



Machines

5-AXIS MILLING**5-axis modular machining center Hermle C40U dyn, 2005**

Machining area: X = 850 mm, Y = 700 mm, Z = 500 mm.

5-axis modular machining center Deckel Maho DMC 100U duoBlock, 2005

Six pallets, automatic changer.

Machining area: X= 1000 mm, Y= 1000 mm, Z = 1000 mm.

4-AXIS MILLING**Mori Seiki NV5000a1B/40 vertical axis milling machine, 2008**

Machining area: X = 1020 mm, Y = 510 mm, Z = 510 mm.

2 pcs, Mori Seiki NH-4000 DCG horizontal axis milling machine, vm. 2005

Machining area: X = 560 mm, Y = 560 mm, Z = 630 mm.

Matsuura ES-450H II horizontal axis milling machine, 2001

Machining area: X = 450 mm, Y = 400 mm, Z = 400 mm.

Tsugami FMA3 horizontal axis milling machine, 1991

Machining area: X = 360 mm, Y = 330 mm, Z = 400 mm.

2 pcs, CNC-machining centers Fanuc Robodrill T21iEL, 2005

Machining area: X = 550 mm, Y = 400 mm, Z = 330 mm.

CNC-machining center Kitamura Mycenter 2X, 1997

Machining area: X = 510 mm, Y = 355 mm, Z = 460 mm.

3-AXIS MILLING**Mori Seiki NV5000 vertical milling machine, 2003**

Machining area: X = 800 mm, Y = 510 mm, Z = 510 mm.

2 pcs, CNC-machining centers Fanuc Robodrill T14iA, 1998

Machining area: X = 500 mm, Y = 380 mm, Z = 300 mm.

MULTIPURPOSE CNC LATHES**Mori Seiki NT-4300DCG/1500SZ, 2007**

Max turning diameter at main spindle 730 mm, at opposite spindle 275 mm, bar working capacity 90 mm.

SWISS TURNING MACHINES**3 pcs, CNC sliding head-type automatic lathe Tornos Bechler DECO 2000, 2001**

Max. diameter of bar being turned 16 mm / 32 mm.

CNC sliding head-type automatic lathe Tornos Bechler ENC 164 + LNS Hydrobar magazine bar feeder, 1993

Max. diameter of bar being turned 16 mm.

CNC sliding head-type automatic lathe Tornos Bechler ENC 75 + Robobar SSF magazine bar feeder, 1996

Max. diameter of bar being turned 7 mm.

CNC sliding head-type automatic lathe Tsugami BS 12 CE + LNS Tryton magazine bar feeder, 1998

Diameter of bar being turned 2 - 12 mm, turning length with one stroke 140 mm.

CNC sliding head-type automatic lathe Tsugami BS 26 CE + LNS Hydrobar magazine bar feeder, vm. 1998

Diameter of bar being turned 5 - 26 mm, turning length with one stroke 200 mm.

CNC-TURNING CENTRES**2 pcs, CNC-turning center Takisawa TA-25 YBT + Irco-bar accessory diameter 50 mm, vm. 1998**

Turning diameter 230 mm, turning length 530 mm, mandrel drilling 75 mm.

OTHER CNC-LATHES**CNC-lathe Harrison Alpha 400, 1997**

Turning diameter 1.5 - 320 mm.

CNC-lathe Harrison Alpha 1330U, 2004

Turning diameter 1.5 - 260 mm.

CNC-lathe Harrison Alpha 1800S, 2007

Turning diameter max. 800 mm.

MEASURING MACHINES**Coordinate measuring machine Zeiss Prismo, 2003**

X = 1200 mm, Y = 1800 mm, Z = 1000 mm, resolution 0,00004 mm.

Smartscope 250 video measuring system, 2001**Nikon V-12B profile projector****OTHER MACHINES****Charmilles Robofill 440cc wire spark machining tool, 2005**

X = 550 mm, Y = 350 mm, Z = 300 mm. Piece and wire turning option.

Fanuc Robocut 4-OC wire spark machining tool, 1999

X = 320 mm, Y = 220 mm, Z = 180 mm.

Charmilles Roboform 400 die sinking EDM machine, 1988

X = 450 mm, Y = 320 mm, Z = 410 mm, C = 360°.

Charmilles HD30cnc EDM drill, 2005

X = 300 mm, Y = 200 mm, Z = 300 mm, electrodes between 0,3 - 3 mm.

5-axis CNC grinding machine Jungner US 560, 1999**Tool grinding machine Junker, 2001****2 pcs, Centre lathe Harrison VS 330TR, 1989**

Turning diameter 320 mm.

Bridgeport EZ-Trak DX 3-axis CNC-vertical milling machine, 2004

Machining area: X = 762 mm, Y = 305 mm, Z = 340 mm.

2 pcs, Vertical milling machines

Machining area: X = 650 mm, Y = 380 mm, Z = 300 mm.

Zoller Smile tool measurement and pre-assembly machine, 2004**Alfalaser laser marking station, 2004****Alphalaser ALV 100 laser welding machine, 2004**

Nd:YAG 1064 nm, average power 100 W. Welding diameter 0,2 - 2,0 mm.

Helium-leak detector Leybold UL200