

Machinery & Equipment

Gromas Maskinfabrik A/S

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CNC Milling Centres

CNC Milling Centres	Type	Working Area	Tools	Equipment	Axis	Year
Okuma	MX55	1050 x 560 x 450 mm	32	Fully controlled A-axis, spindle coolant	4	1999
Okuma	MF46VA	762 x 460 x 460 mm	32	2 x palletes, 15,000 rpm, spindle coolant	3	2004
Okuma	MU400	762 x 460 x 460 mm	48	Fully controlled 5-axes with \varnothing 400 table, 15,000 rpm	5	2013
Okuma	MU400	762 x 460 x 460 mm	48	Fully controlled 5-axes with \varnothing 400 table, 15,000 rpm	5	2005
Okuma	MB65DVA	1530 x 660 x 610 mm	48	Fully controlled A-axis, spindle coolant	4	2005
Okuma	MA400 H	Y610 - X560 - Z600	60	8000 rpm. / B-axis, with 2 pallets	4	2006
Okuma	MA400 H	Y610 - X560 - Z600	60	15000 rpm. / 1-B-axis, with 2 pallets	4	2007
Okuma	MA400 H	Y610 - X560 - Z600	120	15000 rpm. / B-axis, with 2 pallets	4	2008
Okuma	MULTUS	\varnothing 630 x 900 mm	60	CNC multi-function lathe/mill centre, Y-axis, subspindle, spindle bore \varnothing 80, \varnothing 70 draw tube, magazine barfeed	7	2007
Okuma	MACTURN	\varnothing 720 x 2000 mm	80	CNC multi-function lathe/mill centre, Y-axis, subspindle, B-turret with 12 fixed tools, selfcentrering steady rest	9	2008

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CNC Bench Lathes

CNC Lathes	Type	Working Area	Tools	Equipment	Axis	Year
Okuma	LT-15	Ø210 x 200 mm	2 x 12	Double spindle 7-axes multifunction lathe, ø 80 mm spindle bores, ø 67 mm through draw tube	7	1999
Okuma	LVT-300	Ø280 x 200 mm		Vertical Lathe for chuck pieces, C-axis, rotating tools, magazine barfeed for unsupervised operation	4	2004
Okuma	LU-25	Ø420 x 1250 mm	12	5-axes lathe with tailstock, ø 110 mm spindle bore, ø 102 mm in draw tube, 2 turrets	5	1998
Okuma	LB-15	Ø250 x 600 mm		CNC lathe with tailstock, ø 80 mm spindle bore, ø 72 mm through draw tube, bar magazine	3	1994
Okuma	LB-3000	Ø410 x 500 mm	12	CNC lathe with NC-controlled tailstock, spindle bore ø 80, ø 70 draw tube, magazine barfeed ø 6 - ø 65	4	2007
Okuma	MULTUS	Ø630 x 900 mm	60	CNC multi-function lathe/mill centre, Y-axis, subspindle, spindle bore ø 80, ø 70 draw tube, magazine barfeed	7	2007
Okuma	MULTUS	ø630x900 mm	60	CNC multi-function lathe/mill centre, Y-axis, subspindle, spindle bore ø 80, ø 70 draw tube, magazine barfeed, Motoman Robot	7	2013
Okuma	MACTURN	Ø720 x 2000 mm	80	CNC multi-function lathe/mill centre, Y-axis, subspindle, B-turret with 12 fixed tools, selfcentrering steady rest	9	2008
Mori-Seiki	SL25B	Ø370 x 550 mm	10	Dock	3	1990
Mori-Seiki	SL 400 BMC	Ø680 x 2000 mm	12	Rotating tools [x,z] Dock and Support	4	1999
Mori-Seiki	ZL 200	Ø220 x 450 mm	12+8	Rotating tools [x,z], Dock, Barfeeder	4	1999

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CNC Longturning Lathes

CNC Longturning Lathes	Type	Working Area	Tools	Equipment	Axis	Year
Maier	ML 26 D	Ø5-Ø26	16	Rotating tools (x,z), Subspindel, Barfeeder 3 m	12	2000
Maier	ML 26 D	Ø8-Ø26	16	Rotating tools (x,z), Subspindel, Barfeeder 4 m	12	2000
Tornos DECO	2000-13	Ø3-Ø16	22	Rotating tools (x,z), Subspindel, Barfeeder 4 m	17	2001

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Automatic Saws

Automatic Saws	Type	Working Area	Year
Automatic band saw	Kasto Functional A	Ø260 mm max.	2004
Automatic band saw	Kasto SSB A2	Ø260 mm max.	2004
Automatic band saw	Kasto HB360AV	Ø450 mm max.	1999
Automatic band saw	Kasto HB360AV	Ø450 mm max.	2001

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Manual Machinery

Manual machinery

Various universal milling machines up to 1170 x 250 x 500 mm	Various bench lathes up to \varnothing 650 x 3500 mm
Honing machines up to \varnothing 176 x 1000 mm	Key cutting machine max 12 x 67 mm
Sheet metal cutters 2500 x 12 mm	CNC folding machine 3000 mm, 110 t.
Corner cutting machine	Hydraulic press 60 t.
Metal bend up to 2 metres	Pillar drilling machines
Rolling machines	Glass bead blasting cabinet
Various welding machines, primarily TIG	Belt grinders up to 1000 x 2500 mm

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Measuring Equipment

Measuring Equipment (all systematically under calibration)	Type	Working Area	Year
CMM - Zeiss Contura 3D Measuring machine	G2 HTG	X1200, Y1000mm Z600mm	2009
Optical projector - Nikon	V-12A	X100 Y50 Z60	1999
Surface testing - Mahr MahrSurf	PS1	Ra. Rz. etc.	2008
700 pcs. "Manual equipment" - Gauges, rings, micrometers, etc.	Different kinds	0,01 up to 1.500.000 mm	1999-2012
Camera inspection - Hawkeye Rigid SuperSlim 14" Borescope Kit	Optical	Ø4 x 350 mm	2010

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Other Equipment

Other Equipment	Type	Remarks	Year
Tool store & handling , "Computer controlled"	SECO POINT	500 stock places	2007
Washing Machine	Hesø	Multi rinse, wash, dry	2009
Compressors 2 pcs.	Stenhøj CSA-15KW	12 Bar	2008
Tool offset	Zoller	Preparation of tool offset	2007
Clamping Station			2008
Truck	FG15N	1.5 ton lifting capacity	1986
Electrical lifters	BT LSU1250 ond		2009

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CAD / CAM and MRP / ERP system

CAD / CAM and MRP / ERP system	Type	Remarks	Year / rev
SolidWorks	CAD system		2009 / 2012
Edgecam	CAM system		2009 / 2011
Mapaz	MRP system	Integrated with Microsoft NAV ERP	2006 / 2012
Microsoft NAV	ERP system	Integrated with Mapaz MRP	2005 / 2012
Mastercam	CAM system		2003 / 2011