

Engineering



swiss
made 



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Gremotool Engineering

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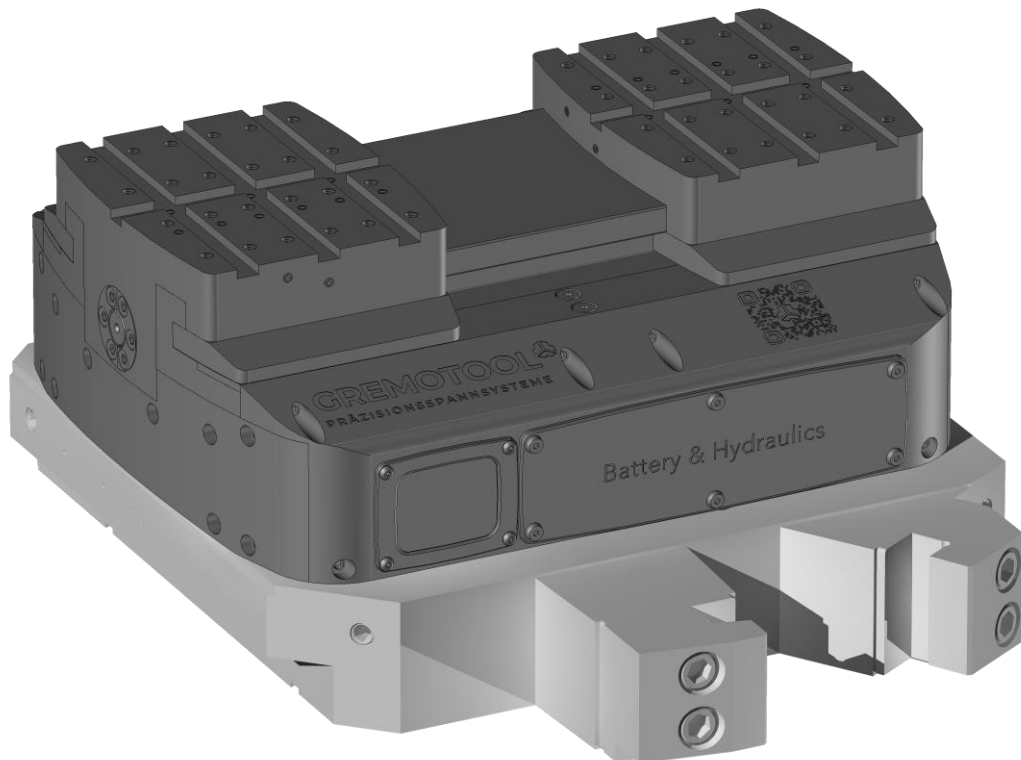
Gremotool Swiss Precision Engineering

Let's design the future together

The world is constantly changing, and this change is continuously increasing.

Increasing global competition not only has an impact on manufacturing, the development of products must also be innovative, flexible, market-driven and effective at a high level. The opportunities and risks of the current state of the art and new technologies must be constantly taken into consideration.

With our vast experience in the ranges of project management, mechanics, electronics and digital technology, we are the ideal partner for every development process.



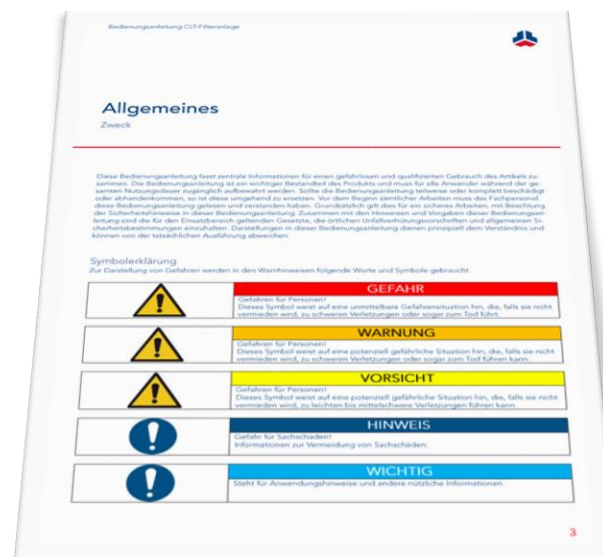
Gremotool Swiss Precision Engineering

Reliability in all sectors

The major challenge in projects is the assessment of risks.

Economic, technical or safety risks must be carefully and realistically assessed. We prepare the documentation in accordance with the current, fundamental standards and regulations.

- Machinery Regulation MR (EU) 2023/1230
- Safety of machinery – Risk assessment and Risk minimation EN ISO 12100:2011
- Safety of machinery General layout guidelines EN ISO 13849-1:2023

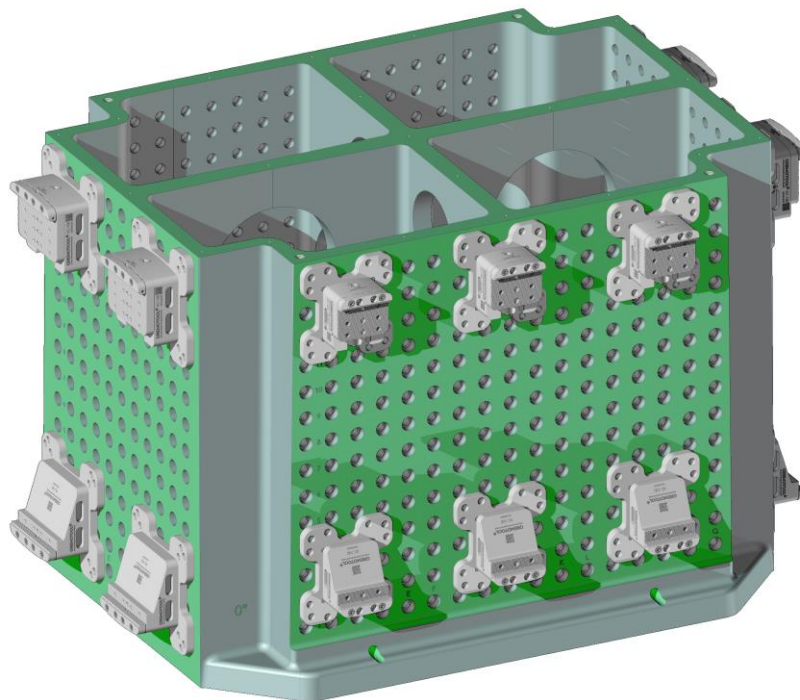


Services by Gremotool

Innovative and sustainable developments

With our network-based partners, we offer a full range of services from the very first idea to the completed product.

- Recording requirements
- Concept and technical studies with functional specifications and processes
- Machine system layout
- Mechanical, electrical and digital design and engineering
- Digital twin with drawings, circuit diagrams and source code
- Documentation of the development
- Production and purchasing
- Assembly and documentation of the process
- Commissioning, service and maintenance



Documentation by Gremotool

Solutions developed in direct cooperation with our customers

The process to the EC Declaration of Conformity

In Switzerland and in the EU countries, all products placed on the market by dealers or manufacturers must fulfil the Machinery Ordinance. We prepare the complete documentation and declaration to confirm that the product complies with the state of technology.

- User agreement
 - o Catalogue of requirements
 - o Operating requirements
 - o Special requirements
 - o Goals of protection, risks
 - o To be complied with standards
- Project basis
 - o Duration of use
 - o Conditions of use
 - o Risk profiles
 - o Requirements
- Measurement documentation
 - o Measurements
 - o Calculations incl. FEM simulations
 - o Audit reports
- Technical documentation
 - o Drawings
 - o Digital twin
 - o Circuit diagrams
 - o Sourcecode
- Risk assessment
 - o Hazard analysis
 - o Risk analysis
 - o Actions
- Operating instructions with security instructions
 - o EC- Declaration of Conformity

Engineering

According requirements

Combined CAD / CAM

The digital twin is already present in the name. The Gremotool clamping devices are designed in the same programme in which the production programming is created. This makes it possible to update changes to the geometries of the finished workpiece with minimal programming effort for production. In combination, product development becomes scalable at several levels of production.

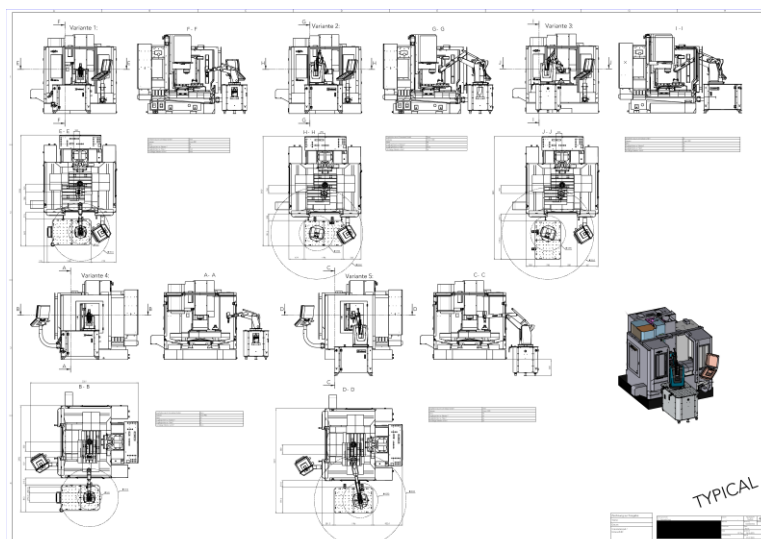
Customised solutions according to requirements

Whether a special jaw or equipping a machine with a clamping device specifically for a family of cast components, Gremotool offers customised clamping solutions. Together, we offer over 60 years of expertise in various parts of manufacturing, system technology and mechanical engineering to guarantee the best possible clamping solution for reliable production.

Parameterised series

The consistent parameterisation of the design data of all clamping devices makes it possible to create Gremotool products cost-effectively, flexibly and according to customer requirements. Special jaws for specific applications can also be made available quickly and easily using this process.

Are you looking for a new solution for clamping? We are looking forward, solving your tensions ensuring a secure grip.



Digitisation

With the future

Sensors

Gremotool integrates various types of sensors into selected products for the era of Industry 4.0. These include acceleration, pressure and force measurement sensors. These are read and temporarily stored by a microcontroller. These components are powered by a rechargeable battery.

Monitoring

Once the data has been collected, it is sent from the microcontroller to a base station in the machining centre via a wireless connection. There it is stored and analysed. This allows the user to access further machine-independent values directly during the production process. This gives the user a deeper insight into the machining process and can optimise it in a targeted manner.

Process reliability

Clamping devices that are enhanced with these functions make it possible to guarantee process stability in automated production. Key factors in workpiece clamping are monitored and analysed:

Is the workpiece still sufficiently tensioned?

Which forces are acting on the workpiece?

Is there still enough energy for safe clamping?

Are there any vibrations during the production process?

This allows conclusions to be drawn about the tolerances and surface quality of the component while it is still being machined.

Our Knowhow Focus

Development and sales of machine tools	more than 20 years of experience
Mold engineering	more than 20 years of experience
Mold production	more than 20 years of experience
Special-Purpose Engineering	more than 30 years of experience
Measurement & Test Equipment Engineering	more than 10 years of experience
Integration of Handling Systems	more than 15 years of experience
Engineering of Production Resources	more than 20 years of experience
Hydro-Mechanical Installations	more than 20 years of experience
Engineering of workpiece clamping	more than 40 years of experience
Project Management	more than 50 years of experience
Medical Engineering	more than 20 years of experience
Integration of Sensors / Actuators	more than 20 years of experience
Digital Technology	more than 10 years of experience

Contact



René Baumann

CEO and Chief Sales

«Industrie 4.0 – an (R)Evolution?»



Philipp Hugentobler

Technology & Chief Development

«Paying attention of the entire process from production to application in development, and constantly learning new things along the way, is a motivating challenge. »



Christian Eberle

Technology & Chief Development

«Collected data influences the long-term success of today's manufacturing. »



Gerda Weissteiner

Administration and customer service

«Pleasure, heart and engagement.»

Our customers

Machining tool manufactures and retailers

We are looking forward to support customers in assessing the suitability of machines. For this purpose, the machine, machine equipment, tools and clamping devices are checked in detail regarding the required workpieces. Afterwards we create a report with the assessment and show the potential dangers during use. This includes collision considerations, automation capabilities, process reliability, suggestions for an economical manufacturing strategy and a cost overview.

Extremposition:
Spindel Z-500
B-Achse -105°
C-Achse 0°
WZ-Aufnahme:
HSK-E50-Disk120

Hub= 0 - 114mm

Hub= 0 - 134mm

Hub= 0 - 154mm

Zeichnung zur Freigabe:
Name:
Datum:
Firmenstempel /
Unterschrift:

Pos.	Mt.	Beschreibung	Abmessung	Material	Evts.	Zust./Fertig	St.
1	1	FWC-03 auf SP5-240	200 x 250 x 170	...	...	02000140	A
2	1	FWC-03 auf SP5-240	200 x 250 x 170	...	...	02000044	A
3	1	FWC-03 auf SP5-240	200 x 250 x 170	...	...	02000000	A
4	2	Series 1000	14 x 15 x 40	1.2010	Mik-Markon	02000071	A

Freigegeben:	Datum:	14.02.2024	PHI	Schulzstrasse 622	82001576C
Offenlegung:	C: Pos. 2: Griffbacken angepasst	14.02.2024	PHI	Schulzstrasse 622	82001576C
Material:	Angebotsmodell	14.02.2024	PHI	Schulzstrasse 622	82001576C
Dimensionen:	Mil 5 600 U	14.02.2024	PHI	Schulzstrasse 622	82001576C
Werte:	165 kg	23.01.2024	PHI	Schulzstrasse 622	82001576C
Werkstoff:	27.06.2024	PHI	Schulzstrasse 622	82001576C	
Werkstoff:	27.06.2024	PHI	Schulzstrasse 622	82001576C	

820001576C

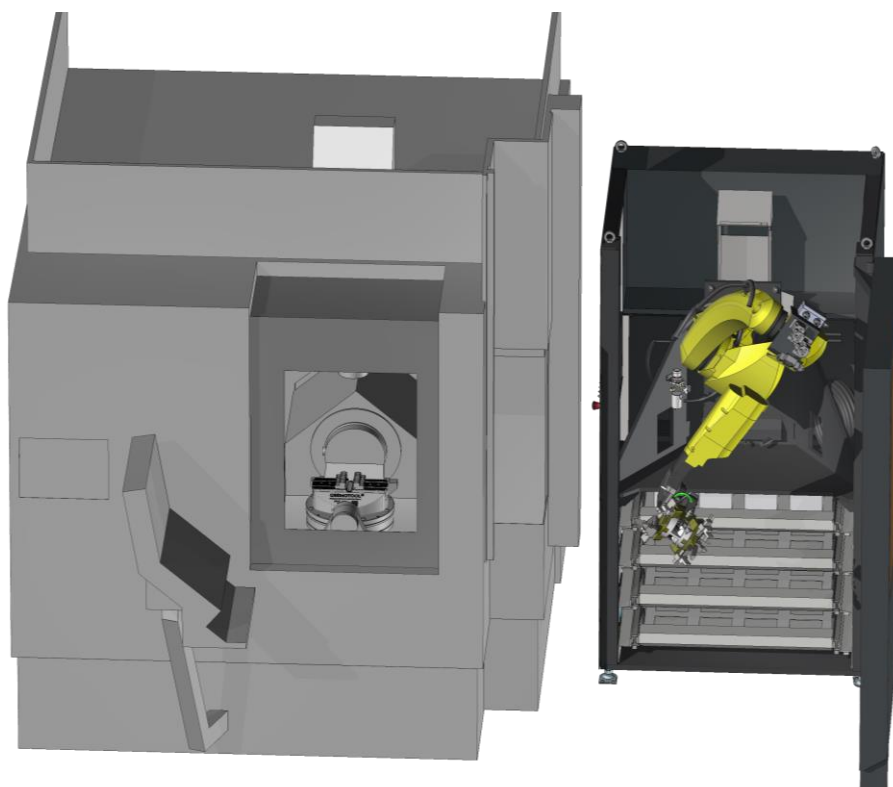
Wienstrasse 3
CH-9000 Gossau SG
www.gremotool.ch

PRÄZISIONSGANNELESYSTEME

Our customers

Automation and Integrator

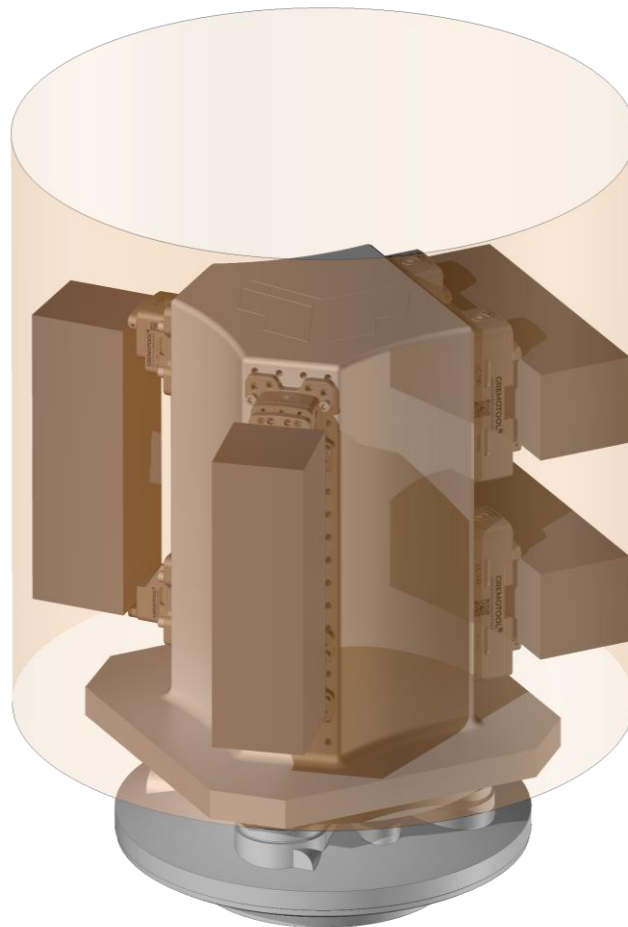
There is a lot to consider when integrating robots into existing or new machines. If the manufacturing strategy is not defined or the environment does not allow it, the best robot is of no use. With us, robot manufacturers and integrators receive the best possible support so that they can focus on their core competencies. We provide the integrator with the best possible information about the processing machine.



Our customers

Individual customers

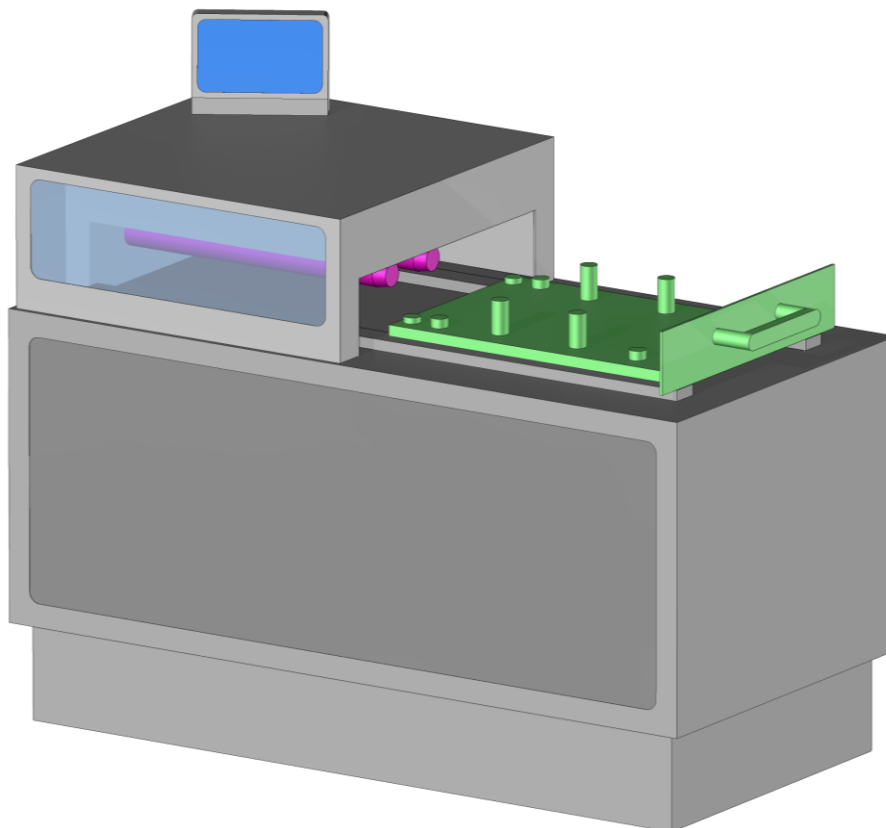
How should the workpiece be manufactured as quickly and most economically as possible? Everyone who works in the manufacturing process asks themselves this question. From our experience, we know the most common and best manufacturing processes for every workpiece, having the network.



Our customers

Measuring and Test Equipment

Precision and accuracy are the big keywords when it comes to measuring and testing equipment construction. The requirements in this range are particularly high so that process reliability is at the highest level, the measurements are meaningful, and the tested workpieces correspond to the quality. We are looking forward to supporting our customers in achieving their quality goals.





Imprint

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Our general terms and conditions apply, which can be accessed at www.gremotool.ch.

Further catalogues can be downloaded from the website www.gremotool.ch.

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