

Machinelist Hawo B.V.

Turning centers

1 Tadu FP CNC: Fagor 8050 TC	Ø 3000 x 600 mm Ø 2500 x 3000 mm
1 Geminis GHT 5 CNC: Siemens 810 D	Ø 1000 x 3000 mm
1 Mori Seiki SL35 CNC: Fanuc T4F	Ø 420 x 1500 mm
1 Hwacheon Hi Eco35 CNC: Fanuc 0-TC	Ø 420 x 1200 mm
1 Nakamura Tome CNC: Fanuc 15T	Ø 170 x 315 mm
1 Emco 340 TC CNC: Siemens 810TC	Ø 156 x 300 mm
1 Hwacheon Hi Tech 200 CNC: Fanuc, Bar feeder Turret with NC operated tools	Ø 200 x 400 mm Ø 40 x 1000 mm

Conventional lathes

1 Excello Grinding device: Max. Internal dia. Max. External dia.	Ø 860 x 2900 mm Ø 750 x 600 mm Ø 700 x 600 mm
1 VDF	Ø 610 x 1500 mm

CNC Horizontal boring machines

X - Y - Z

1 Juaristi CNC: Heidenhain TNC 355 (B-Axis) Max. workpiece weight 3000 kg. Tool changer with 60 magazine positions	1500 x 1100 x 1200 mm
1 Juaristi CNC: Heidenhain TNC 426 (B-Axis) Max. workpiece weight 6000 kg. Tool changer with 40 magazine positions	3000 x 2000 x 1600 mm
1 Juaristi CNC: Heidenhain TNC 355 (B-Axis) Max. workpiece weight 8000 kg.	2000 x 1650 x 1500 mm
1 Juaristi CNC: Heidenhain TNC 355 (B-Axis) Max. workpiece weight 12000 kg.	3000 x 2000 x 2000 mm
1 Mandelli Storm 2500 - with tilting head Universal machining center CNC: Siemens 840D 8 pallets, palletsize 1250x1000 mm Tool changer with 208 magazine positions	2600 x 1500 x 1800 mm

CNC Milling machine

1 Lagun GBM 18 CNC: Heidenhain 426 M	1700 x 800 x 1000 mm
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Machining centre/CNC milling (vertical)

1 Supermax YCM-VMC-165A CNC: Heidenhain TNC 410 Tool changer with 30 magazine positions	1650 x 700 x 700 mm
1 Supermax YCM-MV-106A CNC: Fanuc MKP 100 Tool changer with 30 magazine positions	1020 x 600 x 600 mm

1 Matsuura V 1000 CNC: Fanuc 15M Tool changer with 30 magazine positions	1000 x 550 x 500 mm
1 Matsuura 760 CNC: Yasnac (B-Axis) Tool changer with 20 magazine positions	760 x 440 x 485 mm
1 Enshu EV 450 CNC: Yasnac J100M Tool changer with 20 magazine positions	560 x 560 x 460 mm

Machining centre/CNC milling (horizontal)

1 Matsuura H plus 630 (2 pallets) CNC: Fanuc G-Tech 16i (B-Axis) Tool changer with 60 magazine positions	1050 x 920 x 870 mm
1 Matsuura H plus 630 (2 pallets) CNC: Fanuc G-Tech 30i (B-Axis) Tool changer with 60 magazine positions	1050 x 920 x 870 mm
1 Matsuura MAM 600 HF (2 pallets) CNC: Matsuura System I 80 Control Tool changer with 24 magazine positions	600 x 600 x 625 mm
1 Enshu JE40 (2 pallets) CNC: Yasnac J100M Tool changer with 30 magazine positions	400 x 500 x 400 mm

Machining centre/5-axes simultaneous

2 Hermle C40UP CNC: Heidenhain iTNC 530 Tool changer with 233 magazine positions Fastems palletchanger 15 pallets pallet size 630 x 630 mm	850 x 700 x 500 mm
1 Hermle C 20 with RS2 palletchanger 35 pallets pallet size 225 x 225 mm	250 x 250 x 500 mm

Grinding machines

1 LGB R16090 NC (surface)	1730 x 930 x 550 mm
1 Joenliih NC (surface)	600 x 300 x 400 mm
1 Grisetti (cylindrical)	Ø 380 x 2000 mm
1 Ger (cylindrical)	Ø 300 x 1000 mm

Drilling machines

1 Deephole drilling unit for all Juaristi machines	Ø 6 t/m Ø 20 mm
1 Deephole drilling unit Universal	Ø 3 t/m Ø 50 mm
1 Mass Radial drillingmachine	Ø 4 t/m Ø 125 mm 1500 mm

Spark erosionmachines

1 Makino EDNC 64 (CNC sinker EDM)	900 x 630 x 400 mm
1 Makino EDNC 32 (CNC sinker EDM)	750 x 600 x 380 mm
1 Makino U53 (CNC wire EDM)	520 x 370 x 320 mm
1 TopEDM TSH-30 (hole drilling EDM) Ø0,5 - Ø3	300 x 200 x 200 mm

Bandsaws

1 Cosen C-320 NC (Automatic bar feeder)	Ø 260 mm
1 Cosen AH-7652H (Automatic bar feeder)	Ø 520 mm

Measuring equipment

1 Iota 1202 (3D measuring) Co-ordinate measuring machine	capacity 1025 x 1025 x 665 mm
1 Mitutoyo Crysta-Apex C-9168 3D CNC CMM software MCOSMOS Co-ordinate measuring machine	1605 x 905 x 805 mm
1 Trimos (Height Gauge)	
1 Mitutoyo LH 600 (Digital Height Gauge)	
1 Prazis DHT 02 (Hardness testing machine)	
1 Hommel (Surface roughness testing)	
1 Prazis (2D Contour Projector)	

CAD CAM Software

3 Pro-Engineer (Parametrics)
2 Autocad 2000
1 Topsolid 5-axes (Missler)
1 Powermill 5-axes (Delcam)