

Automation

www.hermle.de



01.1 ROBOT SYSTEMS

The crème de la crème of HERMLE's automation solutions are its robot systems. Individually configurable and highly flexible, whether for pallet handling, changing workpieces from dies or directly from rack storage. Gripper change from single to double gripper for even more flexibility. A wide range of magazine configurations to suit individual customer requirements.

The robot systems can be adapted to all HERMLE machining centres and they are available in different versions, From the RS 05-2 robot system for small pallets and components to the RS 3 system with a transport capacity of up to 420 kg and also including highly productive systems with linear linking.



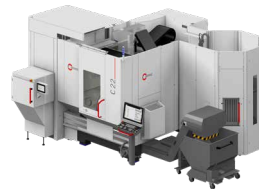
RS 2 robot system



RS 05-2 robot system



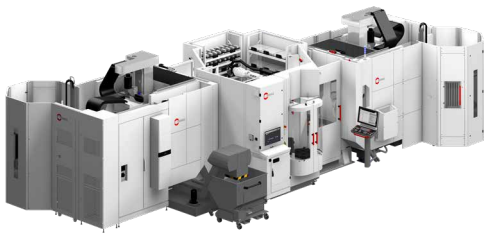
RS 1 robot system



RS 05-2 robot system

COMPACT AND MODULAR

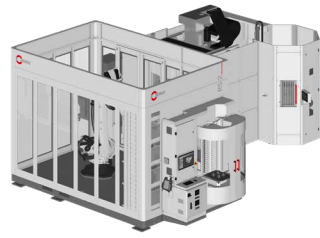
Available for:
C 12, C 22, C 32 and C 250
Transport weight: up to 10 kg



RS 1 robot system

ONE SYSTEM. INFINITE POSSIBILITIES.

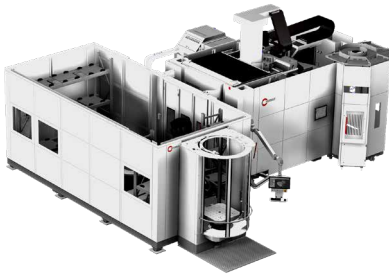
Available for:
C 12, C 22, C 32, C 42, C 250 and C 400
Transport weight: up to 60 kg



RS 2 robot system

FLEXIBLE AND VERSATILE

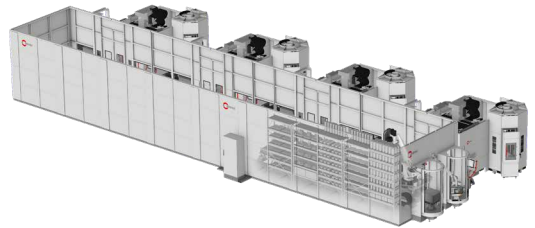
Available for:
C 22, C 32, C 42, C 52, C 250, C 400 and C 650
Transport weight: up to 210 kg



RS 3 robot system

VERSATILE AND INDIVIDUAL

Available for:
C 42, C 52, C 400 and C 650
Transport weight: up to 420 kg



RS Linear robot system

VARIABLE FOR MAXIMUM PRODUCTIVITY

Available for:
C 22, C 32, C 42, C 52, C 250, C 400 and C 650
Transport weight: up to 420 kg

ADVANTAGES

- Individual design for economic production of workpieces and parts families
- Short loading and unloading cycles
- Pre-programmed sequence control
- Flexible magazine design
- Different gripper systems
- Pallet handling
- Parts handling
- Die handling
- Tool handling
- HACS management software with intuitive operability*

*For RS 05-2 / RS 1 only

01.2 PALLET CHANGERS

Our pallet changer is setting new standards for parallel setup in our highly dynamic machining centres. A further increase in productivity allows for more adaptable storage systems. Machining centres can be set up via pallet storage for production-oriented machine runs with minimum operator interference/without operator interference or for customer-specific runs using a wide range of parts.



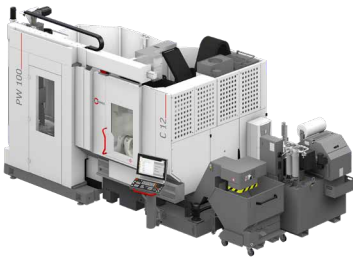
Optionally rotating setup station



Double gripper for 2 x 150 kg



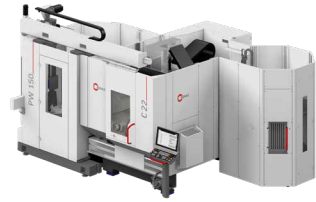
Pallet changer PW 150 8-fold rack storage



Pallet changer PW 100

COMPACT WITH LARGE RACK STORAGE

Available for: C 12
Transport weight: up to 100 kg



Pallet changer PW 150

COMPACT WITH LARGE RACK STORAGE

Available for: C 22
Transport weight: up to 150 kg



Pallet changer PW 850

RELIABLE AND PRACTICAL

Available for: C 42 / (MT)
Transport weight: up to 850 kg



Pallet changer PW 2000

FOR LARGE/HEAVY PARTS

Available for: C 52 / (MT)
Transport weight: up to 2000 kg



Pallet changer PW 3000

VARIABLE FOR LARGEST PARTS

Available for: C 52 / (MT) and C 62 / (MT)
Transport weight: up to 3000 kg

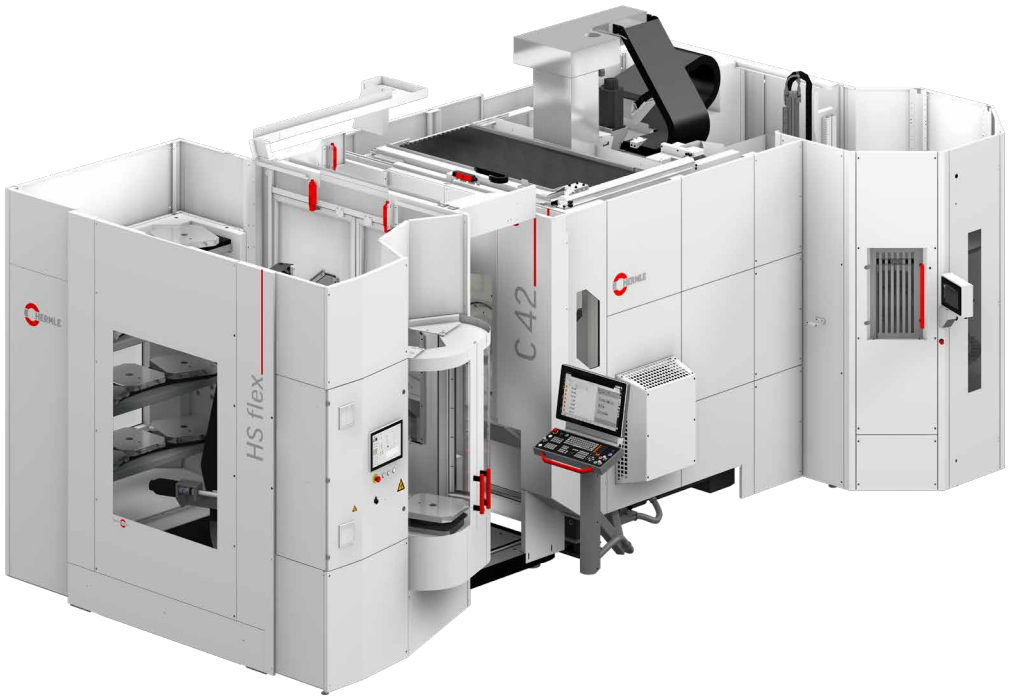
ADVANTAGES

- *Completely free access to the machining centre**
- *Quick and easy installation*
- *Complete transport (no disassembly)*
- *Setup station optionally rotatable*
- *Pallet storage unit*
- *HACS management software with intuitive operability*

*For C 12 / C 22

01.3 HANDLING SYSTEMS

For efficient production. Pallets in a wide variety of shapes, sizes and weights can be handled automatically by handling systems to achieve advantages in cost and time.



HS flex with two pallet storage modules and a setup station, adapted to a C 42 machining centre.



Handling system HS flex

FLEXIBLE AND COMPACT

Available for:
C 12, C 22, C 32, C 42, C 250 and C 400
Transport weight: up to 450 kg



Handling system HS flex heavy

FLEXIBLE AND COMPACT

Available for:
C 32, C 42, C 400 and C 650
Transport weight: up to 1200 kg



Handling system HS flex hybrid

FLEXIBLE AND CONFIGURABLE

Available for:
C 12, C 22, C 32, C 42, C 250 and C 400
Transport weight: up to 450 kg

ADVANTAGES

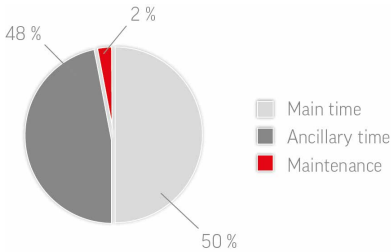
- *Automation solution for high-capacity pallet storage*
- *Optimised, operator-friendly access to the machining centre*
- *Easy and quick installation and commissioning*
- *HACS management software with intuitive operability*

02

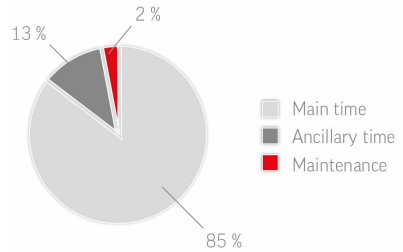
Why automation?

Why automation? Humans have always been very inventive when it comes to making work easier, avoiding hard and monotonous activities and improving productivity. Now the main aims are to increase production times and decrease idle- and down-times. The better this can be achieved, the lower the machine-hour rate and the lower the personnel costs, meaning altogether lower capital commitment. Especially in times of staff shortages in the high-qualification areas, automation provides an alternative to manned triple-shift operations.

*Average machine utilization
(individual production)*



*Average machine utilisation
(automated production)*



ADVANTAGES

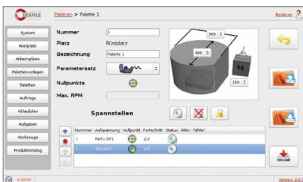
- Higher degree of utilization
- Greater production capacity
- Minimized machine-hour rate
- Shorter order throughput time
- Lower capital commitment
- Less manpower dependant
- Fewer shutdowns
- Better time allocation
- Reduced personnel cost ratio



03 HACS – Intelligent order management

The HERMLE Automation Control System HACS is an easy-to-operate order management system for your HERMLE machining centres.

The intuitively operable software allows for intelligent order processing and assists the operator in his daily tasks. The transparent representation of the orders and required operator actions reduces organisational downtimes and maximises system productivity.



FEATURES

- Forecast of runtime and tool usage
- Intuitive allocation of NC programs and zero points
- Order definition for piece counting, order prioritisation and planning
- Dynamic sequence plan change
- Control independent and can thus be used for Siemens and Heidenhain

ADVANTAGES

- Intuitive operation
- All relevant data at a glance: System overview, work plans, pallets, tasks, tool table and the sequence plan
- Tool analysis: View of tools that are not required at the next and last time of use for all tools (including all NC programs)
- Visualisation of the operator tasks for uninterrupted processing of the sequence plan
- Features easy pallet transport with drag and drop
- Reduction of organizational downtimes

04.1

HIGH-PERFORMANCE-LINE

With its HIGH-PERFORMANCE-LINE, HERMLE has been supplying high-tech sectors for the international market with highly precise and high-performance machining centres for many years now. Whether as stand-alone machine, automated system or connected manufacturing facility, our machines are unequalled in their field.



C 12



C 22



C 32

Traverse path (in mm):

350 x 440 x 330

450 x 600 x 330

650 x 650 x 500



C 42 / C 42 MT



C 52 / C 52 MT



C 62 / C 62 MT

Traverse path (in mm):

800 x 800 x 550

1000 x 1100 x 750

1200 x 1300 x 900



04.2 PERFORMANCE-LINE

HERMLE's PERFORMANCE-LINE machining centres have all the high-precision capabilities of the HIGH-PERFORMANCE-LINE, and the only concessions they make concern the range of equipment.



C 250



C 400



C 650

Traverse path (in mm):

600 x 550 x 450

850 x 700 x 500

1050 x 900 x 600

05 Worldwide

You can find our sales and service network in more than 50 countries on 6 continents with competent on-site service. That is one of our success factors for long-term customer relationships based on partnership.

Our motto: Direct sales and local service – nothing else will do! HERMLE works for its customers worldwide to provide direct, on-site consultation, sales, training and expert service.



Maschinenfabrik
Berthold HERMLE AG
Industriestrasse 8-12
D-78559 Gosheim

Phone +49 (0)7426 95-0
info@hermle.de | www.hermle.de



The machining examples used in this leaflet are published with the explicit and kind permission of our customers. The information in this brochure only contains general descriptions and/or performance features that, in a concrete application, may not always apply in the form described or represented here or may have changed due to further development of the products. The performance features desired shall only be binding if they have been expressly agreed upon in writing at the time of the contract. The machines shown may incorporate options, accessories and control variants.