



CNC MILLING AND DRILLING:

1 CNC five-axis portal high-precision machining center DMG MORI DMU 210 µPrecision

Positioning accuracy < 4 μm, volumetric accuracy < 15 μm, with CNC rotary table, IKZ, infrared probe, swivel milling head for 5-sided machining in automatic mode **Tool changer**: 123 magazine places **Linear axes:** X: 2,100 mm, Z: 1,250 mm, Y: 2,100 mm Automatic universal milling head with integrated motor spindle as a driven B-axis **Spindle speed:** 12,000 U / min high performance spindle, HSK-A100 **Year of construction:** 2018

1 CNC five-axis portal machining center DMG MORI DMU 210 P

With CNC rotary table, IKZ, infrared probe, swivel milling head for 5-sided machining in automatic mode **Tool changer**: 123 magazine places **Linear axes:** X: 2,100 mm, Z: 1,250 mm, Y: 2,100 mm Automatic universal milling head with integrated motor spindle as a driven B-axis **Spindle speed:** 12,000 U / min high performance spindle, HSK-A100 **Year of construction:** 2018

1 CNC five-axis high-precision machining center DMG MORI DMU 125 $\mu Precision$

Positioning accuracy < 4 μm, volumetric accuracy < 15 μm, with CNC rotary table, IKZ, infrared probe, swivel milling head for 5-sided machining in automatic mode **Tool changer**: 123 magazine places **Linear axes**: X: 1,250 mm, Z: 1,000 mm, Y: 1,250 mm Automatic universal milling head with integrated motor spindle as a driven B-axis **Spindle speed**: 12,000 U / min high performance spindle, HSK-A100 **Year of construction**: 2021

1 CNC five-axis universal machining center DMG MORI DMC 125 U "duoBlock"

With CNC rotary table, IKZ, infrared probe, swivel milling head for 5-sided machining in automatic mode
Tool changer: 120 magazine places
Linear axes: X: 1,250 mm, Z: 1,000 mm, Y: 1,250 mm
Pallet changer with flexible pallet system
Automatic universal milling head with integrated motor spindle as a driven B-axis
Spindle speed: 12,000 U / min high performance spindle, HSK-A100
Year of construction: 2012



1 CNC five-axis universal machining center DMG MORI DMU 125 P "duoBLOCK"

With CNC rotary table, IKZ, infrared probe, swivel milling head for 5-sided machining in automatic mode **Tool changer:** 120 magazine places **Linear axes:** X: 1,250 mm, Z: 1,000 mm, Y: 1,000 mm Automatic universal milling head with integrated motor spindle as a driven B-axis **Spindle speed:** 10,000 U / min high performance spindle, HSK-A100 **Year of construction:** 2006

1 CNC five-axis universal machining center DMG MORI DMU 100 P "duoBLOCK"

With CNC rotary table, IKZ, infrared probe, swivel milling head for 5-sided machining in automatic mode **Tool changer:** 120 magazine places **Linear axes:** X: 1,000 mm, Z: 1,000 mm, Y: 1,000 mm Automatic universal milling head with integrated motor spindle as a driven B-axis **Spindle speed:** 10,000 U / min high performance spindle, HSK-A100 **Year of construction:** 2008

1 five-axis machining center Heller HF 5500 APC

With CNC swivel rotary table and pallet carrier, IKZ, infrared measuring probe **Tool changer:** 160 magazine places Pallet changer with flexible pallet system Accuracy package **Linear axes:** X: 900 mm, Z: 930 mm, Y: 950 mm **Spindle speed:** 16,000 U / min high performance spindle, HSK-A63 **Year of construction:** 2023

1 five-axis machining center Heller HF 3500 APC

With CNC swivel rotary table and pallet carrier, IKZ, infrared measuring probe **Tool changer:** 160 magazine places Pallet changer with flexible pallet system Accuracy package **Linear axes:** X: 710 mm, Z: 710 mm, Y: 750 mm **Spindle speed:** 16,000 U / min high performance spindle, HSK-A63 **Year of construction:** 2022



1 CNC five-axis universal machining center DMG MORI DMC 80 FD "duoBLOCK"

A milling / turning / grinding machining center With CNC rotary table, IKZ, infrared probe, swivel milling head for 5-sided machining in automatic mode **Tool changer:** 123 magazine places Pallet changer with flexible pallet system **Linear axes:** X: 800 mm, Z: 850 mm, Y: 1,050 mm Automatic universal milling head with integrated motor spindle as a driven B-axis **Spindle speed:** 12,000 U / min high performance spindle, HSK-A63 **Year of construction:** 2018

1 CNC five-axis universal machining center DMG MORI DMC 80 U "duoBLOCK"

With CNC rotary table, IKZ, infrared probe, swivel milling head for 5-sided machining in automatic mode
Tool changer: 120 magazine places
Pallet changer with flexible pallet system
Linear axes: X: 800 mm, Z: 800 mm, Y: 1,050 mm
Automatic universal milling head with integrated motor spindle as a driven B-axis
Spindle speed: 12,000 U / min high performance spindle, HSK-A63
Year of construction: 2010

1 CNC universal machining center DMG MORI DMC 80 U "hi-dyn"

With CNC rotary table, IKZ, infrared probe, swivel milling head for 5-sided machining in automatic mode **Tool changer:** 120 magazine places **Linear axes:** X: 800 mm, Z: 600 mm, Y: 700 mm **Spindle speed:** 12,000 U / min high performance spindle **Completely overhauled:** 2013

1 CNC five-axis universal machining center DMG MORI DMU 80 P "duoBlock"

With CNC rotary table, IKZ, infrared probe, swivel milling head for 5-sided machining in automatic mode **Tool changer:** 123 magazine places **Linear axes:** X: 800 mm, Z: 850 mm, Y: 1,050 mm **Spindle speed:** 18,000 U / min high performance spindle, HSK-A63 **Year of construction:** 2017

1 CNC five-axis universal machining center DMG MORI DMU 80 P "duoBlock"

With CNC rotary table, IKZ, infrared probe, swivel milling head for 5-sided machining in automatic mode **Tool changer:** 123 magazine places **Linear axes:** X: 800 mm, Z: 850 mm, Y: 1,050 mm **Spindle speed:** 18,000 U / min high performance spindle, HSK-A63 **Year of construction:** 2015



1 CNC five-axis universal machining center DMG MORI DMU 80 P "duoBlock"

With CNC rotary table, IKZ, infrared probe, swivel milling head for 5-sided machining in automatic mode **Tool changer:** 120 magazine places **Linear axes:** X: 800 mm, Z: 800 mm, Y: 1,050 mm **Spindle speed:** 12,000 U / min high performance spindle, HSK-A63 **Year of construction:** 2011

2 CNC universal milling and drilling machines DMG MORI DMU 80 P "hi-dyn"

With CNC rotary table, IKZ, infrared probe, swivel milling head for 5-sided machining in automatic mode **Tool changer:** 120 magazine places **Linear axes:** X: 800 mm, Z: 800 mm, Y: 800 mm **Spindle speed:** 12,000 U / min high performance spindle **Year of construction:** 2007

1 CNC universal milling and drilling machine DMG MORI DMU 80 P "hi-dyn"

With CNC rotary table, IKZ, infrared probe, swivel milling head for 5-sided machining in automatic mode **Tool changer:** 60 magazine places **Linear axes:** X: 800 mm, Z: 600 mm, Y: 700 mm **Spindle speed:** 12,000 U / min high performance spindle **Year of construction:** 2002

1 CNC five-axis universal machining center DMG MORI DMU 75 monoBLOCK 2nd

With CNC swivel rotary table, IKZ, infrared measuring probe **Tool changer:** 120 magazine places **Linear axes:** X: 750 mm, Z: 650 mm, Y: 560 mm **Spindle speed:** 20,000 U / min high performance spindle, HSK-A63, accuracy package **Year of construction:** 2023

2 CNC five-axis universal machining centers DMG MORI DMC 60 HL

With CNC swivel rotary table and pallet carrier, IKZ, infrared measuring probe **Tool changer:** 183 magazine places Pallet changer with flexible pallet system **Linear axes:** X: 630 mm, Z: 750 mm, Y: 800 mm **Spindle speed:** 15,000 U / min high performance spindle, HSK-A63 **Year of construction:** 2018



1 CNC five-axis universal machining center DMG MORI DMU 60 eVo

With CNC swivel rotary table, IKZ, infrared measuring probe **Tool changer:** 120 magazine places **Linear axes:** X: 600 mm, Z: 500 mm, Y: 500 mm **Spindle speed:** 18,000 U / min high performance spindle, HSK-A63 **Year of construction:** 2018

1 CNC five-axis universal machining center DMG MORI DMU 60 eVo

With CNC swivel rotary table, IKZ, infrared measuring probe **Tool changer:** 120 magazine places **Linear axes:** X: 600 mm, Z: 500 mm, Y: 500 mm **Spindle speed:** 18,000 U / min high performance spindle, HSK-A63 **Year of construction:** 2014

2 CNC five-axis universal machining centers DMG MORI DMU 60 eVo

With CNC swivel rotary table, IKZ, infrared measuring probe **Tool changer:** 120 magazine places **Linear axes:** X: 600 mm, Z: 500 mm, Y: 500 mm **Spindle speed:** 18,000 U / min high performance spindle, HSK-A63 **Year of construction:** 2012

1 CNC five-axis universal machining center with robot loading system DMGMORI DMU 60 eVo

With CNC swivel rotary table, IKZ, infrared measuring probe **Tool changer:** 120 magazine places **Linear axes:** X: 600 mm, Z: 500 mm, Y: 500 mm **Spindle speed:** 18,000 U / min high performance spindle, HSK-A63 **Year of construction:** 2011

1 CNC five-axis universal machining center DMG MORI DMU 60 P "hi-dyn"

With CNC rotary table, IKZ, infrared probe, swivel milling head for 5-sided machining in automatic mode **Tool changer:** 120 magazine places **Linear axes:** X: 600 mm, Z: 600 mm, Y: 700 mm **Automatic universal milling head with integrated motor spindle as a driven B-axis Spindle speed:** 12,000 U / min high performance spindle **Year of construction:** 2008



1 CNC five-axis universal machining center DMG MORI DMU 60 P "hi-dyn"

With CNC rotary table, IKZ, infrared probe, swivel milling head for 5-sided machining in automatic mode **Tool changer:** 30 magazine places **Linear axes:** X: 600 mm, Z: 600 mm, Y: 700 mm **Automatic universal milling head with integrated motor spindle as a driven B-axis Spindle speed:** 12,000 U / min high performance spindle **Year of construction:** 2006

1 CNC universal milling and drilling machine DMG MORI DMU 60 monoBlock

With IKZ, infrared measuring probe **Tool changer:** 60 magazine places **Linear axes:** X: 730 mm, Z: 560 mm, Y: 700 mm **Spindle speed:** 12,000 U / min high performance spindle **Year of construction:** 2009

7 CNC five-axis universal machining centers DMG MORI DMU 50 3rd

With CNC swivel rotary table, capable of simulation **Tool changer:** 60 magazine places, IKZ **Linear axes:** X: 650 mm, Z: 475 mm, Y: 520 mm **Year of construction:** 2017 to 2022

1 CNC universal milling and drilling machine DMG MORI DMU 50

With CNC swivel rotary table, capable of simulation **Tool changer:** 30 magazine places **Linear axes:** X: 500 mm, Z: 400 mm, Y: 450 mm **Year of construction:** 2016

1 CNC universal milling and drilling machine DMG MORI DMU 50

With tool changer and rigid table Linear axes: X: 500 mm, Z: 400 mm, Y: 450 mm Year of construction: 2004

2 CNC universal milling and drilling machines DMG MORI DMU 50

With tool changer and swivel rotary table with digital display Linear axes: X: 500 mm, Z: 400 mm, Y: 400 mm Year of construction: 2001

Multiple inch tool presetting and measuring devices with image processing technology



CAM PROGRAMMING:

Multiple 2.5-D and 3D CAM workstations with 5-axis modules and feature technology

Equipped with all common standard interfaces, e.g. DXF, DWG, IGES, STEP, VDA

DRILLING RANGE:

1 Danube quick radial drilling machine Danuflex 135

Work table: 600 mm x 1,800 mm Cantilever travel path: 1,050 mm max. drilling performance: 35 mm Year of construction: 2000

ROTARY RANGE:

1 CNC precision lathe Weiler E80 / D3

Spindle hole: 106 mm, center height: 400 mm, center width: 2,000 mm Year of construction: 2011

1 turning-milling machining center DMG MORI CTX beta 1250 TC 4A

Center height: 250 mm, center width: 1,250 mm, 6-sided complete machining with counter spindle Milling spindle: compactMASTER, spindle speed: 12,000 U / min. HSK A63 12-position star turret VDI 40 **Tool changer:** 80 magazine places Year of construction: 2022

1 turning-milling machining center with robot loading system DMG MORI CTX beta 1250 TC 2nd

Center height: 250 mm, center width: 1,250 mm, 6-sided complete machining by counter spindle Milling spindle: compactMASTER, spindle speed: 12,000 U / min. HSK A63 **Tool changer:** 80 magazine places **Year of construction:** 2018



1 turning-milling machining center DMG MORI CTX beta 1250 TC 2nd

Center height: 250 mm, center width: 1,250 mm, 6-sided complete machining by counter spindle Milling spindle: compactMASTER, spindle speed: 12,000 U / min. HSK A63 **Tool changer:** 80 magazine places Year of construction: 2015

1 CNC universal lathe DMG MORI CLX 550 V3

With C-axis and 12-fold disc turret, all tools are driven Spindle hole: 104 mm, center height: 240 mm, center width: 1,240 mm Year of construction: 2018

1 CNC universal lathe DMG MORI CTX 520 linear V4

With C-axis, Y-axis and 12-fold disc turret, all tools are driven Spindle hole: 90 mm, center height: 335 mm, center width: 1,350 mm Year of construction: 2006

1 CNC universal lathe DMG MORI CTX beta 800 Limited Edition

With C-axis, Y-axis and 12-fold disc turret, all tools are driven Spindle hole: 81 mm, center height: 280 mm, center width: 800 mm Year of construction: 2024

1 CNC universal lathe DMG MORI CTX beta 800 Limited Edition

With C-axis and 12-fold disc turret VDI 40, all tools are driven, 6-sided complete machining by counter spindle Spindle hole: 65 mm, center height: 280 mm, center width: 800 mm, spindle speed: 5000 Bar loading magazine Year of construction: 2022

2 CNC universal lathes DMG MORI CTX beta 800

With C-axis and 12-fold disc turret, all tools are driven Spindle hole: 65 mm, center height: 280 mm, center width: 800 mm Year of construction: 2014

1 CNC universal lathe DMG MORI CTX beta 800

With C-axis and 12-fold disc turret, all tools are driven Spindle hole: 65 mm, center height: 280 mm, center width: 800 mm Year of construction: 2013



1 CNC universal lathe DMG MORI CTX beta 800

With C-axis and 12-fold disc turret, all tools are driven Spindle hole: 65 mm, center height: 280 mm, center width: 800 mm Year of construction: 2012

1 CNC universal lathe DMG MORI CTX 420 linear V3

With C-axis and 12-fold disc turret, all tools are driven Spindle hole: 65 mm, center height: 280 mm, center width: 635 mm Year of construction: 2005

1 CNC universal lathe DMG MORI CTX alpha 500 V3

With C-axis and 12-fold disc turret, all tools are driven Spindle hole: 65 mm, center height: 250 mm, center width: 500 mm, spindle speed: 6000 Year of construction: 2022

1 CNC universal lathe DMG MORI NEF 400 V3

With C-axis and 12 driven tools

12-position turret, spindle hole: 65 mm, center height: 135 mm, center width: 800 mm Year of construction: 2015

1 CNC universal lathe DMG MORI NEF 400

12-position turret, spindle hole: 65 mm, center height: 135 mm, center width: 800 mm Year of construction: 2007

1 precision lathe Weiler Condor VC plus

Spindle hole: 57 mm, center height: 180 mm, center width: 800 mm Year of construction: 2015

1 precision lathe Weiler Condor VC

Spindle hole: 56 mm, center height: 180 mm, center width: 800 mm Year of construction: 2008



WIRE-CUT EDM RANGE:

1 Agie Charmilles Progress VP 3

Spark erosion cutting machine Linear axes: X: 500 mm, Z: 426 mm, Y: 350 mm Thin wire technology: up to 0.05 mm Maximum workpiece dimensions: 1,050 x 650 x 420 mm Year of construction: 2018

1 Agie Charmilles Progress VP 2

Spark erosion cutting machine Linear axes: X: 350 mm, Z: 256 mm, Y: 250 mm Thin wire technology: up to 0.05 mm Maximum workpiece dimensions: 750 x 550 x 250 mm Year of construction: 2016

1 Agie Classic 2S

Spark erosion cutting machine Linear axes: X: 350 mm, Z: 256 mm, Y: 250 mm Maximum workpiece dimensions: 750 x 550 x 250 mm Year of construction: 2002

GRINDING RANGE:

1 CNC universal cylindrical grinding machine Studer S31 CNC

C-axis for form and thread grinding Center distance: 1,000 mm, center height: 175 mm Year of construction: 2013

1 high-precision surface and profile grinding machine ELB BD 15 KGT STC

With CNC control unit Grinding range: 1,500 x 600 mm, max. workpiece height: 600 mm Year of construction: 2011



1 high-precision surface and profile grinding machine ELB BD 10 ZRT XC PRO

With CNC control unit Grinding range: 1,000 x 600 mm, max. workpiece height: 610 mm Year of construction: 2018

1 high-precision surface and profile grinding machine ELB BD 10 KGT STC

With CNC control unit Grinding range: 1,000 x 600 mm, max. workpiece height: 500 mm Year of construction: 2012

1 precision rotary table grinding machine Geibel and Hotz RT 600 SD

With NC control unit Grinding range: Ø 600 x 200 mm Year of construction: 2017

1 precision surface grinding machine Geibel and Hotz FS640SC

With NC control unit Grinding range: 600 x 400 x 375 mm Year of construction: 2005

1 horizontal cross grinding machine Sunnen MBB - 1660 CG

Spindle speed: 200 - 2,500 min, diameter range: 1.5 – 165 mm Year of construction: 2011

SAWING RANGE:

1 automatic band saw Kasto tec A4

Saw cut range: 430 x 430 mm Year of construction: 2007

1 semi-automatic universal circular saw Kaltenbach KKS 400

Saw cut round up to 130 mm, miter cut up to 180° Year of construction: 2006



WELDING RANGE:

Gas shielded welding, electric welding, brazing and oxyacetylene welding

We also weld aluminum + stainless steels 1.4301, 1.4571, 1.4404, 1.4112, 1.4122.

Several TIG and MIG-MAG welding machines

1 precision system welding table - make: DEMELER

With precision grid clamping system

3 annealing furnace NABERTHERM

Interior dimensions: 750 x 1,000 x 750 mm

1 temperature test chamber / climatic chamber

Temperature range: +180 °C to -40 °C **Year of construction:** 2017

QUALITY ASSURANCE:

1 CNC coordinate measuring machine ZEISS ACCURA

Linear axes: X: 1,600 mm, Z: 1,000 mm, Y: 3,000 mm Calypso VAST Navigator Software Year of construction: 2018

1 CNC coordinate measuring machine ZEISS ACCURA

Linear axes: X: 900 mm, Z: 800 mm, Y: 1,600 mm Calypso VAST Navigator Software Year of construction: 2014

1 CNC coordinate measuring machine ZEISS CONTURA

Linear axes: X: 1,000 mm, Z: 600 mm, Y: 1,600 mm Calypso VAST Navigator Software Year of construction: 2007



1 CNC coordinate measuring machine ZEISS CONTURA

Linear axes: X: 900 mm, Z: 600 mm, Y: 1,200 mm Calypso VAST Navigator Software Year of construction: 2022

1 CNC coordinate measuring machine ZEISS CONTURA

Linear axes: X: 1,000 mm, Z: 600 mm, Y: 1,200 mm Calypso VAST Navigator Software Year of construction: 2017

1 IFA hard stone slab 2,000 x 1,000 mm

With TESA Micro-Hite, height measuring device

6 IFA hard stone slab 1,200 x 800 mm

With TESA Micro-Hite, height measuring devices

1 Faro Gage measuring arm

Work volume: 1.2 m

Multiple roughness measuring devices

LASER MARKING:

1 Trumpf Tru Mark Station 7000

Laser marking machine, max. workpiece size, width: 1,000 mm, height: 400 mm, depth: 500 mm Year of construction: 2023

1 Trumpf Tru Mark Station 7000

Laser marking machine, max. workpiece size, width: 1,000 mm, height: 400 mm, depth: 500 mm Year of construction: 2012



PART CLEANING:

1 Elma ultrasonic cleaning line

Year of construction: 2014

SURFACE FINISH:

1 glass bead blasting machine RAGA PULSAR III

With abrasive recovery for ultra-fine finishing of aluminum and stainless steel

1 barrel finishing machine

SERVICES:

Through a solid network of subcontractors we offer:

CNC laser cutting (stainless steel and aluminum) CNC coordinate grinding Flame cutting / plasma arc cutting Waterjet cutting Sink erosion 3D printing All surface finish and hardening procedures with very short delivery times

ASSEMBLY SERVICES:

Assembly of:

Small and large assemblies Special machines Stations and production lines Handling systems Clamping devices Complete machines, electrically and pneumatically installed



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