



CNC MILLING AND DRILLING:

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

Positioning accuracy < 4 μ m, volumetric accuracy < 15 μ m, 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 μ Precision

Positioning accuracy < 4 μ m, volumetric accuracy < 15 μ m,

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



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



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



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



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

 $\textbf{Spindle speed: } 12,\!000~\textrm{U}~\textrm{/}~\textrm{min high performance spindle}$



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 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



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



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



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



Linear axes: X: 1,000 mm, Z: 600 mm, Y: 1,200 mm
Calypso VAST Navigator Software
Year of construction: 2017
L IFA hard stone slab 2,000 x 1,000 mm
With TESA Micro-Hite, height measuring device
5 IFA hard stone slab 1,200 x 800 mm
With TESA Micro-Hite, height measuring devices
L Faro Gage measuring arm
Work volume: 1.2 m
Multiple roughness measuring devices
LASER MARKING:
I Trumpf Tru Mark Station 7000
Trumpi Tru Mark Station 7000
Laser marking machine, max. workpiece size, width: 1,000 mm, height: 400 mm, depth: 500 mm Year of construction: 2023
L 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:
L Elma ultrasonic cleaning line

1 CNC coordinate measuring machine ZEISS CONTURA



SURFACE FINISH:
1 glass bead blasting machine RAGA PULSAR III
With abrasive recovery for ultra-fine finishing of aluminum and stainless steel
With abrasive recovery for all a fine finishing of alaminatin and stanless seech
1 barrel finishing machine
SERVICES:
Through a solid network of subcontractors we offer:
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

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