

LIST OF MACHINES - ESOX TOOLSHOP

CNC Plunger EDM machines

Type	pcs	Company	Controlls	Year of production	Max. size of the work piece [mm]	Max. weight of the work piece[kg]	Max. weight of the electrode[kg]
ROBOFORM 50	1	CHARMILLES TECHNOLOGIES	CT	1998	600x400x450	800	50
ROBOFORM FO550	1	CHARMILLES TECHNOLOGIES	CT	2010	600x450x480	900	150
EXERON EDM313	1	EXERON	MF30	2010	600x450x500	900	150
Hole EDM DRILL 20	1	AGIE CHARMILLE	CT	2015	min. hole diam. 0,3	max. hole diam. 3	

CNC wire EDM cutting machines

Type	pcs	Company	Controlls	Year of production	Max. size of the work piece [mm]	Angle cutting [°]	Min. thickness of the wire [mm]	Precision of the repeated startup [mm]
ROBOCUT ALFA-C600iA	1	FANUC	FANUC C600	2014	600x450x350	± 30	0,1	0,003
ROBOCUT ALFA 1iD	1	FANUC	FANUC 310-WA	2010	600x400x310	± 30	0,1	0,003

CNC machines centers

Type	pcs	Company	Controlls	Year of production	Max. movements x,y,z [mm]	Max. weight of the work piece [kg]	Rpm [1/min]	Special function
MIKRON HPM8000-5axis	1	MIKRON	Heidenhein 630	2015	800x800x590	500	20 000-60 000	laser measurement device
MIKRON HSM 400	1	AGIE CHARMILLES	Heidenhein 530	2011	500x450x360	120	30 000	Graphite
MCV 1000	1	MAS Sezimovo Usti	Heidenhein 530	2005	1000x550x560	650	10 000	Cooling throught the spindle
PINACLE 810	1	Taiwan	Heidenhein 530	2007	810x800x570	650	12 000	Cooling throught the spindle

CNC Lathe machine

Type	pcs	Company	Controls	Year of production	Max. movements [mm]	Max. weight of the work piece [kg]	Rpm [1/min]	Special function
MOR SEIKI NL2000	1	MORI SEIKI	M720BM	2012	L600	400	6000	Y-axis
MMASTRUM 32	1	MAS Sezimovo Usti	Heidenhein	2001	L800 diam 150	350	4500	-

ClassicalMachinig Devices

Type	pcs	Company	Controls	Year of production	Max. piece x,y,z [mm]	Max. weight of the work piece [kg]	Rpm [1/min]	Special funcion
Horizontal milling machine	1	WH 63 Tos Vansdorf	-	1980	-	500	1800	Drilling deep holes to 1m diam8,10
Vertical milling machines	3	FA4V, FA3A, FA3AV	-	-	600x220	150	-	-
Boring machines	10	Different types	-	-	600x600	300	-	-
Lathe	1	SV18R	-	-	L800 diam 300	-	-	-
Flat grinding machines	3	BPH20NA	-	-	550x200	-	-	-
Round grinding machine	1	2Ud	-	-	L700 diam 100	-	-	-
Sawing machines	2	-	-	-	-	-	-	-

Special Machines

Type	pcs	Company	Controls	Year of production	Max. piece x,y,z [mm]	Max. weight of the work piece [kg]	Rpm [1/min]	Special function
Micro sheet plating welder IMX IIX	1	Joisten Kettenbaum	-	1999	Sheet thick. 0,2, 0,1	-	-	-
Miccro welding	1	Mikro pulzný TIG SW-V01	-	2009	0,6-1,0	-	-	-
Hardening and annealing ovens PK/H5S	1	LAC s.r.o.	Mikrotherm 82	2001	400x300x200	20	-	-
Hardening in oil KK250	1	LAC s.r.o.	-	2007	400x300x201	20	-	-
Tempering oven PP70/65	1	LAC s.r.o.	HT industry	2007	400x300x202	20	-	-
DIE SPOTING MACHINE BV 28 E	1	BV 28 E - Millutensil	-	2008	1000x1185	-	-	weight of mold=7tons

Measurement Systems

Type	pcs	Company	Controls	Year of production	Max. piece x,y,z [mm]	Max. weight of the work piece [kg]	Rpm [1/min]	Special funcion
WENZEL 3DCoordinate Measuring Machines	1	WENZEL GmBH Germany	-	2000	650x750x500	-	-	-
WERTH 3D optical 300x200	1	WERTH Germany	-	2005	300x200	-	-	-
Universal optical microscope	1	Carl Zeiss Jena - Germany	-	1965	200x150	-	-	-

Heat Treating

Type	pcs	Company	Controls	Year of production	Max. piece x,y,z [mm]	Max. weight of the work piece [kg]	Rpm [1/min]	Special funcion
Hardening oven	1	-	-	2000	450x300x150mm	15	-	-
Tempering oven	1	-	-	2007	450x300x150mm	15	-	-