### GUHRING

COMPETENT TOOL MANAGEMENT



PROFESSIONAL. SUSTAINABLE.



Powered by

### EVERYTHING FROM ONE SUPPLIER.

COMPREHENSIVE AND GLOBAL.



#### **AMERICA**



CANADA

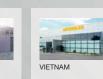




ASIA







AFRICA





AUSTRALIA



### 48 SALES COMPANIES



### IN EXCESS OF 70 PRODUCTION AND SERVICE **CENTRES**





































GERMANY









**EUROPE** 



GERMANY MARKT ERLBACH





GERMANY WEHINGEN



GERMANY





















# »WE ARE READY FOR INDUSTRY 4.0 «





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### GUHRING TOOL MANAGEMENT. COMPETENT PARTNER.

For more than 15 years Guhring has successfully carried out tool management projects world-wide in a variety of extension levels. Small as well as medium-sized companies with individual and small batch production as well as enterprise customers with large batch production are supported by Guhring with full responsibility.

Because of the wide variation and the experience in implementing world-wide customer projects Guhring possesses an outstanding expertise in the tool management sector.

With this know-how Guhring can also support your company in specifically optimising your tool management.





### **GUHRING TOOL MANAGEMENT.**ADVANTAGES.

Whilst direct tooling costs reflect tool consumption they remain the target of optimisation in companies, indirect tooling costs are hidden in the process organisation of tool management. They are less transparent and less quantifiable.

On the one hand indirect tooling costs are for example costs incurred through the necessary process organisation such as procurement, storage etc., on the other hand they are also costs arising from deficits in these management processes.

### GUHRING TOOL MANAGEMENT

## OPTIMISES PROCESSES & REDUCES COSTS

### FOR THE COMPANY'S PRODUCTION IT MEANS:

- Interruption of production orders due to unavailable tools
- Insufficient transparency of tool stock and storage locations
- Increased time investment of foremen and machine operators due to unavailable tools
- Overstock or missing/understock in warehouse
- \ Increased tool variety

### YOUR COMPANY RECEIVES ALL THE COMPONENTS REQUIRED FROM GUHRING THE SOLE SUPPLIER.

Any activities to optimise the process organisation and the costs connected that have to be carried out by employees responsible in addition to the daily work schedule are often neglected due to lack of time. This is where Guhring begins with its modular tool management concepts. You can receive all required components from one supplier – Guhring.

RE-ORGANISATION AND CONTROL OF YOUR TOOL MANAGEMENT

TRANSPARENCY OF ALL PROCESSES THANKS TO THE APPLICATION OF GUHRING'S TOOL MANAGEMENT SOFTWARE

**AUTOMATED TOOL DISPENSING SYSTEMS** 

GSS SHRINK FIT AND PRE-SETTING EQUIPMENT

FURTHER OPTIMISING DIRECT TOOLING COSTS. IDENTIFYING AND REDUCING INDIRECT TOOLING COSTS.

### GUHRING'S TOOL MANAGEMENT. CONCEPTS.

#### LOGISTIC TOOL MANAGEMENT.

#### PERFORMANCE.

- Guhring as central logistics partner for the procurement of all products in the machining and production area
- Article spectrum includes all types of cutting tools as well as accessories
- The customer decides which tools are applied tools during the project
- Scheduling and ordering of all tools to be applied including non-Guhring products
- Monitoring delivery schedules
- Tool availability including consignment stock
- \ monitoring stock levels
- Guhring TM tool dispensing system for tool storage
- Re-grinding and re-coating in Guhring service centres or with original supplier
- Note: Delivery of new and refurbished tools
- → Filling the Guhring TM tool dispensing system.
- Consumption and costing reports
- Monthly invoicing by Guhring based on withdrawn tools. Subcontractors paid by Guhring

#### ADVANTAGES.

- The customer can focus on core competences and value adding activities
- Customer specific compilation of scope of performance
- Only one contact person for the procurement of all tools and products
- Neduction of tied-up capital thanks to consignment stock
- Determining the cost reduction potential for indirect tooling costs
- Cost transparency thanks to clear cost allocation and monthly consumption reports to various criteria such as time period, product, cost centre, tool type etc.
- 24 hour tool dispensing during partly unmanned shifts

#### TECHNOLOGICAL TOOL MANAGEMENT.

#### PERFORMANCE.

- Responsibility of complete tool management
- Guhring project team including tool managers, application technicians and pre-setting personnel on-site.
- Looking after Guhring tools and non-Guhring products – including turning, grinding, honing and assembly
- Scheduling and ordering all tools to be applied
- Monitoring delivery deadlines
- \ Incoming goods inspection
- Managing tool stock
- Assembly and pre-setting of tools
- Delivery of pre-set tools directly to manufacturing facilities
- Collection of worn tools from production area
- Disassembly and assessment of worn tools including wear analysis
- Dispatch of tools for refurbishment, i.e. re-grinding and re-coating
- Continuous technological improvements of tools and processes (CIP)
- Comprehensive reporting such as for example tooling costs per component, determining the cost driver per workpiece, documentation of tool life development
- Monthly invoicing by Guhring according to agreed modus, sub-contractors are paid by Guhring

#### ADVANTAGES.

- Customer specific compilation of scope of performance
- Quick achievement of optimisation targets as Guhring tool managers can invest 100% of working time in optimisations
- Reduction of personnel costs in tool management
- Reduction of tied-up capital thanks to consignment stock
- Determining the cost reduction potential for indirect tooling costs
- Cost transparency thanks to clear cost allocation and monthly consumption reports to various criteria

### GUHRING TOOL MANAGEMENT. CONCEPT MODULES.

Guhring's tool management concepts are designed according to customer requirements. Long-term experience of the tooling sector, the technology and the professional handling of

workflow and customer data form the optimal basis for a reliable and individual co-operation with Guhring as a partner. Tool management is divided into the following concept modules.

#### GTMS.



Modern and practice-oriented tool management software from Guhring is the engine of tool management.

#### LOGISTICS.



The GTMS triggers order suggestions as required and co-ordinates delivery and re-grind service.

#### SERVICE.



Thanks to the co-ordinated delivery and re-grind service all production relevant working materials and tools are made available based on requirement and on time.

#### INTERFACES.



With the assistance of interfaces GTMS connects to all ERP/PPS, CAD and IT systems. Also logistics systems like Paternoster or shuttle systems can be activated and managed.

#### INTEGRATION.



By incorporating the software in the existing customer infrastructure it provides support to all relevant tool management processes.

#### IDENTIFICATION.



Login is either by barcode, PIN, RFID or by biometric data.

#### ONLINE COMMUNICATION.



GTMS enables data exchange via Intranet and Internet, web applications on tablet, smartphone and PC.

#### MACHINES.



Multiplex dispensing systems offer solutions for various areas of application and security levels.



»OUR INTELLIGENT

TM SOLUTIONS OPTIMISE

YOUR TOOL MANAGEMENT,«

### GUHRING TOOL MANAGEMENT. CUSTOMER EXAMPLES.

MillCraft 3D in Affalterbach is a young, fast growing company in the model mould and prototype construction sector. For the machining of high-tech materials the team applies the technology of Guhring to satisfy the high customer demands.



» For us flexibility and speed, paired with a high standard of quality, is enormously important. Here, Guhring's tool dispensing system is a great help. As well as an accurate order management it guarantees us quick tool availability and is therefore indispensable in our daily work process. «

Sven Goldschmidt I MillCraft 3D Managing Director



Sven Goldschmidt, MillCraft 3D Managing Director, appreciates the application of Guhring's TM 326 tool dispensing system.



» GUHRING'S TOOL DISPENSING SYSTEM IS INDISPENSABLE IN OUR DAILY WORK PROCESS.«



»TM 526 – OF ESSENTIAL BENEFIT TO OUR COMPANY.«

### GUHRING TOOL MANAGEMENT. CUSTOMER EXAMPLES.

»Hightech made in Regensburg« - how the dynamic company Aytec faces the challenges of its international customers. Here it relies on tools and dispensing systems from Guhring to guarantee the quality for manufacturing special machines.



»Controlled dispensing and the automatic re-ordering of tools is very important to us. With Guhring's tool dispensing system TM 526 tools are always available and we can fully concentrate on our core competences. This is a key benefit for us. «

Christian Ruhland I Aytec Managing Director



The users Jonas Polleter and Paul Troppmann are also convinced: "Self-explanatory software – and tool search is a thing of the past."

### GUHRING TOOL MANAGEMENT SOFTWARE.



All Guhring tool dispensing systems are controlled by the user-friendly GTMS. It allows a simple, quick and intuitive operation via integrated touchscreen.

The software provides the customer application and individual setting possibilities in all areas of production.

Thanks to the modular design processes in manufacturing can be accurately costumized and all aspects of the tool cycle, from provision and storage to disposal, can be transparently presented.

The software documents all relevant movement

data of stock, triggers order suggestions and enables evaluations to different criteria.

This comprehensive and detailed reporting offers your company a multitude of optimisation potentials in the tool cycle.

Interfaces furthermore enable the connection to different merchandise management systems as well as an online connection to your suppliers thanks to automated order processes.

#### MODULAR DESIGN.

#### CENTREPIECE.

#### LOGISTICS MODULE.

- Machine control
- Scheduling
- Article master data
- Evaluations

#### A-Z PLANNING.

#### PLANNING MODULE.

- **\** Communication
- **Wear** data
- Components
- Tool catalogues / DIN 4000

#### SAFETY IN ALL PROCESSES.

#### QUALITY MODULE.

- Inspection instrument management
- Machines
- Complaints

- Serial number management
- Incoming goods data

#### PRDUCTION UNDER CONTROL.

#### PRODUCTION MODULE.

- \ Work plans
- **\** Orders



#### GUHRING







### GUHRING TOOL MANAGEMENT SOFTWARE.

#### PERFORMANCE & CUSTOMER ADVANTAGES.

- Simple and intuitive user interface and menu navigation
- Personal dashboard
- \ Creation of various tool lists
- Direct call-up of CAD systems and graphics programmes for processing and presenting tool drawings
- Comprehensive storage management functions with which also Guhring's TM tool machines are controlled
- Depiction of customer organisation for clear cost allocation of tool withdrawals

- Accurate consumption analyses to various criteria, i.e. tool consumption per component, machin or manufacturing area
- Individual solutions can be programmed according to customer requirements
- Connection to all current ERP/PPS systems, tool management and paternoster lift systems via programming of corresponding interfaces
- \ Multi-lingual software
- Production of individual customer forms.







### GUHRING TM TOOL DISPENSING SYSTEMS.

TM 326 AND TM 526 SYSTEMS.

Controlled storage and dispensing of tools is the basis for gaining tool consumption transparency and direct tooling costs. A prerequisite for this is however that tool stock is kept under lock and key and that every tool withdrawal is indeed registered in the management software. Only this way it is ensured that the stock displayed by the software is also physically existent and the tool scheduling can work reliably.

All systems are controlled by the GTMS logistics module. It enables a simple and intuitive operation of the dispensing machines.

Log-in is customer specific by PIN, barcode, RFID or biometric data. Depending on the system

type tools can be stored and managed under different security levels. Guhring's TM 326 and 526 systems were specifically developed for this.

They are compatible to one another and can be adapted to various customer requirements for individual, small and large series production.

These Guhring TM tool systems therefore offer the decisive advantages of an intelligent tool dispensing system

#### ADVANTAGES.

- > 24 hour controlled tool availability
- Reduction in storage and management costs
- Permanent consumption control
- Prevention of production stoppages
- \ Clear allocation of tooling costs
- \ Elimination of safety stock

- Storage and management of all articles relevant to production
- \ Eliminates loss and theft
- ➤ Employee awareness of tooling costs
- \ Communication with all IT systems possible

OPTIMISED MANAGEMENT PROCESSES PERFORMANCE INCREASE IN TOOL MANAGEMENT.



SECURE NOW. LONG-TERM SAVING. PROFIT.

# TM 326 BASIC VERSION. MANY POSSIBILITIES.



TM 326 embodies a flexible storage solution for all application requirements for individual and small batch production. Electronically locked drawers can be individually adapted in height and partitioning options according to the article spectrum. It is ideal for accommodating different products in small quantities.

The storage module is the centrepiece of Guhring's Tool Management Software that monitors and controls all movements. The system can be combined with all Guhring system types.



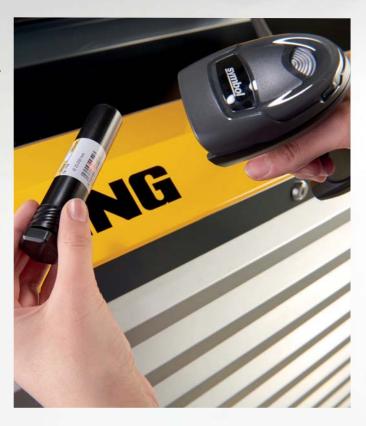
ELECTRONICALLY CONTROLLED.

MODULARLY EXTENDABLE.

### TM 326. DESIGNS AND DIMENSIONS.

#### BASIC UNIT EQUIPMENT

- Electronically locked dispensing system in a rigid steel sheet construction
- Manually operated drawers with LED display and full pull-out (load capacity per drawer max. 200 kg)
- Individual drawer height and partitioning options
- \ Height: 1700 mm (incl. attachment) Usable height: 900 mm
- \ Scanner for reading barcode and QR code
- \ 21.5" HD touchscreen monitor
- Storage module of Guhring TM software
- \ Operating manual available

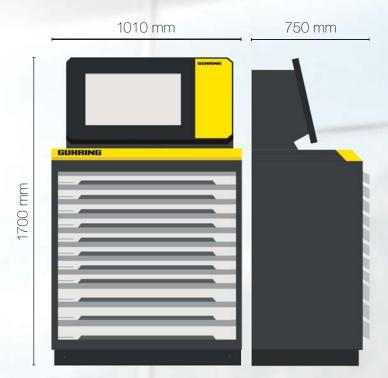


#### EXTENSION UNIT EQUIPMENT

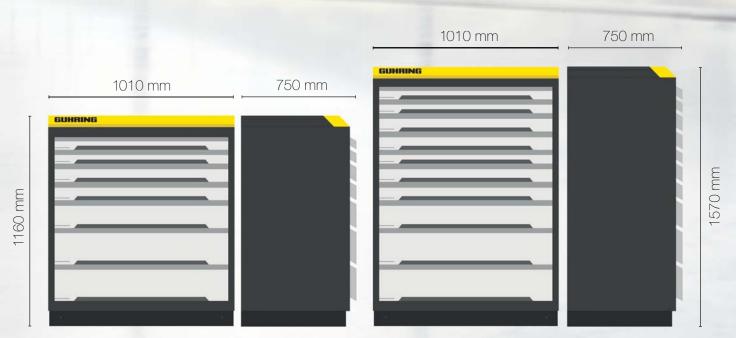
- Electronically locked dispensing system in a rigid steel sheet construction
- Manually operated drawers with LED display and full pull-out (load capacity per drawer max. 200 kg)
- Individual drawer height and partitioning options
- 2 different heights:Height: 1160 mm | 1570 mmUsable height: 900 mm | 1300 mm

#### OTHER

- \ Lift truck base with removable front panel
- Operating voltage: 230 V / 50Hz
- Special colours to RAL / NCS on request



TM 326 basic unit | front and side view



TM 326 extension units | front and side view (2 heights)

### TM 326. DESIGNS AND DIMENSIONS.

#### DRAWER PARTITIONING OPTIONS

\ Flexible composition of drawer height

Available front height: 75 mm | 100 mm | 150 mm | 200 mm Usable height: 60 mm | 85 mm | 135 mm | 185 mm



Box set



Recess set



Partition set (standard equipment)



Anti-slip mat



#### ELECTRONIC DRAWER FLAP SYSTEM

\ Flexible composition of drawer height

Available front height: 75 mm | 100 mm | 150 mm | 200 mm Usable height: 50 mm | 75 mm | 125 mm | 175 mm

Flaps per drawer	Internal compartment dimension width x depth	Flap partitioning width x depth
48	109 x 75 mm	8 x 6
40	109 x 95 mm	8 x 5
32	109 x 125 mm	8 x 4
36	146 x 75 mm	6 x 6
24	146 x 125 mm	6 x 4
24	220 x 75 mm	4 x 6
18	146 x 175 mm	6 x 3
20	220 x 95 mm	4 x 5
16	220 x 125 mm	4 × 4
12	440 x 75 mm	2 x 6
12	225 x 200 mm	3 x 4
8	440 x 125 mm	2 x 4
4	440 x 259 mm	2 x 2



#### TM 526 DRAWER SYSTEM. 100% DISPENSING CONTROL.



The TM 526 system has been designed for large batch production with high product turnover rate. The individual drawer gradually opens when operated, this means only the

respective booked quantity is dispensed. This results in 100% tool withdrawal transparency as well as a clear allocation of tooling costs.



ACCESS ELECTRONICALLY LIMITED.
TRANSPARENT TOOL MOVEMENTS.

### TM 526. DESIGNS AND DIMENSIONS.

#### BASIC UNIT EQUIPMENT

- Electronically locked dispensing system in a rigid steel sheet construction
- Manually operated drawers with LED display and full pull-out (load capacity per drawer max. 20 kg)
- \ Individual drawer height and width
- \ Height: 1750 mm (incl. attachment)
- > PC with WIN 10,64 Bit
- \ 21.5" HD touchscreen monitor
- \ Operating manual in available



#### EXTENSION UNIT LOCKABLE COMPARTMENT EQUIPMENT

- Option with 16 lockable compartments

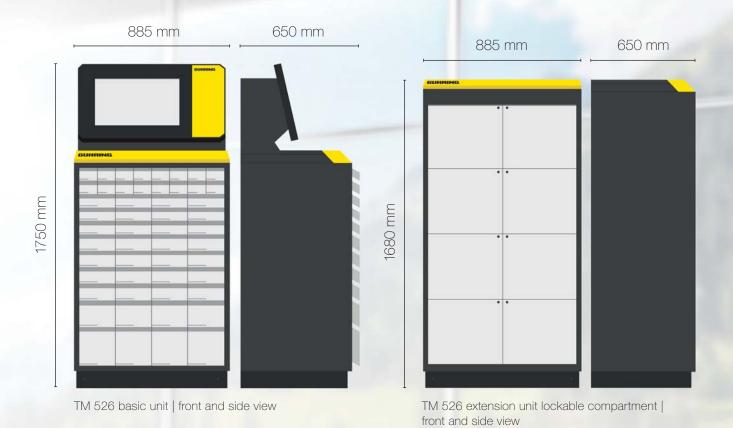
  Available internal dimensions: 334x151x534 mm (WxHxD)
- Version "Power supply"
   Option with 16 lockable compartments
   each storage locker is equipped with 230V
   Available internal dimensions: 334x151x384 mm (WxHxD)
- Option with 8 lockable compartments
   Available internal dimensions: 334x331x534 mm (WxHxD)
- Version "Power supply"
  Option with 8 lockable compartments
  each storage locker is equipped with 230V
  Available internal dimensions: 334x331x384 mm (WxHxD)

#### EXTENSION UNIT EQUIPMENT

- Electronically locked dispensing system in a rigid steel sheet construction
- Manually operated drawers with LED display and full pull-out (load capacity per drawer max. 20 kg)
- \ Individual drawer height and width
- 2 different heights: 1300 mm | 1500 mm

#### OTHER

- Lift truck base with removable front panel
- Special colours to RAL / NCS on request
- Operating voltage: 230 V / 50Hz





TM 526 extension unit (2 heights) | front and side view

### TM 526. DESIGNS AND DIMENSIONS.

### DRAWER PARTITIONING OPTIONS

- Name of the construction (load capacity per drawer max. 20 kg)
- \ Available drawer height / level: 42 / 60 / 113 / 186 / 258 mm

Possible drawer partitioning:
Individual compartment depth of drawer partitioning:
30
4
2
1 Partition
30
4
2
1 Partition
30
4
133
271
545 mm

variable drawer width per level
50mm / 8 drawers per level (only for 42 mm height)
110mm / 5 drawers per level (only for 42 mm/60 mm height)
150mm / 4 drawers per level
215mm / 3 drawers per level
350mm / 2 drawers per level









## GUHRING TM TOOL DISPENSING SYSTEMS.

EXTENSION STORAGE SYSTEMS.



The with Guhring basic units freely combinable extension storage systems provide suitable space for all tools.

The control via Guhring's TM 326 and

TM 526 tool dispensing systems guarantee secure storage and withdrawal only following a booking.



LARGE STORAGE SPACE.
TRANSPARENT MANAGEMENT.

The TM 426 tool dispensing system is the perfect solution for storing large quantities of compact tools within the smallest space. In the spiral systems tools are stored in a

space-saving manner and are absolutely secure. The tools are dispensed by a goods dispenser optionally also via a lift system.



### TM 426. SPIRAL SYSTEM. DESIGNS AND DIMENSIONS.

### EXTENSION UNIT EQUIPMENT

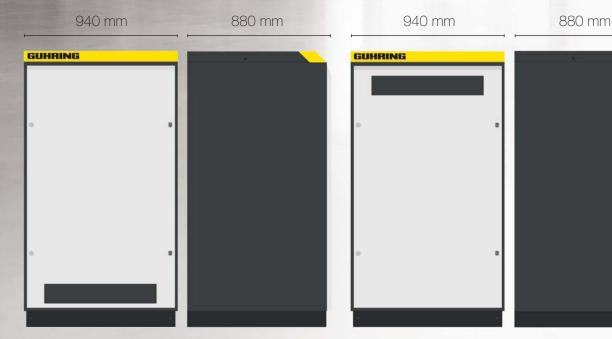
- \ Withdrawal to Fifo principle
- \ Goods dispensed bottom
- Spiral options can be configured according to product spectrum

### EXTENSION UNIT L EQUIPMENT

- Withdrawal to Fifo principle
- \ 6-8 spiral levels with 10 spiral places each
- \ Goods dispensed top
- \ Integrated transport lift for tools

#### **OTHER**

- Spiral option partitioning:9 | 13 | 15 | 21 | 24 | 31
- \ Lift truck base with removable front panel
- Value of the North North
- Special colours to RAL / NCS on request



TM 426 extension unit / front & side view

TM 426 extension unit L / front & side view

### LOCKER DOOR SYSTEM. DESIGNS AND DIMENSIONS.

#### **EQUIPMENT**

- Locker door cabinet available with or without viewing window
- \ Electronic locking by Guhring TM software

4 -5 shelves (load capacity per shelf: 200 kg)

### VERTICAL PULL-OUT SYSTEM. DESIGNS AND DIMENSIONS.

#### **EQUIPMENT**

- Pull-outs with electronic locking via GTMS (load capacity per pull-out: 300 kg)
- > 3 different pull-out options:
  - 4 pull-outs per 300 mm
  - 6 pull-outs per 200 mm
  - 8 pull-outs per 150 mm

- 2 different depths:765 mm | 1135 mm
- Nobust design thanks to rotating pull-out roller and reaching in security
- \ Individual partitioning material



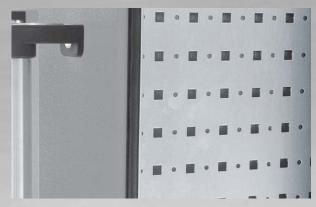
Tool holders



Holders for extra length tools



Storage tray



Perforated sheet wall





# CONTROLLED WITHDRAWAL FOR MORE TRANSPARENCY. OPTIMAL STORAGE FOR ALL TYPES OF CONSUMABLES.

#### **OUR CUSTOMERS CONFIRM:**

- 10% lower tool consumption
- \ 14 % less machine stoppages thanks to permanent tool availability
- 14% greater application of re-ground tools in production
- No Daily 1 hour time saving in tool search and procurement



TARGETED AND QUICK THANKS TO STATUS LED LIGHT.

# WE CREATE DRDER



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