

JECMETAL'S MACHINE CAPABILITY & M/C CAPACITY

1 CNC MILLING

1.1 M/c capacity

- based on 8 hrs -- 1080 hrs / week (include Saturday 5 hrs per m/c)
- based on 22 hrs -- 2904 hrs / week (include Saturday 1 shift)

1.2 M/c capability

No.	Mc No.	Machine (Type)	Working Range (mm)	Accuracy (mm)	ATC	Remarks
1	C01	Makino RMC 55	X=550 Y=320 Z=350	0.025	N/V	3 Axis
2	C02	Makino FNC-60-A20	X=600 Y=400 Z=400	0.010	20 Tools	3 Axis
3	C03	Makino RMC 55-A10	X=550 Y=320 Z=350	0.025	10 Tools	3 Axis
4	C06	Makino MAX65	X=650 Y=400 Z=400	0.010	20 Tools	3 Axis
5	C07	Deckel Maho DMU50V	X=500 Y=380 Z=380	0.010	24 Tools	5 Axis
6	C09	Deckel Maho DMU 50 eVolution	X=500 Y=420 Z=380	0.010	32 Tools	5 Axis
7	C10	Fanuc Robodrill T14 iDLe	X=700 Y=400 Z=500	0.010	14 Tools	3 Axis
8	C11	Fanuc Robodrill T21 iDLe	X=700 Y=400 Z=350	0.005	21 Tools	3 Axis
9	C12	Hartford VMC 2100A Sumo	X=2000 Y=1000 Z=750	0.010	32 Tools	3 Axis
10	C13	Makino S33	X=650 Y=450 Z=400	0.005	20 Tools	3 Axis
11	C14	Hartford PRO 1000AP (Spindle Thru Coolant 70 Bar)	X=1000 Y=600 Z=600	0.010	20 Tools	3 Axis
12	C15	Makino S33-APC Double Pallet	X=650 Y=450 Z=400	0.005	20 Tools	3 Axis
13	C16	Makino S33-APC Double Pallet	X=650 Y=450 Z=400	0.005	20 Tools	3 Axis
14	C17	Fanuc Robodrill T14 iEe	X=500 Y=400 Z=350	0.010	14 Tools	3 Axis
15	C18	Makino A51-A40 Horizontal Double Pallet	X=560 Y=560 Z=600	0.005	40 Tools	4 Axis
16	C19	Deckel Maho DMU 60 Monoblock	X=530 Y=500 Z=400	0.005	30 Tools	5 Axis
17	C21	Fanuc Robodrill T21 iFLe	X=700 Y=420 Z=500	0.010	21 Tools	3 Axis
18	C22	Makino PS65	X=660 Y=510 Z=450	0.005	30 Tools	3 Axis
19	C23	Mazak Nexus VCN510C-II	X=700 Y=400 Z=400	0.005	30 Tools	3 Axis
20	C24	Hartford HB-4210BC	X=4000 Y=2100 Z=1070	0.010	40 Tools	4+1 Axis
21	C25	Makino KE55	X=550 Y=320 Z=350	0.005	N/V	3 Axis
22	C26	Agma A10	X=1000 Y=550 Z=500	0.010	24 Tools	3 Axis
23	C27	Tongtai Topper TMV-510CII	X=500 Y=350 Z=300	0.005	20 Tools	3 Axis
24	C28	Hartford HSA2215	X=2200 Y=1500 Z=780	0.010	32 Tools	3 Axis

2 CNC TURNING

2.1 M/c capacity

- based on 8 hrs -- 360 hrs / week (include Saturday 5 hrs per m/c)
- based on 22 hrs -- 968 hrs / week (include Saturday 1 shift)

2.2 M/c capability

No.	Mc No.	Machine (Type)	Working Range (mm)	Accuracy (mm)	ATC	Remarks
1	T04	Okuma LCS15	O.D. = 250; Length = 200	0.020	8	2 Axis
2	T05	Okuma LB102-M	O.D. = 120; Length = 250	0.015	12	3 Axis
3	T06	Tornos Bechler, Deco2000	O.D. = 20; Length = 400	0.010	22	10 Axis
4	T07	Okuma Bar Center-34	O.D. = 25; Length = 100	0.015	8	2 Axis
5	T09	Galaxy GL-250	O.D. = 250; Length = 250	0.010	8	2 Axis
6	T08	Galaxy GL-300	O.D. = 250; Length = 300	0.010	8	2 Axis
7	T10	Mazak QTN-200 II - MSY	O.D. = 380; Length = 575	0.010	12 (24 if double sided holder)	4 Axis + 2 Spindle
8	T11	FANUC Oi-TD LC38X2000	O.D. = 500; Length = 2000	0.030	8	2 Axis

3 MANUAL MILLING

3.1 M/c capacity

- based on 8 hrs -- 450 hrs / week (include Saturday 5 hrs per m/c)
- based on 22 hrs -- 1210 hrs / week (include Saturday 1 shift)

3.2 M/c capability

No.	Mc No.	Machine (Type)	Working Range (mm)	Accuracy (mm)
1	M12	LAGUN	X=600 Y=250 Z=300	0.020
2	M05	LAGUN	X=600 Y=250 Z=300	0.020
3	M02	RAMBO	X=600 Y=250 Z=300	0.050
4	M07	RAMBO	X=600 Y=250 Z=300	0.050
5	M01	PROTURN	X=550 Y=250 Z=300	0.050
6	M15	QUICK JET	X=600 Y=250 Z=300	0.010
7	M16	QUICK JET	X=600 Y=250 Z=300	0.010
8	M17	MYTECH	X=600 Y=250 Z=300	0.010
9	M18	MYTECH	X=600 Y=250 Z=300	0.010
10	M19	MYTECH	X=600 Y=250 Z=300	0.010

4 MANUAL TURNING

4.1 M/c capacity

- based on 8 hrs -- 90 hrs / week (include Saturday 5 hrs per m/c)
- based on 22 hrs -- 242 hrs / week (include Saturday 1 shift)

4.2 M/c capability

No.	Mc No.	Machine (Type)	Working Range (mm)	Accuracy (mm)
1	T01	WINHO	O.D. = 350; Length = 850	0.010
2	T02	WINHO	O.D. = 350; Length = 850	0.010

5 GRINDING

5.1 M/c capacity

- based on 8 hrs -- 495 hrs / week (include Saturday 5 hrs per m/c)
- based on 22 hrs -- 1331 hrs / week (include Saturday 1 shift)

5.2 M/c capability

No.	Mc No.	Machine (Type)	Working Range (mm)	Thk Accuracy (mm)	Pitching Accuracy (mm)	Remarks
1	G01	Okamoto 450DX	X=400 Y=150 Z=240	0.002	0.005	Semi-auto
2	G02	Okamoto 450DX	X=400 Y=150 Z=240	0.002	0.010	Semi-auto
3	G06	Okamoto 450DX	X=400 Y=150 Z=240	0.002	0.010	Semi-auto
4	G05	Okamoto 350DX	X=300 Y=150 Z=240	0.002	0.010	Manual
5	G08	Okamoto 450DX	X=400 Y=150 Z=240	0.002	0.005	Semi-auto
6	G11	Okamoto 525DX	X=500 Y=250 Z=240	0.002	0.020	Semi-auto
7	G10	Okamoto ACC 450 CV	X=400 Y=150 Z=240	0.002	0.005	Semi-auto
8	G09	Okamoto 350DX	X=300 Y=150 Z=240	0.002	0.005	Manual
9	G14	Okamoto ACC 450 CV	X=400 Y=150 Z=240	0.002	0.005	Semi-auto
10	G13	Okamoto 525ST	X=400 Y=250 Z=240	0.002	0.005	Semi-auto
11	G12	Okamoto ACC 450 CV	X=400 Y=150 Z=240	0.002	0.002	Semi-auto

6 WIRE CUT

6.1 M/c capacity

- based on 8 hrs -- 90 hrs / week (include Saturday 5 hrs per m/c)
- based on 22 hrs -- 242 hrs / week (include Saturday 1 shift)

6.2 M/c capability

No.	Mc No.	Machine (Type)	Working Range (mm)	Accuracy (mm)	Remarks
1	W02	Makino U32	X=350 Y=250 Z=220 U=+/-15 V=+/-15	0.002	Submerge type
2	W01	Makino EC32 (Z-Axis manual)	X=350 Y=250 Z=220 U=+/-15 V=+/-15	0.002	Flushing type

7 EDM

7.1 M/c capacity

- based on 8 hrs -- 225 hrs / week (include Saturday 5 hrs per m/c)
- based on 22 hrs -- 605 hrs / week (include Saturday 1 shift)

7.2 M/c capability

No.	Mc No.	Machine (Type)	Working Range (mm)	Accuracy (mm)	Remarks
1	E01	GROMAX	X=450 Y=200 Z=200	0.050	Manual
2	E02	ARD	X=450 Y=200 Z=200	0.010	Manual
3	E03	ECOWIN	X=400 Y=300 Z=200	0.010	Manual
4	E04	MAKINO EDGE 2	X=350 Y=200 Z=200	0.002	CNC
5	E05	MAKINO EDGE 2	X=350 Y=200 Z=200	0.005	CNC with ATC

8 SUPER DRILL

8.1 M/c capacity

- based on 8 hrs -- 90 hrs / week (include Saturday 5 hrs per m/c)

8.2 M/c capability

No.	Mc No.	Machine (Type)	Working Range (mm)	Accuracy (mm)	Remarks
1	S01	OMEGA	X=400 Y=300 Z=100	0.020	Mainly for drilling carbide and harden material
2	S02	CASTEK	X=400 Y=300 Z=100	0.020	

9 LASER MARKING

9.1 M/c capacity

- based on 8 hrs -- 45 hrs / week (include Saturday 5 hrs per m/c)

9.2 M/c capability

No.	Mc No.	Machine (Type)	Working Range (mm)	Remarks
1	L01	TOYO	X=100 Y=100	Mainly for Marking

10 DEBURRING SYSTEM

10.1 M/c capacity

- based on 8 hrs -- 90 hrs / week (include Saturday 5 hrs per m/c)

10.2 M/c capability

No.	Mc No.	Machine (Type)	Remarks
1	D01	Model - 500	Generating magnetic field with positive and negative molecule in order to etch the sharp corner
2	D02	Micro Silica	Deburring / Polishing inner and intersection holes by using abrasion concept

JECMETAL'S INSPECTION FACILITIES

No.	Inspection / Measuring facilities	Qty	Brand	Model No.	Remarks
1	CMM (cordinated measuring m/c)	1	Brown & Sharpe	PFX 454	Capacity : X:300 Y:450 Z:300mm
2	Faro - Arms	1	FARO	10ft (3.0M), 7 axis with Bluetooth	Accuracy : +/- 0.0063mm
3	Faro Gauge	1	FARO	12751-004 Platinum	Accuracy : +/- 0.005mm
4	Block Gauge	1 set	SMSB	PTW	0.5 - 100 mm
5	Bore Gauge(50mm~100mm)	1	Mitutoyo	-	50mm - 100mm
6	Concentricity Gauge	1	-	-	-
7	Height Gauge	1	-	-	-
8	Pin Gauge (0.22 - 10 mm)	1 set	SMSB	-	Range = 0.02 mm
9	Ring Gauge	5	SMSB	-	-
10	Thread Plug Gauge (various sizes)	1 each	-	-	-
11	Thread Ring Gauge (various sizes)	1 each	-	-	-
12	Calipers (Vernier & digimite type)	62	Mitutoyo	-	Digital and Analog type
13	Micrometers (for external & internal)	49	Mitutoyo	-	Digital and Analog type
14	Check Master	1	SMSB	CA07227	0 ~ 600mm
15	Height Master	1	Mitutoyo	34527	10mm - 310mm / 0.001mm
16	Coating Thickness Tester	1	Mitutoyo	-	-
17	Hardness Tester	1	Mitutoyo	HR522	For HRC scale
18	HRC Hardness Test Block (3 ranges)	1 each	SMSB	19BAA	Ø30.9 / Ø62.1
19	Mini Rigid Borescope	1	Everest	-	Probe OD : 1.90mm
20	Toolmakers Microscope	1	Mitutoyo	TM510	50mm x 50mm
21	Profile Projector	1	Mitutoyo	PJ3000	200mm x 100mm
22	Setting Rod	4	SMSB	-	25, 50, 75 & 100 mm
23	Surface RA meter	1	Mitutoyo	SJ-210P	-
24	Granite Table	1	-	-	-
25	Roughness Comparator	2 sets	-	-	-
26	Unimate	6	-	-	-

JECMETAL'S CAD-CAM SOFTWARE

No.	Software	Formats that can be viewed or opened for CAD-CAM Dept.
1	ACIS.SAT	*.sat
2	Assembly Files	*.iam
3	BMP	*.bmp
4	Catia V4	*.DLV, *.model
5	Catia V5	*.CATDrawing, *.CATPart, *.CATProduct
6	Drawing Files	*.dwg, *.idw
7	DXF Files	*.dxf
8	GIBBS Cam	*.vnc
9	iFeature Files	*.ide
10	IGES Files	*.ige, *.iges, *.igs
11	Inventor Files	*.iam, *.ide, *.idw, *.ipt, *.ipn
12	Parasolid	*.x_t, *.xmt
13	Parasolid Binary Files	*.x_b
14	Part Files	*.ipt
15	Point List	*.txt
16	Presentation Files	*.ipn
17	Pro / Engineer Files	*.asm, *.prt
18	SAT Files	*.sat
19	Solid Edge	*.par
20	Solid Edge Assembly	*.ASM
21	Solid Works Assembly	*.SLDASM
22	Solid Works File	*.SLDPRT
23	STEP Files	*.ste, *.step, *.stp
24	STL Files	*.stl
25	XGL Files	*.xgl
26	ZGL Files	*.zgl