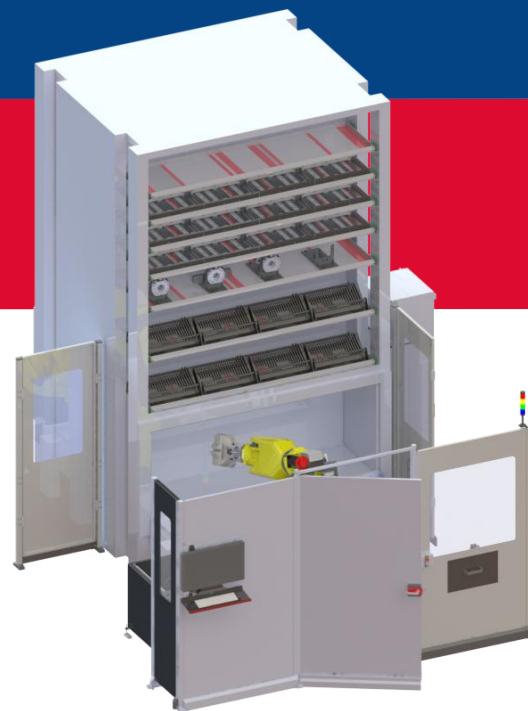


FROM CHF 390'000.-
Excl. VAT and Services
From 410'500.- €

Gremotool workpiece and pallet
handling system Wick AG



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Overview

Gremotool workpiece and pallet handling system Wick AG

Overview	2
Introduction	4
Gremotool workpiece and pallet handling system Wick AG	4
WH / PH and SH handling systems	5
Gremotool product presentation	6
Advantages workpiece and pallet handling system (WH-PH)	6
WH-PH-clamping systems	9
Gremotool pallet clamping system	10
Gremotool pneumatic / hydraulic clamping systems	12
Gremotool hydraulic clamping systems	13
Gremotool hydraulic long stroke clamping systems with sensors	14
Gremotool clamping device for pallet handling Recommendation	15
Layout Gremotool workpiece handling system WiCell	20
Layout Gremotool workpiece handling system WiTower	22
WH-PH-modular system	24
Layout Gremotool workpiece handling system Wick AG	24
Software	26
IPM = Intelligent Production Management	26

Overview

Gremotool workpiece and pallet handling system Wick AG

WH-PH-components	27
Storage, temporary storage and removal from storage	27
Gremotool workpiece clamping jaws	28
Additional components	29
Interface handling system (Industrie 4.0)	35
Machine tool	36
Preparations for workpiece and pallet handling system	36
Gremotool TCF	37
Gremotool CLT-filter system	38
Gremotool PAT Toolboy-Vise	39
Regulations	40
MR 2023/1230 – MD 2006/42/EC	40
Gremotool WH-PH	41
Gremotool workpiece and pallet handling system Wick AG	41
Imprint	44

Introduction

Gremotool workpiece and pallet handling system Wick AG

Handling technology has become even more important worldwide in recent years, particularly due to the increasingly competitive global economy. It is forcing companies to continuously rethink and optimise their production processes and make them more efficient and flexible in order to remain competitive.

- Improving quality while reducing production costs.
- Integrating new technologies into existing systems.
- Qualified employees who are familiar with investing in and implementing technology.

These are some of the challenges facing managers in order to remain successful in the long term.

Conclusion:

Handling technology (digitisation) has become a decisive factor in companies.



* This document is not complete.

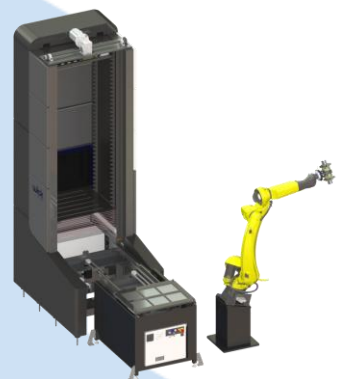
Introduction

WH / PH and SH handling systems

Pallet handling (PH)

Pallet handling in machining offers numerous advantages, including:

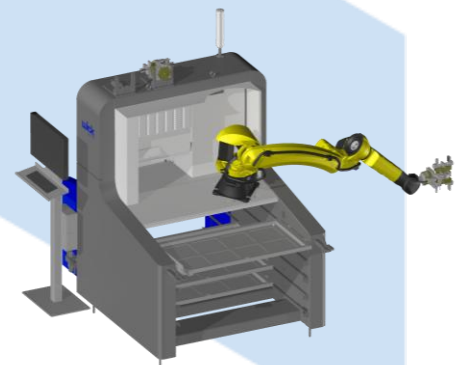
- High efficiency of manufacturing processes
- Robot takes over loading and unloading of the machining centre
- Very high precision thanks to the repeat accuracy of the zero-point clamping systems
- Continuous machining during workpiece clamping at the set-up station
- Flexibility when changing over and adapting to different workpieces
- Human errors are minimised
- Complex geometries or multiple clamping possible



Workpiece handling (WH)

Workpiece handling on machine tools is characterised by:

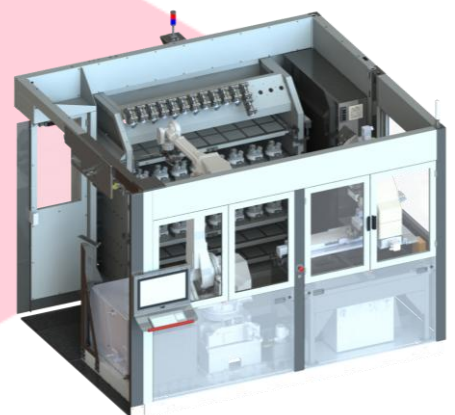
- Pneumatic or hydraulic workpiece clamping
- Workpiece clamping within the machining centre
- Minimal set-up times guarantee high machine running times
- Maximum productivity and utilisation of the machining centre
- Long, labour-saving production thanks to various drawers



Vise handling (SH)

Important aspects of vise handling are:

- Automated loading and unloading of the processing machine
- Vices with zero-point clamping systems for fast and precise positioning
- Flexible system that changes the vice depending on the workpiece
- High stability guaranteed through the use of precision vices
- High efficiency of manufacturing processes
- Maximum productivity and utilisation of the machining centre



Gremotool product presentation

Advantages workpiece and pallet handling system (WH-PH)

efficiency

Handling systems minimise the time required for manual intervention. Workpieces and/or vices are moved by the robot, which speeds up the entire production process.

precision

The use of robots ensures that workpieces are always positioned in the same way. This reduces errors and waste.

occupational safety

Manual and monotonous handling can be labour-intensive and dangerous. Workpiece and pallet handling systems usually perform these tasks better and minimise the risk of injury to employees.

flexibility

Workpiece and pallet handling systems are programmable and adaptable to transport, grip and position different workpieces and vices. Changing products and varying quantities are no problem.

Cost savings

In the long term, investing in a handling system reduces operating costs. Less waste, longer production times and optimised personnel deployment result in savings and increase competitiveness.

machine utilisation

Production machines operate more efficiently when workpieces are fed in and removed automatically. This avoids unnecessary waiting times and ensures that machines can be operated for longer periods each day.

production quality

The monitored, precise and reproducible movement of the handling system improves the quality of the end products.

set-up times

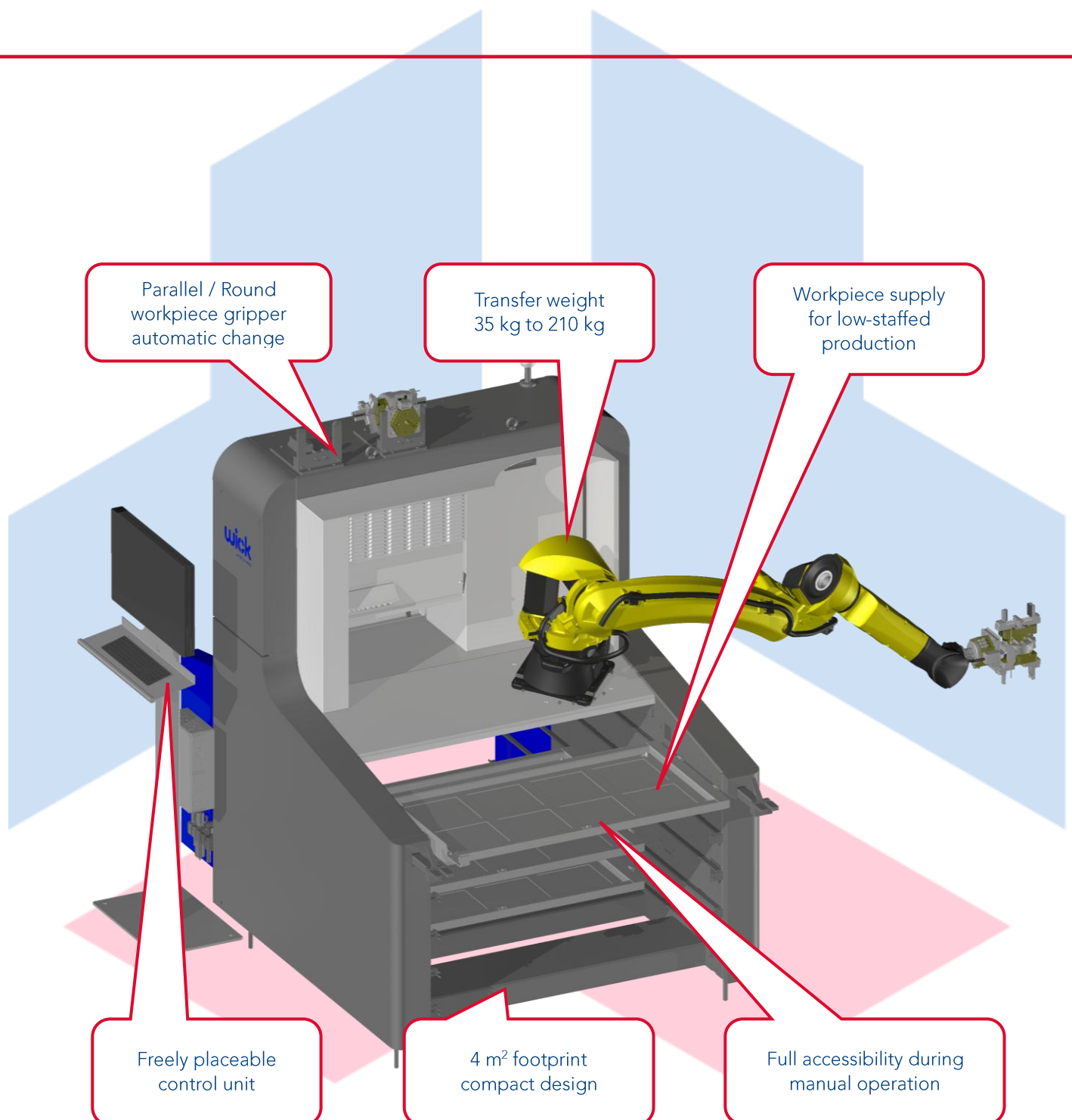
Combining workpiece and pallet handling minimises set-up times. The vices are prepared outside the machining centre while the robot works on orders.

Finished workpieces

The flexibility of the cell allows various processing machines, storage systems, labelling, cleaning and measuring devices to be combined with this system in order to cover all steps for the finished workpiece.

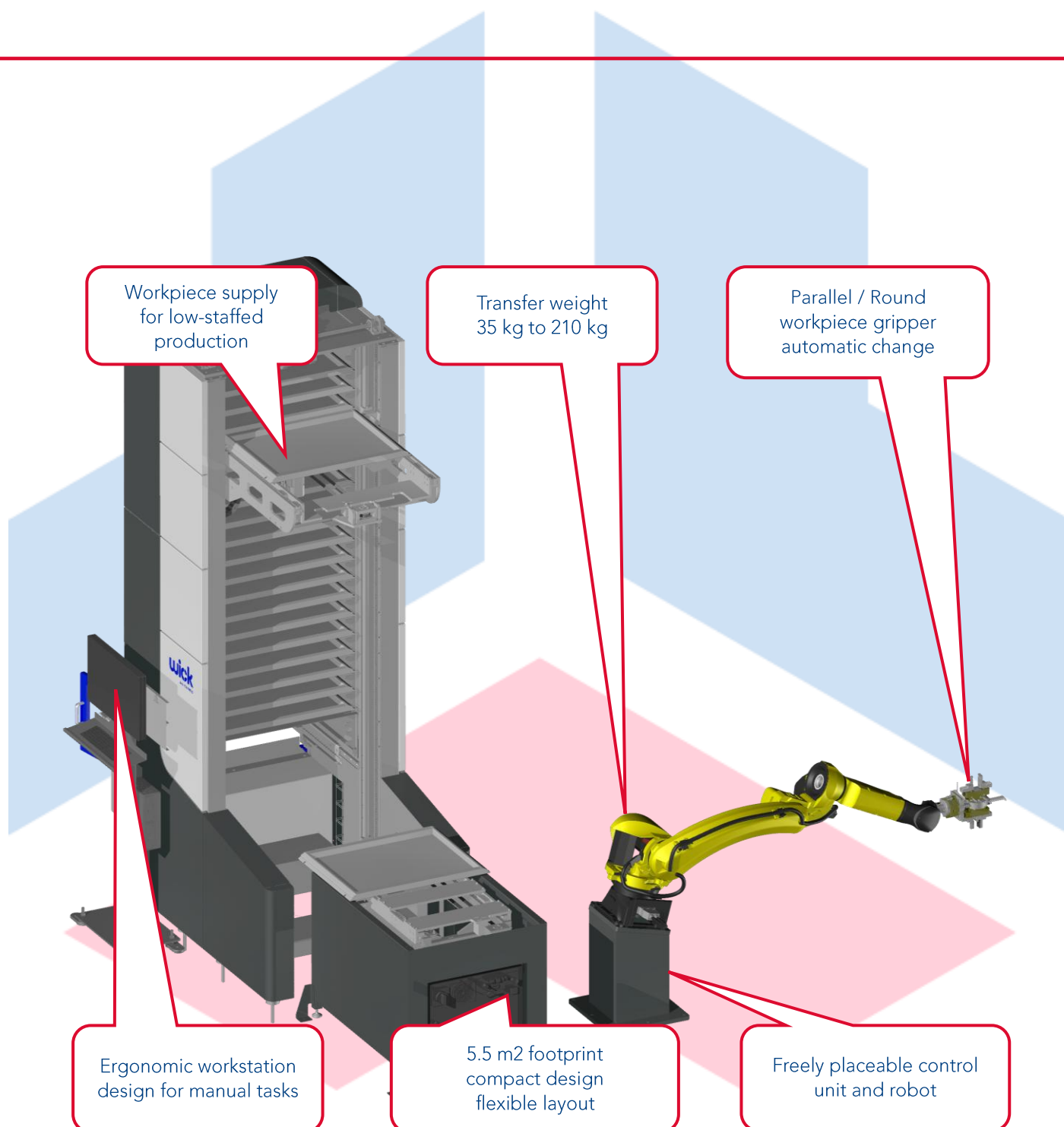
Gremotool product presentation

Advantages workpiece and pallet handling system (WH-PH) WiCell



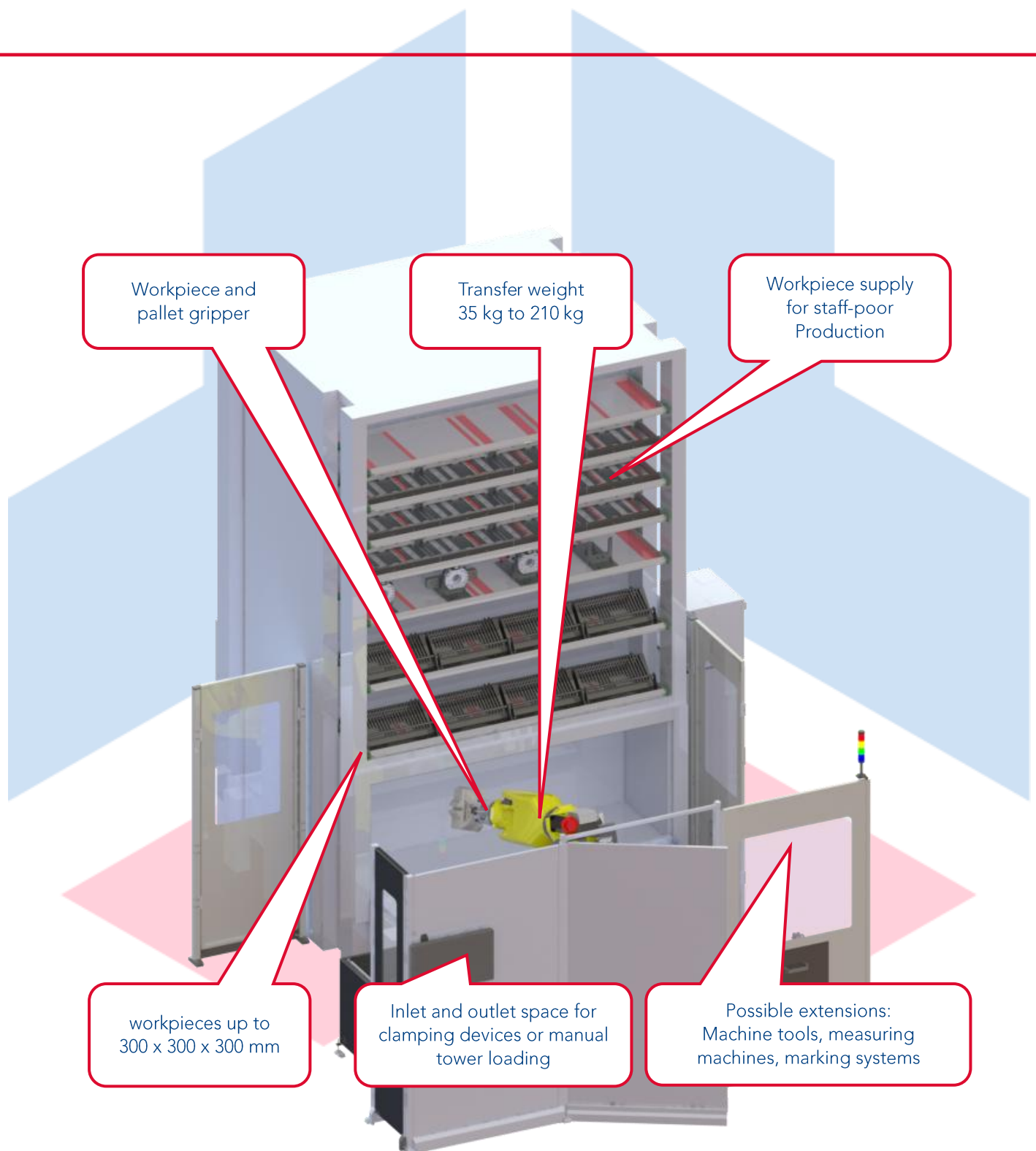
Gremotool product presentation

Advantages workpiece and pallet handling system (WH-PH) WiTower



Gremotool product presentation

Advantages workpiece and pallet handling system (WH-PH)



WH-PH-clamping systems

Gremotool pallet clamping system

Gremotool LC-series

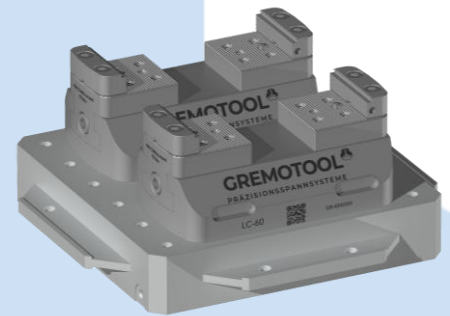
- High-precision centring clamp
- High process reliability
- Closed base body to prevent chips from remaining
- Various sizes and fastening options
- Deep and stable
- Large Gremotool jaw range



LC-34 with integrated pallet for maximum workpiece sizes



LC-60 with integrated pallet for maximum workpiece sizes



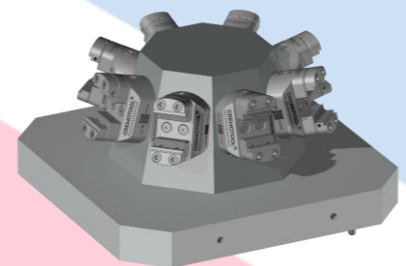
LC-60 and LC-60AM for distortion-free tensioning across both Vises



LC-50 with integrated pallet for maximum workpiece sizes



LC-100 und LC-100AM for distortion-free tensioning across both Vises



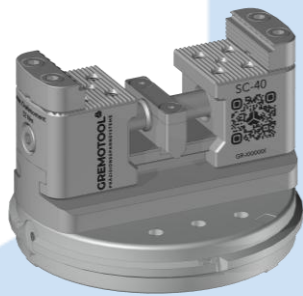
8x LC-34 on pyramid and UPC-320

WH-PH-clamping systems

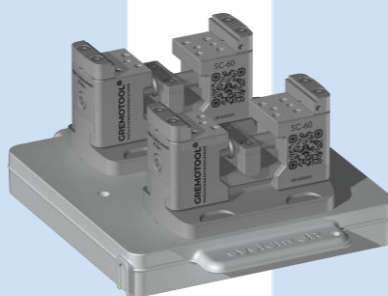
Gremotool pallet clamping systems

Gremotool SC-series

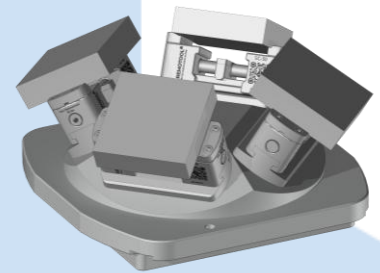
- High for optimum spindle accessibility
- High-precision centre clamp
- Various sizes and mounting options
- Large range of Gremotool jaws



SC-40 with pallet for maximum accessibility



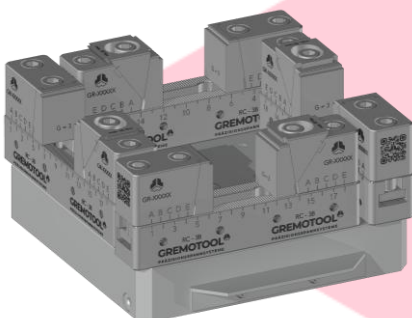
SC-60 und SC-60AM for distortion-free tensioning across both Vises



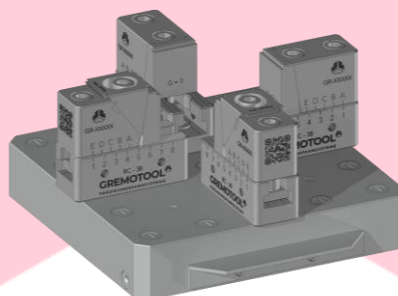
4x SC-50 on Pyramid and Dynafix

Gremotool RC-series

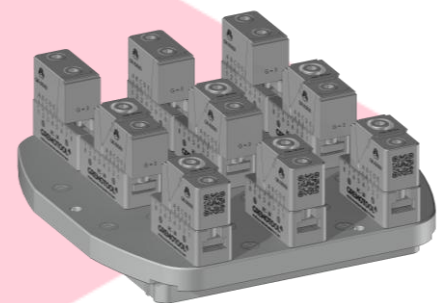
- Modularly adaptable to clamping situation
- Multiple clamping forces possible
- Quickly interchangeable jaws with downward pull effect
- Short set-up times



4x RC-38 at the edge for 4 workpieces on GPS-240



2x RC-38 for use as 4-jaw chuck on GPS-240



3x RC-38 as 4-jaw chuck on Dynafix

WH-PH-clamping systems

Gremotool pneumatic / hydraulic clamping systems

Gremotool PMC/HMC-series

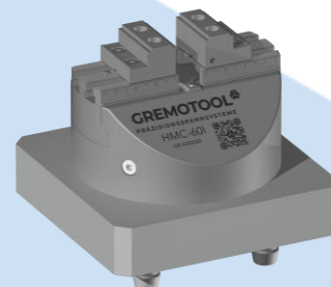
- Pneumatic/hydraulic centre clamp
- Integrated clamping force safety device
- Pressure reducing valve for clamping force adjustment (pneumatic)
- Clamping force via hydraulic pressure (hydraulic)
- Excellent accessibility from all sides
- Various sizes and mounting options
- Large Gremotool jaw range



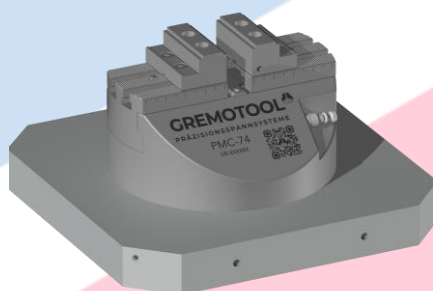
HMC-50 on pallet



PMC-60 on pallet



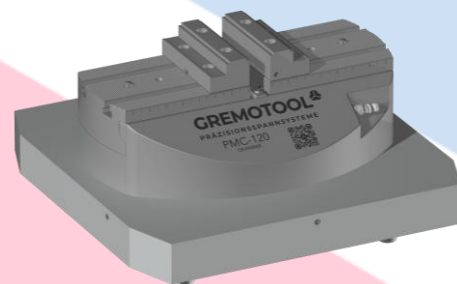
HMC-60l on pallet



PMC-74 on pallet



HMC-100 on pallet



PMC-120 on pallet

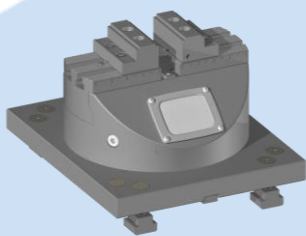
WH-PH-clamping systems

Gremotool hydraulic clamping systems

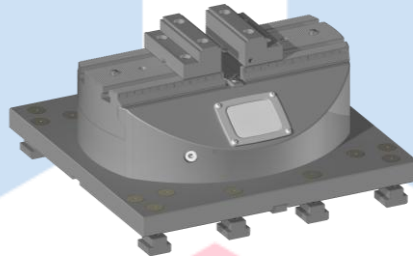
Gremotool HMCc-series

- Hydraulic centre clamp
- Sensors for measuring clamping force
- Sensors for measuring jaw position
- Radio transmission to Blum Novotest RC66 measuring probe receiver
- Battery-powered sensor technology
- Integrated clamping force safety device
- Clamping force adjustment via pressure reduction
- Excellent accessibility from all sides
- Various sizes and mounting options
- Large Gremotool jaw range

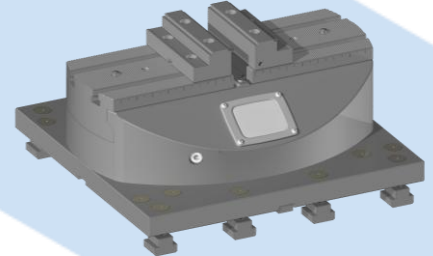
BLUM
focus on productivity



HMCc-74 on base plate
pallet mounting possible



HMCc-100 on base rail
pallet mounting possible



HMCc-120 on base plate
pallet mounting possible



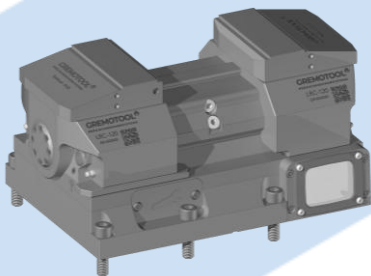
WH-PH-clamping systems

Gremotool hydraulic long stroke clamping systems with sensors

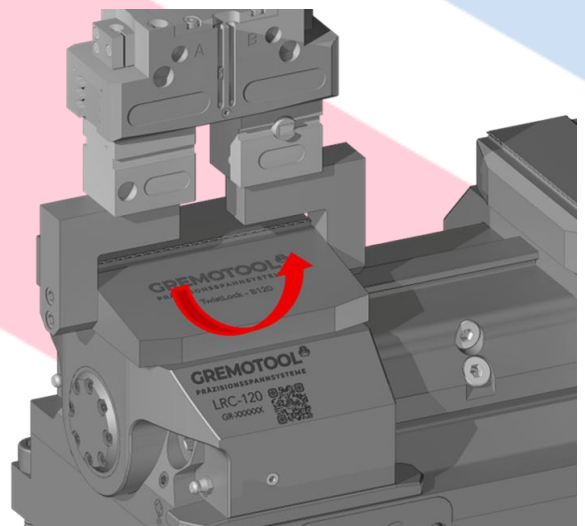
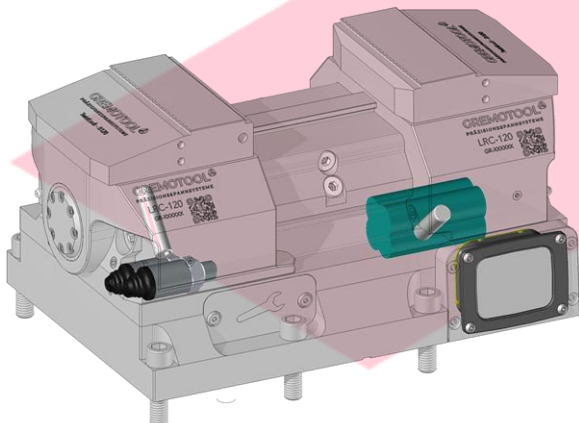
Gremotool LRC-series

- Hydraulic centre clamp with long stroke (110 mm)
- 40 kN clamping force per jaw
- Sensors for measuring clamping force
- Sensors for measuring jaw position
- Radio transmission to Blum Novotest RC66 measuring probe receiver
- Battery-powered sensor technology with charge level monitoring
- Integrated clamping force safety device
- Clamping force adjustment via pressure reduction
- Can be mounted on various zero-point pallets
- Excellent accessibility from all sides
- Automated interchangeable Gremotool TwistLock swivelling jaws

BLUM
focus on productivity



LRC-120



WH-PH-clamping systems

Gremotool clamping device for pallet handling Recommendation

Recommended LC



LC-34



LC-34



LC-40



LC-50

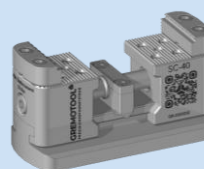
Recommended SC



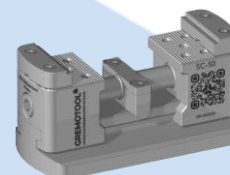
SC-34



SC-34



SC-40



SC-50

**Max. workpiece length
(clamping range) [mm]**

36

36

85

106

**Min. workpiece width
(jaw width) [mm]**

34

34

40

50

**Max. workpiece height
[mm]**

70

70

70

60

**Max. workpiece weight
[kg]***

4

4

18

32

Recommended pallet

ITS-50

Macro 50 / 70

GPS-120

ITS-148

WH-PH-clamping systems

Gremotool clamping device for pallet handling Recommendation

Recommended LC



LC-50



LC-74

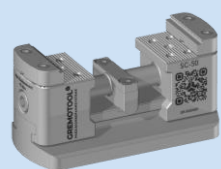


LC-100

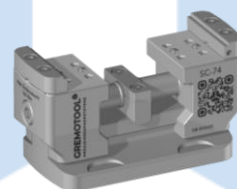


LC-120

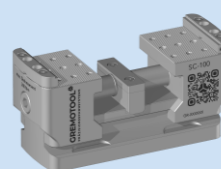
Recommended SC



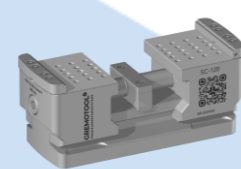
SC-50



SC-74



SC-100



SC-120

**Max. workpiece length
(clamping range) [mm]**

106

180

228

270

**Min. workpiece width
(jaw width) [mm]**

50

74

100

120

**Max. workpiece height
[mm]**

60

120

120

120

**Max. workpiece weight
[kg]***

70

70

70

70

Recommended pallet

Macro Magnum

GPS-240

UPC-320

Dynafix

WH-PH-clamping systems

Gremotool clamping device for pallet handling Recommendation

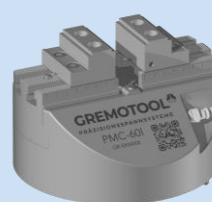
Recommended PMC



PMC-50



PMC-60



PMC-60I



PMC-74

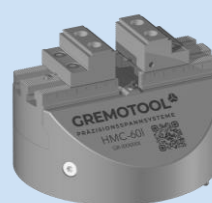
Recommended HMC



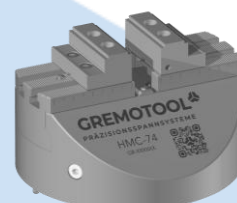
HMC-50



HMC-60



HMC-60I



HMC-74

Max. workpiece length (clamping range) [mm]	110	114	134	154
Min. workpiece width (jaw width) [mm]	50	60	60	74
Max. workpiece height [mm]	150	150	150	200
Max. workpiece weight [kg]*	25	25	25	50
Min. table size [mm]	Ø148	Ø170	Ø190	Ø210

WH-PH-clamping systems

Gremotool clamping device for pallet handling Recommendation

Recommended PMC



PMC-100

PMC-120

Recommended HMC



HMC-100

HMC-120

**Max. workpiece length
(clamping range) [mm]**

250

294

**Min. workpiece width
(jaw width) [mm]**

100

120

**Max. workpiece height
[mm]**

200

200

**Max. workpiece weight
[kg]***

50

50

Min. table size [mm]

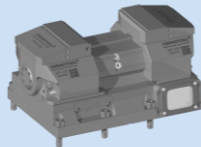
260 x 310

260 x 350

WH-PH-clamping systems

Gremotool clamping device for pallet handling Recommendation

Recommended LRC



LRC-120

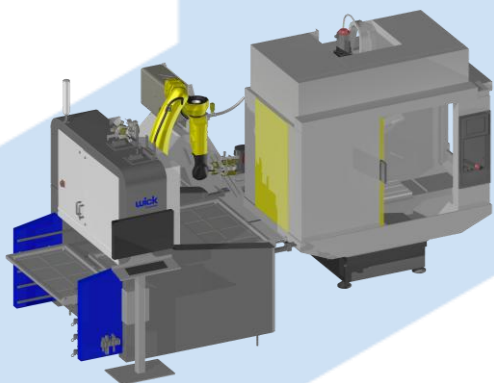
Jaw stroke [mm]	55
Max. workpiece length (clamping range) [mm]	305
Min. workpiece width (jaw width) [mm]	100
Max. workpiece height [mm]	300
Max. workpiece weight [kg]*	50
Recommended table size	320 x 320

WH-PH-modular system

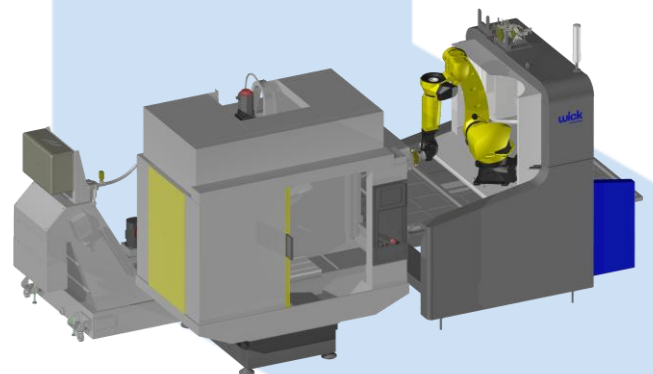
Layout Gremotool workpiece handling system WiCell

Flexible layouts for machine tools

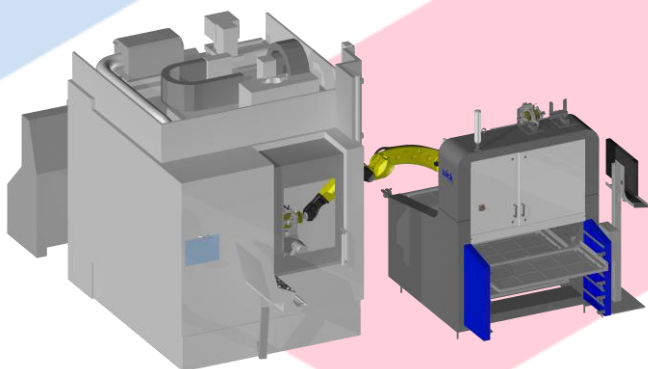
- Layout for 3-axis machines
- Layout for 5-axis machines
- Left side of the machine
- Right side of the machine
- In front of the machine
- Multiple machines can be loaded



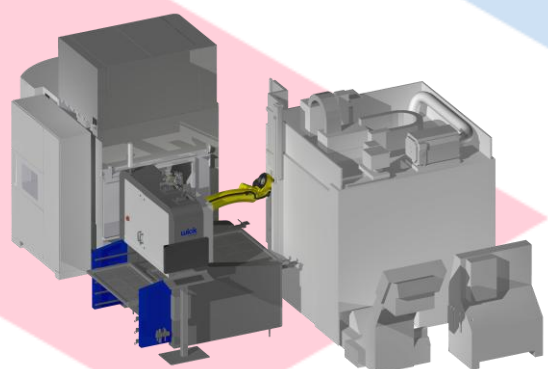
Handling System on the left of the machine



Handling System on the right of the machine



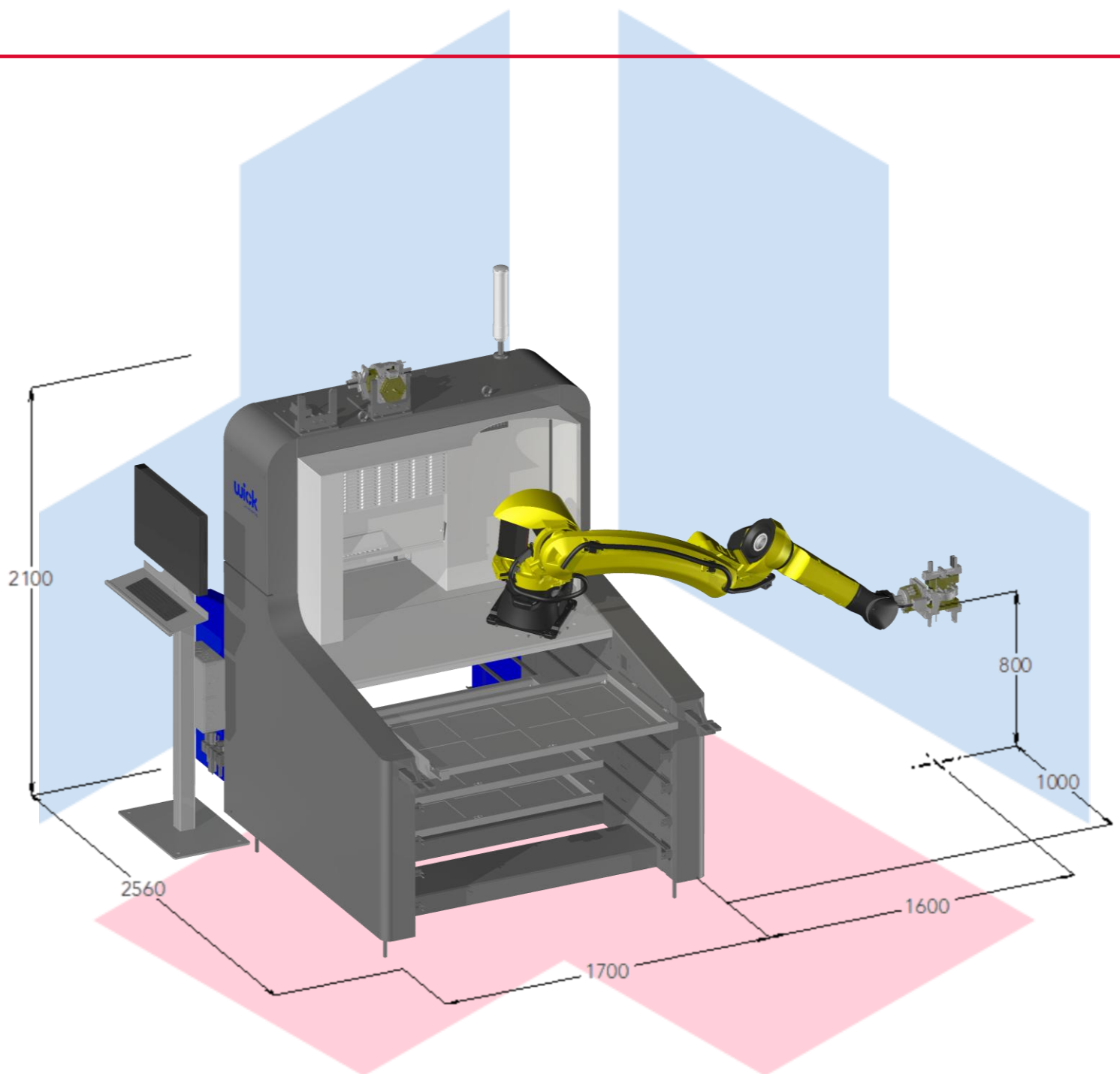
Handling System next to a 5-axis machine



Handling System between to machines

WH-PH-modular system

Layout Gremotool workpiece handling system WiCell

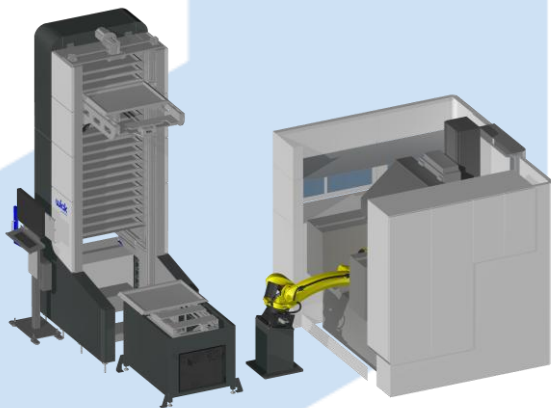


WH-PH-modular system

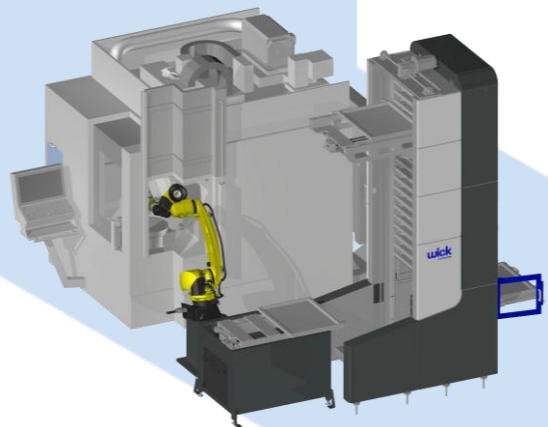
Layout Gremotool workpiece handling system WiTower

Flexible layouts for machine tools

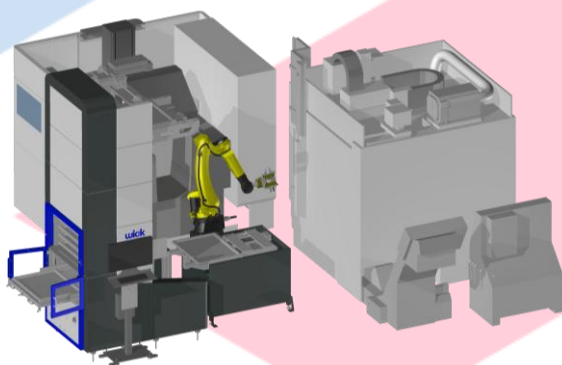
- Layout for 3-axis machines
- Layout for 5-axis machines
- Left side of the machine
- Right side of the machine
- In front of the machine
- Multiple machines can be loaded



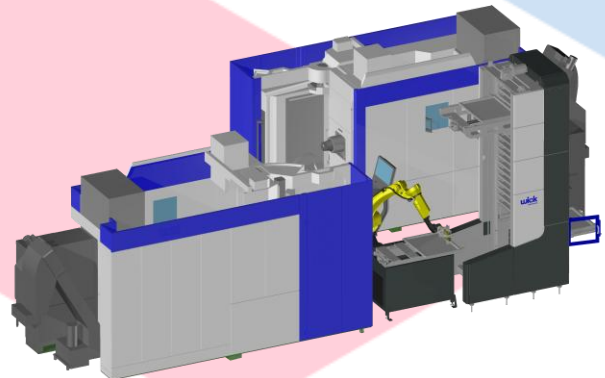
Handling System behind the machine



Handling System on the right side of the machine



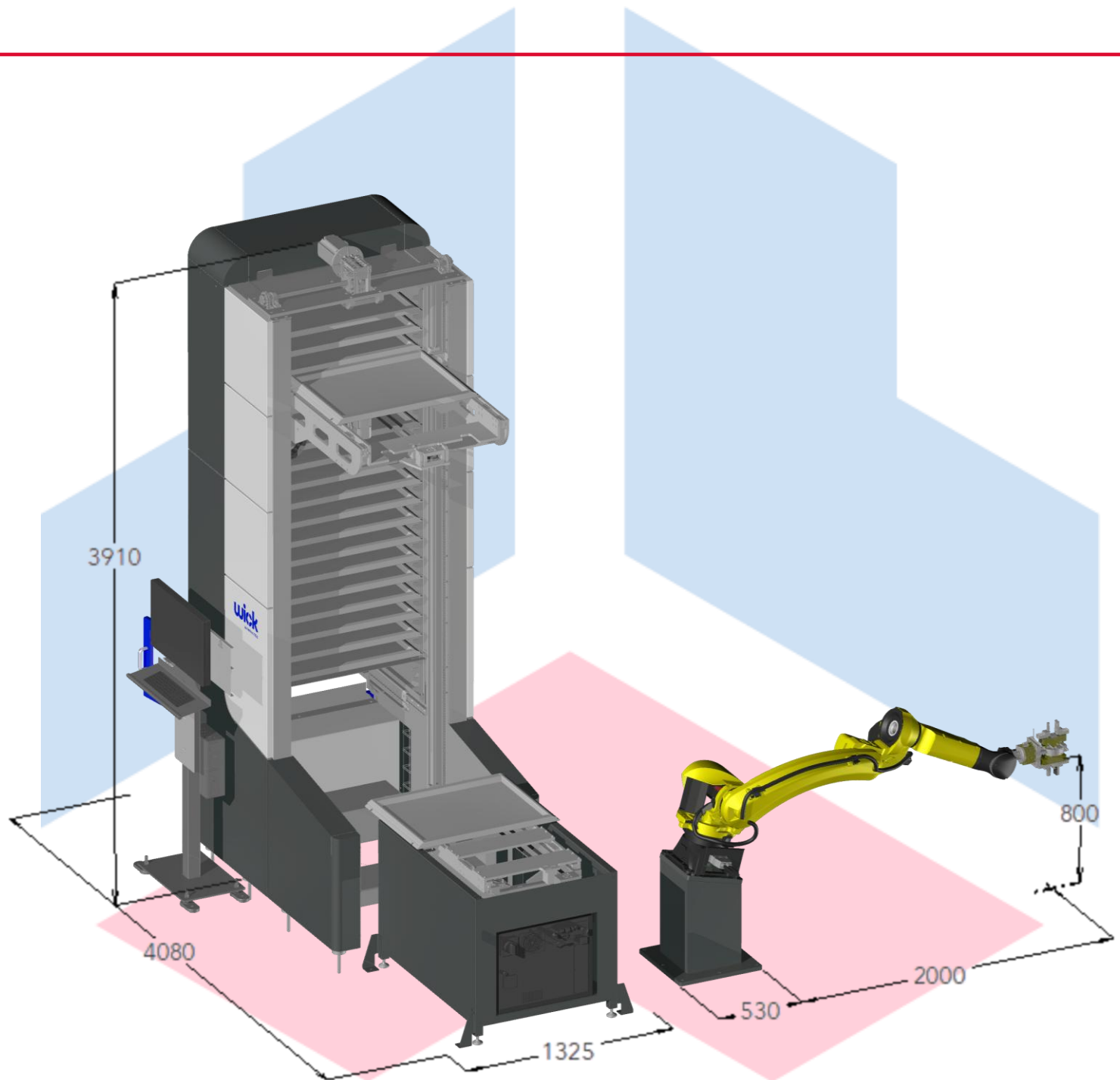
Handling System between two machines



Handling System with two identical machines

WH-PH-modular system

Layout Gremotool workpiece handling system WiTower

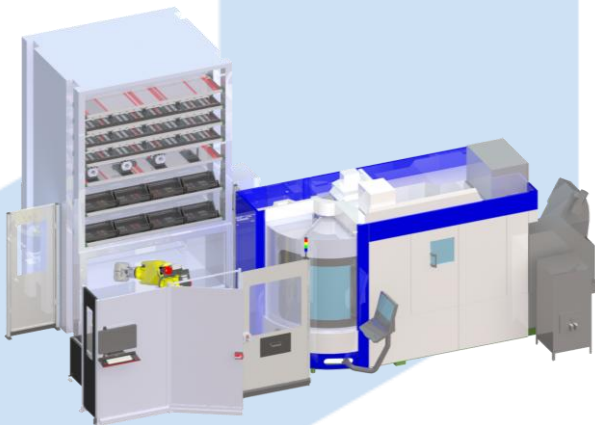


WH-PH-modular system

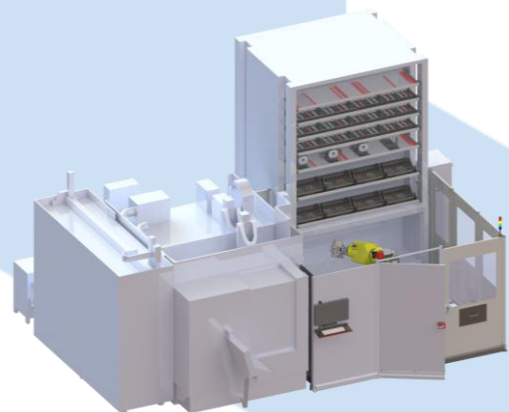
Layout Gremotool workpiece handling system Wick AG

Flexible layouts for machine tools

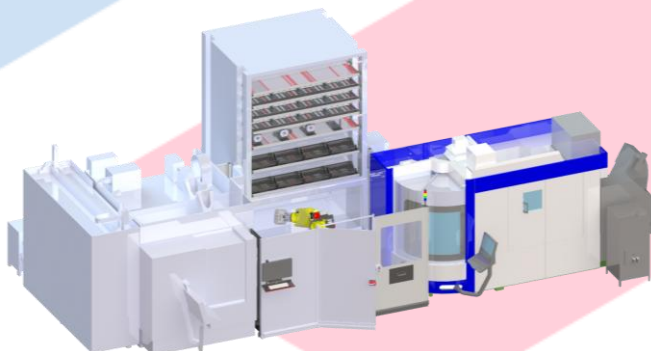
- Layout for 3-axis machines
- Layout for 5-axis machines
- Left side of the machine
- Right side of the machine
- In front of the machine
- Multiple machines can be loaded



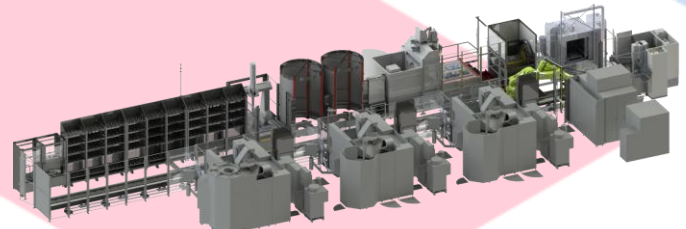
Handling system on the left side of the machine



Handling system on the right side of the machine



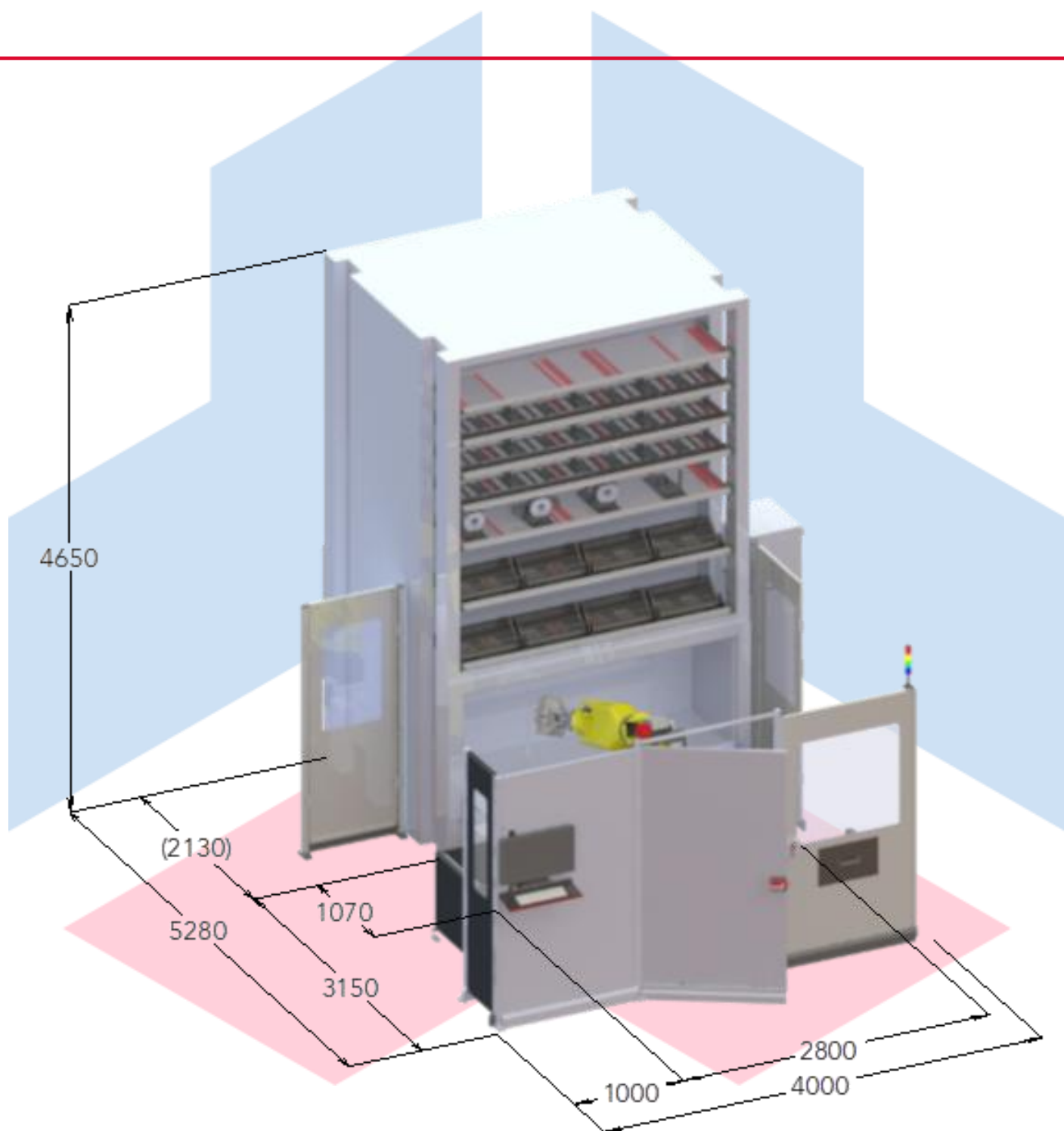
Handling system between two machines



Handling system for multiple machines

WH-PH-modular system

Layout Gremotool workpiece handling system Wick AG



Software

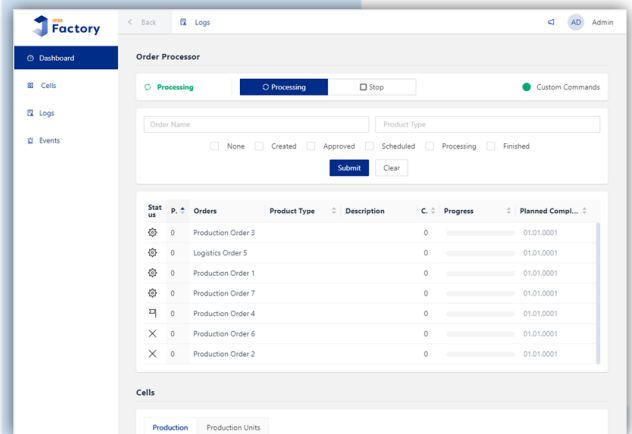
IPM = Intelligent Production Management

IPM Factory

The IPM Factory is responsible for managing and organising production orders within manufacturing.

- Production planning and control
- Prioritisation of orders
- Progress monitoring
- Optimisation of production processes
- Communication with other machines
- Resource control

An IPM factory is often a decisive factor in a company's flexibility and competitiveness, as it has a direct impact on delivery times and production capacities.

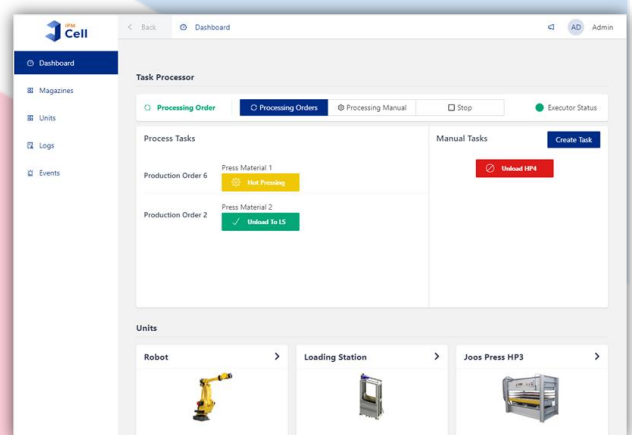


IPM Cell

An IPM Cell is responsible for managing and optimising the entire production cell in manufacturing.

- Monitoring and control of machines
- Material flow management
- Quality control and traceability
- Maintenance planning
- Process optimisation

IPM Cell software plays a central role in modern production systems based on lean or agile manufacturing principles.



Tool Manager

Cutting tool management deals with the administration of cutting tools used in machining.

- Tool storage
- Life cycle management
- Automatic tool monitoring
- Data analysis and documentation

Effective cutting tool management helps to maintain high production quality, reduce machine downtime and minimise the costs of tool procurement and replacement.

WH-PH-components

Storage, temporary storage and removal from storage

Integrated workpiece storage

A vertical lift module serves as the workpiece storage for the robot.

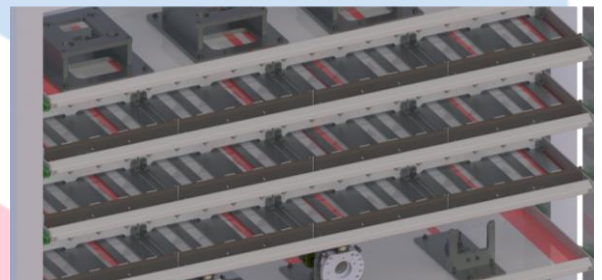
- Multiple drawers stacked on top of each other for high material density
- Can be operated independently in the workspace by robots
- Can be pulled out by employees for loading
- Robots and employees can work on different drawers simultaneously
- Ergonomic workpiece loading for employees
- Easy cleaning of drawers
- Up to 3.2 m² of space per drawer for workpieces or pallets
- 560 kg per drawer



Drawer inserts

Various drawer inserts for the raw material can be placed in the drawers.

- Can be inserted into the drawer without tools
- Freely configurable
- Up to 4 workpieces per insert pocket
- Mat prevents shifting and protects the workpieces



AGV automated guided vehicles

Automated Guided Vehicles serve to improve logistics efficiency within the company.

- Less material storage at the machine
- Less direct material feeding at the machine
- Incorrect material handling is minimised



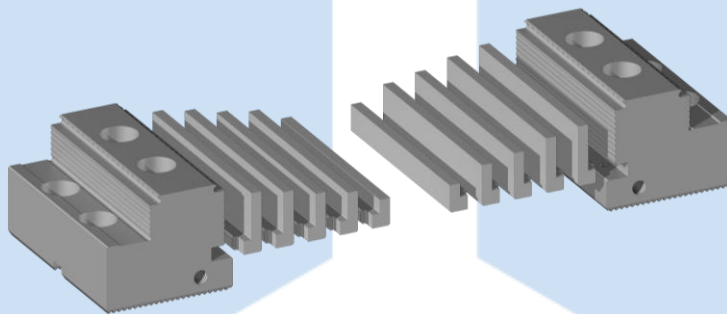
WH-PH-components

Gremotool workpiece clamping jaws

Gremotool workpiece clamping jaws

Gremotool workpiece clamping jaws are the ideal link between clamping devices and workpieces.

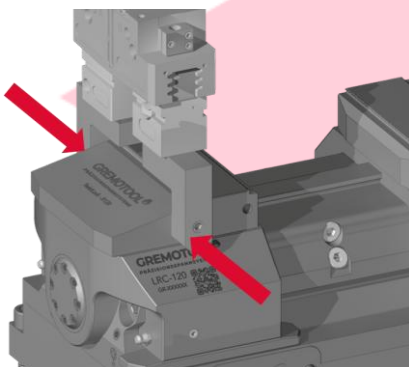
- Gremotool jaw system
- Secure and stable fixing of the workpiece
- Precise for maximum machining quality
- Gripping, shoulder, prism and soft jaws



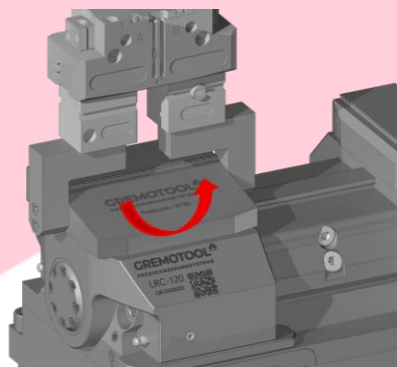
Gremotool TwistLock interchangeable jaws

The Gremotool TwistLock interchangeable jaws can be replaced automatically using the robot gripper.

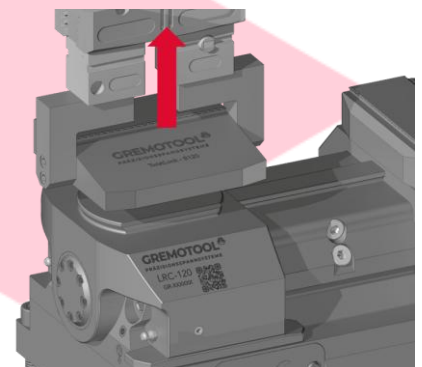
- Automated jaw change
- Downward force during clamping
- Manual jaw changes possible
- Gripping, stepped and soft jaws



Grip the jaw



Rotate the jaw by 90°



Lift the jaw

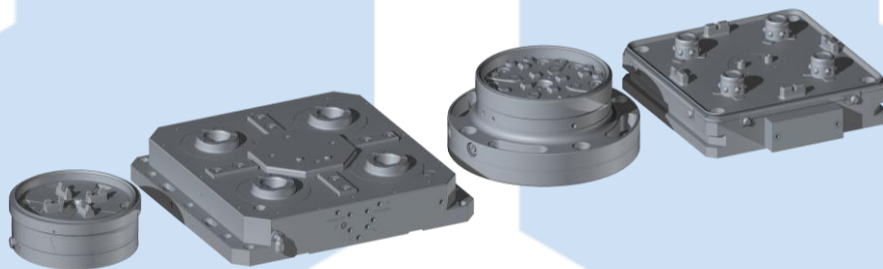
WH-PH-components

Additional components

Zero-point clamping system

Zero-point clamping systems are permanently installed on the machine tool table.

- Precise workpiece/pallet positioning
- High repeat accuracy
- Maximum set-up time optimisation, efficiency, process reliability and cost reduction
- Increased flexibility through modularity
- Mechanical, pneumatic or hydraulic operation
- Various dimensions/round or square



Zero-point pallets

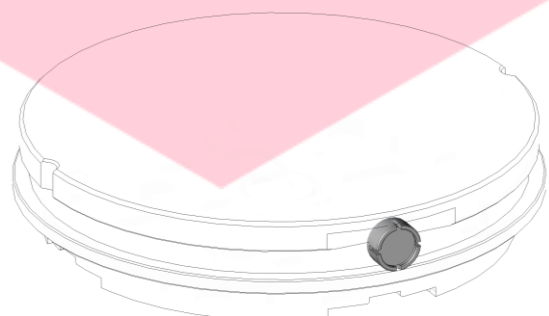
The zero-point pallets are the link between the clamping device and the zero-point clamping system.

- Precise positioning on zero-point clamping system
- Fast automated changeover of pallets/workpieces
- Various machining stations or machines
- Maximisation of machine running times, higher productivity
- Multiple parts per pallet possible

Pallet RFID identification (workpiece identification)

The RFID chip is a passive sensor element that does not have a battery.

- Identification of the pallet
- Contactless and automatically readable
- Assignment of the correct processing procedure
- Traceability and control
- Can be used for tool identification
- Important for networked manufacturing processes



WH-PH-components

Additional components

Workpiece gripper

The correct grippers are essential for moving the workpieces.

- Adjustable to workpiece dimensions
- Parallel gripper for cubic workpieces
- 3-finger gripper for cylindrical workpieces
- Automated grippers change possible
- Flexible movement of different workpieces
- Single gripper for heavy workpieces
- Gripping workpieces up to 200 mm wide

Automated loading can be accelerated by using two grippers on the robot arm:

cycle:

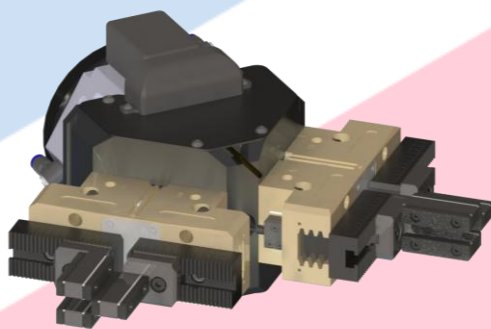
Pick up raw material
Remove finished part from clamping device
Clamp raw material
Deposit finished part

Gripper 1:

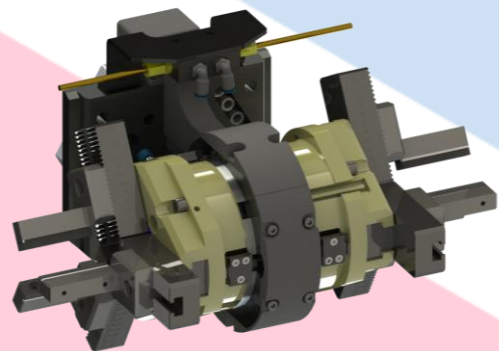
Raw material
Raw material
Empty
Empty

Gripper 2:

Empty
Finished part
Finished part
Empty



Double parallel gripper



Double universal gripper

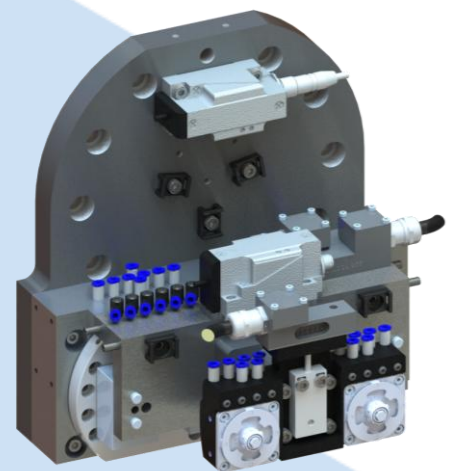
WH-PH-components

Additional components

Pallet gripper

The right pallet clamp is important for moving pallets.

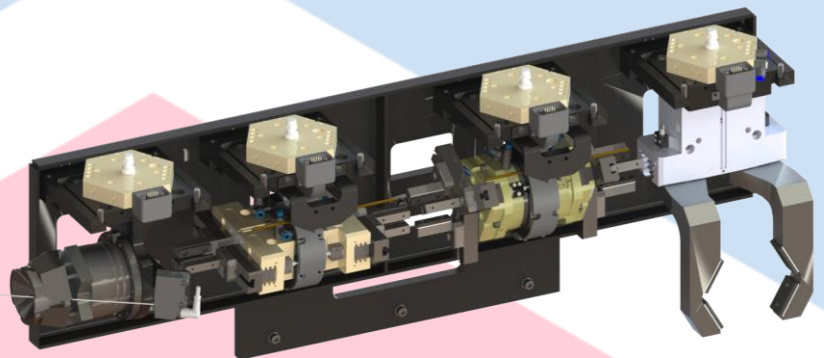
- Designed as a fork or coupled with a clamping bolt
- Secure gripping and movement
- Minimisation of misplacement and damage
- Can be equipped with RFID sensors
- With clamping bolt on pallet for optimised movement, including tilting functions
- Media feed for vice possible via coupling for screws



Gripper change

A gripper change is essential for the flexibility of the robot. This allows it to adapt independently to the pallets or workpieces in order to ensure seamless production on the processing machine without human intervention.

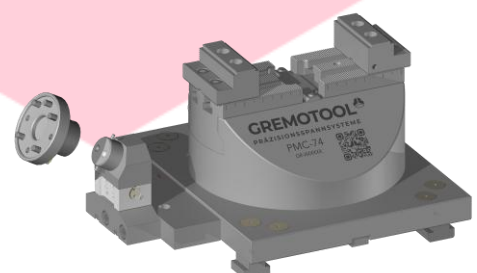
- Switch to clamping bolt coupling
- Switch to pallet fork
- Switch to workpiece gripper



Media coupling for clamping system

In order to drive the clamping device on the machining table, it must be supplied with the correct medium.

- Rotary joint in the machine table
- Hose gallows for flexible, continuous connection
- Media coupling for connecting and disconnecting the connection by robot



WH-PH-components

Additional components

Workpiece turning station

A turning station is required so that the workpieces can be machined from all sides.

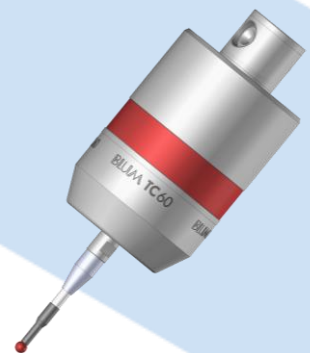
- 6-sided machining
- Ideally aligned workpieces



measuring station

Quality control verifies the suitability of the workpieces for use.

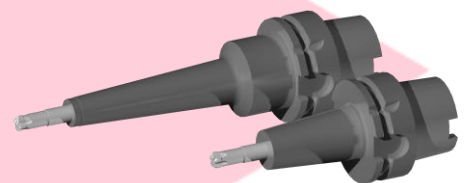
- Quality assurance, process control
- Precise measurements during machining (in-line measurement)
- Reduction of scrap and rework
- Maximisation of quality and process stability
- Quality control between machining steps or before assembly



Tool Handling

The machining centre should be capable of maintaining uninterrupted production at the highest quality. To achieve this, spare tools are required for replacement.

- Automated tool change
- Tool service life is maintained
- Tool breakage does not lead to machine downtime
- Simplified tool logistics
- Clear allocation of tools
- Simplified tool inventory management



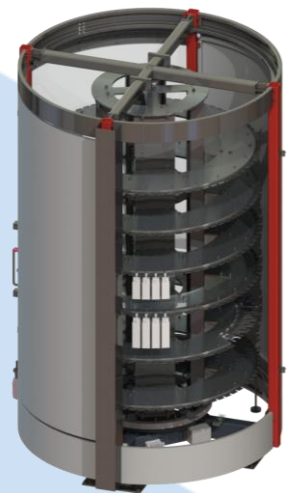
WH-PH-components

Additional components

Additional workpiece storage

To increase the storage capacity of the workpiece handling system, an additional workpiece storage unit can be added.

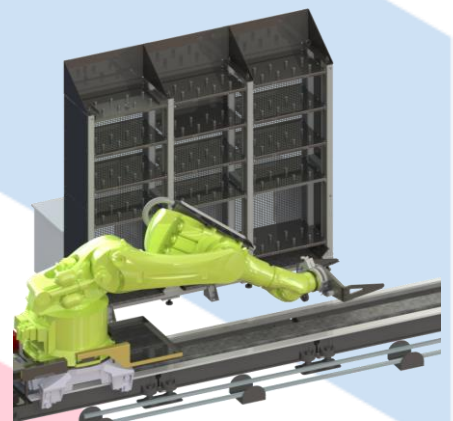
- Interchangeability of inlays
- Easy integration and operation
- Multiplication of capacity



Pallet storage

If a zero-point clamping system is used on the machine, the clamping systems can be automatically exchanged to meet the requirements of the workpieces.

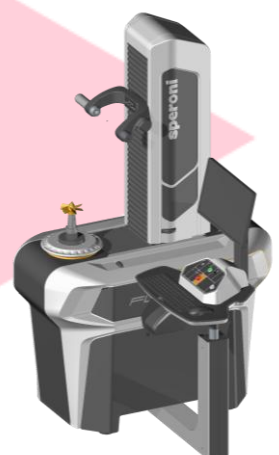
- Storage for various clamping systems
- Accessible to employees for set-up work



Tool presetting device

To ensure that the machine tool can achieve the required quality with the tools, these must be measured after assembly. This is achieved using a tool presetting device.

- Tool presetting (pre-adjustment)
- Measurement values are transmitted to the tool
- Measurement values are transmitted to the correct machining centre
- No time-consuming tool adjustments on the machine are required
- Communication with the handling system and machining centre via OPC-UA



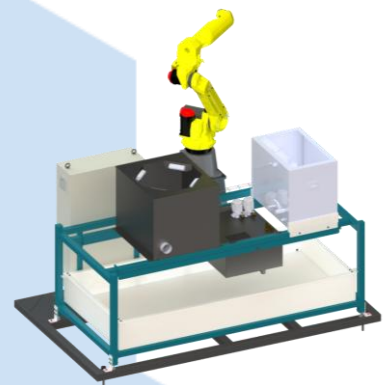
WH-PH-components

Additional components

Cleaning station

Workpieces that have been cleaned and removed from the workpiece handling system simplify downstream processes.

- Blowing off in cleaning station
- Chips collected in cleaning station
- Can be combined with ultrasonic cleaning
- Low space requirement



Marking station

In some industries, clear identification of components by means of markings or labelling is required.

- Laser marking systems can be integrated into the line
- Engraving machines can be integrated into the line



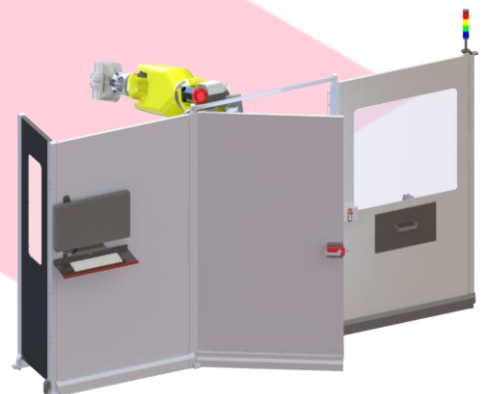
Protective fence / laser scanner

Safety measures must be in place for the operation of all hazardous areas of a machine/system.

- Safety mechanism
- Objects are detected or prevented from entering the hazardous area
- In case of danger, the robot is slowed down or stopped
- Protective fences prevent unintentional EMERGENCY STOP activations

Various possible types:

- Protective fence with mesh
- Protective fence with pane
- Protective fence with sheet metal
- Protective fence with light curtain
- Light curtain
- Laser scanner



WH-PH-components

Interface handling system (Industrie 4.0)

Interface machine tool

Handling systems must be able to communicate with the connected machine tools.

- Standardised communication between machine tool and handling system (e.g. Fanuc via Focas)
- E.g. OPC-UA umati
- Cross-manufacturer communication
- HMI for communication between human and machine tool

Interface between machining tools and tool presetting device

The tool presetting device is used to measure the tools and enter the values into the machine tool for correct path corrections.

- Precise measurement of tools
- Assignment of measured values to the correct tool
- Central tool setup
- Data transfer of measured values directly to the machine tool
- Minimisation of input errors



ERP interface (material/order management)

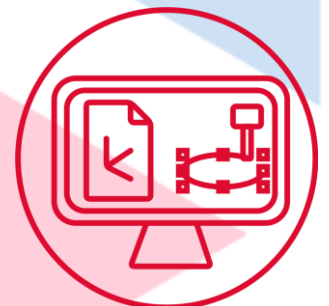
All orders are managed and tracked in an ERP system.

- Essential data exchange between enterprise software and handling systems
- Improved efficiency
- Reduction in manual intervention

CAM interface (NC programmes)

The NC programmes for the machine tools are created in CAM.

- Smooth data exchange is important
- Assigning the right programmes to pallets
- Simulation software for validating NC programmes
- Reduction in set-up times and first run



Gremotool clamping device interface

The Gremotool PMC/HMC and LRC series clamping systems are designed for mounting on machine tables or pallets.

- Flexible use of clamping devices for workpieces
- Secure clamping of workpieces

Further information can be found in the Gremotool catalogue Handling Systems.

Machine tool

Preparations for workpiece and pallet handling system

Workpiece and pallet handling system preparation for machine tools

Most machine tool manufacturers offer the option of preparing or equipping the machine tool with a suitable automation interface directly ex works. The interface preparation includes mechanical, electrical and digital components to enable automation of the machine tool. A media coupling on the machine table is recommended for workpiece handling.

Workpiece and pallet handling system retrofit to existing machine tool

In order for workpiece handling to be installed on existing machine tools, the mechanical, electrical and digital interfaces must be recorded. The appropriate concepts for the flawless operation of the system can then be determined.

The relevant legal standards must be observed when retrofitting.

- | | | |
|----------------------------------|---------------|------|
| - Machinery Directive 2006/42/EC | MVO 2023/1230 | (CE) |
| - Robotics – Safety requirements | ISO 10218 | |
| - Product Safety Act | ProdSG | |
| - Industrial Safety Regulations | BetrSichV | |
| - Risk assessment | | |
| - Technical documentation | | |
| - etc. | | |



workpiece measuring probe

A workpiece measuring probe is used to achieve the required precision and safety of the workpieces in the machine tool room. This function of the machine sends a signal at a certain deflection so that the machine recognises the exact position of the workpiece in the Gremotool clamping device.

Machining tool breakage monitoring

To ensure that workpieces can always be removed from the machine tool with dimensional accuracy, the machining tools used must be checked periodically. This involves determining whether any cutting edges or machining tools are broken. If such a breakage is detected, the continuation of work on the workpiece must be reviewed.

Mechanical interface

For workpiece handling, the Gremotool clamping device can be fixed directly onto the table. This enables workpieces to be placed and fixed precisely and quickly on the clamping device.

Software-interface

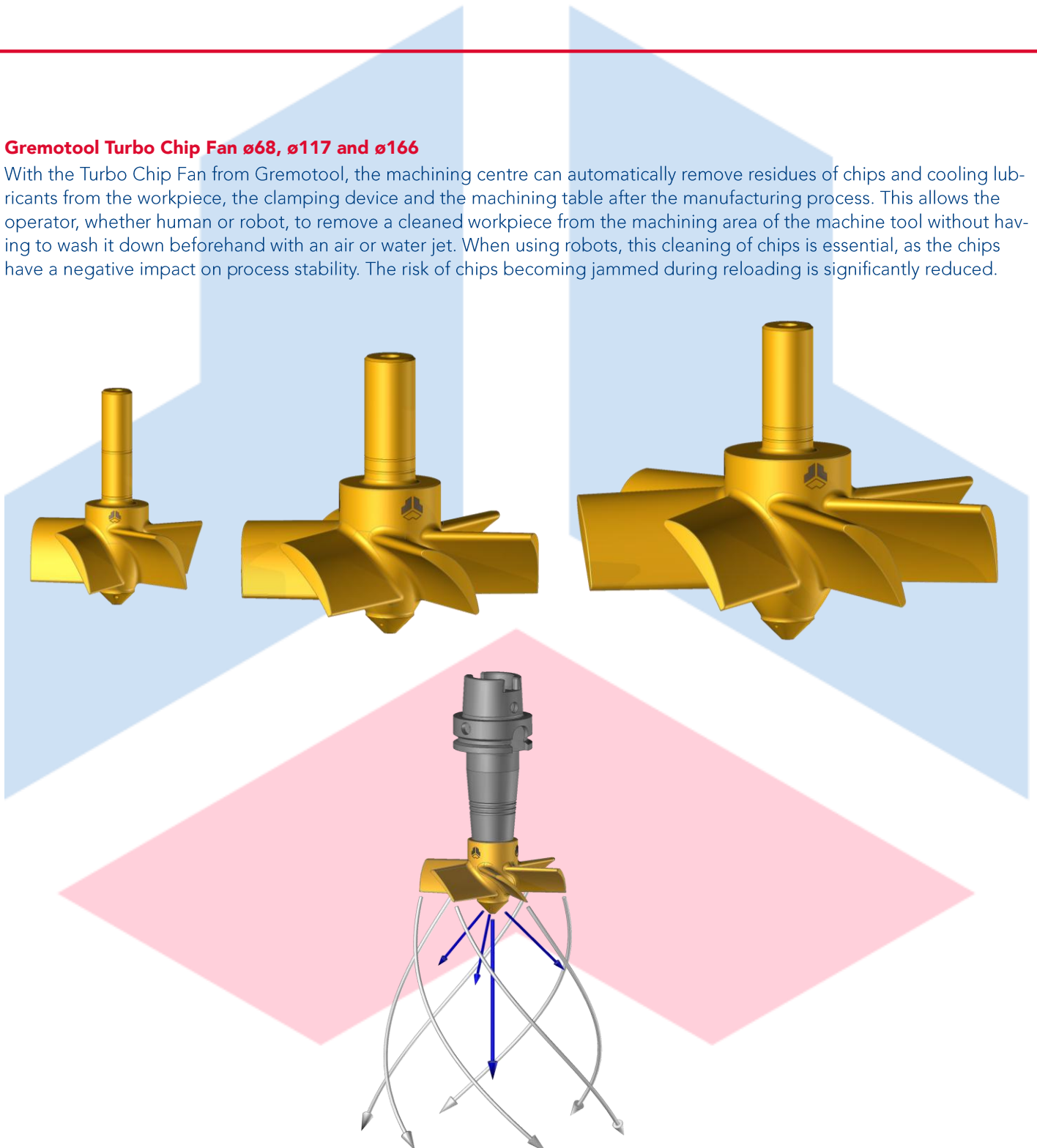
A common interface is required to enable communication between the machine tool and the handling system. This allows the machine tool's robot to release the end of the loading/unloading process and the machine tool to take over the manufacturing process.

Machine tool

Gremotool TCF

Gremotool Turbo Chip Fan ø68, ø117 and ø166

With the Turbo Chip Fan from Gremotool, the machining centre can automatically remove residues of chips and cooling lubricants from the workpiece, the clamping device and the machining table after the manufacturing process. This allows the operator, whether human or robot, to remove a cleaned workpiece from the machining area of the machine tool without having to wash it down beforehand with an air or water jet. When using robots, this cleaning of chips is essential, as the chips have a negative impact on process stability. The risk of chips becoming jammed during reloading is significantly reduced.



Machine tool

Gremotool CLT-filter system

Gremotool Cooling Liquid Treatment (CLT):

- Can be easily integrated into existing cooling lubricant systems
- Optimal addition to belt filters and magnetic separators
- Filtration of steel, cast iron, graphite, aluminium, copper, brass, tool abrasion and grinding dust
- Improves surface quality in metalworking
- Extends the service life of machining tools and cooling lubricants
- Oil and sludge absorbing filter unit
- Reduces wear on system components (valves, nozzles, pumps, rotary joints)
- No external power supply
- Extremely easy to operate and maintain
- Reduces your operating and disposal costs

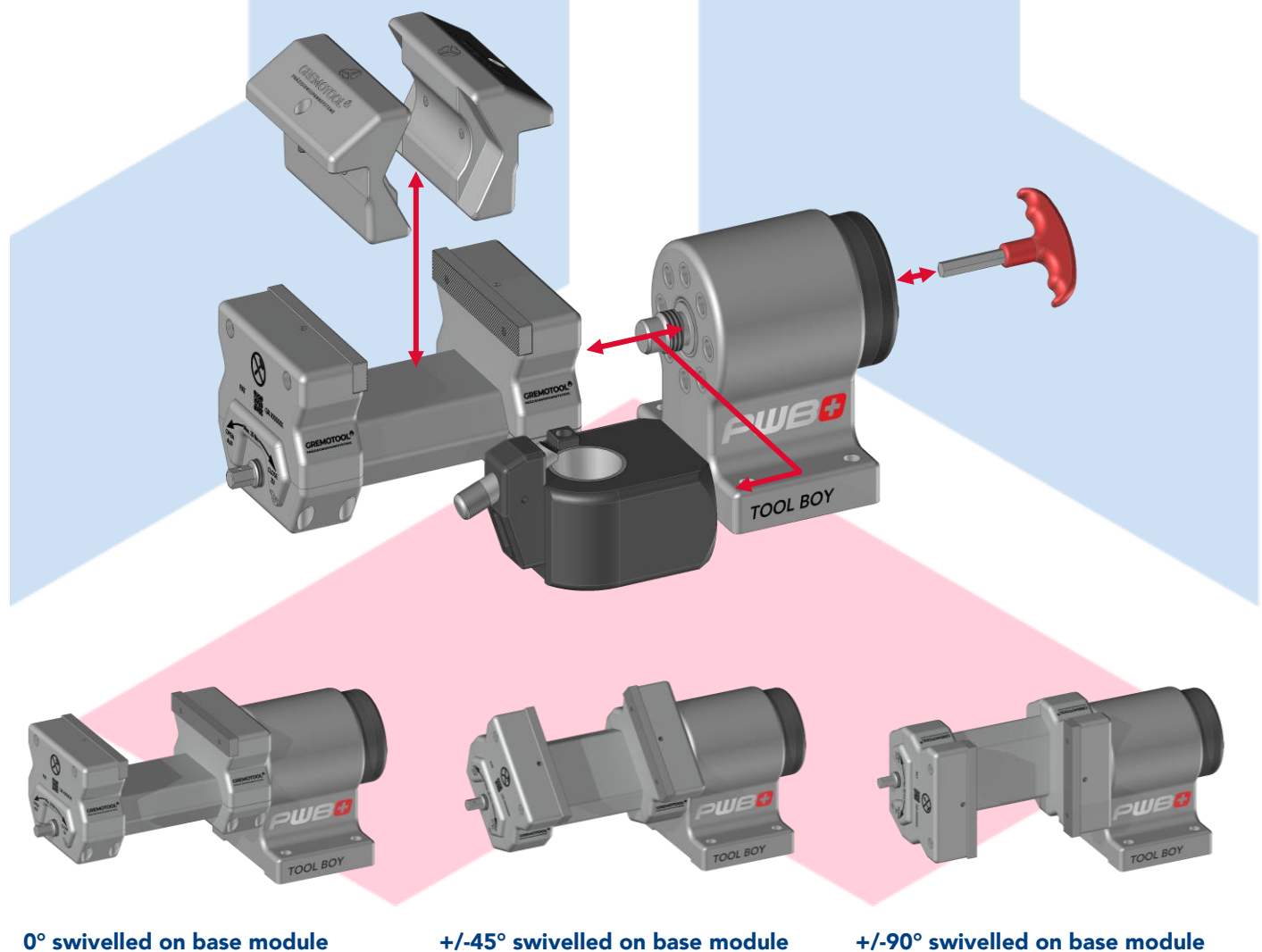


Machine tool

Gremotool PAT Toolboy-Vise

Gremotool PAT Toolboy Vice

Gremotool has added a new universal adapter to pwb's machining tool mounting aid. The PAT is a vice that can be attached to the base of the ToolBoy. This allows it to be used flexibly for clamping workpieces. The interaction of both elements allows the PAT to be swivelled, just like the machining tool holders. Various machining tools and workpieces can be clamped in the vice with magnetic protective jaws without damage and without having to change the adapter.



0° swivelled on base module

+/-45° swivelled on base module

+/-90° swivelled on base module

Regulations

MR 2023/1230 – MD 2006/42/EC

Operating instructions:

Detailed instructions are essential for the correct operation, maintenance and troubleshooting of the system. They must contain all safety-related information. Operating instructions will be available for the individual components. However, the system itself, i.e. the interaction of the individual components used, must be evaluated in a system operating manual.

CE Declaration of Incorporation:

The CE marking confirms that the system complies with European safety and health requirements. This declaration is particularly important for machines in the EU.

Risk and safety assessment:

Before commissioning, a comprehensive analysis must be carried out to identify potential hazards and define appropriate protective measures.

Software update:

Regular updates ensure optimal performance and security improvements. They may include new features and bug fixes.

Cyber security:

In networked systems, data and access must be protected to prevent attacks, manipulation or unauthorised access.

Remote maintenance:

Modern systems often offer remote monitoring and maintenance capabilities, which can reduce down-time and lower maintenance costs.



Gremotool WH-PH

Gremotool workpiece and pallet handling system Wick AG

Optimise your logistics with Gremotool – your expert in workpiece handling

Efficiency in logistics is crucial for the smooth running of your business. A high-performance workpiece handling system is a key factor in this. Trust in Gremotool's expertise to find the best possible solution for your requirements.

Thanks to many years of experience and innovative approaches, Gremotool offers tailor-made systems that optimise your processes and simplify the handling of workpieces. This not only increases your productivity, but also reduces time-consuming and cost-intensive processes.

Let us advise you and discover the advantages of a high-quality workpiece handling system from Gremotool. Contact us today for more information!



wick
JAG ROBOTICS

GREMOTOOL 
PRÄZISIONSSPANNSYSTEME

R. Wick AG

Alte Zugerstrasse 10
CH-6403 Küsnacht

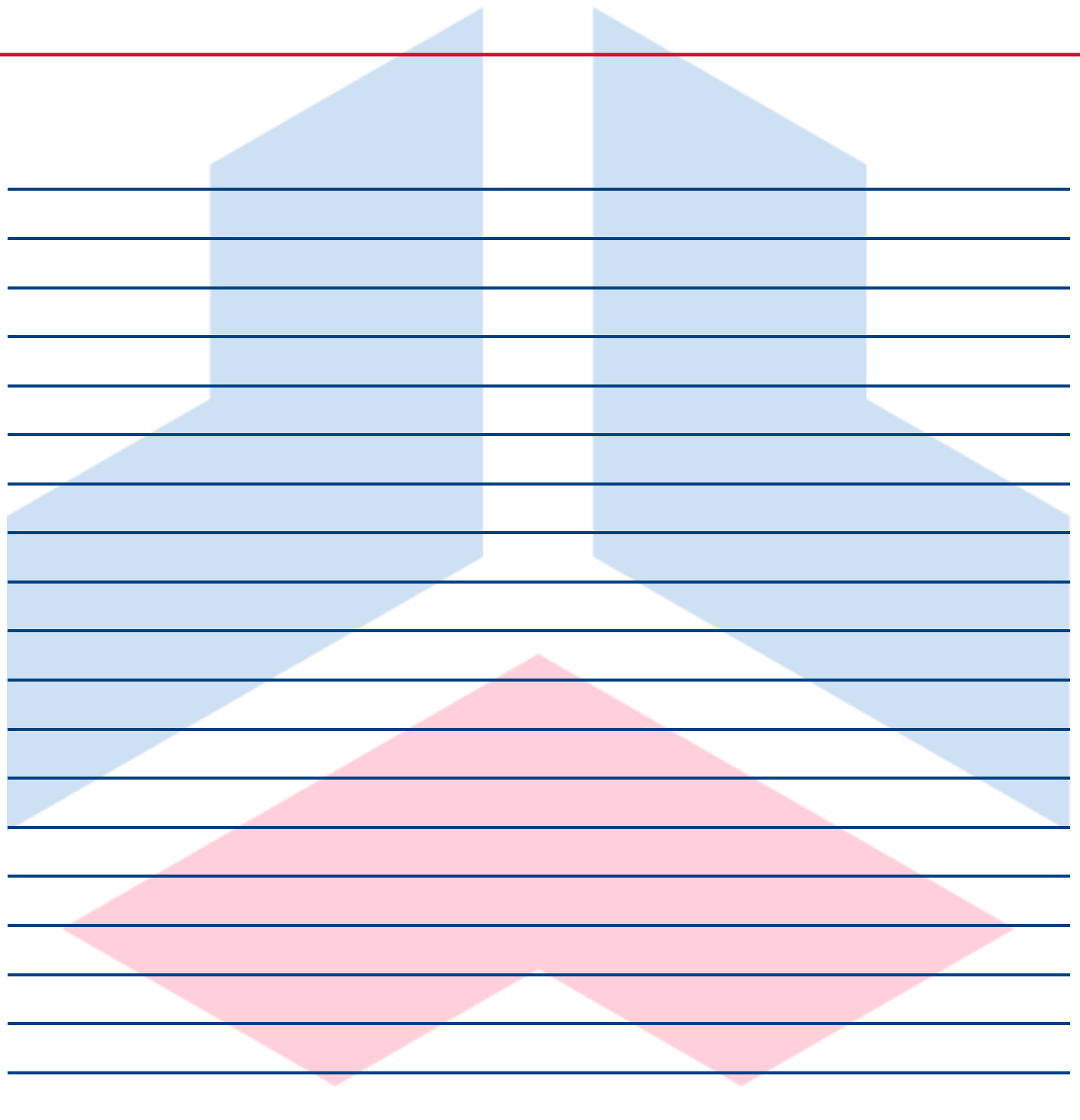
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Gremotool GmbH

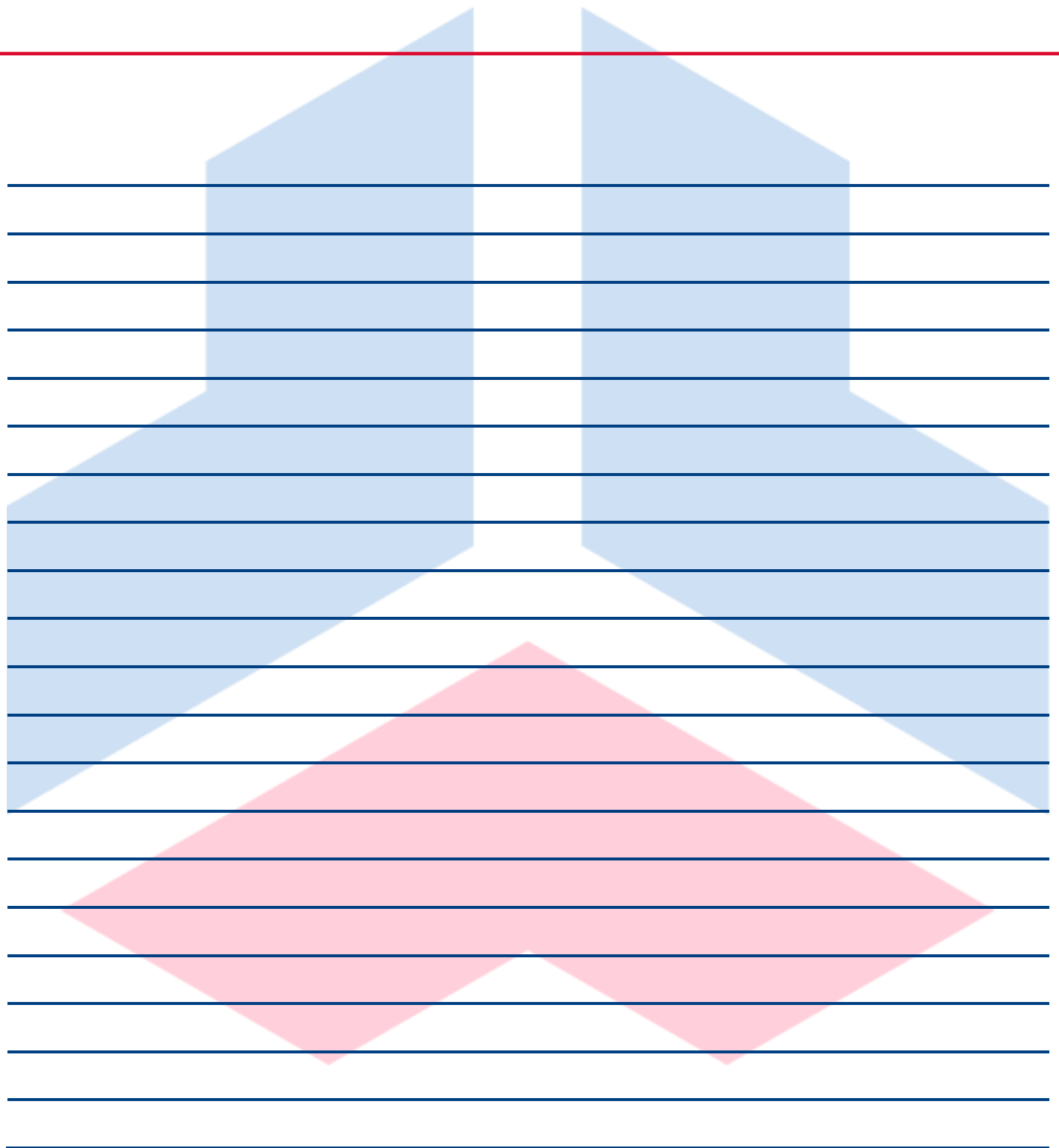
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www.gremotool.ch

Notes



Notes



A large graphic area for notes, featuring a background of horizontal blue lines. Overlaid on these lines are two large, light blue trapezoidal shapes pointing upwards, and a large, light pink diamond shape at the bottom. A thin red horizontal line is positioned above the blue trapezoids.



Imprint

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Publication Aug. 2026, 5th Edition

