LatheTime

CNC MACHINING · TURNING

Custom CNC Machined Parts, Made to Your Drawings

CNC milling, turning, turn-mill and Swiss-type machining in Shenzhen — from one-off prototypes to batch production. Thirty new CNC lathes now run dedicated batch work in our workshop.



Five-axis milling under full coolant — photographed on our own shop floor.

ABOUT LATHETIME

The Gap Between the Drawing and the Quote

Most machined parts do not fail in the machine. They fail earlier — in the gap between the drawing a customer sends and the quote that comes back.

A purchasing manager sends a drawing to a portal. Software reads the shape, counts the volume, and returns a price in seconds. Nobody has asked whether the thin wall will hold, whether the thread callout matches the gauge in the drawer, whether the finish specified can survive the material chosen. The order is placed, the metal is cut, and the questions arrive afterwards — as delays, as re-quotes, as parts that almost match the drawing. Almost is an expensive word in machining.

latheTime was built to close that gap. We are a CNC machining workshop in Shajing, Baoan, Shenzhen, and the first thing that happens to your drawing here is unfashionable: a person reads it. An engineer opens the file, checks the tolerances against the process that will hold them, looks at the threads, the finish, the quantity — and only then do we put a price on it. The price takes longer than a bot's. It also stays the price.

The workshop floor is organised around how parts actually flow. Five-axis and four-axis milling centres take the housings, brackets and manifolds. Turn-mill centres handle the parts that are both turned and milled, finished in one clamping instead of three. Swiss-type sliding-headstock machines run the long, slender work. Wire EDM cuts what rotating tools cannot reach, and precision grinding finishes the surfaces that have to be flat, smooth and true. Around those machines sit the finishes, so a part can travel from raw bar to finished component without leaving the building.

This year the floor changed: thirty new CNC lathes arrived, set in a row dedicated to batch turning. A part we prove out in prototype can now move down the same floor into batch production, made by the same team and checked the same way. Prototypes and production stop being two different suppliers' problems.

The customers who find us are usually building something specific: a medical device that must pass its next design review, an instrument that ships in small batches to laboratories, a motor housing, a lighting fitting. They need a machining partner that reads drawings carefully, answers honestly, and delivers parts that match what was agreed. If you have a drawing, send it. You will not get an instant price. You will get an engineer who has read it, a fixed quotation, and parts made the way the drawing asked.

30	6	15	10+
new CNC lathes added for batch production	core machining processes under one roof	surface finishes available	materials machined regularly, from aluminium to PEEK

SERVICES — 1 OF 2

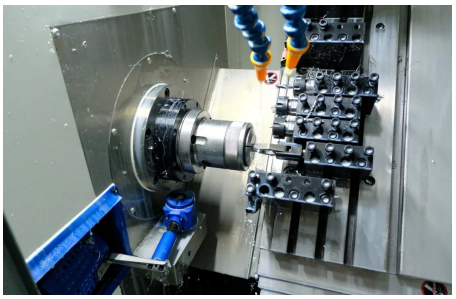
Machining Services

Six processes under one roof, so your part is not handed off between subcontractors. Every service below is quoted by an engineer who has read your drawing first.



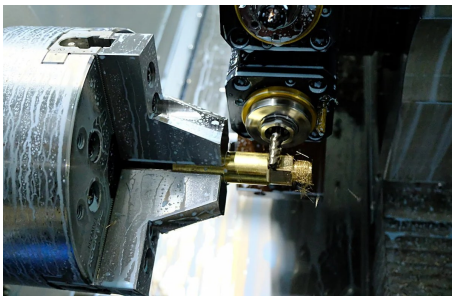
CNC Milling (3, 4 & 5 Axis)

Housings, brackets, manifolds and complex prismatic shapes, milled from solid metal and engineering plastics. Approaching a part from several sides in fewer setups means more features finished in one run — and geometry that stays true to the drawing.



CNC Turning

Precision turned parts made to your drawings on CNC lathes — shafts and axles, bushings and spacers, threaded fittings and connectors, pins, studs and inserts. Metric and imperial threads are routine, and threaded parts are verified with gauges before dispatch. Thirty new CNC lathes now run dedicated batch turning alongside our prototype work.



Turn-Mill Machining

Parts that are both turned and milled — flanges, shafts and fittings whose features must agree with each other — are finished in a single clamping on our turn-mill centres: turned, drilled and milled without moving to another machine. Fewer setups mean fewer chances to lose accuracy, and a shorter route from drawing to finished part for irregular-shaped components.

SERVICES — 2 OF 2

Machining Services

Swiss-Type Machining

Long, slender and small-diameter parts — pins, shafts and connectors — run from bar on sliding-headstock machines, supported close to the cutting edge so they do not bend or chatter the way they would on a conventional lathe. The process for small precision parts that must come off the machine complete, in one pass.

Wire EDM

Wire EDM cuts hardened and conductive metals with a moving wire and electrical discharges — no cutting force on the part. It holds sharp internal corners, narrow slots and fine detail that a milling cutter cannot reach, and it cuts profiles and apertures after heat treatment, when milling is no longer practical. Most EDM jobs start as a CNC-milled or turned blank from our own shop, so the whole part — machining, heat treatment, wire cutting — stays in one place and one quotation.

Precision Grinding

Grinding is the finishing step when a turned or milled part needs a finer surface, or a dimension held closer than machining alone leaves it. We grind shafts, pins, bushings and flat parts in steel, stainless and other metals — including hardened parts finished after heat treatment — as part of the same job as the CNC work, so fits between mating parts are ground against the same drawing and checked together before dispatch.



The workshop floor in Shenzhen — milling, turning, turn-mill, Swiss-type machining, wire EDM and precision grinding under one roof.

MATERIALS

Materials We Machine

These are the materials we work with every week. Send your drawing in any of them, or ask us about a grade you don’t see — an engineer reviews material, tolerances and finish together and returns a fixed quotation.

Aluminium 6061, 7075, 6082 — light, versatile, and anodizes beautifully. The default choice for housings, brackets and panels.	**Stainless Steel** 303, 304, 316 — corrosion resistance for wet, outdoor and hygienic environments; fittings, shafts and equipment parts.
Brass Free-machining brass that cuts cleanly and holds fine threads — fittings, connectors, valves, knobs and decorative hardware.	**Carbon Steel** Strong, cost-effective machinery grades for shafts, gears, sprockets, flanges and structural machine components.
Copper Conductivity grades (C110, tellurium copper C145) for electrical terminals, contacts, busbar parts and heat sinks.	**Titanium** Grade 2 and Grade 5 (Ti-6Al-4V) — steel-like strength at much lower weight, with outstanding corrosion resistance.
POM (Acetal) Stiff, low-friction, dimensionally stable engineering plastic for gears, bushings, bearings and sliding parts.	**Nylon** Tough, impact-resistant polyamide for gears, rollers, wear pads, guides, bushings and insulators.
PEEK High-performance plastic for heat, chemicals and continuous wear — seals, valve seats and instrument components.	**Polycarbonate** The transparent engineering plastic that does not shatter — machine guards, safety covers, sight glasses and windows.

Not sure which material?

Tell us what the part does — load, environment, temperature, appearance — with your enquiry, and our engineers will flag if the specified material looks wrong for the job before you spend anything. Material certificates are available on request for metals; mention it with the enquiry so the paperwork travels with your parts.

SURFACE FINISHES

15 Surface Finishes

The finish is part of the part. Every finish below is quoted together with the machining — one engineer-reviewed quotation covers the part and its finish, so there are no surprises after production.

Anodizing Hard, coloured oxide layer for aluminium.	**Alodine / Chem Film** Thin conductive coating for aluminium; paint base and grounding.	**Passivation** Restores stainless steel's corrosion resistance, with no size change.
Electropolishing Smooth, bright stainless finish that is easy to keep clean.	**Powder Coating** Durable colour paint finish for aluminium and steel.	**Black Oxide** Black conversion finish for steel, with no build-up.
Sand / Bead Blasting Uniform matte finish and preparation before coating.	**Polishing** Satin to mirror finishes on show faces.	**PVD Coating** Hard, premium decorative colours: gold, rose gold, black.
Electroless Nickel Even nickel layer that reaches bores and recesses.	**Heat Treatment** Hardening, tempering and stress relief for steel parts.	**As-Machined** Cleaned and deburred, no coating — the economical default.
Brushed Finish Fine satin grain for visible stainless and aluminium parts.	**E-Coating** Thin, even electrophoretic paint that reaches complex shapes.	**Electroplating** Nickel, chrome and zinc plating for protection and decoration.



Electropolished stainless steel — smoothed, brightened and easy to keep clean.

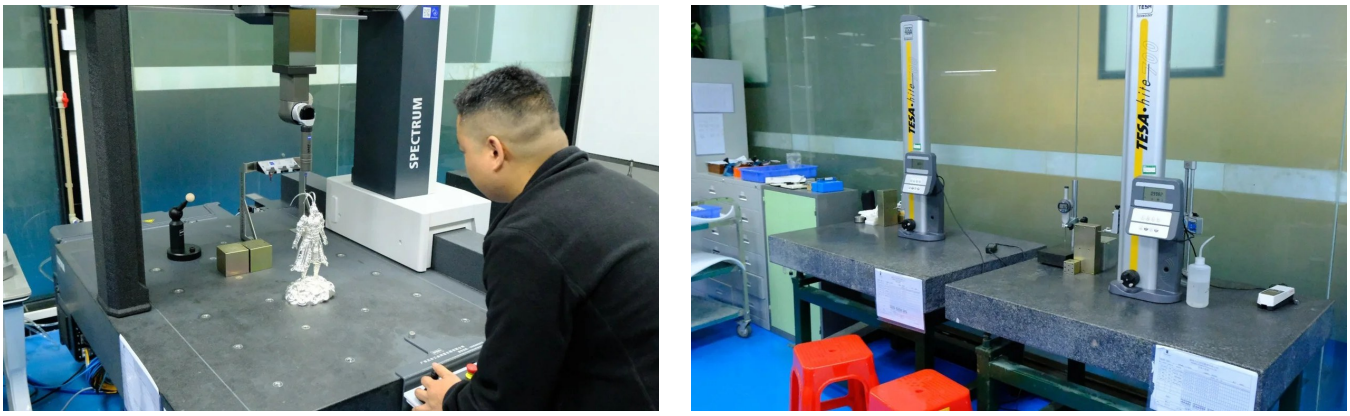
Choosing a finish: tell us what the finish must do — protect, conduct, match a colour, survive handling — and the engineer will confirm the specified finish works with the material, or suggest the better route at quote stage.

QUALITY

Checked Before It Ships

Quality here is not a department at the end of the line; it is a habit at every stage. Our production is certified to ISO 9001:2015 and ISO 14001:2015 — but certificates hang on walls; what protects your order is the checking rhythm on the floor.

- **Certified production** — Production certified to ISO 9001:2015 and ISO 14001:2015.
- **Checked in process** — Parts are measured while they are being made, not only after — dimensions against your drawing at every stage.
- **Threads verified, not assumed** — Threaded features are checked with gauges before a batch is passed.
- **Final inspection before dispatch** — Before anything is packed, each batch is measured against the drawing one more time.
- **Paperwork on request** — Material certificates, a dimensional report, and a first-article inspection on a new part are produced as a matter of course.



Coordinate measuring machine (CMM) and bench inspection in our own inspection room.

We are happy for customers to ask exactly how a given dimension will be verified before they commit — ask with your enquiry and the engineer will answer on the quotation.

HOW IT WORKS

From Drawing to Delivered Parts

1
Send Your Drawing
Send a STEP or IGES model with your 2D PDF drawing — tolerances, material, finish and quantity.

2
Engineer-Reviewed Quote
An engineer — not a bot — checks your drawing, material and quantity, and returns a fixed price that holds. No re-quotes after you order.

3
Production
Your parts are machined and finished in our own workshop — milling, turning, turn-mill, Swiss-type machining, wire EDM and grinding under one roof.

4
Inspection & Delivery
Every batch is inspected against your drawing before dispatch and packed for export. DDP delivery is available on request.

What we need from you

- A STEP or IGES model plus a 2D PDF drawing with tolerances, material and finish.
- The quantity — one-off prototypes through small production batches are all routine.
- The finish and any surfaces that must stay uncoated, marked on the drawing.
- An NDA is welcome — drawings are used only to quote and make your parts.

We do not offer instant quotes. Every enquiry is reviewed and quoted by an engineer, so the price is fixed and the part is checked for manufacturability before we commit.



Turn-mill centre on the workshop floor — turned and milled features finished in one setup.

WHY LATHETIME

Why Customers Stay With Us

Engineer-Reviewed Quotes

Every drawing that reaches us is read by an engineer before it is priced — material, tolerances, threads, finish and quantity all checked against how the part will actually be made. That is slower than an instant bot quote, and it is why the price we send is the price that holds: no re-quotes after you order, no surprises when production starts.

Complex Parts in One Setup

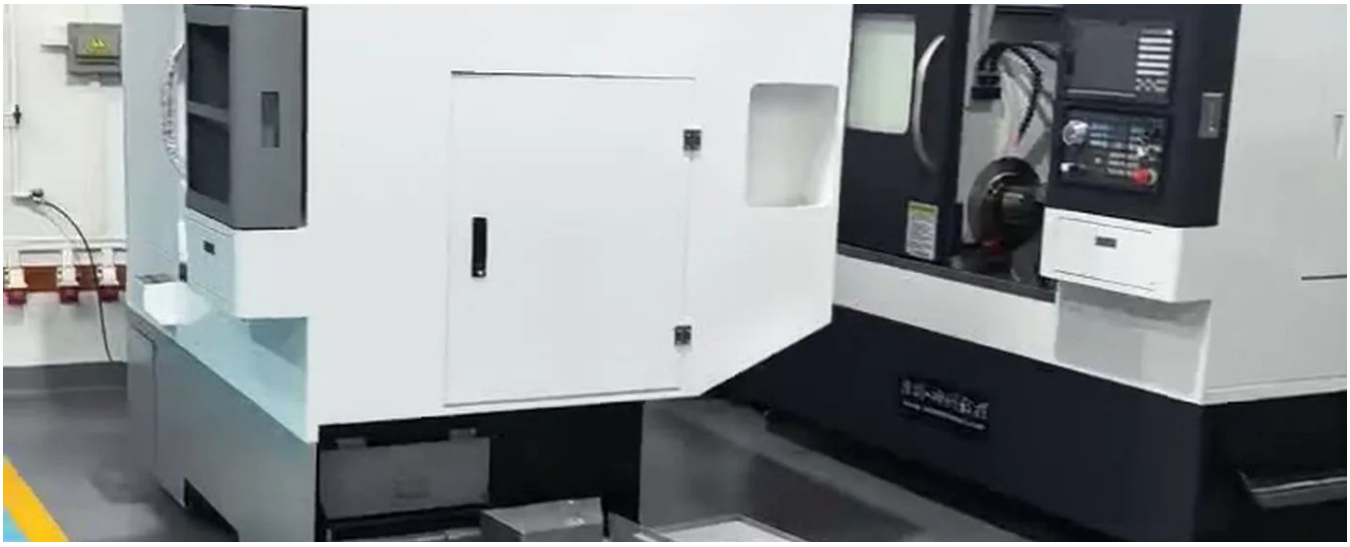
Turn-mill centres and five-axis machines finish turned and milled features in a single clamping, so a flange with cross-holes, flats and a thread does not travel between three machines and three queues. Fewer setups mean fewer chances to lose accuracy — and a shorter route from drawing to finished part for irregular-shaped components.

Batch Capacity That Scales

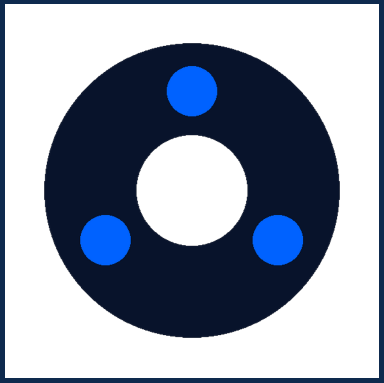
Thirty new CNC lathes now run dedicated batch turning in our workshop, next to Swiss-type machines for long, slender, small-diameter parts. A prototype we prove out for you can move straight into batch production on the same floor, with the same team that made the first one.

One Shop, Full Route — Checked Before It Ships

Milling, turning, turn-mill, Swiss-type machining, wire EDM and precision grinding sit under one roof, with fifteen surface finishes available, so your part is not handed off between subcontractors. Every batch is checked in process and again before dispatch — dimensions against your drawing, threads verified with gauges — and inspection reports are available on request.



The batch turning line — thirty new CNC lathes dedicated to batch work.



Have a drawing ready?

Send your drawing today — an engineer will review it and reply with a fixed quotation. No bots, no obligation.

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Custom CNC machined parts, made to your drawings — prototypes through batch production.