

Tool Management

The ARNO StoreManager gives you the benefit of 100 % access control with guaranteed individual removal – simple and fast.

OUTSTANDING

OUTSTANDING FOR MORE PRODUCTIVITY IN YOUR PRODUCTION.

Do you have challenging machining tasks? We have outstanding solutions. For three generations, we have been developing tool systems which have outstanding quality, long tool life and process reliability. As an ARNO customer you benefit from a combination of experience and pioneering spirit. Besides these values we are also influenced by the typical Swabian talent for inventiveness. We are proud to assist our customers to secure that extra competitive advantage with clever new developments and advancements and we will continue along this path in the future.

TOOL MANAGEMENT WITH ARNO.

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EVERYTHING SIMPLY HAS ITS PLACE.

2,160 drawers on 1.5 m²

It's incredible how much space there is in the StoreManager^{PRO}. Choose between 4 compartment sizes with customizable configuration.

Access time approx. 10 seconds

That's how long it takes until the operator holds the required tool in his hand.

Updates guaranteed for 5 years

You gain long-term benefits from our ARNO StoreManager. You receive regular system updates for at least 5 years as part of our maintenance and support contract.

Starting at 15 Euro per compartment

StoreManagers offer you an excellent price per location ratio.

Smooth integration into your production

StoreManagers are easy to integrate into your existing process structures since they have interfaces to all common ERP and tool management systems. If you need other interfaces, we adapt the system for you – fast and at low cost.



Guaranteed individual removal

Only the selected compartment opens – no other item can be taken out. This makes every removal traceable.

Variable and modular

Cabinet configuration is customisable with 4 different compartment sizes. If some day there is no space left, you can expand the system with additional cabinets.

100 % access control and cost transparency

Full control thanks to guaranteed individual removal.

24/7 availability

Practical, especially in multi-shift work:
Employees have access at all times to the tools required.

0 % deficit stock

Stock warnings when minimum levels are reached and the system generates automatic repeat orders or order proposals.
This means no machine downtimes due to missing tools.

Data import

We help you start off your new ARNO automated tool manager by importing existing tool data into the StoreManager system.



WHEN YOU HAVE EVERYTHING UNDER CONTROL, YOU LOWER COSTS.

Interview: Simon Lang, Product Manager Tool Management Systems at ARNO Werkzeuge.

Why should a customer opt for an automated tool management system from ARNO?

Simply because our automated tool management systems are easy to operate, sturdy, compact and absolutely flexible. For example, the compartments are individually configurable depending on the items stocked. By the way, the customer is totally free to decide here – he's not dependent on ARNO Werkzeuge. Whether he stocks tools, office materials or personal protective clothing, he has guaranteed individual removal and absolute cost transparency – and he can also rely on our typical ARNO service. For example, we make sure that our StoreManagers can be integrated in more or less any production environment by offering the right interface options. As far as I know, no other company offers such an overall package of hardware, software and service.

Guaranteed individual removal – what exactly does that entail?

On the bottom line, it means that the customer has genuine overall control. Before an item is removed from the cabinet, it must first be selected and only then does the compartment open. This is an integrated part of the software. So the customer knows at all times when, who, what item and why an item was removed and by whom. This is vital to identify and optimise potential savings in the long term. It eliminates tool loss and avoids double or incorrect repeat orders.

But is an automated tool management system really worth it for all companies?

Definitely yes! When you have overall control, costs go down automatically. You only have to think how much time an employee spends every day searching for tools. Add to that how often machines suffer downtimes because of missing tools: you'll soon realise how fast you can amortise the investment in an automated tool management system. If the initial investment is too high, we offer StoreManagerDUO on a rental basis. We even offer a 30-day trial phase – entry into Tool Management 4.0 doesn't get any easier than that.





“It’s so easy to use. Absolutely anybody can do it straight away.”

StoreManager^{DUO} – what’s really behind this and are there any variants?

The DUO is a combined carousel and drawer system to store both small and large items in one cabinet. The DUO is particularly interesting for smaller firms but it cannot also be used for separate production cells in large companies. The PRO is our carousel system which has up to 2,160 compartments on a very small footprint. And the START is the drawer variant for larger parts. So we offer the right system for any requirement and they are all easy to use. Even somebody who has never worked with the system before could retrieve a particular tool right away.

Before, you mentioned the typical ARNO Service – can you say exactly what this is?

We always try to make work as easy as possible for our customers. For example, if a customer wants to control his paternoster from the StoreManager, we adapt the system at a fair price. I’ve heard of suppliers who ask an astronomical price for this. That’s not the way we do it. We want to build long-term partnerships and support our customers. For example, it also means that we import existing tool data into the StoreManager system. This makes it very easy for the customer when he first starts using the system.

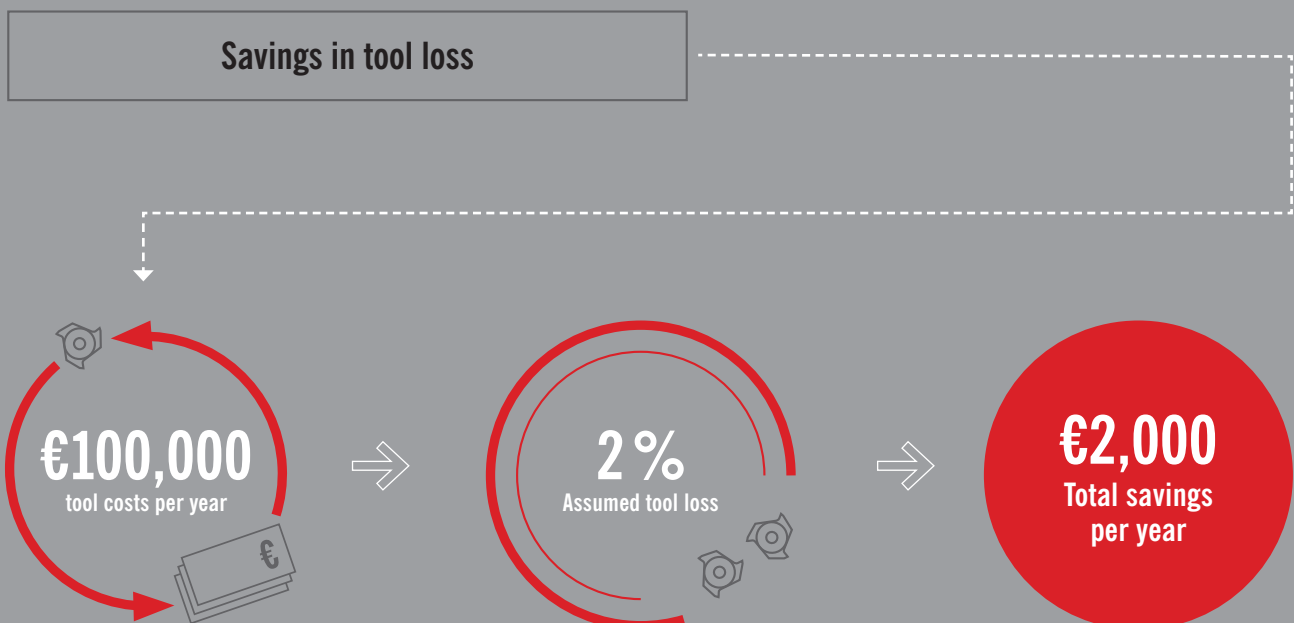
THERE IS SO MUCH SAVINGS POTENTIAL HERE.

The challenge

Every manufacturing company knows the problem: valuable working time is lost searching for tools. Our sample calculation assumes only 10 minutes a day per employee – in reality, the time lost is often much greater. If tools that are needed are not found, the missing tools cause ancillary costs since the tools which ought to be there must be ordered.

The solution

With automated tool management systems like the ARNO StoreManager, the tools needed are at the right place at the right time. Search time is eliminated, there is no more tool loss and the customer can even save time-consuming stock-taking.



Search time savings



The result

An efficient tool management system lowers tool costs, reduces machine downtimes enormously and uses working time productively. Positive side effect: Employees have less stress and are more satisfied.

€42,000
total savings
per year

A CABINET LIKE THIS ONE HAS TO WITHSTAND QUITE A LOT!

Gerhard Müller, Head of NC Production at ARNO Werkzeuge.

In the meantime, there are many well-designed automated tool management systems with loads of functions. But in most cases, the most important feature is often forgotten: these types of cabinets have to endure quite a lot! They are extremely rugged and therefore perfect for everyday work in industrial environment. They fit into any production environment and are equipped with interfaces to common ERP and tool management systems. If an interface is missing, we will supply it – fast and simple. But the most important thing is: They're easy to operate. There's no need for training lasting multiple days. You can start immediately. This is what our customers appreciate the most.



ARNO StoreManagers ensure smooth work flows with 24/7 availability. In addition, they help lower tool costs by providing full access control and 100 per cent cost transparency. Their rugged construction, simple operation and adaptability to new challenges raise efficiency in any production environment.

STURDY AND COMPACT

Hardware

ARNO StoreManagers are extremely rugged – especially the carousel systems. And their footprint of only 1.5 m² means there is really room for them in any production shop

INTUITIVE OPERATION,
FULL COST TRANSPARENCY

Software

Easy operation ensures smooth work flows. Guaranteed single removal ensures 100 per cent access control and cost transparency.

ADAPTABLE

Compatible system

ARNO StoreManagers fit in any workshop thanks to their 4 compartment sizes, variable compartment configuration and interfaces to all common production systems.



PLENTY OF STOWAGE SPACE FOR EVERY WORKSHOP.

ARNO DIGITAL // More details on StoreManagers at toolmanagement.arno.de



Fast assured single removal in about 10 seconds

- Item selected by full-text search, menu or barcode scanner
- Access only possible to selected storage location for full stock control
- Withdrawal of basket of goods or single good
- Order-related withdrawal by showing corresponding items



Error-free item data acquisition

- Barcode scanner for normal barcodes or optionally QR codes
- Typing errors are avoided, efficiency increases
- Fast return transfer of products or storage of new items

Three systems for all requirements:
The carousel system in the StoreManager^{PRO} is rugged and space-saving. StoreManager^{START} is the ideal addition for large items. StoreManager^{DUO} combines both systems in one and is therefore perfect for small companies or production cells.



STRONG ADVANTAGES

of the ARNO StoreManager design

Always the right one – 3 StoreManager variants to cater for every requirement and every item size

Rugged construction for long-term use in tough everyday work conditions

Variable with 4 compartment sizes and individually configurable compartments

Outstanding price-performance ratio – starting at 15 Euro per compartment



Plenty of stowage space with the carousel system

- Space-saving: up to 2,160 items on a 1.5 m² footprint
- Rugged: The carousel system is sturdy and almost wear-free
- Flexible: With 4 individually configurable compartment sizes. The compartment configuration is flexible.
- Reliable: Guaranteed single removal for 100% stock control



Space for large items in the drawer system

- The ideal supplement to the carousel system for large items
- Flexible: Customers can individually configure drawer height, width and subdivision (with cassettes)
- Reliable: Individual compartments can be electronically interlocked to ensure full access control

EFFICIENCY MADE EASY.



ARNO DIGITAL // Discover the full scope of functions at toolmanagement.arno.de



Intuitive operation

- Convenient touch screen with large buttons
- Customisable menu structure
- Reliable operator navigation with self-explanatory menu
- No long training needed



Optimised processes

- Automated order proposals and repeat orders
- User-defined list of favourites
- Entry of tool photos or PDFs with additional information
- Option of employee sensitisation with price display
- Parts list (assignment of related components)

Whether you opt for RFID chip or fingerprint sensor, you have full access control to StoreManagers and a quick overview of tool consumption. A software module lets you make settings from the convenience of your workplace PC.



SMART ADVANTAGES

of the ARNO StoreManager software

Transparency from guaranteed single removal and logging of all accesses


Reliable – no output if calibration date of measuring instruments exceeded

Practical – both gross and net prices can be entered and displayed

Automatic messages when minimum stock levels are exceeded and/or immediate sending of repeat order

Entnahmeprotokoll nach Maschine

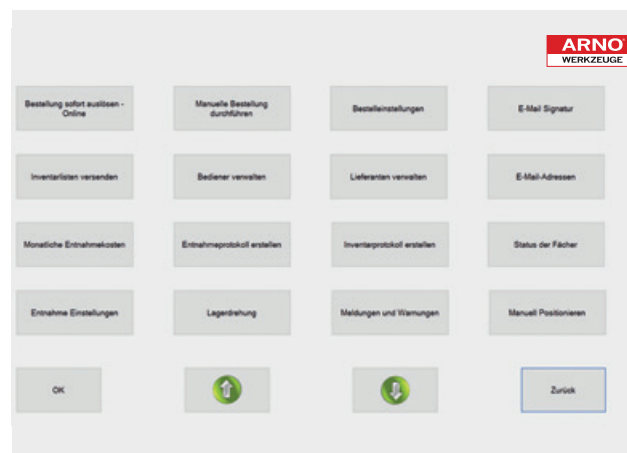
Zeitraum: 2017-06-01 bis 2017-07-01



PNr	MNr	Auftrag	Artikel Bezeichnung	Datum	Uhrzeit	Stk	Preis
198	111	11111	VHM-FRÄSER-ECKRADIUS Ø 6 ER1	20.06.2017	10:49:55	1	€ 44,52
198	111	11111	Vollhartmetallbohrer	23.06.2017	17:08:19	1	€ 0,00
Gesamtentnahme:							€ 44,52
38	201	53650	HARTMETALLFRÄSER SCHLICHT NEU Ø 1	14.06.2017	06:41:07	1	€ 19,03
103	201	54710	HARTMETALLFRÄSER SCHLICHT NEU Ø Lg. 19	09.06.2017	08:43:08	1	€ 1,00
103	201	54720	WENDEPLATTEN Z.FRÄSEN Ø 10	30.06.2017	19:33:01	2	€ 92,88
38	111	53700	WENDEPLATTEN Z.FRÄSEN Ø 12	03.06.2017	09:01:51	2	€ 96,58
103	201	54720	WENDEPLATTEN Z.FRÄSEN Nr. 0-42	30.06.2017	18:18:26	10	€ 150,70
Gesamtentnahme:							€ 1.038,27

Efficient controlling

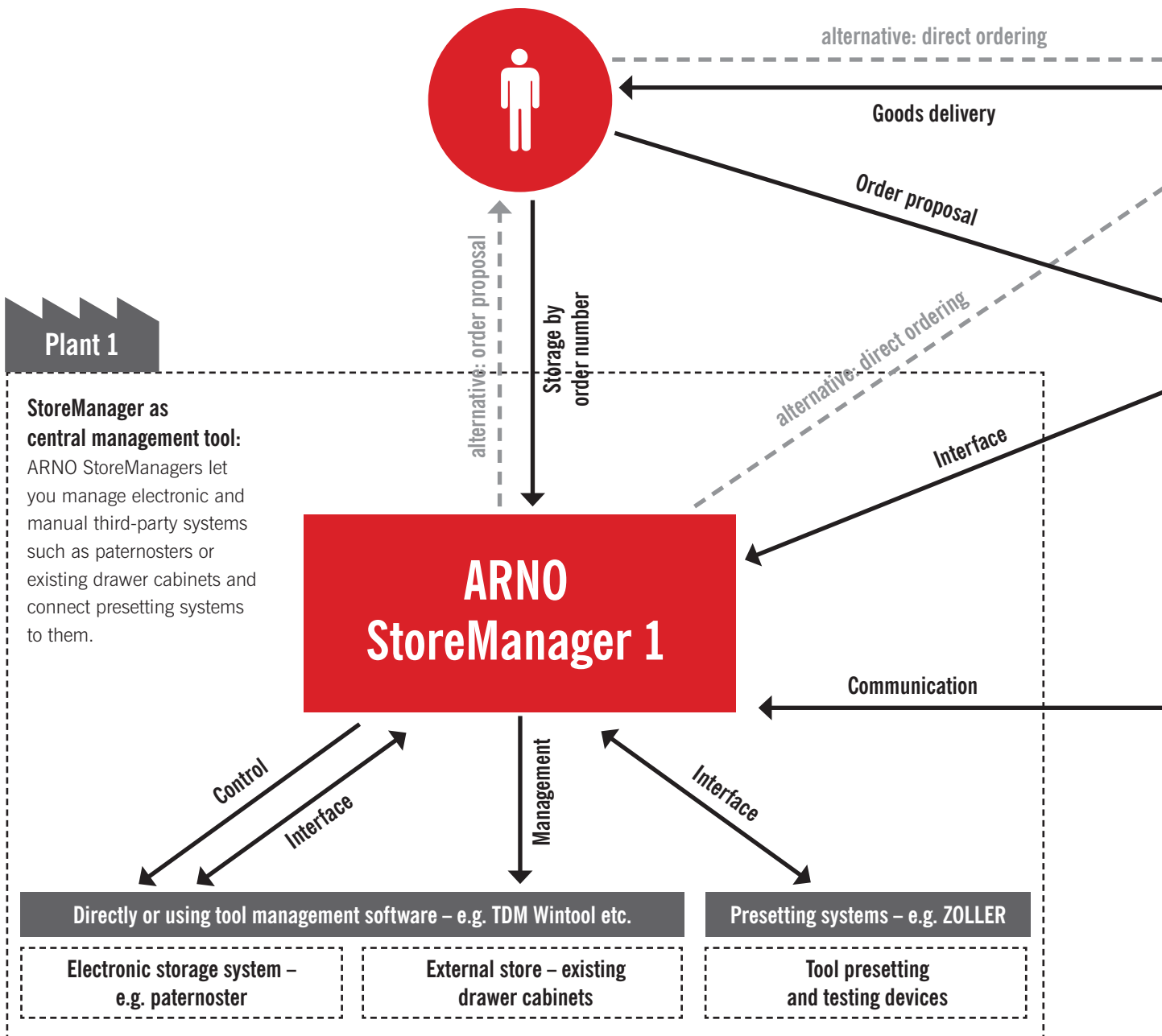
- Removal logs generated and sent (in PDF or XLS format)
- Analysis per cost centre, personnel number, order number or machine
- Optimised tool usage – used and/or reground tools output before new tools



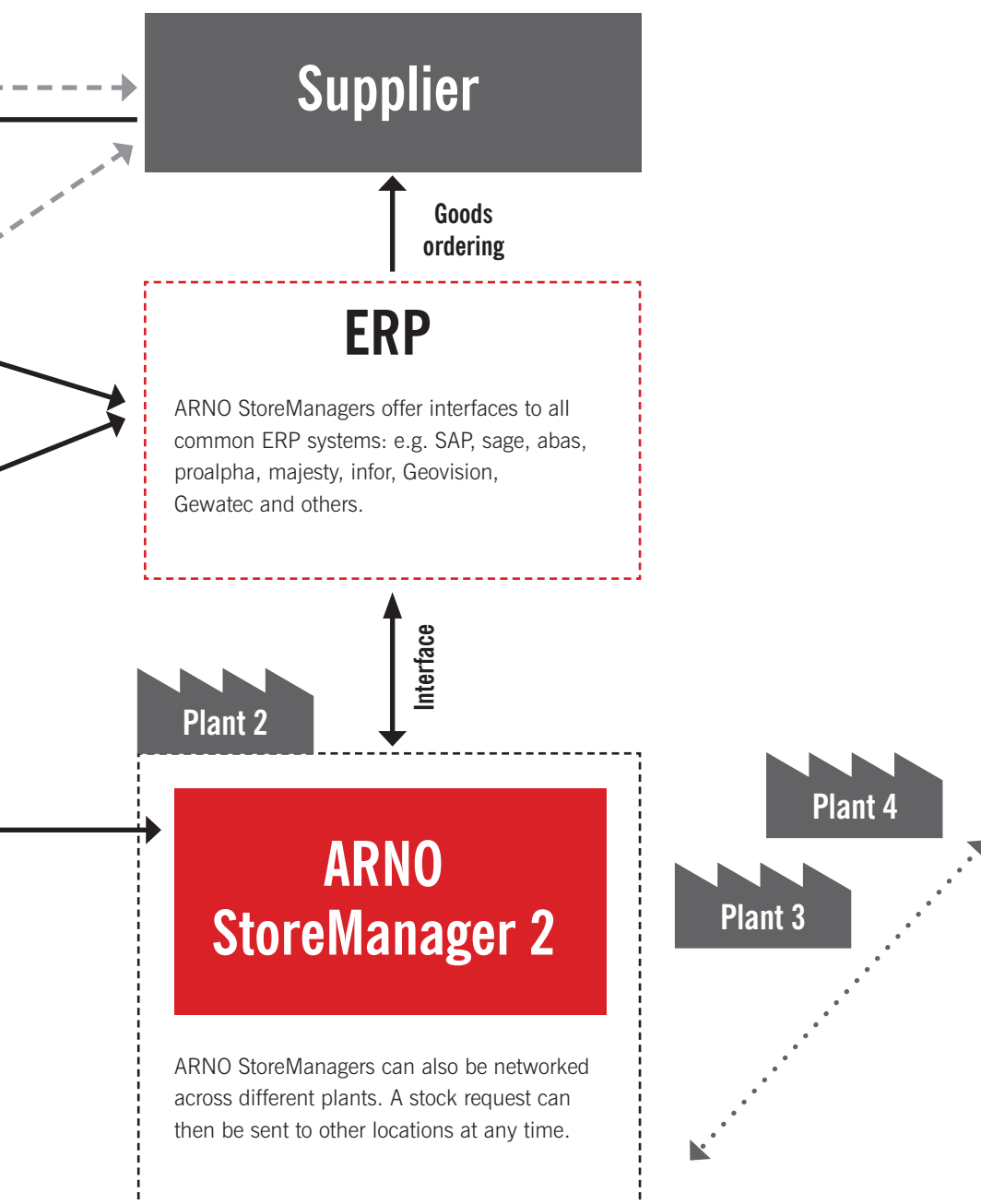
Customised settings

- Individual access rights granted
- Entry of email addresses for reports, orders, warnings and supplier updating
- Order-related removal: quick and error-free by abbreviated selection lists

WELL CONNECTED IN ALL DIRECTIONS.



ARNO StoreManagers are so flexible: they can simply be integrated in any type of company structure – with interfaces to all common ERP and tool management systems. ARNO StoreManagers also adapt flexibly to new challenges and are expandable at any time, even across several locations.



THE **A**RNO STOREMANAGER – EVERYTHING HAS ITS PLACE.





STRONG COMBINATION.

Twice as good: ARNO StoreManager^{DUO} combines the advantages of a carousel and a drawer system.

Ideal for small companies or production cells: StoreManager^{DUO} is equipped with an upper section consisting of 360 individual compartments in a carousel system to store tools and small parts. The lower section has four drawers providing additional space for larger items. With the ARNO StoreManager^{DUO} you have everything under control and in view: indexable inserts, drill bits, milling cutters, holders, measuring devices, special tools and much more

Why not see for yourself and be impressed by the benefits of automated tool management – thanks to the ARNO rental scheme which comes with a 30-day trial period, no risk and no major investment. It brings the future to companies of any size.



Master module



- Module with PC, monitor, RFID reader and barcode scanner
- 360 individually locked storage locations and 4 drawers (individually locked)

Plus expansion module



- Every DUO Master module can be expanded by adding up to 2 DUO Plus modules
- Each module offers another 360 carousel storage locations and 4 drawers



COMBINED ADVANTAGES

of the ARNO StoreManager^{DUO}

Combined carousel and drawer cabinet –
360 individual compartments and 4 drawers

Ideal for small companies or production cells

All the benefits, no risk – with the innovative
ARNO rental scheme

Connection to ERP systems via CSV interface

StoreManager^{DUO} Facts and Figures

Available in fixed configuration
with 360 compartments and 4 drawers.

Individual compartment 180x large/straight”
Front width: 87 mm |
Rear width: 68 mm
Depth: 195 mm | Height: 53 mm

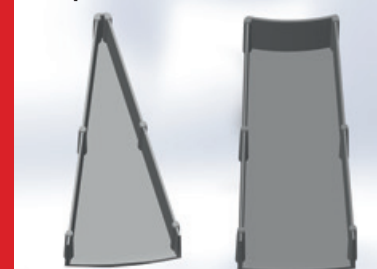
Individual compartment 180x “small/tapered”
Front width: 87 mm |
Rear width: 6 mm
Depth: 195 mm | Height: 53 mm

Drawer 2x height 100 mm
Inner dimensions usable: 600/600 mm
Drawer 2x height 200 mm
Inner dimensions usable: 600x600 mm



15 levels each with 24 compartments

Compartment sizes



2 compartments with guaranteed single removal



2 heights: 100 and 200 mm

PRACTICAL: THE RENTAL CONCEPT FOR THE DUO.

Fit for the future: Entry into digital tool management is even easier with the rental scheme for the ARNO StoreManager^{DUO}.



NO-RISK BENEFITS

with the rental concept for the ARNO StoreManager^{DUO}

No service/maintenance/spare parts costs –
the monthly rental covers it all

No-risk trial – you may return the device
within the first 30 days after start-up

Low monthly rate which decreases as tool turnover
rises – the rate is calculated and adapted based on
the tool turnover (with ARNO) of the previous year

All basic functions are covered by the rental.
This also applies to all software updates

Higher tool turnover, lower rental. **Our innovative rental scheme.**

Master module

- Every DUO Master module can be expanded by adding up to 2 DUO Plus modules.



Dimensions	StoreManager ^{DUO} Master			StoreManager ^{DUO} Plus		
Width	800 mm			800 mm		
Depth	800 mm			800 mm		
Height	1,828 mm			1,828 mm		
Footprint	0.64 m ²			0.64 m ²		
Weight empty	approx. 250 kg			approx. 230 kg		
Carousel						
Number of compartments	360			360		
Large compartment (w x h x d)	Front 87 mm	x 50 mm	x 195 mm	Front 87 mm	x 50 mm	x 195 mm
	Rear 68 mm			Rear 68 mm		
Small compartment (w x h x d)	Front 87 mm	x 50 mm	x 195 mm	Front 87 mm	x 50 mm	x 195 mm
	Rear 6 mm			Rear 6 mm		
Drawers						
Number of drawers 100 mm high	2			2		
Number of drawers 200 mm high	2			2		
General						
Max. rotation speed	2 rpm			2 rpm		
Max. access time	15 seconds			15 seconds		
Power supply	230 volts / 50 Hz			230 volts / 50 Hz		
Operation	Touch screen, barcode scanner			–		
Network connection	LAN socket			–		
Permissible temperature in operation	+10°C to +40°C			+10°C to +40°C		
Permissible humidity	5 – 95% (non-condensing)			5 – 95% (non-condensing)		
Maintenance	Hardware fully maintenance-free			Hardware fully maintenance-free		
Dust-protected	Yes			Yes		

IT SIMPLY OFFERS YOU MORE!

Up to 2,160 compartments on a footprint of 1.5 m², flexible configuration, extremely rugged, easy to operate and available 24/7: StoreManager^{PRO} offers you more of everything.

With the ARNO StoreManager^{PRO} you benefit from smooth functioning tool management, tool tracing and tool replacement – and with that from more efficient internal production processes. The modular system has many software options to adapt the system to your requirements with up to 2,160 configurable compartments to ensure controlled individual removal and a return option for each tool.

It makes tool management and repurchasing simpler and more efficient. You can trigger orders to any number of suppliers at any time or production workers can easily generate order proposals for the purchasing department. The practical orientation of the software design permits you to conveniently edit data from a workplace PC.



MORE ADVANTAGES of the ARNO StoreManager^{PRO}

Fully modular to permit user-defined adaptations of compartment configurations and software functions

Sensational price/location ratio –
cost per compartment starting at 15.- Euro

Space-saving: up to 2,160 compartments
on a footprint of only 1.5 m²



StoreManager^{PRO} Facts and Figures

2 variants with a footprint of
d 1.20 x w 1.20 x h 1.95 m
= less than 1.5 m²

- StoreManager^{PRO} 2160 Master with up to 2,160 compartments for individual item removal
- StoreManager^{PRO} 1080 Master with up to 1,080 compartments for individual item removal

4 compartment sizes – user-configurable:
Equip your StoreManager^{PRO} to meet your requirements.



Compartment sizes, 1x compartment (w x h x d):

Front	38 mm	50 mm	205 mm
Rear	18/28 mm		



Compartment sizes, 2x compartment (w x h x d):

Front	38 mm	100 mm	205 mm
Rear	18/28 mm		



Compartment sizes, 3x compartment (w x h x d):

Front	122 mm	50 mm	205 mm
Rear	74 mm		



Compartment sizes, 6x compartment (w x h x d):

Front	122 mm	100 mm	205 mm
Rear	74 mm		

Optional additional service



Training for min.
one working day on-site



StoreManager^{PRO}
put into service by technical staff

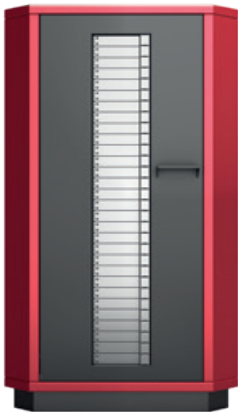


Import of data to your database
(using prepared Excel spreadsheet)

Flexible payments terms are available.
Please contact us.

EXPANDABLE TO MEET ANY REQUIREMENT.

We offer expansion systems (Plus modules) in various sizes to add to your StoreManager^{PRO} Master system.



StoreManager^{PRO} 2160 Plus

- Footprint 1,200 mm x 1,200 mm (≤ 1.5 m²)
- Same layout as StoreManager^{PRO} 2160 Master
- (but without PC, monitor and scanner)



StoreManager^{PRO} 1080 Plus

- Footprint 1,200 mm x 1,200 mm (≤ 1.5 m²)
- Same design as StoreManager^{PRO} 1080 Master
- (but without PC, monitor and scanner)

Dimensions

Width

Depth

Height

Footprint

Weight empty

Compartment sizes, w x h x d

Number of compartments (max.)

1x compartment

2x compartment

3x compartment

6x compartment

Drawer height

75 mm

100 mm

150 mm

200 mm

250 mm

300 mm

General

Max. rotation speed

Max. access time

Power supply

Operation

Network connection

Permissible temperature in operation

Permissible humidity

Maintenance

Dust-protected

Do you need more storage space?
The modular StoreManager system is easy to expand.



**StoreManager^{PRO}
2160 Master**

**StoreManager^{PRO}
1080 Master**

**StoreManager^{PRO}
2160 Plus**

**StoreManager^{PRO}
1080 Plus**

1,200 mm

1,200 mm

1,200 mm

1,200 mm

1,200 mm

1,200 mm

1,200 mm

1,200 mm

1,950 mm

1,950 mm

1,950 mm

1,950 mm

≤ 1.5 m²

≤ 1.5 m²

≤ 1.5 m²

≤ 1.5 m²

approx. 250 kg

approx. 220 kg

approx. 250 kg

approx. 220 kg

2,160

1,080

2,160

1,080

Front 38 mm
Rear 18/28 mm x 50 mm x 205 mm

Front 38 mm
Rear 18/28 mm x 50 mm x 205 mm

Front 38 mm
Rear 18/28 mm x 50 mm x 205 mm

Front 38 mm
Rear 18/28 mm x 50 mm x 205 mm

Front 38 mm
Rear 18/28 mm x 100 mm x 205 mm

Front 38 mm
Rear 18/28 mm x 100 mm x 205 mm

Front 38 mm
Rear 18/28 mm x 100 mm x 205 mm

Front 38 mm
Rear 18/28 mm x 100 mm x 205 mm

Front 122 mm
Rear 74 mm x 50 mm x 205 mm

Front 122 mm
Rear 74 mm x 50 mm x 205 mm

Front 122 mm
Rear 74 mm x 50 mm x 205 mm

Front 122 mm
Rear 74 mm x 50 mm x 205 mm

Front 122 mm
Rear 74 mm x 100 mm x 205 mm

Front 122 mm
Rear 74 mm x 100 mm x 205 mm

Front 122 mm
Rear 74 mm x 100 mm x 205 mm

Front 122 mm
Rear 74 mm x 100 mm x 205 mm

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2 rpm

2 rpm

2 rpm

2 rpm

15 seconds

15 seconds

15 seconds

15 seconds

230 volts/50 Hz incl. UPS module

230 volts/50 Hz incl. UPS module

230 volts/50 Hz incl. UPS module

230 volts/50 Hz incl. UPS module

Touch screen, barcode scanner

Touch screen, barcode scanner

-

-

LAN socket / GSM module

LAN socket / GSM module

via Master

via Master

+10°C to +40°C

+10°C to +40°C

+10°C to +40°C

+10°C to +40°C

5 – 95% (non-condensing)

5 – 95% (non-condensing)

5 – 95% (non-condensing)

5 – 95% (non-condensing)

Hardware fully maintenance-free

Hardware fully maintenance-free

Hardware fully maintenance-free

Hardware fully maintenance-free

Yes

Yes

Yes

Yes

SMALL CABINET FOR LARGE ITEMS.

Perfect for long and large items: StoreManager^{START} – the drawer system from ARNO.

StoreManager^{START} is the best expansion for the StoreManager^{PRO}. If the size of the compartments on the carousel system is too small, we offer our StoreManager^{START} which has a number of different compartment sizes and drawer configurations to choose from. The number and height of the drawers are user-configurable as well as the configuration of the individual drawers.

Of course, StoreManager^{START} also has a system expansion option by connecting Plus variants. As with StoreManager^{PRO} you benefit from the easy to operate software with its many practical functions and the convenient option of managing data from a PC.

Configuration options

The main system measures 717 x 725 x 1,600 mm (footprint 0.6 m²) and you can configure it with the following drawers and compartments to meet your requirements:

Drawers

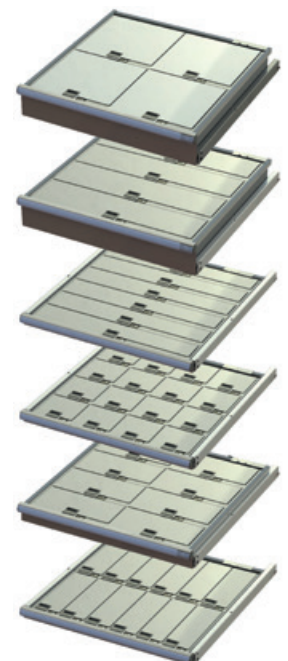
Choose from the following heights for the fully extending drawers (Σ 900 mm)

Fully extending drawers	75 mm	100 mm	150 mm	200 mm	250 mm	300 mm
Available with individual compartments	•	•	•			
Available without individual compartments	•	•	•	•	•	•

Compartments

You can also select the number and size of the electronically locked individual compartments. The size of the compartments refers to the inner dimensions (useful area).

Drawer height	75 mm	100 mm	150 mm
4 individual compartments	–	594 x 111 x 61 mm	296 x 260 x 111 mm 594 x 111 x 111 mm
6 individual compartments	594 x 62 x 36 mm	–	–
8 individual compartments	296 x 111 x 36 mm	296 x 111 x 61 mm	296 x 111 x 111 mm
12 individual compartments	98 x 260 x 36 mm	98 x 260 x 61 mm	–
16 individual compartments	147 x 111 x 36 mm	147 x 111 x 61 mm	147 x 111 x 111 mm





StoreManager^{START} 717 Master Configuration examples

Footprint

717 mm w x 725 mm d x 1,600 mm h

Example 1

1 drawer 100 mm (without individual compartments)
1 drawer 200 mm (without individual compartments)
2 drawer 300 mm (without individual compartments)

Example 2

1 drawer 100 mm, 16 individual compartments
1 drawer 100 mm, 12 individual compartments
1 drawer 100 mm, 8 individual compartments
1 drawer 75 mm, 6 individual compartments
1 drawer 75 mm (without individual compartments)
1 drawer 150 mm (without individual compartments)
1 drawer 300 mm (without individual compartments)

Example 3

1 drawer 100 mm, 16 individual compartments
1 drawer 150 mm, 16 individual compartments
2 drawers 100 mm, 12 individual compartments
2 drawers 150 mm, 8 individual compartments
2 drawers 75 mm, 6 individual compartments



MAJOR ADVANTAGES

of the ARNO StoreManager^{START}

Perfect for large or small items,
for example, complete tools

Flexibly selectable drawer configurations

Expandable with additional
cabinets at any time

Optional additional service



On-site training for min.
one working day



StoreManager^{START}
put into service by technical staff



Import of data to your database
(using prepared Excel spreadsheet)

**Flexible payment terms are available.
Please contact us.**

INDIVIDUALLY CONFIGURABLE.

We offer you expansion systems (Plus modules) in various sizes to add on to your StoreManager^{START} Master system.



StoreManager^{START} 717 Plus

- Footprint 717 x 725 mm ($\leq 0.6 \text{ m}^2$)
- This expansion system has the same length and width as the StoreManager^{START} Master. Turn to page 29 for the possible number and size of electronically locked drawers and compartments.

The following heights (outer dimensions) are available:
700 mm, 850 mm, 1,000 mm, 1,150 mm, 1,450 mm



StoreManager^{START} 1023 Plus

- Footprint 1,023 x 725 mm ($\leq 0.8 \text{ m}^2$)
- This expansion system is wider than the StoreManager^{START} 717, but it can only be equipped with electronically locked drawers without individual compartments.

The following heights (outer dimensions) are available:
700 mm, 850 mm, 1,000 mm, 1,450 mm



Dimensions

Width

Depth

Height

Footprint

Weight empty

Compartment sizes, w x h x d

Number of compartments (max.)

1x compartment

2x compartment

3x compartment

6x compartment

Drawer height

75 mm

100 mm

150 mm

200 mm

250 mm

300 mm

General

Max. rotation speed

Max. access time

Power supply

Operation

Network connection

Permissible temperature in operation

Permissible humidity

Maintenance

Dust-protected

Do you want to know more? Simply write to us at:
storemanager@arno.de



**StoreManager^{START}
717 Master**

**StoreManager^{START}
717 Plus**

**StoreManager^{START}
1023 Plus**

717 mm	717 mm	1,023 mm
725 mm	725 mm	725 mm
1,600 mm	700 mm / 850 mm / 1,000 mm / 1,150 mm / 1,450 mm	700 mm / 850 mm / 1,000 mm / 1,450 mm
≤ 0.6 m ²	≤ 0.6 m ²	≤ 0.8 m ²
Depending on configuration	Depending on configuration	Depending on configuration
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
1 / 6 / 8 / 12 / 16 compartments	1 / 6 / 8 / 12 / 16 compartments	Only available without individual compartments
1 / 4 / 8 / 12 / 16 compartments	1 / 4 / 8 / 12 / 16 compartments	Only available without individual compartments
1 / 4 / 8 / 16 compartments	1 / 4 / 8 / 16 compartments	Only available without individual compartments
Only available without individual compartments	Only available without individual compartments	Only available without individual compartments
Only available without individual compartments	Only available without individual compartments	Only available without individual compartments
Only available without individual compartments	Only available without individual compartments	Only available without individual compartments
-	-	-
10 seconds	10 seconds	10 seconds
230 volts / 50 Hz incl. UPS module	230 V / 50 Hz	230 V / 50 Hz
Touch screen, barcode scanner	-	-
LAN socket	via Master	via Master
+ 10°C to + 40°C	+ 10°C to + 40°C	+ 10°C to + 40°C
5 – 95% (non-condensing)	5 – 95% (non-condensing)	5 – 95% (non-condensing)
Hardware fully maintenance-free	Hardware fully maintenance-free	Hardware fully maintenance-free
Yes	Yes	Yes

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GREAT SUCCESS: ARNO TOOL MANAGEMENT IN ACTION.

Easy to operate: the correct tool is easy to find due to the clear operating layout of the ARNO StoreManager.

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“Our StoreManager makes work so much easier.”

Phileas Hauk, head of tool purchasing at Zahn GmbH

STABLE PROCESSES ALL ALONG THE LINE – FROM A FOR ARNO TO Z FOR ZAHN.

Zahn GmbH relies on ARNO Werkzeuge for the reliable production of high-precision parts, ranging from tool systems and the development of customised tools through to the optimisation of its enterprise resource planning system (ERP).

At its head offices in Aglasterhausen near Heidelberg, the company takes a closer look at each situation. Over the years, Zahn GmbH has gradually specialised in the production of complex high-precision turned and milled parts for major customers in the automotive and aerospace industries. Whether it is a prototype or a series production part, they constantly work to tight tolerances of 4 μ as well as short-term delivery dates. “We are well positioned to cover a wide range of materials and applications and we can react flexibly to customer requirements,” explains Managing Director Lars Pramme. It is mandatory to guarantee high precision to ensure reliable processes across the entire range of applications and materials. This can only be achieved by using reliable tool systems, possessing experience in custom developments, and having a well-conceived ERP system that ensures rapid and smooth work flows. Zahn GmbH found just the right partner to ensure all this - ARNO Werkzeuge (ARNO).

A system for stable processes

Over the past two years, Zahn GmbH has switched all of its turning, milling, grooving and drilling processes to ARNO Werkzeuge. For Pramme, the main reason for deciding to work with only one tool manufacturer in these fields was to increase

process reliability. “Of course, this also made procurement processes much more efficient. But the most important for me was to increase reliability in production. For example, we were continuously confronted with fluctuating tool batches from some manufacturers. And we only noticed this by the amount of wear we experienced with tools in production. With ARNO, quality is at a constant high level and the tools are stable in operation.” Pramme also appreciates the technical expertise and the short communication paths at ARNO. “They have people there who can assess the cause when chatter marks occur on a workpiece. In this type of case, I need immediate support. And I get it from ARNO.”

Full control and increased productivity with efficient tool management

To ensure that production processes keep running efficiently, tools must fit to the nearest μ and they must also be exactly at the place they are needed. However, small and medium-size companies often fail to have sufficient overview of tool circulation or stock levels mushroom out of control. In the worst-case scenario, this results in machine downtimes due to missing components. Despite regular inventories, bottlenecks in the tool store still occur at Zahn GmbH. “Traceability was not





Controlled individual removal for full access control and optimised planning of tool requirements.

100% guaranteed,” explains Phileas Hauk, who is responsible for tool purchasing at Zahn GmbH, “and I often had to request express deliveries from ARNO. That took a lot of time and was very stressful.” In the end, the decision was made in 2015 to totally revamp tool storage.

Compatible with third-party systems and management at various locations

Zahn GmbH has strict specifications in its search for the right tool management system. It had to allow the integration of third-party systems and assume the management of the system at Ossfeld, a partner company located 40 kilometres away in Ubstadt-Weiher. The specification also required variable tool compartment occupation and 100% access control. After a detailed market analysis, these demands were only met by one system: the ARNO StoreManager, an automated tool management system with software.

“Alone its compatibility with third-party systems makes it unique on the market,” says Hauk. “We now have two StoreManagers in operation, one in Ubstadt-Weiher and one here in Aglasterhausen. Our system assumes the control function. Not only is the management system in Ubstadt-Weiher linked to ours, the system also integrates our pater-



A practical feature: employees simply log in to the system using transponders which are also used at Zahn GmbH.



The intuitive software makes long training superfluous.

noster storage system and the ERP system here in Aglasterhausen. Everything runs like a dream.”

Guaranteed tool availability

At Zahn GmbH there is a safety stock level for ARNO products which are constantly needed. This has many benefits, as Haul explains: “We have everything available immediately and as soon as a minimum quantity is undershot, purchase orders are generated automatically. This reduces the workload enormously.” Pramme adds: “This gives us more time to deal with technical issues when we meet our ARNO contacts Mr Wollensack and Mr Seiter. In addition, we don’t need to bother with annoying manual orders. And instead of many small invoices, there is only one bulk invoice a month. A very practical solution indeed.”

Defined single withdrawal for 100% traceability

Other benefits of the ARNO StoreManager include the space-saving carousel system with variable compartment configuration and rapid data transmission by means of a barcode scanner. Employees simply access the system by transponders which are also used at the company. With the clear menu structure which is user-modifiable, employees select the required tool on a touch screen monitor and then withdraw it from

the compartment. “It’s quick and we have full access control. We now know when a tool was withdrawn, by whom, for which job order and for which machine. We have been able to optimise tool requirements for upcoming job orders,” says Haul with satisfaction.

All in all, the partnership between Zahn GmbH and ARNO Werkzeuge is a success story which will certainly be continued. “They understand where the real problems lie in the day-to-day production environment and give support at many levels. Now I have stable processes, full transparency in tool management and so much more peace of mind in the company,” says Managing Director Pramme in conclusion. “It’s an enormous relief to have found a reliable tool manufacturer who provides me with both high-quality products and comprehensive know-how. Open honest consultancy intensifies the feeling of trust within the cooperation and creates an excellent basis for future projects.”



Successful team – from left to right: Phileas Hauk, Tool Purchasing at Zahn GmbH, Dieter Wollensack, ARNO Sales Manager South and Lars Pramme, Managing Director of Zahn GmbH.

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