

META MULTIPAL®

Pallet racks and more...



A look round

The following pages will let you get to know our company & our META MULTIPAL® pallet racks.



Logical and systematic: an overview of the META product range





CONTENTS

- 4**
The META point of view
- 6**
Benefits of META MULTIPAL®
Pallet Racking System
- 8**
The System, the Accessories
- 10**
Planning Measurement Aids
- 12**
Load Data for Frames & Beams
- 13**
META Racking Inspection
- 14**
Practical Solutions
- 18**
META MULTIBLOC®
Mobile Racks
- 19**
META MULTILINE®
Order-picking & flow racks
META MULTIPAL® E/D
Drive-in/drive-through racks



1 Shelving

2 Pallet racks

3 Cantilever racks

4 Mobile racks

5 Steel platforms

Strong, cooperative and...

The META Standpoint.



We make the kind of products that bring 'lift' to our customers' businesses. We've been doing this for more than 40 years.

Because our operational processes and internal structures ensure the quality, cost-effectiveness and safety of all META products.

Every day, more than 250 highly motivated employees bring their experience, expertise and vision into our company, and their drive really gets things moving.

And it's the same in our services, we appreciate the individuality of our customers and we respond to each one individually. We are dedicated to what we do, and our work is customer-focussed.

It's only by working as partners that you can create synergy.

With clarity comes trust: excellence to us means expertise.

New product development and continuous improvement of already proven products are always the result of interactions with customers. Creativity can only be considered successful if there is positive feedback from practical situations. For META, the word "partnership" means a constantly replenished ideas pool.

Wings that make your business fly.



Comprehensive advisory service

- 1. Technical advice on location
- 2. Comprehensive distribution network
- 3. Project planning service
- 4. Assembly Service

Branches and agencies in Belgium, Bulgaria, Denmark, Finland, France, the U.K., Italy, Latvia, Luxembourg, the Netherlands, Norway, Austria, Poland, Romania, Russia, Sweden, Switzerland, Slovakia, the Czech Republic and Hungary



Factory at Arnsberg



Warehousing 'investment' advice

You don't just leave your money lying around - you make it work for you.

If security, return on investment and rapid availability have been thought through very carefully, then you can wait for success to arrive!

And every warehouse is storing enormous assets. As with money investments, the important thing with stored goods is rapid availability. What is needed is the movement and flow of materials in all operational areas. META systems have the right answer.

We will be there to advise you.



A problem unsolved means a lost opportunity.

We meet together, get to know each other

Come and have a look round META! You would be welcome to visit us in Arnsberg whenever you wish.

Cordially yours
Eckhard Radke
CEO



**Call on us
we appreciate it!**



Set your sights higher!

META MULTIPAL® Pallet Racks



Customised solutions, of course - but in a system with compatibility between the individual components. This is the basic concept on which all the META warehousing product lines are based.

For you, using META standard parts means:

- It doesn't matter which variant of META MULTIPAL® you choose - the essential elements, frames and beams are always the same. For you, this means a safer and more cost-effective standard unit with flexible add-on options, allowing you to build a fully customised warehousing facility.
- Each of the system components contains all our know-how and decades of practical experience with warehousing technology.
- Cost-effective, well-planned solutions with mature systems technology. Special adaptations can be made, if these make sense. And only if.
- META standard parts are stock items, which means shorter delivery times.





META is a member of the association for warehousing technology and installations, and the RAL-RG 614 quality association in the Hague.

META MULTIPAL® is accredited with the recognised RAL 614/2 quality mark for warehousing and operating installations.

META also carries the RAL quality mark for shelving and mobile racking systems, and for multi-tier systems.

Benefits of META MULTIPAL® pallet racking systems

- META MULTIPAL® pallet racks - quality MADE IN GERMANY
- Decades of experience in the development and production of pallet racking systems
- META, your contact partner - from technical advice, through project planning, up to and including assembly
- META pallet racks meet the requirements of modern flows of goods and materials. Adaptability to the particular goods volume and weight requirements of the charge carriers make it the optimal storage system.
- Perfect storage locations for all commonly used charge carriers such as Europallets and mesh box pallets. Other types of charge carriers can be accommodated through a combination of system accessories from our META range.
- META warehouse furnishings are rigorously tested and meet the relevant regulations and quality standards. Our pallet racks carry the RAL-RG 614/2 quality mark.

For convenience of transport, the frames are supplied in the unassembled state. On request, we can carry out the assembly for you at an extra charge.



The geometric design of the beam agraffe ensures an optimal fit with the perforations in the post. It thus produces a positive form-fit connection



The system, the accessories...



Light shelf bearer



Channel support



Shouldered heavy shelf bearer

Upright protector with rubber buffer to protect the bottom area of the posts from damage due to industrial trucks



Safety barrier for rack fronts

Spacer & corner upright protector



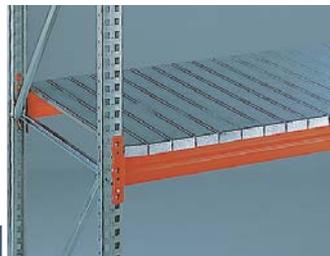


Grating shelf

Rack with mesh bay back



Chipboards with centring plate



Steel panel

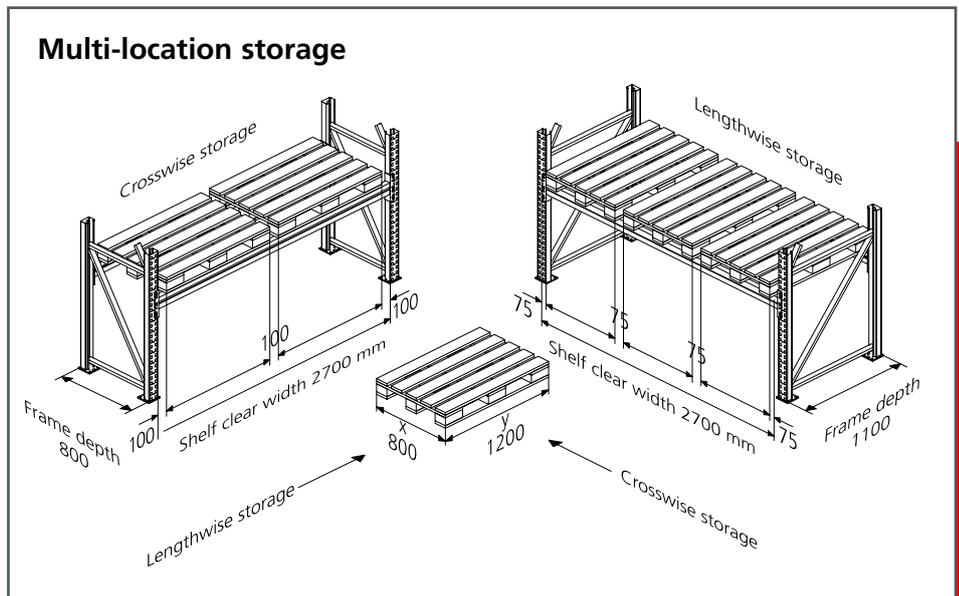


Pallet drawers allow pallets to be pulled out effortlessly from the rack or on the floor



Planning & Measurement Aids

Planning & Implementation Information



META MULTIPAL® is the perfect solution for rationalised, well-arranged and adaptable pallet storage. These sturdy pallet racks meet all practical requirements of the flows of goods and materials in the modern warehouse.

META MULTIPAL®

Standard height of frames:

Pre-galvanised version:

from 2,200 mm to 12,000 mm

plastic coated version:

from 2,200 mm to 6,000 mm

continuous frame over 6,000 mm
as extension frame

Standard beam length:

1,800, 2,200, 2,700, 3,300, 3,600 mm

other sizes on request

Standard rack depth:

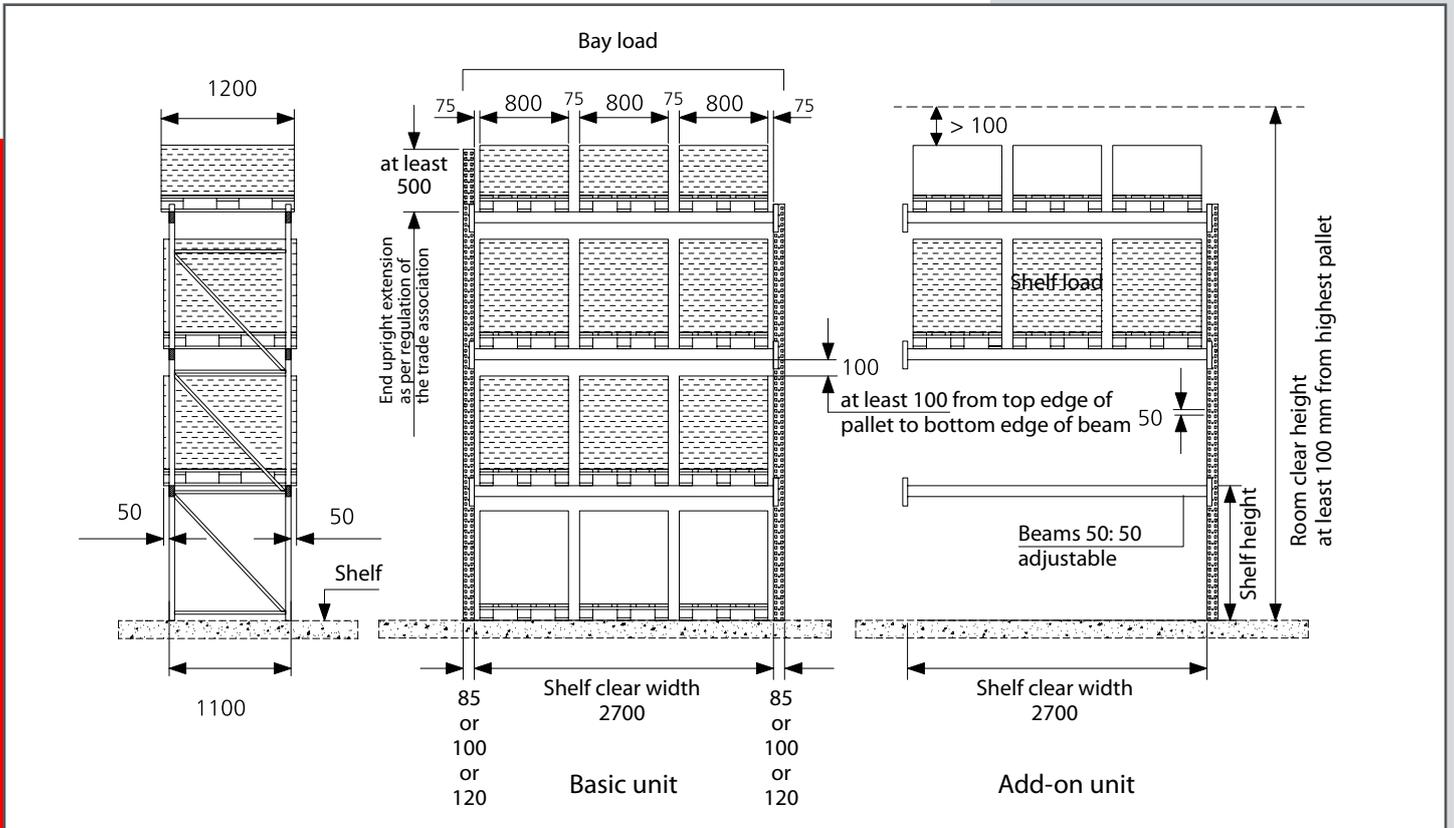
800, 1,100 mm

Surface:

- Pre-galvanised uprights, or optionally uprights in RAL 5010 gentian blue (plastic-coated) for an extra charge
- Galvanised cross-bracing
- Beams RAL 2001 red-orange (plastic-coated)

- Individual shelf loads up to 5.5 t
- Bay loads up to 20.0 t; higher shelf loads up to 25.0 t on request
- Beams attachable in 50 mm steps
- META MULTIPAL® products are RAL-RG 614/2 quality-assured
- META MULTIPAL® carries the GS mark
- Static verification is based on the DIN EN 15512 standard
- The loading data for frames and beams must take account of the number of bays, height of racks and beam arrangement (beam levels and shelf heights). If there are deviations from the pre-defined values, the loading data change and must be planned individually by META.





Selecting the frames & beams:

1. Determine the shelf load
2. Calculate the bay load as the sum of the shelf loads
3. Select the beams according to shelf loads
4. Select the uprights according to bay load and shelf height

Note on safety:

- Loading dimensions may exceed nominal dimensions!
- Lift height of operating truck: top edge of highest beam plus 200 mm
- The bay load data apply to units consisting of one basic bay unit and at least three add-on bays, with at least three beam pairs per bay.

Note on planning:

Basic shelving:

- Frames 85/17 and 85/20:
Nominal length + 170 mm
- Frames 100/20
Nominal length + 200 mm
- Frames 120/20 and 120/25:
Nominal length + 240 mm

Add-on rack:

- Frames 85/17 and 85/20:
Nominal length + 85 mm
- Frames 100/20
Nominal length + 100 mm
- Frames 120/20 and 120/25:
Nominal length + 120 mm



Load Data for Frames & Beams

Which beam and which upright can bear which load?



MULTIPAL® bay loads: The frame load data refer to racks with a maximum height of 8 metres (highest beam), up to 12 m on request.

The loads refer to racks with:

- at least 4 bays
- at least 3 beam levels
- evenly distributed loads
- shelf width less than 2800 mm

If shelf widths are greater than 2800, the beams should be at least HN 120-20. If the beam cross-sections are smaller for these shelf widths, then bay loads must be reduced. In this case, please contact us for advice. Bay loads depend on the upright/beam combination. If planning a project, please contact us for greater details.

Higher bay loads up to 25 t with upright type 120/25 available on request!

■ Frame performance data:

Frame type	Shelf height mm	Shelf width ≤ 2700 mm						Shelf width > 2700 ≤ 3600 mm		
		Beam sections						Beam sections		
		85/15	85/20	100/20	120/20	140/15	155/17	120/20	140/15	155/17
		kg	kg	kg	kg	kg	kg	kg	kg	kg
SR 85/17	1000	7300	7300	7310	7330	—	—	—	—	—
	1500	6740	6740	6780	6800	—	—	—	—	—
	2000	6310	6310	6410	6450	—	—	—	—	—
SR 85/20	1000	11410	11830	11900	12230	12190	12140	11000	11310	11310
	1500	7180	9800	9950	10390	10700	10670	9420	10120	10150
	2000	5280	7930	8440	9120	9300	9270	7200	8580	9120
SR 100/20	1000	13120	13600	13680	14060	14010	13850	12600	13000	13000
	1500	8870	12100	12280	12820	13210	13170	11630	12490	12500
	2000	6950	10430	11100	12000	12230	12200	10600	11580	12000
SR 120/20	1000	—	18500	19210	19580	20040	20030	18160	18420	18880
	1500	—	14600	17840	18490	19210	19320	15170	17680	18530
	2000	—	11350	14090	16600	17640	17870	11900	15270	17530

■ Beam performance data:

Beam type:						
	HN 85/15	HN 85/20	HN 100/20	HN 120/20	HS 140/15	HS 155/17
Beam length mm	HN 85/15 Shelf load in kg	HN 85/20 Shelf load in kg	HN 100/20 Shelf load in kg	HN 120/20 Shelf load in kg	HS 140/15 Shelf load in kg	HS 155/17 Shelf load in kg
1800	2200 – 2400	2650 – 2800	3300 – 3400	4000 – 4200	—	—
2200	1900 – 2050	2250 – 2400	—	3400 – 3600	—	—
2700	1500 – 1650	1700 – 1850	2400 – 2450	2900 – 3000	3700 – 4500	5250 – 5500
3300	—	—	—	2450 – 2600	3000 – 3800	4350 – 4750
3600	—	—	—	2100 – 2250	2750 – 3550	4000 – 4400

Shelf loads depend on the type of upright used.

META Racking Inspection

Customer service for safety at your warehouse

Warehouse operators are responsible for ensuring that their work equipment (including racks) is in safe condition, and for ensuring the safety of employees, i.e. that the workplace safety and operating safety regulations are applied (in Germany the BetrSichV).

§10 of the BetrSichV "Inspection of work equipment" specifies that racks are subject to the inspection requirement. For the safe operation of racking systems, the legislation requires, among other things, that regular inspections be carried out by a competent person at maximum intervals of 12 months.

With our META racking inspection service, you will not only meet the legal requirements – attested by an official test badge and inspection report – but will also be able to identify possible accident hazards in good time, thus effectively preventing personal injuries and damage to property!

The inspection is carried out by one of our qualified rack inspectors.

Services provided:

- Visual inspection to ensure that the BGR 234 safety guidelines are met
- Visual inspection of racking systems for any identifiable deformation, damage or missing components
- Comparison of load data plates with the actual layout
- Making out an inspection report and awarding the inspection badge
- Organising replacements for damaged components

You can find more information on the web page at www.regalinspektion.de. We would also be pleased to advise you in person or over the telephone.

And incidentally, our rack inspection service is, of course, also certified to DIN EN ISO 9001: 2008 Standard.



Practical solutions

META MULTIPAL® Pallet Racks at Work



META MULTIPAL® pallet racks used for national & international freight, ...



... for fast delivery services & logistics groups operating all over Europe

... in production-related trading

... in the warehouse of a motor manufacturer





META MULTIPAL® pallet racks used by a technical retailer for industrial and pharmaceutical technologies, ...



... in technical wholesale for building services

... in the warehouse of a lighting manufacturer



Practical solutions

META MULTIPAL® Pallet Racks at Work



META MULTIPAL® pallet racks used at an iron trade purchasing and marketing association operating across Europe, ...



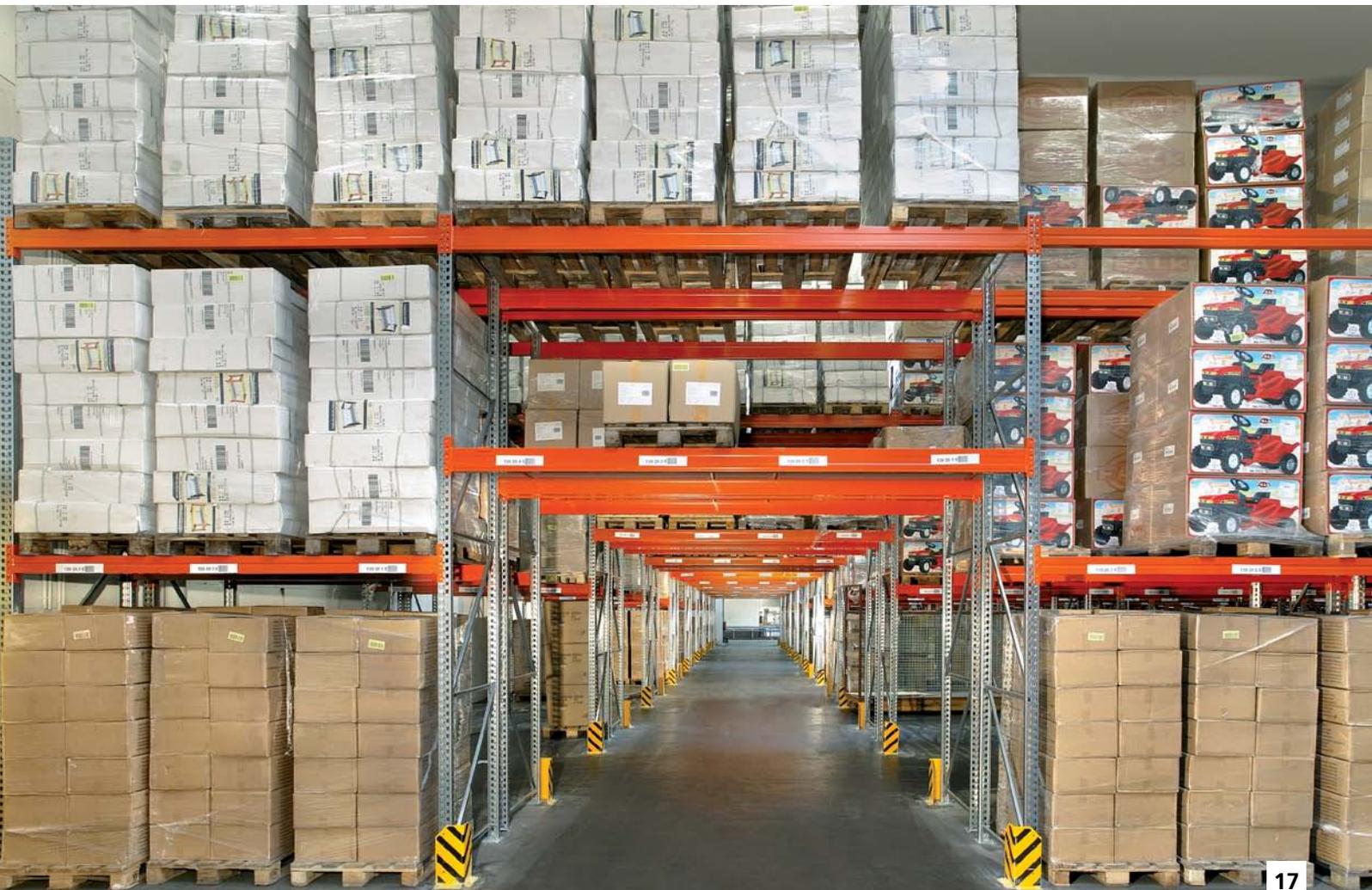
... for shipment



... by a manufacturer of control cabinet and air-conditioning systems, and server and network enclosures



*META MULTIPAL® combined with
META QUICK® shelving or
META MULTISTRONG® cantilever racks*



Mobile Racks with META Pallet Rack Structures



With META mobile racks, you can either halve the warehouse surface area needed for the same storage capacity, or more than double your storage capacity!

Comparison between stationary racking system & mobile racking system

- about 50% saving on space or gain in operational surface area
- about 110% increase in storage capacity
- smaller storage floor area
- larger storage capacity when accessing individual storing positions

META MULTIBLOC® mobile racks convert aisles and vehicle paths into usable storage surface. Under manual or automatic control, aisles can be opened up only where they are needed.

The question of whether to use **stationary racks or mobile racks** mostly occurs when the existing storage space has reached its limit capacity. It is not always possible to build an entirely new warehouse building. This is where META MULTIBLOC® mobile racking technology could be the perfect solution on which to base an improvement strategy.

It is also worth while to acquire a mobile racking system if you want to reclaim production space in your existing buildings or reduce energy and operating costs, for example in deep-freeze storage locations where it is important to make optimal use of every cubic-metre of refrigeration air.

A mobile racking store can be fully integrated with production processes - as a buffer store between production and shipment or for storing semi-finished products at the point of assembly.



META Order Picking and Flow Racks

META MULTILINE® flow racks have proven their worth anywhere that flexibility, efficiency and profitability are crucial. Space utilisation is increased by about 60% compared with conventional racking systems, with up to 30% space saving.

If roller tracks are added, gravity is used as a source of energy – thus making your material flows more dynamic.



The flow rack levels can be individually adapted to a very wide variety of container sizes



META MULTILINE® L order picking flow rack with the FIFO principle (First In First Out)

Benefits of META MULTILINE®

- large storage capacity
- increased turnover rate
- your own transport equipment is used
- greater accessibility
- shorter travel paths and working times
- improved work processes

META MULTIPAL® E/D

Drive-in/drive-through racks

METAMULTIPAL® E/D System drive-in/drive-through racks are the perfect solution for storing large quantities of goods of the same type. But also for palletised but pressure-sensitive goods which do not allow block storage.

The pallets are inserted one behind the other in shelf levels. Using a handling conveyor or stacker, palletised goods can be deposited on lateral Z rails one after the other, on several shelf levels placed one above the other in a racking channel.



And META offers you even more...

We don't know what it is you want to store,
but we're sure to have a solution that suits you!

Other catalogues and more information about
the following product ranges and categories are
available on request quickly and free of charge!

Please contact us!

Shelving / platforms

Pallet racks

Cantilever racks

Mobile racks

Lagertechnik order catalogue

Office shelving order catalogue

Rack inspection

Please contact us!

