

CNC-Lathes**Automatic shaft lathe „TRAUB“ TNL 26**

WORK - Ø min (mm)	10
WORK - Ø max (mm)	26
WORK - Length (mm)	500
SPECIAL:	Programmable in 11 axis bar loader 4m bars loadable

Dual turret automatic shaft lathe "STAR" KNC-32/II

WORK - Ø min (mm)	10
WORK - Ø max (mm)	32
WORK - Length (mm)	depending on the application up to approx. 800
SPECIAL:	Programmable in six axis Up to 10 driven tools Y-axis

Automatic shaft lathe "STAR" SR 32

WORK - Ø min (mm)	8
WORK - Ø max (mm)	32
WORK - Length (mm)	up to 600
SPECIAL	Programmable B-axis Spindle capacity Ø 32 Transverse movement in 0.02 to symmetry Up to 4 driven tools

Automatic shaft lathe "STAR" ECAS 20 T

WORK - Ø min (mm)	4
WORK - Ø max (mm)	20
WORK - Length (mm)	350
SPECIAL:	Programmable in 12 axis

Automatic shaft lathe "Traub TNL32-11" (2 machines)

Ø max. (mm)	32
Ø min. (mm)	8
Length (mm)	800
SPECIAL:	Front apparatus with 120bar internal cooling deep hole drilling / 11-axis

Automatic shaft lathe "Traub TNL32-9"

Ø max. (mm)	32
Ø min. (mm)	8
Length (mm)	800
Spindle opening	32
SPECIAL:	9-axis

Automatic lathe "MORI SEIKI" SL 25 MC/1000

WORK - Ø min (mm)	30
BAR STOCK Ø max (mm)	63 (Chuck 240)
WORK - Length (mm)	1000
SPECIAL:	Programmable C-axis Up to 6 driven tools

Automatic lathe "MORI SEIKI" SL 150 MC

BAR STOCK Ø max (mm)	42 (Chuck 180)
WORK Ø - min. (mm)	10
Length (mm)	500
SPECIAL:	Programmable C-axis Up to 12 driven tools

Automatic lathe „MORI SEIKI“ ZT 1000 Y (2 machines)

CONTROL AXIS	7
WORK TURRET	2
WORK - Ø max. (mm)	240
Length (mm)	500
SPECIAL:	Programmable C-axis Up to 32 driven tools Y-axis movement +/- 40 mm Barloader up to max. Ø 42mm

Automatic lathe „MORI SEIKI“ ZT 1500 YB (2 machines)

CONTROL AXIS	7
WORK TURRET	2
WORK - Ø max. (mm)	42
Length (mm)	700
SPECIAL:	Programmable C-axis
	Up to 16 driven tools
	Y-axis movement +/- 40 mm
	Portalloader with max. 10 kg/workpiece

Automatic lathe „MORI SEIKI“ NZ 1500Y2T2

CONTROL AXIS	8
WORK TURRET	2
WORK - Ø max. (mm)	240
Length (mm)	700
SPECIAL:	Programmable C-axis
	Up to 16 driven tools
	Y-axis movement -/+ 65mm, +/- 45 mm
	Portalloader with max. 10 kg/workpiece

Multitask "MAZAK Integrex" i-200ST

CONTROL AXIS	9
WORK TURRET	1
WORK - Ø max. (mm)	240
Length (mm)	1000
SPECIAL:	C1, C2 programmable Axis, toolchain 110 tools
	Turret with 9 toolstations, portalloader 12kg/workpiece, Y-axis
	+/-130mm, B-axis +/-120mm
	Mazatrol Smooth-X movement

Automatic lathe "Nakamura-Tome WY-150

Ø max. (mm)	off the chuck 225 / off the bar 65
Ø min. (mm)	12
Length (mm)	565
Spindle opening Ø (mm)	65
SPECIAL:	70 bar high pressure / 2 turrets à max 24 sattions
	of which 12 driven, Y-axis

Automatic lathe "Nakamura-Tome AS-200LMYS

Ø max. (mm)	off the chuck 340 / off the bar 65
Ø min. (mm)	12
Length (mm)	570
Spindle opening Ø (mm)	65
SPECIAL:	Counter spindle with tailstock function
	Portalloader with max. 10 kg/workpiece

Automatic lathe "Schaublin "

Ø max. (mm)	250
Ø min. (mm)	10
Length (mm)	280
Spindle opening Ø (mm)	42
SPECIAL:	Programmable C-axis
	Up to 12 driven tools

Machining center "MORI SEIKI" MH 40 Horizontal

RANGE (mm) x	560
RANGE (mm) y	500
RANGE (mm) z	510
	Up to 64 tools

Machining center "MORI SEIKI" Horizontal MH 40

RANGE (mm) x	560
RANGE (mm) y	500
RANGE (mm) z	510
	120 tools and multi pallets
	8 pallets

Machining center „Fehlmann“ Vertikal VERSA 825

RANGE (mm) x	875
RANGE (mm) y	700
RANGE (mm) z	450
SPECIAL:	Programmable 4. + 5. axis
	A-axis = +/- 115°
	C-axis = 360°
	Spindlespeed up to 20'000 min./1
	Up to 346 tooling- and 30 palletstations

Machining center "MORI SEIKI" Vertikal SV500 B/40

RANGE (mm) x	1000
RANGE (mm) y	510
RANGE (mm) z	510
	Up to 30 tools

Machining center „Fehlmann“ Vertikal VERSA 645

RANGE (mm) x	350
RANGE (mm) y	500
RANGE (mm) z	500
	Up to 225 tools
SPECIAL:	Programmable 4. + 5. axis
	Spindle speed bis 30'000 min./1
	B-axis : +/-120°
	C-axis: 360°
	Linked with VERSA 825

Machining center „Mori Seiki“ Vertikal NMV 5000 DCG

RANGE (mm) x	730
RANGE (mm) y	510
RANGE (mm) z	510
SPECIAL:	Programmable 4. + 5. axis
	Spindle speed up to 12'000 min./1
	B-axis : 340°
	C-axis : 360°
	Up to 330 tools and 40 multi pallets

Milling machine "MAHO" CNC-UNIVERSAL-milling machine MH 600 T

RANGE (mm) x	600
RANGE (mm) y	400
RANGE (mm) z	400

Twin-spindle milling machine SW BA 322i

RANGE (mm) x	200
RANGE (mm) y	350
RANGE (mm) z	300
SPECIAL:	Twin-spindle 17'500 r/min., control system Siemens 840 Dsl
	Rapid motion 75 u/min., chip to chip 2,5s
	Clearance 300mm, tooling places 2x40,
	Work piece magazine with robotic arm Fanuc, 2x clamping table to change

Machining center Vertikal Fehlmann Picomax 82 M

RANGE (mm) x	685
RANGE (mm) y	315
RANGE (mm) z	540
SPECIAL:	Up to 32 tools
	Programmable 4. + 5. axis
	Spindle speed up to 18'000 min./1

CLEANING SYSTEMS

Cleaning unit "Dürr Eco Ccore"

SEMI-AUTOMATIC CLEANING UNIT

BASKET SIZE (mm) L	670
BASKET SIZE (mm) B	480
BASKET SIZE (mm) H	400
	Medium: hydrocarbon

Multi chamber cleaning unit „KKS-H3-40-1101“

ULTRASONIC CLEANING UNIT

BASKET SIZE (mm) L	350
BASKET SIZE (mm) B	250
BASKET SIZE (mm) H	250
	Dual frequency 27/80 kHz

MEASURING DEVICES AND INSTRUMENTS**3-D-Coordinate measuring device „Mitutoyo“ Premier 7106 CNC-CONTROL**

Measuring range – length (mm)	1000
Measuring range – width (mm)	700
Measuring range – height (mm)	600
Accuracy (μ)	2
Load (kg)	100

3-D-Coordinate measuring device "Mitutoyo" STRATO-Apex 9106 CNC

Measuring range – length (mm)	1000
Measuring range – width (mm)	900
Measuring range – height (mm)	600
Accuracy (μ)	0.9
Load (kg)	800

Digital measuring projector "SFS" MM1 200

Measuring range Ø100 - L200mm	
digital measuring device for manual measurement	

Digital measuring projector "Keyence" IM 6225

Measuring range Ø100 - L200mm	
digital measuring device for automatic measurement	

Roughness measuring device "Mitutoyo" SJ-410

Measured values in:	Ra, Rz--DIN, Rt, Rz-ISO, Rpm, Rp, Wt, Pt usw.
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Hardness tester „Proceq“ equotip 550

Measured values in:	HB, HV, HRA, HRB, HRC
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Roundness measuring device „Mitutoyo RA 114“

WORK - Ø max (mm)	200
LOAD max (kg)	20

Electrical conductivity measurement „Fischer" Sigmascope SMP350

Measuring range	0,3 – 63 MS/m bzw. 0,5 – 108 % IACS
SPECIAL:	precise measurement of the electrical conductivity of non-ferrous metals

Length measuring device "SIP"

MEASURE - length (mm)	850
Accuracy (μ)	1

Contour measuring system „Conturo Matic T1“**5 MeasureLink – workplaces****HEIGHT MEASURING DEVICE "Mahr" Digimar 817 CLM**

Height (mm)	350-600
Accuracy (mm)	0,005

VARIOUS HEIGHT MEASURING DEVICES "SUMESS"

Height (mm)	500
Accuracy (mm)	0,01

VARIOUS ELECTRONIC MEASURING DEVICES "TESA"

Accuracy (μ)	2
SPECIAL:	Can be utilized with other measuring instruments