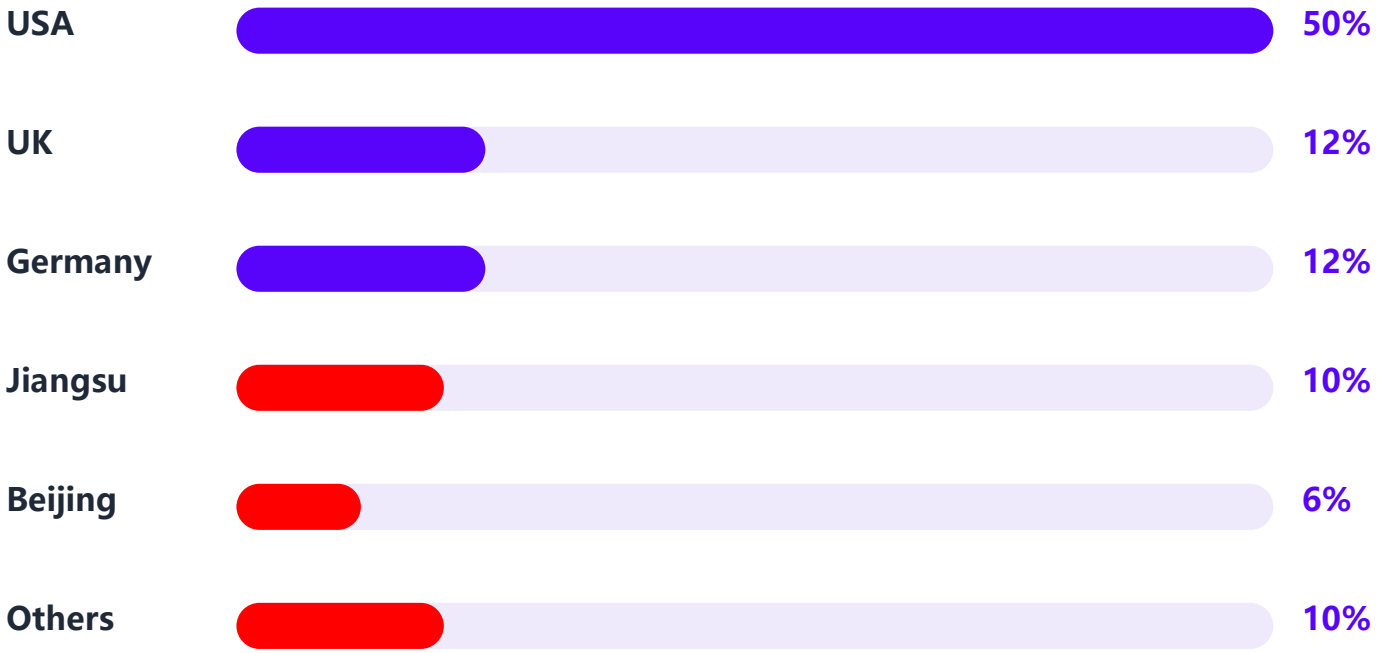
Long-term partner of well-known manufacturers in Europe, the US, Japan, covering automotive, medical, aerospace, robotics, new energy and more

THK
CATL 宁德时代
CISCO
ASTON MARTIN
hp
SEVERIN
TESLA
MAGNA
DENSO
FOXCONN
HUAWEI
Proxim AN SRA COMPANY

8,000+ customers • serving 30+ countries and regions • consistently high customer satisfaction and repeat purchase rates

Market

Sales Coverage (share of revenue)



Sales Network

Overseas
Mainly Europe & North America

Domestic
10 provinces / municipalities

Customer Type
Well-known brand manufacturers in Europe, US, Japan and China

Delivery
International express / air / sea freight

Why Us

GREATLIGHT
RAPID MANUFACTURING

01 5-Axis Machining

5-axis simultaneous machining is our core strength: complex parts finished in one setup, accuracy up to ±0.005 mm and solid assurance for every part.

02 Equipment & Team

Predominantly 4-axis and 5-axis high-precision machines (Beijing Jingdiao, DMG MORI, Brother); an experienced technical team with 20+ years in the industry.

03 Delivery & Service

Quotation within 24 hours and delivery in 7-15 days; stable material and surface-finishing partners deliver complete parts fast, taking the worry out of post-processing.

Culture

Vision

To be China's largest and most reliable company for precision machining and manufacturing of custom parts

Mission

To help every member of the GreatLight family live a happy and fulfilling life, and to contribute to our country's export industry

Core Values

Honesty and integrity, quality and efficiency, sincere cooperation; we value honor, reward performance, care for our people, embrace friendship, stay open-minded and pursue win-win for all

Quality Policy

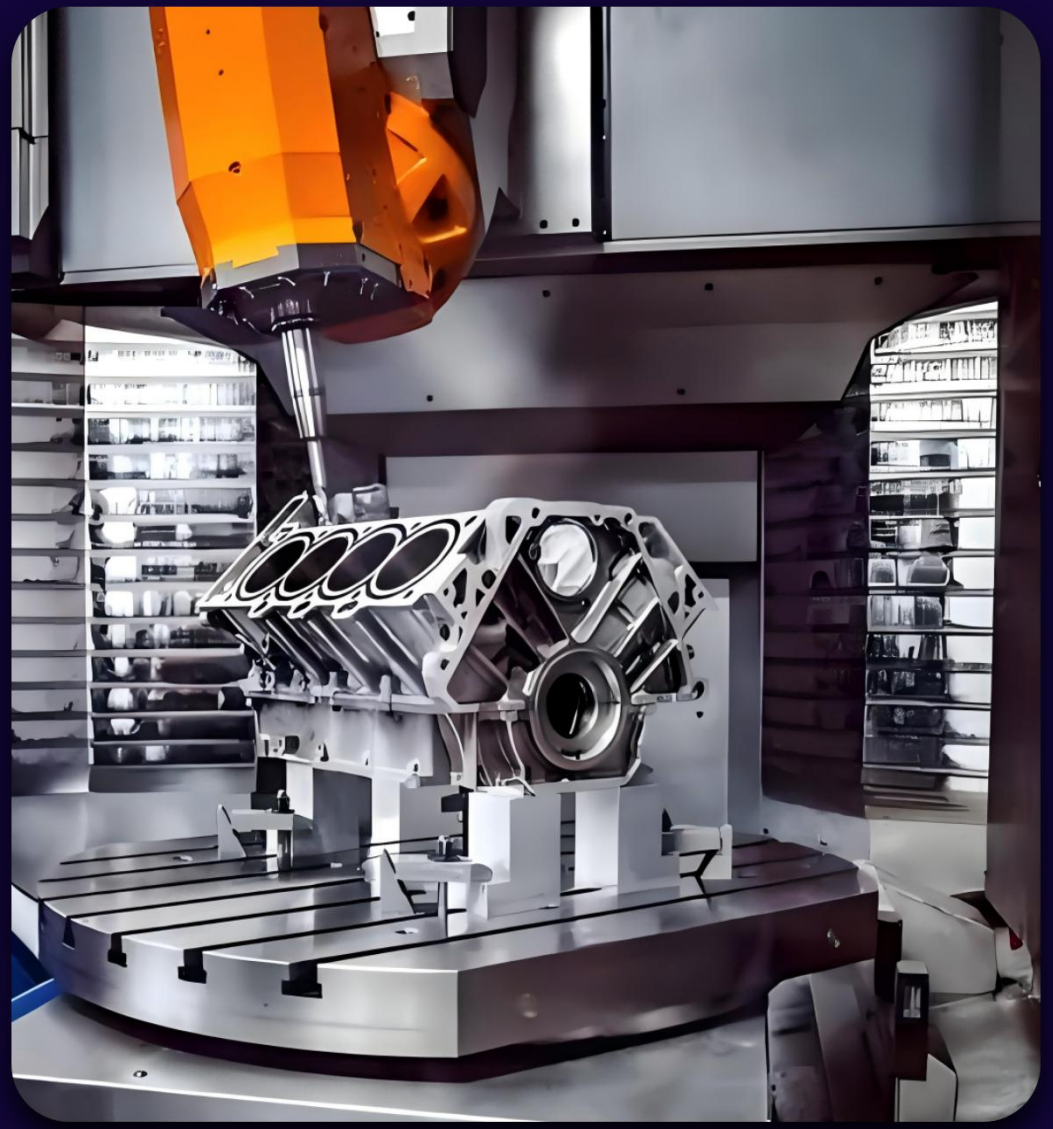
Skilled technology · superior quality · on-time delivery; continuous improvement · customer satisfaction

GREAT LIGHT
CNC Machining

Contact Us

CONTACT US

Website	glcncmachining.com
Corporate Site	greatlight-cnc.com
General Email	info@glcncmachining.com
Sales Inquiry	nora@greatlight-cnc.com
Address	Room 201, No. 10 Xinrong Street, Chang'an Town, Dongguan, Guangdong, China



Thank You

THANK YOU VERY MUCH

Great Light Metal Tech Co., LTD.
glcncmachining.com | greatlight-cnc.com