TUOHANG

Equipment & Metrology List

Baoji Tuohang Precision Manufacturing Co., Ltd.

Location: Baoji, Shaanxi, China

Specialty: Titanium and titanium alloy precision machining

Document: Manufacturing equipment and inspection capability summary

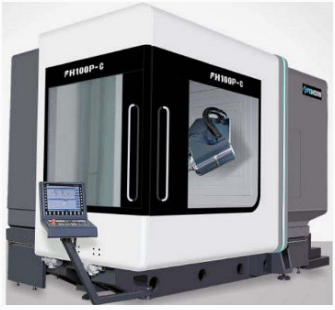
Source: Company equipment list (2024-03-30) and equipment / metrology summary sheet

Category	Items	Machines
Machining Centers (5 / 4 / 3-axis)	7	11
CNC Turning	8	11
Grinding / Conventional / Deep-Hole Drilling	3	3
Waterjet & Cutting	3	3
Metrology & Inspection	6	as listed
Auxiliary Equipment	2	as listed

1. Machining Centers (5-Axis / 4-Axis / 3-Axis)

7 items / 11 machines

1 Horizontal-Vertical Convertible 5-Axis Simultaneous Machining Center with Mill-Turn Function



Equipment ID	TH-X001
Brand / Manufacturer	Guangzhou Feihong
Model	FH100P-C
Quantity	1
Working Table / Capacity	1050 mm
Working Range / Travel	X/Y/Z = 1000/1150/1000 mm; spindle nose to table 160-1160 mm; horizontal milling head 30-1030 mm.
Accuracy	+/-0.005 mm

2 Mikron High-Precision 5-Axis Simultaneous Machining Center



Equipment ID	TH-X002
Brand / Manufacturer	GF Mikron (Switzerland)
Model	MILL700U
Quantity	1
Working Table / Capacity	750 mm
Working Range / Travel	X/Y/Z = 700/600/500 mm
Accuracy	+/-0.005 mm

3 Vertical 3-Axis Machining Center



Equipment ID	TH-X003
Brand / Manufacturer	Xiamen Yangsen
Model	YSV-1265
Quantity	1
Working Table / Capacity	1200 mm
Working Range / Travel	X/Y/Z = 1200/680/680 mm
Accuracy	+/-0.01 mm

4 Vertical 4-Axis Machining Center



Equipment ID	TH-X004
Brand / Manufacturer	Xiamen Yangsen
Model	YSV-855
Quantity	1
Working Table / Capacity	850 mm
Working Range / Travel	X/Y/Z = 850/550/550 mm
Accuracy	+/-0.01 mm

5 Vertical 3-Axis Machining Center



Equipment ID	TH-X005 / TH-X006 / TH-X007
Brand / Manufacturer	Xiamen Yangsen
Model	YSV-855
Quantity	3
Working Table / Capacity	850 mm
Working Range / Travel	X/Y/Z = 850/550/550 mm
Accuracy	+/-0.01 mm

6 Vertical 4-Axis Machining Center



Equipment ID	TH-X008 / TH-X009 / TH-X010
Brand / Manufacturer	Xiamen Yangsen
Model	YSV-855
Quantity	3
Working Table / Capacity	850 mm
Working Range / Travel	X/Y/Z = 850/550/550 mm
Accuracy	+/-0.01 mm

7 Horizontal 4-Axis Machining Center



Equipment ID	TH-X011
Brand / Manufacturer	Xiamen Yangsen
Model	YSH-800
Quantity	1
Working Table / Capacity	800 x 800 mm
Working Range / Travel	X/Y/Z = 1300/800/1000 mm; table indexing 0.001 degree; max workpiece swing 1500 mm; max table load 2000 kg; spindle nose to table center 150-1150 mm; spindle center to table 150-950 mm.
Accuracy	+/-0.005 mm

2. CNC Turning

8 items / 11 machines

8 CNC Lathe, 30-degree Integral Slanted Bed



Equipment ID	TH-C001 / TH-C002
Brand / Manufacturer	Jiatai
Model	JT50A
Quantity	2
Working Table / Capacity	500 mm
Working Range / Travel	Max X travel 550 mm; max longitudinal travel 260 mm.
Accuracy	0.005 mm

9 CNC Lathe, Flat Bed



Equipment ID	TH-C003 / TH-C004
Brand / Manufacturer	Jiatai
Model	CK50 x 1000
Quantity	2
Working Table / Capacity	500 x 1000 mm
Working Range / Travel	Max swing over bed 500 mm; max turning diameter over carriage 300 mm; max X travel 260 mm; max longitudinal travel 1000 mm.
Accuracy	0.01 mm

10 CNC Lathe, Flat Bed



Equipment ID	TH-C005 / TH-C006
Brand / Manufacturer	Baoji Machine Tool
Model	HK80B
Quantity	2
Working Table / Capacity	800 x 2000 mm
Working Range / Travel	Max swing over bed 800 mm; max turning diameter over carriage 500 mm; max X travel 390 mm; max longitudinal travel 1810 mm.
Accuracy	0.02 mm

11 CNC Lathe, Flat Bed



Equipment ID	TH-C007 / TH-C008
Brand / Manufacturer	Yishui Machine Tool
Model	CK6180
Quantity	1
Working Table / Capacity	800 x 2000 mm
Working Range / Travel	Max swing over bed 800 mm; max turning diameter over carriage 480 mm; max X travel 420 mm; max longitudinal travel 2000 mm; spindle bore 104 mm.
Accuracy	0.02 mm

12 CNC Lathe, Flat Bed



Equipment ID	TH-C009
Brand / Manufacturer	Baoji Machine Tool
Model	HK80B
Quantity	1
Working Table / Capacity	800 x 1000 mm
Working Range / Travel	Max swing over bed 800 mm; max turning diameter over carriage 500 mm; max X travel 390 mm; max longitudinal travel 1000 mm.
Accuracy	0.02 mm

13 CNC Lathe, Flat Bed



Equipment ID	TH-C010
Brand / Manufacturer	Baoyi Machine Tool
Model	ESK125
Quantity	1
Working Table / Capacity	1250 x 750 mm
Working Range / Travel	Max swing over bed 1250 mm; max turning diameter over carriage 880 mm; max X travel 620 mm; max longitudinal travel 750 mm.
Accuracy	0.02 mm

14 CNC Vertical Lathe



Equipment ID	TH-C011
Brand / Manufacturer	Baoji Machine Tool
Model	CD125
Quantity	1
Working Table / Capacity	1250 x 900 mm
Working Range / Travel	Max swing over bed 1250 mm; max workpiece length 900 mm; max workpiece weight 4000 kg.
Accuracy	0.02 mm

15 CNC Lathe, Flat Bed



Equipment ID	TH-C012
Brand / Manufacturer	Baoji Machine Tool
Model	HK80B
Quantity	1
Working Table / Capacity	800 x 2000 mm
Working Range / Travel	Max swing over bed 800 mm; max turning diameter over carriage 500 mm; max X travel 390 mm; max longitudinal travel 1810 mm.
Accuracy	0.02 mm

3. Grinding, Conventional Turning & Deep-Hole Drilling

3 items / 3 machines

16 CNC Face & Cylindrical Grinding Machine

No photo available

Equipment ID	
Brand / Manufacturer	Qinchuan Gelande
Model	MK1620Ex5
Quantity	1
Working Table / Capacity	200 x 500 mm
Working Range / Travel	Max workpiece swing 230 mm; max grinding diameter 200 mm; max grinding length 500 mm; max workpiece weight 500 kg.
Accuracy	X axis 0.004 mm; Z axis 0.008 mm; roundness 0.0015 mm; Ra 0.4 um

17 Conventional Lathe

No photo available

Equipment ID	
Brand / Manufacturer	Yishui Machine Tool
Model	CW6180 x 4000
Quantity	1
Working Table / Capacity	800 x 4000 mm
Working Range / Travel	Max swing over bed 800 mm; max turning diameter over carriage 480 mm; spindle bore 104 mm.
Accuracy	0.04 mm

18 Deep-Hole Drilling Machine

No photo available

Equipment ID	
Brand / Manufacturer	Guanlu
Model	TSK2136 x 4m
Quantity	1
Working Table / Capacity	230 x 4000 mm
Working Range / Travel	Drilling 20-100 mm; boring 45-360 mm; trepanning 60-230 mm; machining depth 4000 mm; workpiece OD 90-500 mm; workpiece length 500-4000 mm.
Accuracy	Ra 0.1-0.2 um; 0.1 mm / 1000 mm

4. Waterjet & Cutting

3 items / 3 machines

19 4-Axis Waterjet Cutting Machine



Equipment ID	TH-SD001
Brand / Manufacturer	Xusheng
Model	CUX400H
Quantity	1
Working Table / Capacity	2000 x 4000 mm
Working Range / Travel	X x Y = 2000 x 4000 mm
Accuracy	+/-0.1 mm

20 Plate Shearing Machine



Equipment ID	TH-JB001
Brand / Manufacturer	Jinniu
Model	QC12Y-3 x 2500
Quantity	1
Working Table / Capacity	3 x 2500 mm
Working Range / Travel	Shearing thickness 3 mm; width 2500 mm; material strength 450 kN/cm.
Accuracy	Shear angle 1 degree 30 minutes

21 Band Sawing Machine



Equipment ID	TH-J001
Brand / Manufacturer	Baoji
Model	GB4230
Quantity	1
Working Table / Capacity	300 x 300 mm
Working Range / Travel	Round cutting 300 mm; square cutting 300 x 300 mm.
Accuracy	+/-0.5 mm

5. Metrology & Inspection

6 items

22 Coordinate Measuring Machine (CMM)



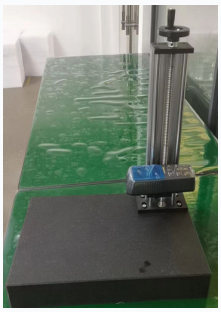
Equipment ID	TH-J001
Brand / Manufacturer	NANO
Model	Micro 10128
Quantity	1
Working Table / Capacity	1000 x 1200 x 800 mm
Working Range / Travel	X x Y x Z = 1000 x 1200 x 800 mm
Accuracy	Probe error R <= 2.5 um

23 Digital Microscope



Equipment ID	TH-J002
Brand / Manufacturer	Baidatong
Model	CCD21-135
Quantity	1
Working Table / Capacity	380 x 250 mm
Working Range / Travel	380 x 250 x 200 mm
Accuracy	48000 W (as stated in source)

24 Surface Roughness Tester



Equipment ID	TH-J003
Brand / Manufacturer	Poruike
Model	BC-200
Quantity	1
Working Table / Capacity	410 x 260 mm
Working Range / Travel	Measuring range 0.005-16
Accuracy	0.001 um

25 Spectrometer

No photo available

Equipment ID	
Brand / Manufacturer	Jitai Instruments
Model	JES-2000
Quantity	
Working Table / Capacity	
Working Range / Travel	
Accuracy	

26 Rockwell Hardness Tester

No photo available

Equipment ID	
Brand / Manufacturer	XIYA
Model	
Quantity	
Working Table / Capacity	
Working Range / Travel	
Accuracy	

27 Ultrasonic Flaw Detector

No photo available

Equipment ID	
Brand / Manufacturer	Beijing Sihe
Model	SH620
Quantity	
Working Table / Capacity	
Working Range / Travel	
Accuracy	

6. Auxiliary Equipment

2 items

28 Ultrasonic Cleaning Machine



Equipment ID	
Brand / Manufacturer	Kemeng
Model	KM-615B
Quantity	1
Working Table / Capacity	330 x 300 mm
Working Range / Travel	Timer 1-30 min; temperature control ambient to 80 C; inner tank 330 x 300 x 150 mm; external dimensions 360 x 325 x 285 mm.
Accuracy	

29 Polishing Machine

No photo available

Equipment ID	
Brand / Manufacturer	
Model	
Quantity	
Working Table / Capacity	
Working Range / Travel	Spindle speed 2000 r/min; working range 15-200 mm.
Accuracy	

Notes

1. Equipment IDs in the source list are retained where provided. Rows 5 and 6 represent three machines each.
2. Items 25-29 (spectrometer, hardness tester, flaw detector, polishing machine) appear in the summary sheet without individual quantities or photographs; those fields are left blank rather than assumed.
3. The "48000 W" figure for the digital microscope is reproduced verbatim from the source document.
4. Equipment ID "TH-J001" is assigned in the source to both the CMM and the band saw; reproduced as-is for traceability.
5. No military-grade qualifications, controlled drawings or third-party logos are included in this document.