

TURNING

Nr.	Model	Description	Bar pass	Runs [mm]			Rpm
			Ø [mm]	X/Ø	Y	Z	[rpm]
1	Star SR 20R III	CNC Sliding headstock lathe- Bar	Ø 20	20		205	10000
2	Star SB 20R type G	CNC Sliding headstock lathe- Bar	Ø 20	20		205	10000
1	Star SR 32JII type A	CNC Sliding headstock lathe- Bar	⁴ Ø 32	32		295	10000
1	Star SR 32J	CNC Sliding headstock lathe- Bar	Ø 32	32		295	10000
1	Okuma LB15II	CNC lathe Fanuc ARCmate 120i Robot	Ø 60	250		500	4200
1	Okuma LB12	CNC lathe Fanuc LRmate 100 Robot	Ø 42	200		300	4200
2	Okuma LB300MY	CNC lathe Driven tools	Ø 70	250	120	1000	3800
1	Okuma GENOS L200E-MY	CNC lathe Driven tools	Ø 50	210	60	300	4200
1	Okuma GENOS L300E-MY	CNC lathe Driven tools	Ø 65	250	120	600	4500
1	Femco HL25	CNC lathe - Bar	Ø 52	210		300	4800
2	OkumaLB3000EXMYW	CNC lathe – Bar Driven tools	Ø 80 - Ø70	250	120	1000	4200
1	Okuma LB300MW	CNC lathe - Bar	Ø 65	250		500	3800
1	Okuma LB300M	CNC lathe – Bar Driven tools	Ø 70	250		500	3800
2	Okuma LB200M	CNC lathe – Bar Driven tools	Ø 50	210		300	4200
2	Okuma LT200MY	CNC lathe – Bar Driven tools	Ø 65	210	120	960	4200
1	Okuma LT200M	CNC lathe – Bar Driven tools	Ø 50	210		960	4200
1	Okuma LT2000EX	CNC lathe - Bar Driven tools	Ø 70	210	120	960	4200

MULTITASKING

Nr.	Model	Description	Bar pass	Runs [mm]			Rpm
			Ø [mm]	X/Ø	Y	Z	[rpm]
5	Okuma MULTUS B300IIW	CNC Multitasking Machine – 5 Axis	Ø 70	300	160	900	10000
4	FANUC mod. M-20iD/25						
1	Okuma MULTUS B200IIW	CNC Multitasking Machine – 5 Axis	Ø 65	250	160	750	12000
2	OKUMA MULTUS U3000	CNC Multitasking Machine – 5 Axis	Ø 70	300	250	900	12000

MILLING

Nr.	Model	Description	N° of tools	Runs [mm]			RPM
				X	Y	Z	[rpm]
1	Okuma MA400HA	Horizontal Machining Centers N° 6 pallets	60	560	610	625	15000
2	Okuma MA400HA	Horizontal Machining Centers N° 6 pallets	200	560	610	625	15000
1	Okuma MA40HA	Horizontal Machining Centers N° 2 pallets	40	560	610	625	7000
1	Okuma MB5000HB	Horizontal Machining Centers N° 2 pallets	64	760	760	810	15000
1	Okuma MU5000V	5 Axis Vertical Machining Center	48	800	1050	600	15000
1	FANUC M-710iC/70						
1	Okuma MU4000V	5 Axis Vertical Machining Center – N° 6pallets	64	740	460	460	20000
1	Okuma GENOS M460-VE	Vertical Machining Centers CN Divider	32	720	460	460	15000
1	Brother TC32B-QT	Vertical Machinig Centers N° 2 pallets	26	550	400	415	16000
1	Brother TC32B-QTn	Vertical Machinig Centers N° 2 pallets	40	550	400	415	16000
1	Kitamura 2	Vertical Machinig Centers CN Divider	20	580	420	450	5000

EDM

Nr.	Model	Description	Wire Diameter Range (mm)	Runs [mm]			Maximum Wire Angle
				X	Y	Z	
2	Mitsubishi MV1200R	Wire EDM Machine	0,1 – 0,3	400	300	220	15° x 200mm

LASER MARKING

Model	Description	Working field	Runs [mm]			Maximum Speed
			X	Y	Z	
CIELLE - TAU SMART	Laser marker	0,1 – 0,3	110	110	255	7m/sec

PRE-SETTING

Model	Description
SPERONI STP MAGIS 500	Tool presetting and measuring system
HAIMER POWER CLAMP PLUS NG	High performance shrink fit machine for all tools, with intelligent NG coil, single chuck version and integrated contact cooling

VACUUM WASHING MACHINE

Model	Description
IFP KP 100	Vacuum washing machine – modified alcohol, hydrocarbons. Ultrasound technology

Measurement tools

Model	Description	Runs [mm]			Precision [mic]	Resolution
		X	Y	Z	Linear (MPE _E)	[mic]
ZEISS Contura G2	3D measuring machine	700	1000	600	1,7+L/350	0,10
OGP Smartscope Zip Lite 300	Optical 3D measuring machine + probe	300	300	150	2.0+6L/1000	0,50

IMS Impact	3D measuring machine	500	600	450	3+L/300	0,50
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Model	Description	Runs [mm]			Precision [mic]	Resolution
		∅	Y	Z	Roundness error	[mic]
JENOPTIK Opticline CS308	Vertical optical measuring machine	80	/	300	Diameter: 2 + ∅ _{mm} /100 Lenght: 5 + L _{mm} /100	0,1

Model	Description	Runs [mm]			Linear measure error asse X	Resolution
		X	Y	Z	[mic]	[mic]
MITUTOYO Formtracer Avant C-3200	Profile measuring machine	100	/	60	X=(0,8+0,01L)µm Z=(1,2+2H/100)µm	X0,05 Z0,04

Model	Description	Runs [mm]			Precision	Resolution
		X	Y	Z	[mic]	[mic]
MITUTOYO LH - 600B	Digital height gauge	/	/	600	±(1,1+0,6L/600)µm	0,1
MITUTOYO LH - 600						

Model	Description	Runs [mm]			Elaborations		Cut-off
		X	Y	Z	Profiles	Parameters	[mic]
MITUTOYO SJ - 210	Roughness meter	16	/	/	R;P;DF	Ra; Rz; Ry; Rt; Rp; Rq.	0,08;0,25;0,8;2,5;8

MITUTOYO SJ - 410	Roughness meter	25	/	/	R;P;W;DF	Ra; Rz; Ry; Rt; Rp; Rq.	0,08;0,25;0,8;2,5;8
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Model	Description	Measurable hardnesses		
CISAM	Hardness testing machine	HRA	HRB	HRC

Model	Description	Magnification		
NIKON SMZ 745T	Stereo Microscope	6	÷	50
MEIJI EMZ1	Microscope	15	÷	30

3D-PRINTER

<i>Model</i>	<i>Technology</i>
NEXA 3D	Lubricant Sublayer Photo-curing (LSPc)
RAISE 3D	Fused Filament Fabrication (FFF)