

Tool Management

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

OUTSTANDING

NEW: THE STOREMANAGER^{LOCKER} SYSTEM!

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.

> Get a StoreManager demonstration at our showroom in Ostfildern.

Please call +49 (0) 711/34 802-0 and make an appointment right away.

TOOL MANAGEMENT WITH ARNO.

04 The ARNO added value

- 10 Tool management system highlights
- 18 ARNO Tool Management Systems | Overview
- 20 ARNO StoreManager^{DUO}
- 24 ARNO StoreManager^{PRO}
- 28 ARNO StoreManager^{START}
- 32 ARNO StoreManager^{Locker}
- 32 Success story
- 38 ARNO Services

EVERYTHING SIMPLY HAS ITS PLACE.

2,160 compartments on 1.3 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

The StoreManager offers an excellent price per location.



Smooth integration into your production

A StoreManager is easy to integrate into your existing process structures since it has 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 withdrawal

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

24/7 availability

Practical, especially in multi-shift environments: 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 tool management system by importing existing tool data into the StoreManager.

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 equipment, he has guaranteed individual withdrawal and absolute cost transparency – and he can also rely on our typical ARNO service. For example, we make sure that the StoreManager 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 withdrawal - 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. The customer knows at all times when, by whom, what item and why an item was withdrawn. 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 a StoreManager. If the initial investment is too high, we offer the StoreManager^{DUO} 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 companies but it can 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.

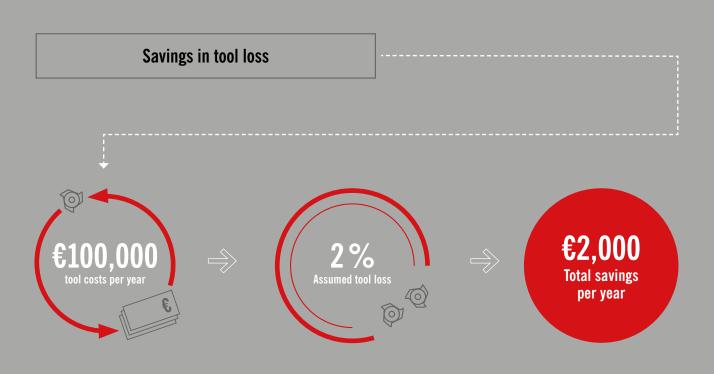
THERE IS SO MUCH Savings Potential Here.

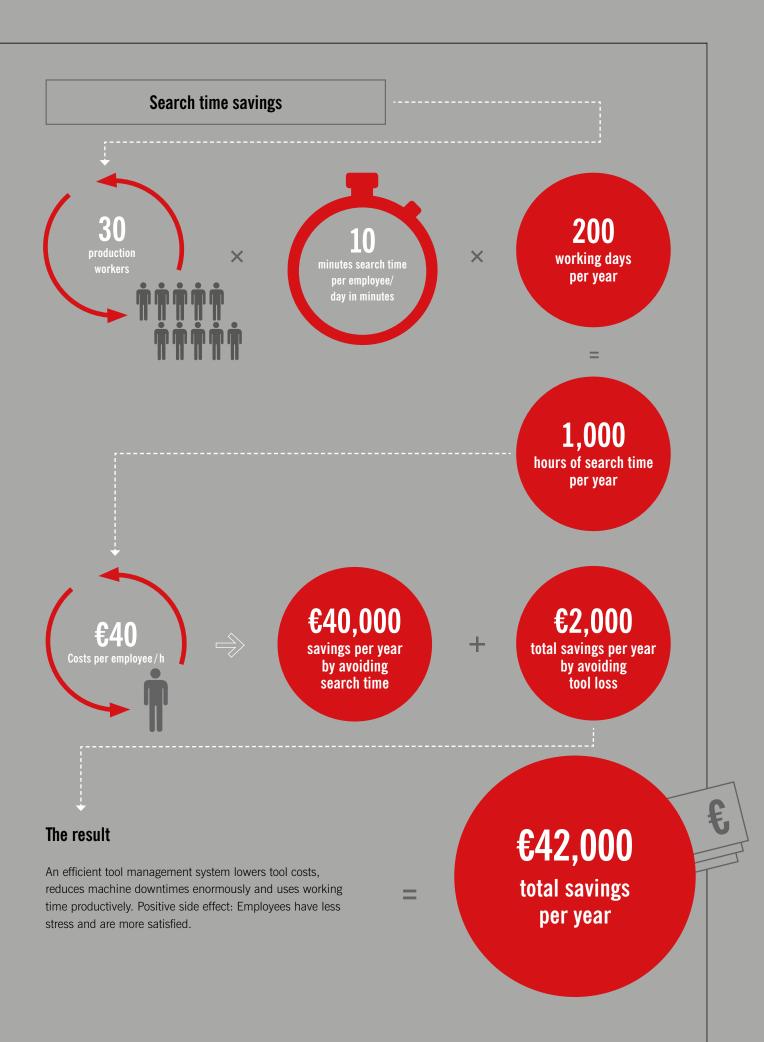
The challenge

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 times are eliminated, there is no more tool loss and the customer can even save time-consuming inventory-taking.





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 forgotten: these types of cabinets have to endure quite a lot! The StoreManager is extremely rugged and therefore perfect for everyday work in an industrial enviroment. It fits into any production environment and is 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: It is easy to operate. There's no need for training lasting multiple days. You can start immediately. This is what our customers appreciate the most. The ARNO StoreManager ensures smooth work flows with 24/7 availability. In addition, it helps to lower tool costs by providing full access control and 100 % cost transparency. The rugged construction, simple operation and adaptability to new challenges raise efficiency in any production environment.

Hardware

STURDY AND COMPACT

INTUITIVE OPERATION, FULL COST TRANSPARENCY The ARNO StoreManager system is extremely rugged, especially as a carousel. With a footprint of 1.3 m² a StoreManager^{PRO} fits in any production shop.

Software

Easy operation ensures smooth work flows. Guaranteed single withdrawal ensures 100 % access control and cost transparency.

Compatible system

The ARNO StoreManager adapts to different workshop environments due to many different compartments sizes, a flexible use of each compartment and interfaces to all common production systems.



ADAPTABLE

ARNO TOOL MANAGEMENT SYSTEM HIGHLIGHTS - OVERVIEW

PLENTY OF STOR/GE SPACE FOR EVERY WORKSHOP.

ARNO DIGITAL // More details on the StoreManager at toolmanagement.arno.de



Fast assured single withdrawal in about 10 seconds

- $\cdot\,$ Item selection via free text search, menu structure or barcode scanner
- $\cdot\,$ Access only possible to selected storage location for full stock control
- $\cdot\,$ 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
- · Quicker returns or storage of new items

4 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.



Plenty of stowage space with the carousel system

- $\cdot\,$ Space-saving: up to 2,160 items on a 1.3 m^2 footprint
- $\cdot\,$ 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 withdrawal for 100% stock control

(+)

STRONG ADVANTAGES

of the ARNO StoreManager design

Always the right one -4 StoreManager variants to cater for every requirement and every item size

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

Variable through different compartment sizes and individually configurable compartments

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





Space for large items in the drawer or locker system

- $\cdot\,$ The ideal supplement to the carousel system for large items
- · Flexible: Customers can individually configure compartment sizes
- Reliable: Individual compartments can be electronically interlocked to ensure full access control

ARNO TOOL MANAGEMENT SYSTEM HIGHLIGHTS - SOFTWARE

EFFICIENCY MADE EASY.

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



Intuitive operation

- $\cdot\,$ Convenient touch screen with large buttons
- $\cdot \,$ Customisable menu structure
- \cdot Reliable operator navigation with self-explanatory menu
- · No long training needed



Optimised processes

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

You have full access control by using RFID chips for system login. A software module lets you make settings from the convenience of your workplace PC.

+

SMART ADVANTAGES

of the ARNO StoreManager software

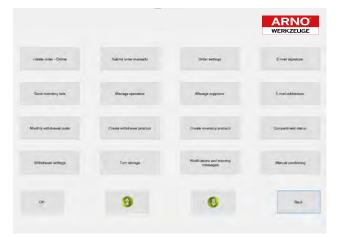
Transparency from guaranteed single withdrawal and logging of all accesses

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

			al protocol by machine no. 21-06-24 to <mark>2021-06-24</mark>		v	VERKZ	ZEUGE
Pho	Mno	Joh	Article description	Date	Time	pea	Price
0000003	111	12345	CCGT 060202FN-ALU AK20	2021-06-24	08:47:28	10	866.5
0000001	ui	12345	CNGA 120408TN-MC AH7516	2021-06-24	14:50:06	10	€404,0
0000248	111	12345	CNMG 120408EN-NMR AM5120	2021-06-24	13:32:17	20	€112.2
0011111	m	12345	CNMG 120408EN-NMR AM5120	2021-06-24	09:11:59	10	€56,1
				Total withdra	walt	1	€187.20
0012569	112	11111	Torque wrench Set 0.6-1.5 Nm	2021-06-24	10:45:04	1	€0,0
0011111	112	IIIII	Torque wrench Set 0.6-1.5 Nm	2021-06-24	12:29:11	1	€76.1
0000248	112	11111	SA35-3003N-M1 AP5020	2021-06-24	12:54:23	3	€45,0
0011111	112	11111	1/4" Bit I 5mm	2021-06-24	10:37:59	J	€0,0
				Total withdra	Wall I	1000	€298.0



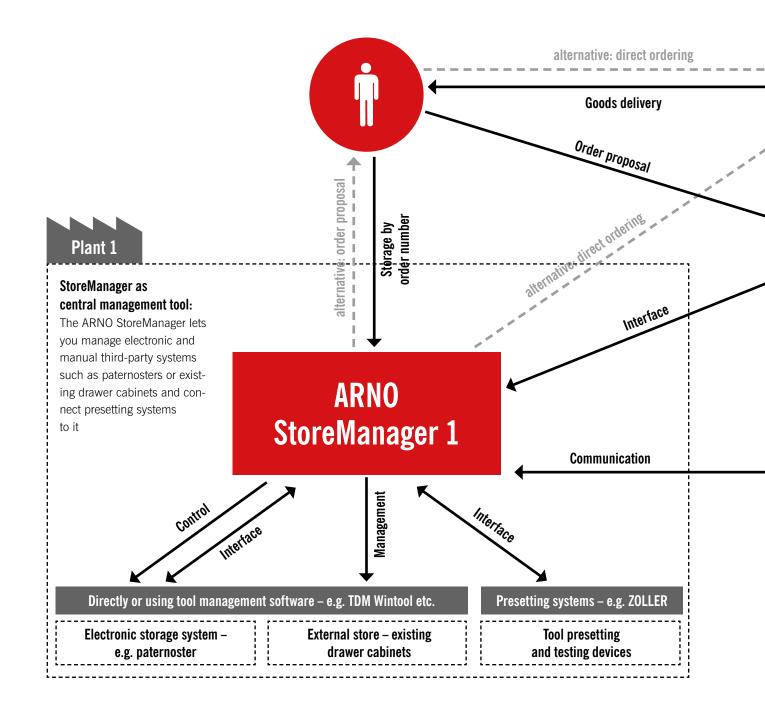
Efficient controlling

- $\cdot\,$ Withdrawal reports generated and sent (in PDF or XLS format)
- $\cdot\,$ Analysis per cost centre, personnel number, order number or machine
- $\cdot\,$ Optimised tool usage used and/or reground tools output before new tools

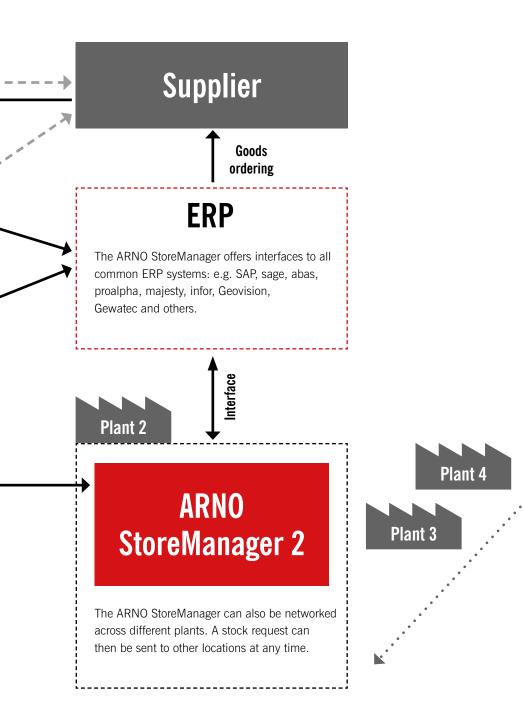
Customised settings

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

WELL CONNECTED In All Directions.



The ARNO StoreManager is so flexible: it can be integrated in any type of company structure – with interfaces to all common ERP and tool management systems. The ARNO StoreManager also adapts flexibly to new challenges and is expandable at any time, even across several locations.



THE ARNO STOREMANAGER – Everything Has its place.

ARNO



ARNO TOOL MANAGEMENT SYSTEMS - STOREMANAGERDUO

DUO – 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.







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 a 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: 612x612 mm Drawer 2x height 200 mm Inner dimensions usable: 612x612 mm



15 levels each with 24 compartments



2 compartments with guaranteed single withdrawal



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 rent 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 rent. This also applies to all software updates

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

Master module

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





Dimensions	StoreManager ^{₀uo} Master	StoreManager ^{₀u₀} 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 \times h \times d)	Front 87 Rear 68	mm mm	imes50 mm	imes 195 mm	Front Rear	87 mm 68 mm	imes50 mm	imes195 mm
Small compartment (w \times h \times d)		mm mm	imes50 mm	imes 195 mm	Front Rear	87 mm 6 mm	imes 50 mm	imes 195 mm

Drawers

Number of drawers 100 mm height	2	2	
Number of drawers 200 mm height	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	via Master module
Permissible temperature in operation	$+10^{\circ}$ C to $+40^{\circ}$ C	$+10^{\circ}$ C to $+40^{\circ}$ C
Permissible humidity	5 – 95% (non-condensing)	5 – 95% (non-condensing)
Maintenance	Hardware fully maintenance-free	Hardware fully maintenance-free
Dust-protected	Yes	Yes

PRO – It simply offers you more!

Up to 2,160 compartments on a footprint of 1.3 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 withdrawal 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 1.3 m²



StoreManager^{PRO} Facts and Figures

2 variants with a footprint of d 1.09 \times w 1.20 \times h 2.03 m = 1.3 m²

- StoreManager^{PR0} 2160 Master with up to 2,160 compartments for individual item withdrawal
- StoreManager^{PRO} 1080 Master with up to 1,080 compartments for individual item withdrawal

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



 Front
 38 mm
 50 mm
 205 mm

 Rear
 18/28 mm
 50 mm
 205 mm



 Front
 122 mm
 50 mm
 205 mm

 Rear
 74 mm
 50 mm
 205 mm



 Front
 38 mm
 100 mm
 205 mm

 Rear
 18/28 mm
 100 mm
 205 mm



 Front
 122 mm
 100 mm
 205 mm

 Rear
 74 mm
 100 mm
 205 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^{PR0} 2160 Plus

- Footprint 1,200 mm \times 1,085 mm (= 1.3 m²)
- · Same layout as StoreManagerPRO 2160 Master
- · (but without PC, monitor and scanner)



StoreManager^{PRO} 1080 Plus

- Footprint 1.200 mm \times 1.085 mm (= 1.3 m²)
- · Same design as StoreManager^{PRO} 1080 Master
- · (but without PC, monitor and scanner)

Dimensions Width Depth Height Footprint Weight empty Compartment sizes, $w \times h \times d$ Number of compartments (max.) $1 \times compartment$ $2 \times compartment$ $3 \times compartment$ 6 × 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
1.085 mm	1.085 mm	1.085 mm	1.085 mm
2.030 mm	2.030 mm	2.030 mm	2.030 mm
1,3 m ²	1,3 m ²	1,3 m ²	1,3 m ²
approx. 500 kg	approx. 500 kg	approx. 480 kg	approx. 480 kg

2.160			1.080			2.160			1.080		
Front 38 mm Rear 18/28 mm	imes50 mm	imes205 mm	Front 38 mm Rear 18/28 mm	imes 50 mm	imes205 mm	Front 38 mm Rear 18/28 mm	imes50 mm	imes205 mm	Front 38 mm Rear 18/28 mm	imes 50 mm	imes205 mm
Front 38 mm Rear 18/28 mm	imes100 mm	imes205 mm	Front 38 mm Rear 18/28 mm	imes 100 mm	imes205 mm	Front 38 mm Rear 18/28 mm	imes100 mm	imes205 mm	Front 38 mm Rear 18/28 mm	imes100 mm	imes205 mm
Front 122 mm Rear 74 mm	imes50 mm	imes205 mm	Front 122 mm Rear 74 mm	imes 50 mm	imes205 mm	Front 122 mm Rear 74 mm	imes50 mm	imes205 mm	Front 122 mm Rear 74 mm	imes 50 mm	imes205 mm
Front 122 mm Rear 74 mm	imes100 mm	imes205 mm	Front 122 mm Rear 74 mm	imes 100 mm	imes205 mm	Front 122 mm Rear 74 mm	imes100 mm	imes205 mm	Front 122 mm Rear 74 mm	imes100 mm	imes205 mm

2.160			1.080			2.160			1.080		
Front 38 mm	imes50 mm	imes205 mm	Front 38 mm	imes 50 mm	imes 205 mm	Front 38 mm	imes50 mm	$\times 205 \text{ mm}$	Front 38 mm	imes 50 mm	imes 205 mm
Rear 18/28 mm			Rear 18/28 mm			Rear 18/28 mm			Rear 18/28 mm		
Front 38 mm	imes100 mm	× 205 mm	Front 38 mm	imes100 mm	imes205 mm	Front 38 mm	imes100 mm	imes205 mm	Front 38 mm	imes 100 mm	imes 205 mm
Rear 18/28 mm	× 100 mm	× 200 mm	Rear 18/28 mm	× 100 mm	× 200 mm	Rear 18/28 mm	× 100 mm	×200 mm	Rear 18/28 mm	× 100 mm	X 200 mm
Front 122 mm	imes50 mm	imes205 mm	Front 122 mm	imes 50 mm	imes 205 mm	Front 122 mm	imes50 mm	imes205 mm	Front 122 mm	imes 50 mm	imes 205 mm
Rear 74 mm	× 50 mm × 205 mm	Rear 74 mm	~ 30 11111	~ 203 11111	Rear 74 mm	× 50 mm	~ 203 11111	Rear 74 mm	× 30 mm	~ 203 11111	
Front 122 mm	√100 mm	× 205 mm	Front 122 mm	imes100 mm	√ 205 mm	Front 122 mm	× 100 mm	imes205 mm	Front 122 mm	imes 100 mm	imes 205 mm
Rear 74 mm	$\times 100 \text{ mm} \times 205 \text{ mm}$	Rear 74 mm	~ 100 11111	~ 203 11111	Rear 74 mm	~ 100 11111	~ 203 11111	Rear 74 mm		~ 203 11111	
-			-								
-			-								
 			-								
-			-								
-			-								
_			-								
 -			-								

2 rpm	2 rpm	2 rpm	2 rpm
15 seconds	15 seconds	15 seconds	15 seconds
230 volts/50 Hz	230 volts/50 Hz	230 volts/50 Hz	230 volts / 50 Hz
Touch screen, barcode scanner	Touch screen, barcode scanner	-	-
LAN socket / GSM module	LAN socket / GSM module	via Master module	via Master module
$+10^{\circ}$ C to $+40^{\circ}$ 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

START – Small Cabinet For Large Items.

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

StoreManager^{START} is the drawer 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 $717 \times 725 \times 1,600$ 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 (usable area).

Drawer height	75 mm	100 mm	150 mm
4 individual compartments	-	$594 \times 111 \times 61 \text{ mm}$	$296\!\times\!260\!\times\!111$ mm \mid $594\!\times\!111\!\times\!111$ mm
6 individual compartments	$594 \times 62 \times 36$ mm	_	-
8 individual compartments	$296 \times 111 \times 36 \text{ mm}$	$296 \times 111 \times 61 \text{ mm}$	$296 \times 111 \times 111 \text{ mm}$
12 individual compartments	$98 \times 260 \times 36$ mm	$98 \times 260 \times 61 \text{ mm}$	-
16 individual compartments	$147 \times 111 \times 36 \text{ mm}$	$147 \times 111 \times 61 \text{ mm}$	$147\!\times\!111\!\times\!111~\text{mm}$





(+)

MAJOR ADVANTAGES

of the ARNO StoreManager^{START}

Perfect for large or long items, for example, pre-assembled tools

Flexibly selectable drawer configurations

Expandable with additional cabinets at any time

StoreManager^{START} 717 Master Configuration examples

Footprint

717 mm w \times 725 mm d \times 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

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 Master system.



StoreManager^{START} 717 Plus

- Footprint 717 x 725 mm ($\le 0.6 \text{ m}^2$)
- · 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: 800 mm, 950 mm, 1,100 mm, 1,250 mm, 1,550 mm





StoreManager^{START} 1023 Plus

- · Footprint 1,023 x 725 mm (≤ 0.8 m²)
- · 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: 800 mm, 950 mm, 1,100 mm, 1,550 mm



Dimensions	
Width	
De pth	
Height	
Footprint	
Weight empty	
Drawer/compa w×d×drawer	rtment dimensions height
No compartments	
4 compartments	
6 compartments	
8 compartments	
12 compartments	
16 compartments	
Drawer height	
75 mm	
100 mm	
150 mm	
200 mm	
250 mm	
300 mm	
General	
Max. load per draw	er
Max. access time	
Power supply	
Operation	
Network connection	1
Permissible temper	ature in operation
Permissible humidit	ty
Maintenance	

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	800 mm / 950 mm / 1,100 mm / 1,250 mm / 1,550 mm	800 mm / 950 mm / 1,100 mm / 1,550 mm
\leq 0.6 m ²	$\leq 0.6 m^2$	\leq 0.8 m ²
Depending on configuration	Depending on configuration	Depending on configuration
612×612 mm	612×612 mm	918×612 mm
$594\!\times\!111$ mm / $296\!\times\!260$ mm	594 $ imes$ 111 mm / 296 $ imes$ 260 mm	-
594×62 mm	594×62 mm	-
296×111 mm	296×111 mm	-
98×260 mm	98×260 mm	-
147×111 mm	$147 \times 111 \text{ mm}$	-
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
	717 Master 717 mm 725 mm 1,600 mm $\leq 0.6 \text{ m}^2$ Depending on configuration 612 × 612 mm 594 × 111 mm / 296 × 260 mm 594 × 62 mm 296 × 111 mm 98 × 260 mm 147 × 111 mm 1/6 / 8 / 12 / 16 compartments 1 / 4 / 8 / 12 / 16 compartments 1 / 4 / 8 / 16 compartments 0nly available without individual compartments	717 Master 717 Plus 717 mm 717 mm 725 mm 725 mm 725 mm 725 mm 1,600 mm 800 mm / 950 mm / 1,100 mm / 1,250 mm 4 0.6 m² < 0.6 m²

200 kg	200 kg	200 kg
2 seconds	2 seconds	2 seconds
230 volts / 50 Hz	230 V / 50 Hz	230 V / 50 Hz
Touch screen, barcode scanner	-	-
LAN socket	via Master module	via Master module
+10 °C to $+40$ °C	$+10^{\circ}\text{C}$ to $+40^{\circ}\text{C}$	+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

Only available without individual compartments Only available without individual compartments Only available without individual compartments

LOCKER – Plenty of space – Down to the last. Corner.

Store work materials and consumables safely in the StoreManager^{LOCKER} – the locker system from ARNO.

The ARNO StoreManager^{LOCKER} offers you an extremely variable stock withdrawal system. The various almost infinite combination of compartment sizes adapts perfectly to your individual requirements. It is ideal for storing bulky items such as power tools, personal protection equipment and valuable or unusual tools. A direct charging socket or network port can be integrated in every compartment.

With the ARNO StoreManager^{LOCKER}, you benefit from smooth tool management, tool tracing and tool replacement – and thus from more efficient internal production processes. The modular system has many software options and possible configurations to adapt the system to your requirements to ensure controlled individual withdrawal and a return option for each item.

The Master version (PC, touchscreen and barcode scanner) allows operation on the system itself. It can also be connected without any problem to an existing StoreManager master module as an expansion.





StoreManager^{LOCKER} key data

System in 2- and 4-row versions Available in widths of 800 and 1100 mm

Options:

- Charging socket in compartment
- Network port in compartment
- Compartment lighting
- Inspection window
- Colour selection from RAL

(+)

VARIABLE BENEFITS

of ARNO StoreManagerLOCKER

Customised layout consisting of 16 different door sizes Charging option in compartment Multiple compartments on compact footprint High compartment load

Optional additional service



Training of min. one working day on site



StoreManager^{LOCKER} start-up by technical staff



Import your database (based on prepared Excel spreadsheet)

Flexible payment terms are available. Please contact us.

CAN BE PARTITIONED AS REQUIRED.

StoreManager^{LOCKER} is available as Master and Plus modules in 2- and 4-row versions with widths of 800 mm and 1100 mm. Layout is user-definable with door widths of 180, 350 or 450 mm. Door heights available from 62.5 mm to 450 mm. The compartment has a usable depth of approx. 450 mm.

Sample configurations:

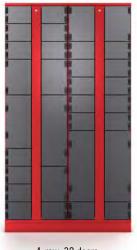


2-row, 8 doors





2-row, 14 doors



4-row, 32 doors



Customised layout to meet your requirements.



4-row, 96 doors

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





Dimensions	StoreManager ^{LOCKER} Master	StoreManager ^{LOCKER} Plus
Width	800 mm / 1100 mm	800 mm / 1100 mm
Height	2000 mm	2000 mm
Depth	500 mm	500 mm
Footprint	0,4 m ² /0,55 m ²	0,4 m ² / 0,55 m ²
Weight empty	250 kg – 300 kg (depending on configuration)	250 kg – 300 kg (depending on configuration)
Number of storage compartments	8 – 96 (depending on configuration)	8 – 96 (depending on configuration)
Compartment sizes		
Width	180 mm / 350 mm / 450 mm	180 mm / 350 mm / 450 mm
Height	62,5 mm (only 180 mm wide / 140 mm / 217,5 mm / 295 mm / 372,5 mm / 450 mm	62,5 mm (only 180 mm wide / 140 mm / 217,5 mm / 295 mm / 372,5 mm / 450 mm
Depth	450 mm	450 mm
General		
Housing	steel, powder-coated	steel, powder-coated
Colour	red / anthracite – Special colour (RAL) at additional cost	red / anthracite – Special colour (RAL) at additional cost
Max. rotation speed	-	_
Max. access time	-	-
Power supply	230 Volt/50Hz	230 Volt/50Hz
Operation	Touch screen, barcode scanner	-
Network connection	LAN socket	-
Permissible temperature in operation	+ 10 °C bis + 40 °C	+ 10 °C bis + 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

SUCCESS STORY

ş



storetec



StoreManage

GREAT SUCCESS: AR TOOL MANAGEMENT IN ACTION.

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



"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 withdrawal 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 paternos-



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

SUCCESS STORY



The intuitive software makes long training superfluous.

ter 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 spacesaving 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 Hauk 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.

OUTSTANDING WHEN IT COMES TO SERVICE.

We do our utmost for you to achieve success: from comprehensive consulting by our machining experts and fast implementation of special solutions through to overnight delivery. As a family-owned company, we focus on successful longterm business relations with our customers. That's why we prefer to develop well-designed products than start short-term sales promotions. And if you use these products in your production, we make sure that there is a benefit for you: efficient, reliable and simple production processes.



PERSONAL

At ARNO you are assigned a personal contact who stands at your side to optimise production processes. An honest and fair consultation offers you genuine added value – either by regular visits to your offices or by telephone.



FAST

When time is an issue, you can rely on ARNO. When you place your order by 18.00 (on Friday by 16.00), you receive your tool the next working day. Of course, we can only guarantee this speed if we have the product in stock – but in all cases, we have a very short implementation for special solutions.



COMPETENT

You benefit from decades of experience, concentrated technical knowhow and our Swabian talent for inventiveness. We have the right solution even for complex machining operations. And if we don't, we'll find one. Since our R&D, Production and Sales departments are all under one roof, we can react fast and start extensive tests.

We are close to you all over the world

Our tools are in use all over the world – that's why we offer service and support across the globe. You can reach us easily through our subsidiaries and distributors.



Karl-Heinz Arnold GmbH

Karlsbader Str. 4 | D-73760 Ostfildern Tel +49 (0)711 34 802 0 Fax +49 (0)711 34 802 130 anfrage@arno.de | www.arno.de

ARNO Italia S.r.l.

Via J. F. Kennedy 19 | 20871 Vimercate (MB) Tel +39 039 68 52 101 | Fax +39 039 60 83 724 info@arno-italia.it | www.arno.de

ARNO (UK) Limited

Unit 9, 10 & 11, Sugnall Business Centre Sugnall, Eccleshall Staffordshire | ST21 6NF Tel +44 01785 850 072 | Fax +44 01785 850 076 sales@arno.de | www.arno.dek

ARNO Werkzeuge USA LLC

1101 W. Diggins St. | US-60033 Harvard, Illinois Tel +1 815 943 4426 | Fax +1 815 943 7156 info@arnousa.com | www.arno.de

ARNO Werkzeuge S.E.A. PTE. LTD.

25 International Business Park #04–70A German Center | SG-609916 Singapore Tel +65 65130779 | Fax +65 68970042 info@arno.com.sg | www.arno.de

ARNO RU Ltd.

Krassnaja UI. 38 | RU-600015 Vladimir Tel / Fax +7 4922 541125 | COT +7 4922 541135 info@arnoru.ru | www.arno.deu

AIF Cluses

310 Rue des Îles | 74300 Cluses Tél +33 (0)4 50 18 24 07 | Fax +33 (0)4 50 89 04 81 cluses@aif.fr | www.arno.de

AIF – Ateliers de l'Île de France

6 Rue des Entrepreneurs | CS30572 | 77272 Villeparisis Cedex Tél +33 (0)1 64 27 03 30 | Fax +33 (0)1 64 27 03 49 info@aif.fr | www.arno.de

AIF Sud

ZA des Massies 2 Impasse du Bosquet | 81800 Couffouleux Tél +33 (0)5 63 33 60 42 sud@aif.fr | www.arno.de



OUTSTANDING VERSATILE AND INNOVATIVE.

Turning or Swiss type turning, grooving, drilling or milling: whatever your requirements are, it's worth your while to take a look at ARNO. We have a solution for almost every metal-working application. We have the right mix of experience, pioneering spirit and quality to ensure that you get the best out of your production with the right tool systems, tool management solutions and clever innovations.

For more details on our innovative systems, go to www.arno.de