



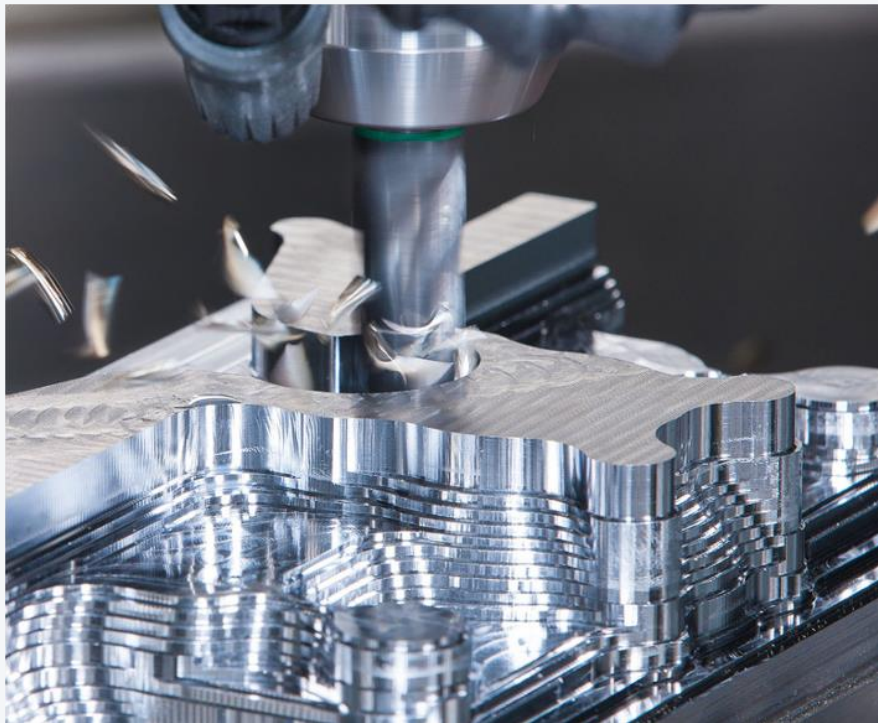
DATA CENTER HARDWARE

CNC machining, fabrication, welding, joining

American-run shop in Chengdu. Milling, turning, laser, weld, and assembly for data-center server racks, fluid hardware, and cooling components & fittings. US commercial face.

Chengdu, Sichuan · US commercial contact · 2026





American-run process

US-level communication and service, with production in Chengdu.

Precision shop

CNC machining including milling, turning, Swiss, fabrication, welding, joining, assembly.

Drawn to data centers

The same aerospace process discipline, applied to server racks, fluid hardware, and data-center components & fittings.

How we work

Drawings and DFM, prototypes through production, DDP export logistics.

Server racks

Frames, uprights, members, and rack structure from drawing to production.

Fluid hardware

Manifolds, distribution blocks, valve bodies, and weldments.

Cooling components

Ports, fittings, and machined details for cooling loops and distribution.

Brackets and frames

Mounts, housings, plates, and structural supports for racks and assemblies.

Finish and kitting

Powder, paint, assembly, kitting, and DDP ship.

How to start

Send a drawing. We quote, review DFM, prototype, then production.



Milling

Vertical and gantry mills up to 3.0 x 2.3 x 0.8 m. 3-axis, 4-axis, and 3+2 turntable. Fanuc and Mitsubishi.

Turning

CNC lathes to Ø400 x 500 mm. Gang-tool and 5-axis Swiss to Ø26 mm for fittings and small fluid hardware.

Special ops

Wire EDM (0.4 x 0.4 m), 5-ton horizontal broach (1.3 m stroke), programmable saws to Ø300 mm.

Inspection

Hexagon CMM 2.1 x 1.0 x 0.8 m with Renishaw 5-axis probe. Optical projectors and TESA-HITE gauges.

In-house machine counts

5

laser machines

12 kW sheet, 6 kW sheet
(x2), tube laser, coil-fed laser

4

robotic weld cells

Plus 31 stick/MIG/TIG
welders and 4-axis rotary
tables

6

CNC brake presses

Forming for brackets, panels,
housings

2

finish lines

Powder coat line and
automatic spray paint

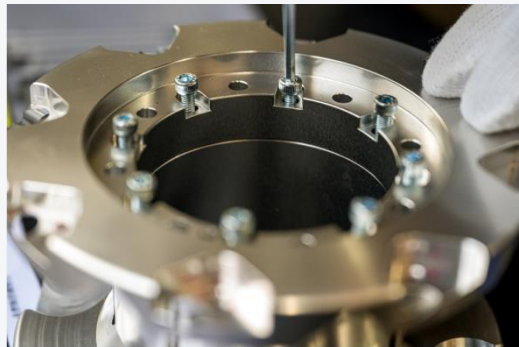
Also in house: turret punch, shears, punch presses (40 and 80 ton), hydraulic presses, flame cut, roll form, multi-head drill, 5-axis rotary table.



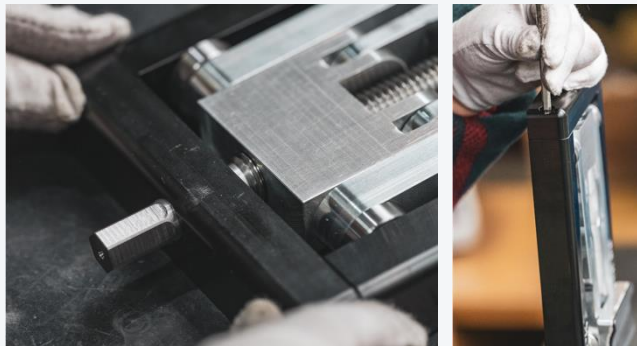
From the shop floor



Precision CNC parts



Assembly and fit-up



Build discipline



Fluid hardware kit

Metrology

Hexagon CMM with Renishaw 5-axis head, optical projectors, TESA height gauges. First-article and production checks.

Quality systems

Documented work instructions, inspection before pack. ISO 9001 certified, with AI-augmented and optimized QA alongside CMM.

Honest language

We do not claim helium leak or ASME pressure qualification until those capabilities are live and documented.

Logistics

DDP export, kitting, custom pack. US commercial face for RFQs, DFM, and follow-up.

Chengdu BeiJi

CNC machining, fabrication, welding, joining, assembly, inspection. Capacity for prototype through production lots.

Sunbird (US)

Sales and business development. Drawings in, quotes out. Same process language as the shop floor.

For data center buyers

Quote landed cost, not factory cost. Talk DFM and lead time. Start with a print, not a brochure war.

23+

CNC mills

VMC + gantry, 3/4/3+2 axis

9

Turning centers

Lathes to Ø400 + Swiss Ø26

5

Laser systems

Sheet, tube, coil-fed

31+4

Weld capacity

Welders + robotic cells

Category	Headline kit
Largest mill envelope	Gantry 3.0 x 2.3 x 0.80 m
CMM	Hexagon 2.1 x 1.0 x 0.8 m, Renishaw 5-axis
Sheet process	Laser, turret punch, shear, brake, punch press
Finish	Powder coat + automatic spray line
Controls	Fanuc 31i / Oi, Mitsubishi M70, Syntec

Why this shop for data centers



01

Process discipline

Aerospace machining, milling, and weld practice applied to data-center server racks and fluid hardware.

02

One roof

CNC machining, fabrication, welding, joining, finish, and assembly without bouncing between shops.

03

US conversation

Drawings, DFM, and follow-up in English. Production in Chengdu.

04

Quality systems

ISO 9001 certified, with AI-augmented and optimized QA alongside CMM inspection.



Let's talk about your print.

Send a drawing. We will tell you if we can make it, how, and on what lead time.

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