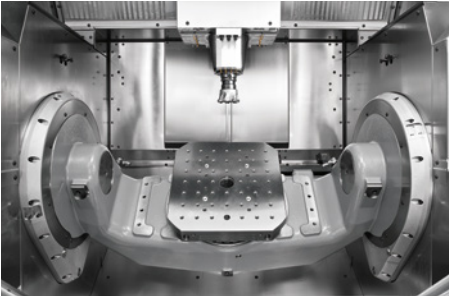


# Automation

[www.hermle.de](http://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



Gripper of a RS 05-2 robot system



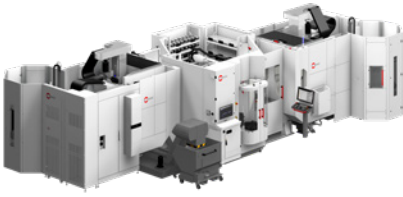
RS 1 robot system



## *RS 05-2 robot system*

### **COMPACT AND MODULAR**

Available for:  
C 250, C 400, C 12, C 22 and C 32  
Transport weight: up to 10 kg



### *RS 1 robot system*

**ONE SYSTEM. INFINITE POSSIBILITIES.**

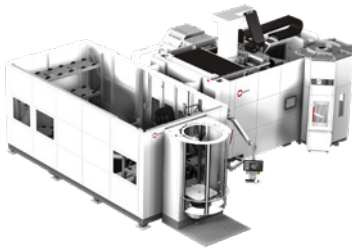
Available for:  
C 12, C 22, C 32, C 42, C 250 and C 400  
Transport weight: up to 60 kg



### *RS 2 robot system*

**FLEXIBLE AND VERSATILE**

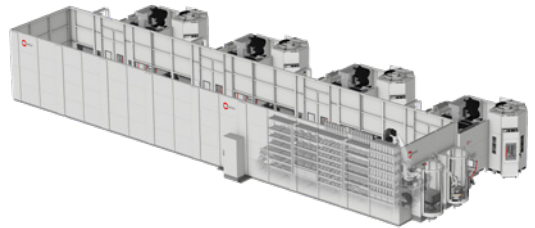
Available for:  
C 250, C 400, C 650, C 22, C 32, C 42 and C 52  
Transport weight: up to 240 kg



### *RS 3 robot system*

**VERSATILE AND INDIVIDUAL**

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



### *RS Linear robot system*

**VARIABLE FOR MAXIMUM PRODUCTIVITY**

Available for:  
C 250, C 400, C 650, C 22, C 32, C 42 and C 52  
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



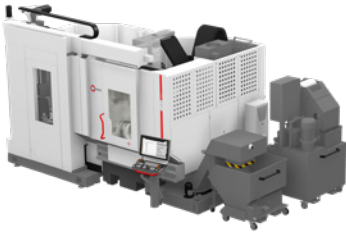
Double gripper for 2 x 150 kg



Pallet changer PW 150 8-fold rack storage



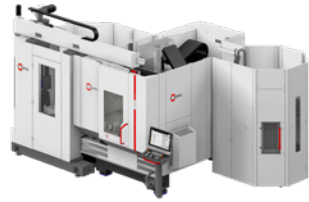
C 62 U with pallet changer PW 3000



### *Pallet changer PW 100*

#### **COMPACT WITH LARGE RACK STORAGE**

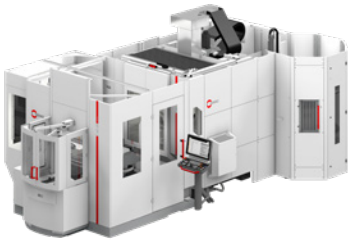
Available for: C 12  
Transport weight: up to 100 kg



### *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 U / (MT)  
Transport weight: up to 850 kg



### *Pallet changer PW 2000*

#### **FOR LARGE/HEAVY PARTS**

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



### *Pallet changer PW 3000*

#### **VARIABLE FOR LARGEST PARTS**

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

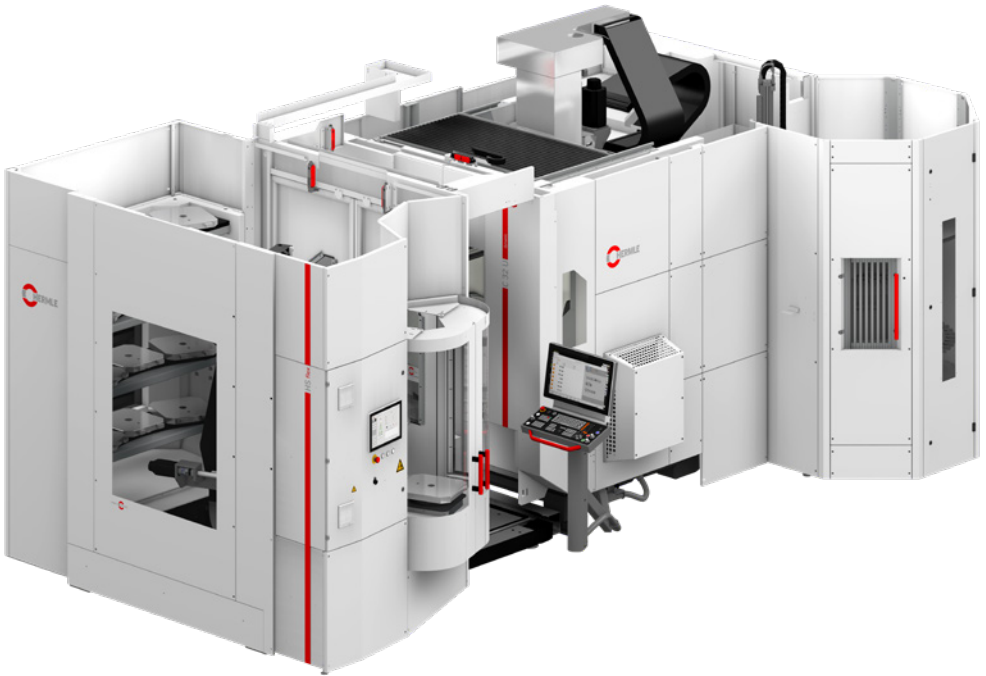
#### **ADVANTAGES**

- *Completely free access to the machining centre\**
- *Quick and easy installation*
- *No floor anchorage required*
- *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.



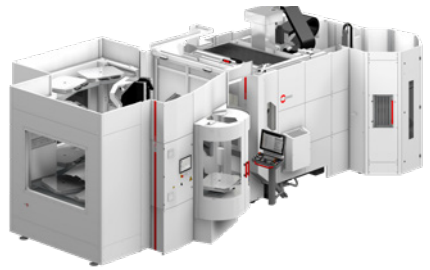
HS flex with two pallet storage modules and a setup station, adapted to a C 42 U machining centre.



## *Handling system HS flex*

### **FLEXIBLE AND COMPACT**

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



## *Handling system HS flex heavy*

### **FLEXIBLE AND COMPACT**

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



## *IH-systems*

### **STRAIGHTFORWARD AND PRACTICAL**

Available for:  
C 12, C 22, C 32 and C 42  
Transport weight: up to 300 kg

## **ADVANTAGES**

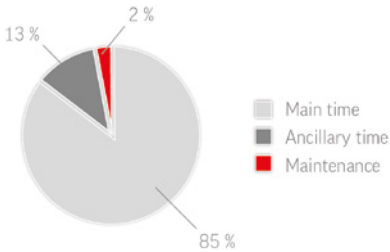
- *Automation solution for high-capacity pallet storage*
- *Optimised, operator-friendly access to the machining centre*
- *No floor anchorage required*
- *Easy and quick installation and commissioning*
- *HACS management software with intuitive operability*

# 02

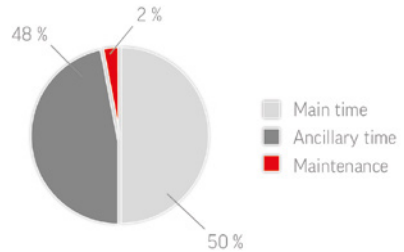
## Why automation?

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

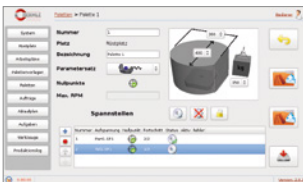


# 03 HACS – Intelligent order management



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

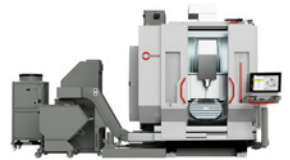
With its HIGH-PERFORMANCE-LINE, Hermle has been supplying high-tech sectors for the international market with highly precise and high-performance machining centres for many years now. Whether as stand-alone machine, automated system or connected manufacturing facility, our machines are unequalled in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



**C 12**



**C 22**



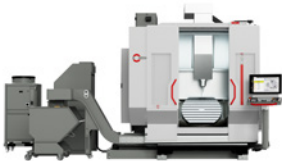
**C 32**

Traverse path (in mm):

**350 x 440 x 330**

**450 x 600 x 330**

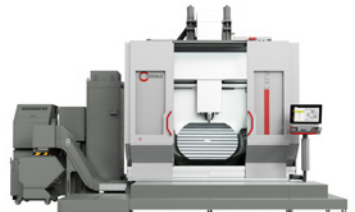
**650 x 650 x 500**



**C 42 / C 42 UMT**



**C 52 / C 52 UMT**



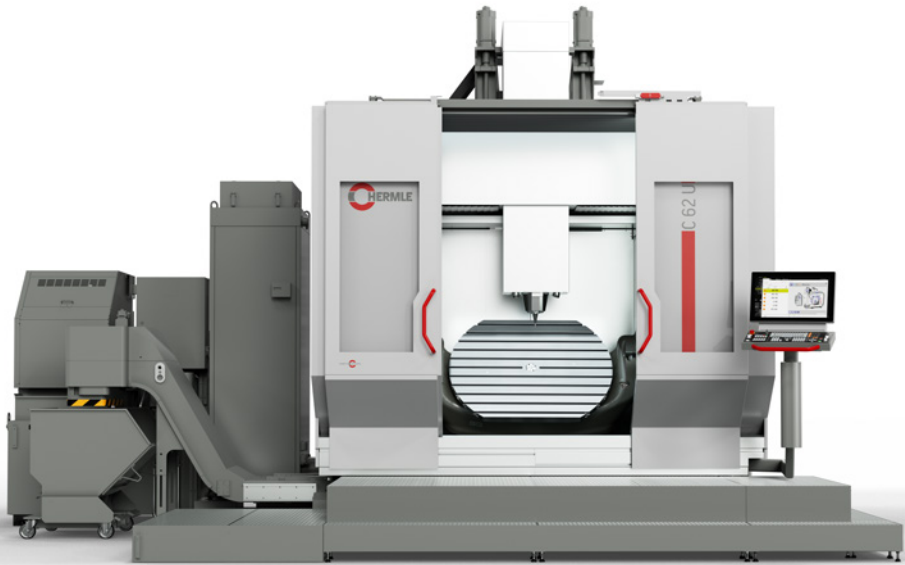
**C 62 / C 62 UMT**

Traverse path (in mm):

**800 x 800 x 550**

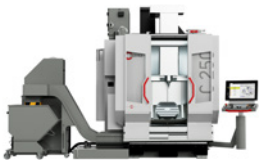
**1000 x 1100 x 750**

**1200 x 1300 x 900**



## 04.2 PERFORMANCE-LINE

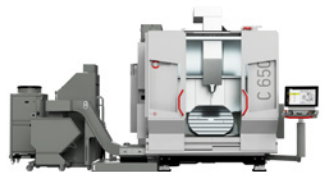
Hermle's PERFORMANCE-LINE machining centres have all the high-precision capabilities of the HIGH-PERFORMANCE-LINE, and the only concessions they make concern the range of equipment.



**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 40 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.



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