

# Machinery list

## OUR TURNING SHOP

Turning and milling machines	Ø	L	X	Y	Z	Automation
Index R 300	400	600	780	140	610	bar loader Ø 100
DMG CTX Gamma 2000 TC	630	2.050	630	200	2.050	
DMG CLX 450	300	800	276	60	755	
Index G420	400	2.300	800	340	2.300	

  

Lathes	Ø	L	Automation
Gildemeister CTX 620	800	2000	
Gildemeister CTX 510 eco V3	680	1050	Rod charger Ø 76
SAEILO CONTUR H-66 P-3000	660	3000	
Hyundai WIA LM 1800 TTSY	210	673	Rod charger Ø 76

## OUR MILLING SHOP

Milling shop	5-Pages	X	Y	Z	automation
UNISIGN Uniport 6000	✓	5.000	3.000	1.000	
DECKEL MAHO DMF 360-II		3.600	1.100	900	
DECKEL MAHO DMU 200 P	✓	1.800	2.000	1.100	
DECKEL MAHO DMC 160 U	✓	1.600	1.250	1.000	
DECKEL MAHO DMC 160 U	✓	1.600	1.250	1000	Terminal WORK-L & TOOL-L
DECKEL MAHO DMU 125 P	✓	1.250	800	800	Terminal TOOL-D
DECKEL MAHO DMC 100U	✓	1.000	1.250	1.000	
HEDELIUS BC 100/50		3.500	1.000	770	Terminal TOOL-S
EMCOMAT FB-600		600	400	400	
GROB G350	✓	600	855	755	Terminal WORK-S & TOOL-D
GROB G150	✓	450	670	665	Terminal WORK-S & TOOL-D

## OUR GRINDING SHOP

Cylindrical grinding	tTip width	Peak height	X	Y	Z	automation
Studer S41 CNC	1.600	275	780	140	610	bar loader Ø 100
Studer S33 CNC	1.000	175	630	200	2.050	
Curve grinding	X	Y	Z	Ø		
Kopp FSK 35 CNC	1.200	285	600	1.200		
Surface grinding	X	Y	Z	Ø		
REFORM CNC	300	300	200			
REFORM CNC Rundtisch				1.100		
MACO RT 400	300	500				

## TECHNICAL CLEANING

Pre-cleaning	Equipment	Notes
steam cleaning	Elmasteam 8 basic wet cleaning device	Steam cleaning, particularly suitable for cleaning blind holes, removing chips, and pre-cleaning
Cleaning bath with deionized water		or rinsing off the cooling lubricant and maintaining quality in the ultrasonic cleaning bath
Ultrasonic cleaning bath with cleaning agent	Elmasonic Select 900	Cleaning bath with a capacity of 65 liters for component sizes up to 550x460mm. Cleaning agent used: Olschner Optimal 9.5
Cleaning bath with deionized water		To rinse off the cleaning agent
hot air drying	Elmadry TD 300	For residue-free drying without staining
Final cleaning	Equipment	Notes
Ultrasonic cleaning bath with cleaner	Elmasonic Select 900	Cleaning bath with a capacity of 65 liters for component sizes up to 550x460mm. Cleaning agent used: Olschner Optimal 9.5
Ultrasonic cleaning bath without cleaner	Elmasonic Select 900	Cleaning bath with a capacity of 65 liters for component sizes up to 550x460mm. For rinsing off the cleaning agent.
Hot air drying	Elmadry TD 300	For residue-free drying without staining
UV and white light control		Final inspection for stains and organic or inorganic contamination.



## OUR MEASURING INSTRUMENTS

Coordinate measuring machines	X	Y	Z
ZEISS Prismo 16/30/10	1.600	3.000	1.000
MITUTOYO Crysta-Apex	900	1.600	800
FaroArm	Ø 3.700	Ø 3.700	Ø 3.700
Keyence XM-T1000	600	500	200

### Vacuum testers

Pfeiffer Vacuum ASM 340

Leybold Phoenix L300i

### Other measuring equipment

Profil Projektor	MITUTOYO PV-5100
Roughness tester	MITUTOYO SJ-400 & SJ-411
Roughness tester	MarSurf PS 10
Altimeter	MITUTOYO LH 600 E
Hardness tester	UCI alphaDUR mini
coating thickness gauge	Sauter TE 1250-0.1FN
hand-held measuring instruments	more than 2,500 different variants

### Cleaning systems

### Technical specifications

SPORER cleaning plant

Bio-Circle parts washer

## CLEANROOM ASSEMBLY

### clean room

### Facts & figures

Clean room – Dimensions	7m x 7m
Cleanroom class	ISO 6
Laminar Flow Bank – dimensions	1990mm x 720mm
Laminar Flow Bank – class	ISO 5
Packaging area / Material and personnel airlock	ISO 7

