



KATALOG CATALOG

4.0

MATERIAL FLOW



WITH BLOKSMA YOU HAVE A TRIPLE BENEFIT



Leading companies put their trust in Bloksma solutions:

AEG . Allweiler . Amr . Arburg . Atlas Copco . Audi . Bar . Bauknecht . Benzinger . Beru . Bitzer . BMW . Borg Warner . Bosch . Brose . Caterpillar . Continental . Danfoss . Eaton . ebmpapst . EMAG . FAG . Federal Mogul . Fein . Felsomat . Festo . Ford . Georg Fischer . Getrag . Grob . Güdel . Hatz . Heidelberg . Husky . INA . irmscher . Kodak . Kuka . Liebherr . LUK . Lütze . Magna . Magna Steyr . Mahle . MAN Roland . Mannesmann . Mercedes-Benz . Metabo . Micro Components . Opel . Porsche . Promot . Schaeffler . Stihl . Still . Traub . Valeo . VW . ZF ...

PERFECT LOGISTICS

As BLOKSMA products adhere to the current manufacturing standards in their basic construction, they can be used in all areas.





The material stays in motion from the preliminary supplier to your customer: BLOKSMA logistics ensures efficient production.



BLOKSMA offers tailor-made, sophisticated workpiece carrier systems for automated production. From small and light to large and heavy. Lifters bring the load up conveniently and make every workplace ergonomical.



Material needed for manufacture and assembly is supplied in a clearly structured manner according to the first in – first out principle in the





IN ALL AREAS



Durable, customised, with or without push handle – BLOKSMA trolleys for modern, forklift-free production are available in various designs, dimensions and loading capacities; either in standard sizes or specially manufactured to suit your needs.



Lifters bring loads to a comfortable working height, thereby creating an ergonomic workplace. This protects your employees' health and reduces handling costs.

Also available in tandem.

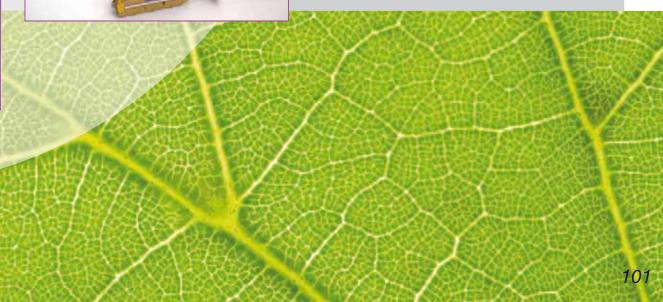
supermarkets and KAN-BAN-Systems – in the smallest possible space, always available and always in the required amounts.

PPLY



IN IN-HOUSE TRANSPORT

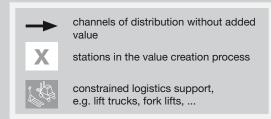
Logistics systems such as BLOKSMA taxi or portal wagons ensure that only as much material is provided in assembly and manufacture as is necessary, or as much as has already been used.



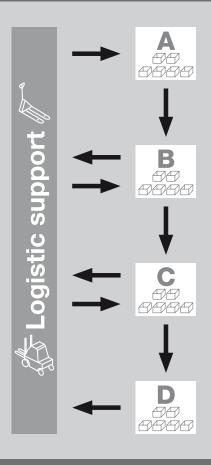
AN ECONOMIC PERSPECTIVE ON THE MATERIAL LOGISTICS

The optimisation of value-creating processing stations is only one aspect of lean production. In lean production, the material flow plays a decisive role. The transport time from the warehouse via the interim storage facility to the repacking workstations is unproductive and therefore expensive.

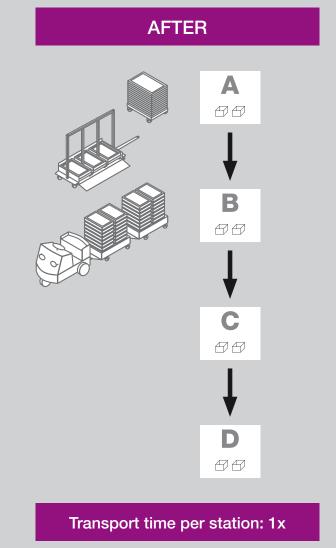
In contrast, an optimised material flow offers a big reduction in time and material stocks.



BEFORE



Transport time per station: 3x



Fictitious time saving sample calculation:

Transport time one-way

2 min.

Value creation stations

Time requirement before (3 ways)

 $2 \times 4 \times 3 = 24$ min.

Time requirement after (1 way)

 $2 \times 4 \times 1 = 8 \text{ min.}$

Savings per load

24 - 8 = 16 min.

For 4 loads per shift in a 3-shift operation, you can achieve annual savings of (240 working days): 16 min. x 4 x 3 x 240 = 46080 min. **= 768 hours**

102 www.bloksma.de



OPTIMISE YOUR "PRODUCTIVITY FACTOR" PFA



What is PFA?

The productivity factor establishes the relationship between the total duration of the product cycle with the duration of the actual value creation process. The smaller the factor, the more efficient the manufacturing process. The factor can be optimised by reducing the activities which do not generate added value, such as the material transport from one processing station to the next.

Time total delivery, manufacturing times, in-house transport, standing time, distribution

Time value-creation processing, assembly, machine operating times

LET'S USE A CONCRETE EXAMPLE OF A MANUFACTURER OF PROFESSIONAL POWER TOOLS

Targets

- increased efficiency
- ground-level storage without shelving and forklifts
- a two-third reduction of work-in-progress
- halving the lead time
- increased productivity per unit area
- improved ergonomics

Proposed solutions

"getting the production moving":

- modern layout with just-in-timeprinciple as flow production
- removal of high shelving with a roller conveyor
- forklift-free zones
- reduction of walk and search paths, as well as manual repacking and restacking
- uniform SLC container from the supplier to the customer

BEFORE

Lead time / working day 1587 min. Value creation estimated 200 min.

PFA =
$$\frac{1587 \text{ min.}}{200 \text{ min.}}$$
 = 7,94

Stock 4.950.000 €

AFTER

Lead time / working day 595 min. Value creation estimated 200 min.

$$PFA = \frac{595 \text{ min.}}{200 \text{ min.}} = 2,98$$

Stock 1.600.000 €



Savings

Time saving through trolley usage

per working day 992 min.

Interest gained through lead time reduction

from 8 to 3 working days per working day 1.315 €

Stock reduction per year 3.170.000 €

Capital expenditure total approx. ca. 90.000 €

A PRODUCTION IS ONLY AS GOOD AS ITS MATERIAL LOGISTICS

Material transport time is a weighty cost factor in the manufacturing process. With BLOKSMA know-how and BLOKSMA products, you can also optimise your material flow, thereby saving time and money. An investment with a worthy return.

BLOKSMA – SOLUTIONS FOR EFFECTIVE MATERIAL LOGISTICS



www.bloksma.de 103

Transport and handling made easy: BLOKSMA trolleys form the foundation for a "rolling" production. Nothing is left behind with these systems and everything can be easily and quickly brought to its destination as required.

Small, flexible units can be built with the aid of our trolleys – clear, space-saving and brought to its destination quickly thanks to short running times. You achieve a high level of flexibility and can therefore make optimum use of all further technical options that are essential in modern, forklift truck-free production.

Whether forwarding on to the next work stage or ergonomics at the workstation or even Kanban planning and the associated options to reduce stock values or lead times – you choose the correct means.

Trolleys have numerous names: trolley, dolly, carriage, transport roller... their function is the same, namely to roll the goods to be transported across the floor.



The BLOKSMA trolley is available in the most diverse of designs, dimensions and load-bearing capacities, either in standard measurements or specially adapted to your requirements:

- Durable steel, stainless steel or aluminium construction
- Wheels from well-known quality suppliers
- Perfectly adapted to the goods to be transported

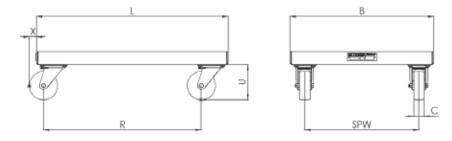
- Oil-tight for machining-based production
- With fixed or removable push handles
- With towing bar, suitable for train formation
- With additional elements for the requirements in automatic lines
- With additional structures to fulfil ergonomic requirements



TROLLEYS Product Overview

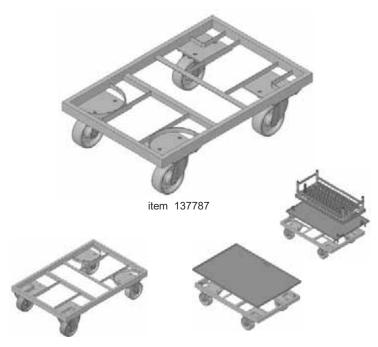
	Trolleys for KLT BOR up to 500 kg	107
	Trolleys for light loads BOK up to 250 kg	110
	Trolleys for light loads – oil-tight BOK up to 500 kg	111
	Trolleys – moulded version, oil-tight BOZ up to 300 kg	112
	Trolleys for heavy loads BOR 250 kg and more	113
	Trolleys – Special versions BOV	114
III III	Trolleys – Racks and accessories	115

Check List - Layout Trolley



Criteria	Dimensions / Notes
L = length of trolley	
B = width of trolley	
SPW = track width (centre)	
C = wheel width	
R = wheel distance - length	
X = excess length – swivel castor	
U = underpass height/clearance	
Wheel pairing	
Number of swivel castors / fixed castors	
Wheel quality - coating	PA- / PP or similar
Wheel diameter	
ESD version: (electric conductive)	yes / no
Brake	yes / no
Directional locking device	yes / no
Free from abrasion / wheel coating / colour	
Kind of bearings / castors ball bearing	
Product to be carried (description – dimensions – look -	
please send photo or drawing)	
Centering of product to be transported	
Pan oil-tight	yes / no
Material	alu / steel / steel pre-galvanized /
	stainless steel
Surface	colour powder coated / zinc coated
Adapted for automation	yes / no
Requested load capacity	
Push handle	yes / no
Train version / drawbar	yes / no
Other requirements	
Requested additional products	
Lifter	yes / no
Supermarket station	yes / no
Taxi cart / portal cart	yes / no
Required quantity	





item 137786

top tray 139282 serves as drip tray

Trolleys BOR

for KLT max. 500 kg

For indoor transport of a stack of boxes

Various wheel qualities (PP, rubber coated or ESD)

Adapted to transport pallets (see chapter LOGISTICS TRF)

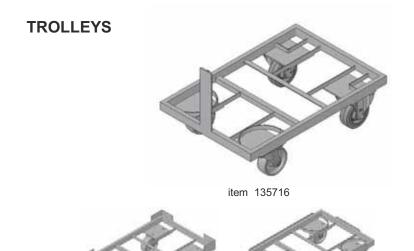
Standard sizes 400 x 400 / 600 x 400 as well as 800 x 600 mm

Item no.	Product to be carried	Size of trolley and load	Centering of product	Wheels	Wheel design
138151 138152	KLT 400 x 400 mm KLT 400 x 400 mm	400 x 400 mm 400 x 400 mm	All on inside edge of try	PA ESD Hard plastic	2 swivel and 2 fixed castors
		max. 250 kg		Ø 100 mm	

137786 138149 142700 142701	KLT 600 x 400 mm KLT 600 x 400 mm KLT 600 x 400 mm KLT 600 x 400 mm	600 x 400 mm 600 x 400 mm 600 x 400 mm 600 x 400 mm max. 250 kg	On inside edge of try	PA ESD-Hard plastic rubber 2x rubber / 2x PA all Ø 100 mm	2 swivel and 2 fixed castors
137787 138150 138484 139319	KLT 600 x 400 mm KLT 600 x 400 mm KLT 600 x 400 mm KLT 600 x 400 mm	600 x 400 mm 600 x 400 mm 600 x 400 mm 600 x 400 mm max. 250 kg	On inside edge of try	PA ESD-Hard plastic rubber 2x rubber / 2x PA all Ø 100 mm	4 swivel castors

Further types / dimensions on request.

Accessories / compatible parts for this trolleys please refer to page 115



item 142595 centering at the side

item 137785 centering via corner angle

Trolleys BOR

for KLT max. 500 kg

For indoor transport of a stack of boxes

Various wheel qualities (PP, rubber coated or ESD)

Adapted to transport pallets (see chapter LOGISTICS TRF)

Standard sizes $400 \times 400 / 600 \times 400$ as well as 800×600 mm

2 swivel and 2 fixed castors
2 fixed castors
4 swivel
castors
With drawbar
2 swivel and
2 fixed castors
Z IIAGU CASIOIS
With drawbar
2 swivel and
2 fixed castors
2 2 2 W

Further types/dimensions on request.

Accesories / compatible parts for this trolleys please refer to page 115

max. 250 kg

all Ø 100 mm





item 138158

Trolleys BOR

for KLT & GLT max. 500 kg

For indoor transport of a stack of boxes

Various wheel qualities (PP, rubber coated or ESD)

Adapted to transport pallets (see chapter LOGISTICS TRG)

Standard sizes 600 x 400/ 800 x 600 mm







item 136629 / 140796



item 139211

Item no.	Product to be carried	Size of trolley and load	Centering of product	Wheels	Wheel design
138158 138159	2 KLT 600 x 400 or 1 GLT 800 x 600	800 x 600 mm max.1.000 kg	on inside frame	PA ESD-Hard plastic	3 swivel and 2 fixed castors
142697					4 swivel castors

Accessories transport pallet and push holders

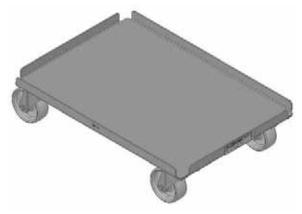
Item no.	Product to be carried	Size of trolley and load	Remark
136629	4 trolleys 600 x 400 or 2 trolleys 800 x 600 From side 107 & 108	max.1.000 kg	Trolleys will be locked on the pallet
140796	With 4 guiding steel rail		

	139211	Empty and very low trolleys (staple)		Push holders for trolleys
--	--------	--------------------------------------	--	---------------------------

Further types/dimensions on request

MATERIAL IN FLOW

TROLLEYS



item 129928

Trolleys BOK I

for light loads max. 250 kg

For indoor transport of a stack of boxes

Adapted to automation on request

Various wheel qualities (polyamide, polyurethan coated, ESD or similar

Designed for various boxes/containers (work piece carriers, boxes, wire baskets or similar)

Various material available (steel, stainless steel, aluminium)







item 134194

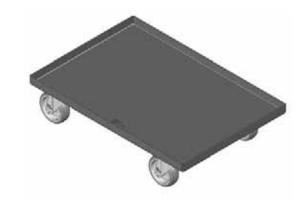


item 139205

Item no.	Product to be carried	Size of trolley and load	Centering of product	Wheels	Wheel design
129928	Box 600 x 400 mm	610 x 420 mm 250 kg	on inside edge of the tray	Ø 100 mm PA	4 swivel castors
134138	Box 600 x 400 mm	610 x 420 mm 250 kg	On iside edge with crane hook	Ø 125 mm rubber	4 swivel castors
134194	Box 600 x 400 mm	620 x 420 mm 250 kg	inside edge of the tray	Ø 100 mm PA	4 swivel castors
136997	Box 600 x 400 mm	620 x 420 mm 250 kg	on inside edge of the tray	Ø 100 mm ESD	4 swivel castors
139205	Box 600 x 400 mm	610 x 420 mm 250 kg	on inside edge one side can be opened	Ø 100 mm PA	4 swivel castors
130520	Box 800 x 600 mm	830 x 630 mm 250 kg	on inside edge of the tray	Ø 100 mm PA	4 swivel castors

Other wheel designs (4 swivel castors / 2 swivel and 2 fixed castors) as well as wheel qualities such as polyamide, polyurethane coated polymide, ESD, rubber or similar available.





item 134744

Trolleys BOK II

for light loads — oil-tight up to 500kg

For indoor transport of a stack of boxes

Adapted to automation on request

Various wheel qualities (polyamide, polyurethan coated, ESD or similar

Designed for various boxes/containers (work piece carriers, boxes, wire baskets or similar)

Various material available (steel, stainless steel, aluminium)



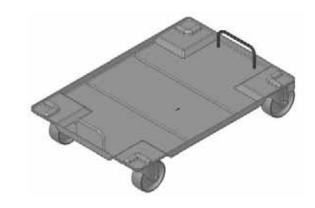
item 129967



item 134096

Item no.	Product to be carried	Size of trolley and load	Centering of product	Wheels	Wheel design
134744	Box 600 x 400 mm	620 x 420 mm 250 kg	on inside edge of the tray	Ø 100 mm PA	4 swivel castors
136999	Box 600 x 400 mm	620 x 420 mm 250 kg	on inside edge of the tray	Ø 100 mm ESD	4 swivel castors
129967	Box 600 x 400 mm	680 x 510 mm 400 kg	on inside edge of the tray	Ø 100 mm PA	4 swivel castors
134096	Box 800 x 600 mm	845 x 655 mm 500 kg	Centering angle	Ø 125 mm PA	4 swivel castors
137000	Box 800 x 600 mm	845 x 655 mm 500 kg	Centering angle	Ø 125 mm ESD	4 swivel castors

Other wheel designs (4 swivel castors / 2 swivel and 2 fixed castors) as well as wheel qualities such as polyamide, polyurethane coated polymide, ESD, rubber or similar available.



item 125373







item 129057



item 135327

Trolleys BOZ

moulded oil-tight version up to 300 kg

For indoor transport of a stack of boxes

size 630 x 430 mm

Adapted to automation on request

Various wheel qualities (polyamide, polyurethan coated, ESD or similar

Designed for various boxes/containers (work piece carriers, boxes, wire baskets or similar)

Various material available (steel, stainless steel, aluminium)







item 125952

Item-No.	Product to be carried	Size of trolley and load	Centering of product	Wheels	Wheel design
129057	box / KLT 600 x 400 mm	630 x 430 mm 450 kg	Centering angle	Ø 100 mm PA	4 swivel castors
129850	Wire WPC 600 x 400 mm	630 x 430 mm 450 kg	Handle	Ø 100 mm PA	2 swivel 2 fixed castors
125373	Wire WPC 600 x 400 mm	630 x 430 mm 450 kg	Handle	Ø 100 mm PA	4 swivel castors
135327	Draht-WST 600 x 400 mm	630 x 430 mm 300 kg	Handle with insertable push holder	Ø 100 mm PA	4 swivel castors
136511	Wire WPC 600 x 400 mm	630 x 430 mm 450 kg	Handle	Ø 100 mm PA	2 swivel 2 fixed castors
140120	Wire WPC 600 x 400 mm	630 x 430 mm 450 kg	Handle	Ø 100 mm PA	4 swivel castors
125952	Wire WPC 600 x 400 mm	630 x 430 mm 450 kg	Staple bars	Ø 100 mm PA	4 swivel castors

Other wheel designs (4 swivel castors / 2 swivel and 2 fixed castors) as well as wheel qualities such as polyamide, polyurethane coated polymide, ESD, rubber or similar available.





item 134574







item 136448

Trolleys BOR

for heavy loads from 250 kg

For indoor transport of a stack of boxes

Adapted to automation on request

Various wheel qualities (polyamide, polyurethan coated, ESD or similar

Designed for various boxes/containers (work piece carriers, boxes, wire baskets or similar)

Various material available (steel, stainless steel, aluminium







item 139921

Item no.	Product to be carried	Size of trolley and load	Centering of product	Wheels	Wheel design
134574	Box 800 x 600 mm	865 x 655 mm 400 kg	Centering angle	Ø 125 mm	4 swivel castors
142290	Box 800 x 600 mm	800 x 600 mm 500 kg	Incline deposit Centering angle	Ø 100 mm	4 swivel castors
135511	Box 1.200 x 800 mm	1.265 x 855 mm 700 kg	Centering angle	Ø 125 mm	4 swivel castors
135743	Box inclined schräg 1.200 x 800 mm	1.327 x 931 mm 700 kg	Incline deposit Centering angle	Ø 150 mm	4 swivel castors
138267	Box 1.200 x 1.000 mm	1.265 X 1.010 mm 500 kg	Centering angle	Ø 150 mm	4 swivel castors
136448	Box inclined 1.200 x 1.000 mm	1.335 x 1.150 mm 1.000 kg	Incline deposit Centering angle	Ø 150 mm	4 swivel castors

Other wheel designs (4 swivel castors / 2 swivel and 2 fixed castors) as well as wheel qualities such as polyamide, polyurethane coated polymide, ESD, rubber or similar available.

MATERIAL IN FLOW

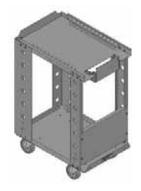
TROLLEYS



item 136686 high deposit



item 131904



item 137610 (high deposit & roll conveyor)



item 130755



item 142595

Trolleys BOV

Additional versions

Additional trolleys according to customers' requirements (also for automation) available.

.



item 135290 (in house)



item 134488





item 129851

Trolleys Accessories

Collecting rack

For space-saving storage of empty trolleys

Push handles

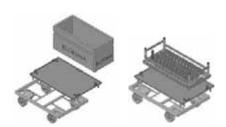
Appliances for ergonomic transport of empty trolleys or trolley stacks with low height

Empties racks



item 138648

Top tray



item 140036 / 139155 serves as drip tray

Push holder

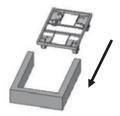


item 139211 / 139510

Centering stations







item 142454

Floor detergents



item 142455

TRANSPORT LOGISTICS

Perfect conditions for lean production: We offer safe logistics solutions for the storage and transport of carriers based upon standardised components.

Adapted to the product-specific requirements, we design storage cabinets and mobile supply solutions – all guaranteed to be process-optimised.

BLOKSMA has developed a varied product range to meet the requirements that are different in all companies that will also fulfil your demands. A continuous further development guarantees the necessary head start in order to always be able to satisfy new requirements.

BLOKSMA can also help you to organise an optimum material flow with reduced stock costs and significantly lower lead times.

Logistics systems such as milkruns ensure that only as much material as is necessary or has already been consumed is provided during assembly or production.

There are two types of milkrun systems:



An **in-house milkrun** transports goods from a supermarket to a point of consumption according to a defined schedule in a particular order.

The delivery volume is controlled by so-called Kanban cards that initiate the subsequent delivery once again when there is a demand. A further advantage is the fact that the emptied containers are constantly returned thanks to the circuit-type system, thus meaning that the workstation is not blocked by empty containers.

During a **cross-company milkrun**, the required volume is delivered to the customer's incoming goods department by the respective suppliers.

Stocks, procurement costs and transport costs can be significantly reduced and, at the same time, the permanent availability of the products in assembly and production can be improved by defining the delivery volumes, travel routes and travel schedules – even in the case of high product variety and assembly requirements in the sequence.



TRANSPORT LOGISTICS - Product Overview

Milkrun – Taxi Carts Gantry Carts TRT (Taxi cart with ramp)	119
Milkrun – Gantry Carts TRP (trolleys run on wheels)	120
Milkrun – Platform carts TRP	121
Milkrun – Shelf carts TRR	122
Racks und shelves TFG	123
Transport cabinets TFS	124
Transport carts TRW	125

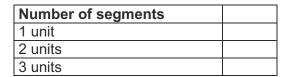
www.bloksma.de

Subject to technical changes. 117

Check List - Layout Transport Logistics -Milkrun Indoor

To be handled

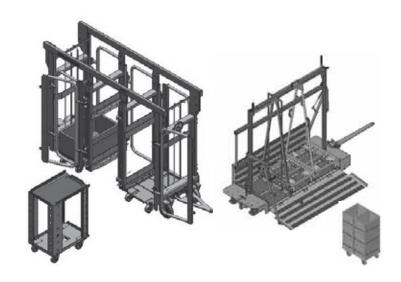
Pallet cage / Euro wooden pallet	
Trolley 1.200 x 800 mm	
Trolley 800 x 600 mm	
Trolley 600 x 400 mm	
Trolley 400 x 400 mm	
Other	



Weight	
Weight per segment	
Total weight	
Height of stack	

Steering	
Hanger / dolly	
Stub axle	

Conveyance	
Trolley with wheels	
Manual – by hand	
Pallet truck / distance between	
forks	
Fork lift truck	
Electric pallet truck / distance	
between forks	
Roller conveyor	

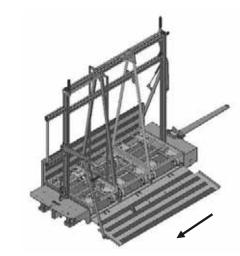


Trolley	
Wheels - 4 swivel castors	
Wheels – 2 swivel and 2 fixed	
castors	
Wheel diameter	
Wheel quality (material)	
Width of wheel	
Track width - SPW	
Wheel brand	

Direction of loading	
To one-side – from short side	
To both sides – from short side	
To one side – from long side	
To both sides – from long side	
Roller conveyor on loading area	



TRANSPORT LOGISTICS MILKRUN



Driving direction

item 138632



item 133287





item 132230

Taxi Carts TRT

With ramps

For fast and safe indoor transport of trolleys with boxes

Easy handling: Unlock ramps, move trolleys into the taxi cart (resp. remove the them from the taxi cart) and lock the ramp. The taxi cart can continue its routing.

Drawbars adapted to tractor

Smooth-running opening and closing of ramps

Various steering systems possible

Loading to one or to both sides possible

Designed for indoor transport only

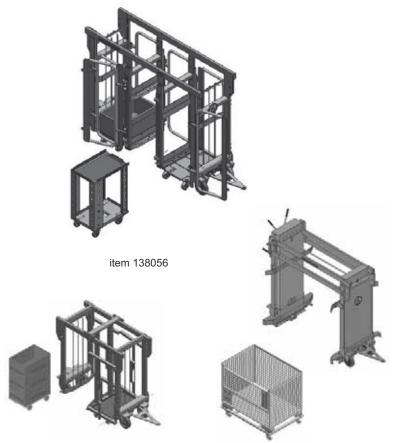
Max. load capacity 750 kg



item 135256

Item no.	Product to be transported Additional features	Features of wheels	Steering
138632	3 trolleys 600 x 400 mm, or 1 trolley 800 x 600 mm and 1 trolley 600 x 400 mm loading and unloading both sides	Ø 160 mm Polyurethan	hanger / cart
142594	2 trolleys 600 x 400 mm or 1 trolley 800 x 600 loading and unloading both sides	Ø 160 mm Polyurethan	hanger/ cart
133287	3 trolleys 600 x 400 mm loading and unloading both sides	Ø 200 mm Polyurethan	stub axle
132230	2 trolleys 630 x 430 mm or 1 trolley 830 x 630 mm loading and unloading both sides	Ø 200 mm Polyurethan	hanger / cart
135256	2 trolleys 673 x 420 mm loading and unloading both sides with shutters	Ø 200 mm Polyurethan	stub axle

TRANSPORT LOGISTICS **MILKRUN**



Gantry Carts TRP

Trolleys run on wheels can be loaded on both sides

For fast and safe indoor transport of trolleys with boxes

When the bolts are unlocked, the trolleys are moved into the cart, (respectively removed from the cart). Once the bolts are locked, the cart continues its routing.

Drawbars adapted to tractor

Steering: hanger system

Various designs available (housing, colours, etc.)

Designed for indoor transport only

Max. load / towing capacity 500 kg

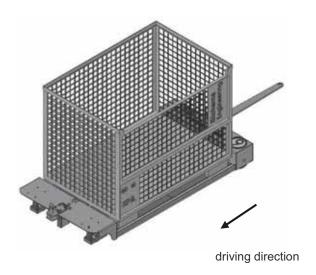
item 136239 item 138270

Item no.	Product to be transported	Features of wheels	Trolley with
136239	2 trolleys 600 x 400 mm up to 620 x 420 mm	Ø 200 mm Polyurethan	2 swivel castors and 2 fixed castors
138056	3 trolleys 600 x 400 mm up to 620 x 420 mm	Ø 200 mm Polyurethan	2 swivel castors and 2 fixed castors
138270	1 trolley 1265 x 865 mm	Ø 200 mm Polyurethan	2 swivel castors and 2 fixed castors
139571	2 trolleys 800 x 600 mm	Ø 200 mm Polyurethan	2 swivel castors and 2 fixed castors

This product range can also be adapted to other trolley dimensions such as 400 x 400 mm and 600 x 800 mm.



TRANSPORT LOGISTICS MILKRUN



item 133191

Platform Taxi Carts TRP

For fast and safe indoor transport of containers.

The containers are moved on respectively removed from the taxi cart by means of forklift trucks/electric pallet trucks or other industrial trucks.

Drawbars adapted to tractor.

Steering system: hangers

Max. load 500 kg

Designed for indoor transport only

Various versions available (housing,

colours, etc.)

Item no.	Product to be transported	Wheels features	Wheels
133191	Pallet cage or pallet	Ø 200 mm	2 swivel and
	800 x 1200 mm	Polyurethan	2 fixed castors
136995	Pallet cage or pallet	Ø 200 mm	2 swivel and
	1.000 x 1200 mm	Polyurethan	2 fixed castors

TRANSPORT LOGISTICS MILKRUN



item 138283



item 136240

Rack Carts TRR

For fast and safe indoor transport of boxes

The boxes/bins are manually placed onto respectively removed from the racks

Draw bar adapted to your tractor

Steering system: hanger / dolly

Rack in various designs available (steel, tube construction or aluminium profile)

Max. load 350 kg

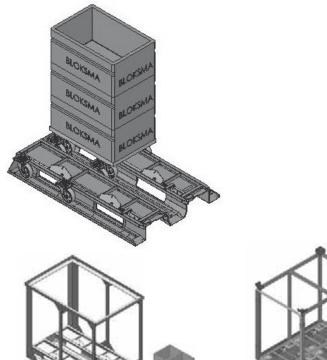
For indoor transport only

Various designs available (housing, colours, etc.)

Item no.	Product to be transported	Wheels features	Wheels
138283	KLT 600 x 400 mm up to 12 units	Ø 125 mm Polyurethan	2 swivel and 2 fixed castors
136240	KLT 600 x 400 mm up to 11 units partly with inclinded rack	Ø 200 mm Polyurethan	2 swivel and 2 fixed castors



TRANSPORT LOGISTICS TRANSPORTRACK



item 132949 / 142456



item 137393

Racks / Transport **Racks** TFG (open design)

For fast and safe indoor transport of boxes or products

The trolley stacks are moved into the rack and the load is secured by a transportation lock

Transport of the rack by industrial trucks such as forklift truck, pallet truck (to a certain extend), electric pallet truck or similar

To some extend the racks are stackable

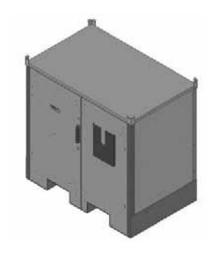
Open systems

Various designs available (housing, colours, etc.)



Item no.	Product to be transported	Dimensions	Stackable
136629	4 trolleys, size 600 x 400 mm or 2 trolleys, size 800 x 600 mm (adapted to items mentioned on page 107 & 108)	L = 1.200 mm W = 800 mm	yes / to a limited extend
132949	4 trolleys size 600 x 400 mm or 2 size 800 x 600 mm (adapted to items mentioned on page 107 & 108)	L = 1.200 mm W = 800 mm	yes
142456	4 trolleys size 600 x 400 mm or 2 size 800 x 600 mm as 132949 but with housing	L = 1.200 mm W = 800 mm	yes
137393	4 trolleys size 600 x 400 mm or 2 size 800 x 600 mm (adapted to items mentioned on page 107 & 108)	L = 1.200 mm W = 800 mm	yes
142730	4 trolleys size 630 x 430 mm (adapted to items mentioned on page 112)	L = 1.395 mm W = 1.045 mm	yes
127809	2 piles of trolleys Size of trolleys 610 x 400 mm	L = 735 mm W = 795 mm	yes

TRANSPORT LOGISTICS TRANSPORT CABINETS



item 129937

Racks und Cabinets TFS (closed design)

For fast and safe indoor transport of boxes or products

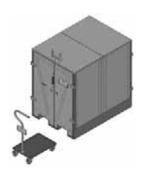
The trolley stacks are moved into the cabinet and the door is closed.

Transport by industrial trucks such as forklift truck, pallet truck (to a certain extend), electric pallet truck or similar

On request, the racks are stackable

Closed systems

Various designes available (housing, colours, etc.)







item 124853



item 129056

Item no.	Product to be transported	Dimensions	Stackable
129937	2 trolley stacks size of trolley 680 x 510 mm	length = 1.175 mm width = 750 mm	,
130341	4 trolley stacks size of trolley 610 x 420 mm	length = 1.365 mm width = 1.010 mm	
124853	2 trolley stacks size of trolley 630 x 430 mm BOZ	length 995 mm width = 670 mm	,
129056	2 trolley stacks size of trolley 630 x 430 mm as well as 1 shelf for 2 KLT 600 x 400 mm	length = 995 mm width = 670 mm	



TRANSPORT LOGISTICS TRANSPORT CARTS



item 138869



item 130052



item 139663

Transport Cart TRW

For fast and safe indoor transport of boxes or products

Manual loading and unloading of boxes/products

Mostly manual transport

Various designs available (housing, colours, etc.)



item 132330

MATERIAL IN FLOW

LIFTERS





Fundamentally effective: Lifting device systems comfortably lift the loads. Instead of knuckling down, all it takes is a push of a button and the desired position is accurately and effortlessly reached. This protects the backs of your staff. Furthermore, the access times are reduced. In the form of the BLOKSMA lifters, ergonomics and economy are held in extremely high regard.

We meet your individual demands thanks to constant further development. Profit from our decade-long experience.

BLOKSMA lifters are available in the most diverse designs:

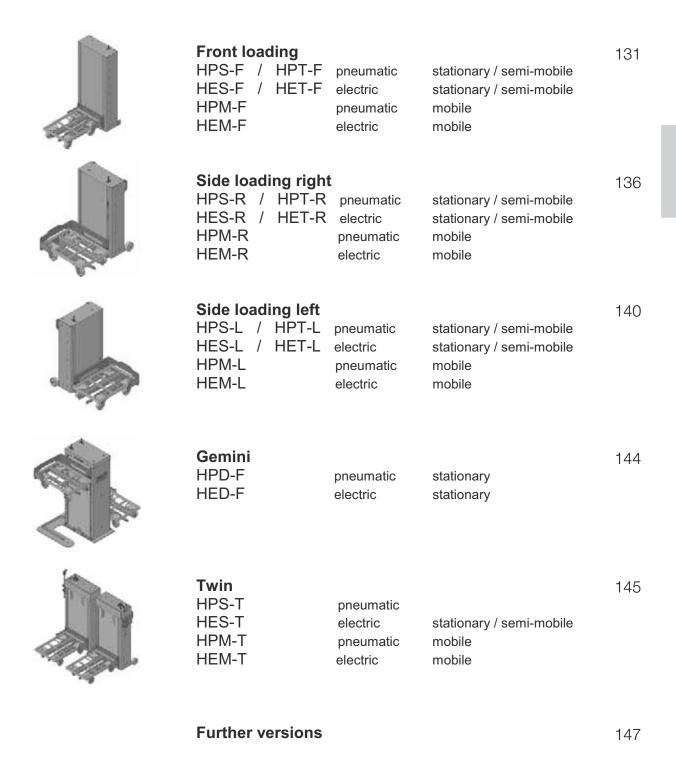
- Stationary in the form of a standing device, mobile or partially mobile, even in a tandem design
- For front loading or side loading, also alternatively available in pivoting design when under load
- With height detection sensor or manual control
- Low design, can be integrated into

assembly lines

- Special load carrying applications possible, also for tipping or emptying bulk material
- Matching safety equipment
- Devices with connected wheel conveyor or with automatic supply and removal of loaded trolleys



Product overview pneumatic or electric

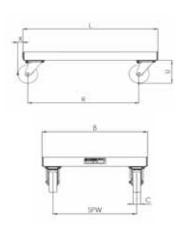


127

Check List - Layout Lifters

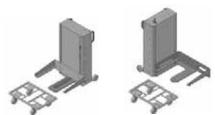
Features of trolley

Features	Please fill in
L = length of trolley	
B = width of trolley	
SPW = distance between wheels	
(Note: Please mind distance between wheels as well as	
surrounding diameter)	
U = distance clearance	
(lower edge of pan to floor level)	
Wheel diameter	
Guide rollers with stopper/brake	
Number of guide and fixed rollers	
(Please indicate position in adjoining sketch)	

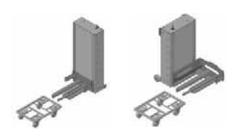


Features of lifting system

Features	Please fill in
Pneumatic / electric	
Design	mobile / stationary / semi-mobile
Loading (see data sheet ALAY)	Front loading Left side loading / right side loading
F = required loading capacity (100-600 kg)	
H = required lifting height – from floor level to upper edge of load carrier / standard 720 or 920 mm	
Positioning of trolley	Crosswise, lengthwise
Operating element For panels we recommend a protective cover	hand lever/panel/foot switch/ automatic mode
Space available	
Colour: Standard RAL 9010 / load carrier zinc coated	
ESD version	yes / no
Required quantity	



Trolley positioned crosswise



Trolley positioned lengthwise

left side loading



front loading

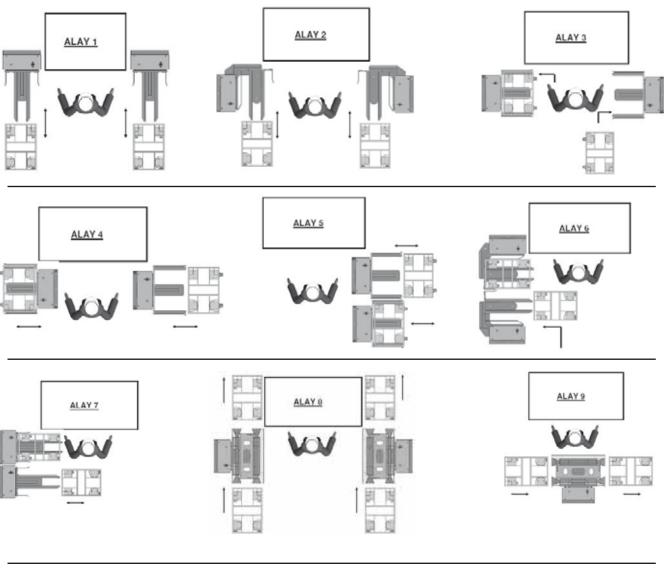


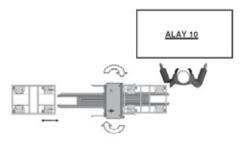
right side loading





POSSIBLE APPLICATIONS LIFTERS



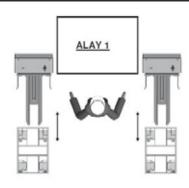




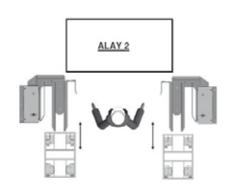
POSSIBLE APPLICATIONS - LAYOUT OF WORKPLACE - ALAY

ALAY	1	2	3	4	5	6	7	8	9	10	11
Front lifter	•		•	•	•		•	•	•	•	•
Side lifter		•				•					
Stationary	•	•	•	•	•	•	•	•	•	•	•
Semi-mobile	•	•	•	•	•	•	•	•	•		
Mobile	•	•	•	•	•	•	•	•	•		
Twin unit						•	•				•
Unloading back side				•	•						
Possibility to traverse								•	•		
To swing into work area										•	•
Replacement by system provisioner	•	•		•	•			•	•	•	•

<u>Definition – Frontloading - Sideloading</u>



front loading



side loading left

side loading right

Control elements



Hand lever on on housing



detachable control panel



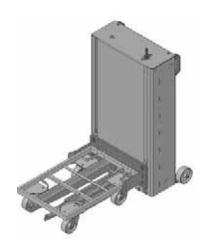
height detection with sensors (Automatic mode)



pedal switch





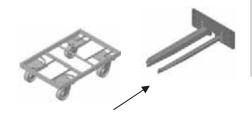


Lifter HPS-F HPT-F HES-F HET-F

Front loading – stationary / semi - mobile trolley lengthwise

Adapted for trolley BOR (trolley for KLT) page 107

Standard control element hand lever on device (options see page 130)



Item stationar		Item no. Semi -mobile design		Load capacity	Size of trolley	Working height above floor
Pneumatic	/ Electric	Pneumatic	/ Electric			level
137003	141109	135031	141029	200 kg	600 x 400	720 mm
137004	141110	137100	141030	200 kg	600 x 400	920 mm
132109	141111	137101	141031	300 kg	600 x 400	720 mm
137006	141112	137102	141032	300 kg	600 x 400	920 mm
137007	141113	137103	141033	400 kg	600 x 400	720 mm
137008	141114	137104	141034	400 kg	600 x 400	920 mm
137009	141115	137105	141035	500 kg	600 x 400	720 mm
137010	141116	137106	141036	500 kg	600 x 400	920 mm

	Item no. stationary design		Item no. stationary design		Size of trolley	Working height above floor
Pneumatic	/ Electric	Pneumatic	/ Electric	'	_	level
137011	141117	137107	141037	200 kg	800 x 600	720 mm
137012	141118	137108	141038	200 kg	800 x 600	920 mm
137013	141119	137109	141039	300 kg	800 x 600	720 mm
137014	141120	137110	141040	300 kg	800 x 600	920 mm
137015	141121	137111	141041	400 kg	800 x 600	720 mm
137016	141122	137112	141042	400 kg	800 x 600	920 mm
137017	141123	137113	141043	500 kg	800 x 600	720 mm
137018	141124	137114	141044	500 kg	800 x 600	920 mm



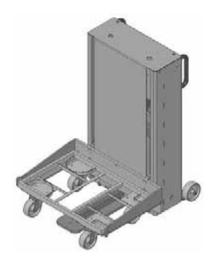
stationary version



semi - mobile version

Power demand: Pneumatic 6 bar / electr. lifters up to 200 kg 230 V as from 300 kg 400 V Other models / dimensions / loads as well as control elements on request.



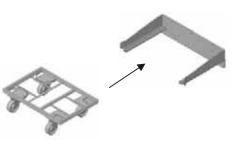


Lifter HPS-F HPT-F HPE-F HET-F

front loading stationary / semi-mobile trolley crosswise

Adapted for trolley BOR (trolley for KLT) see page107

Standard control element hand lever on device (options see page 130)



Stational	Item no. <u>Stationary design</u> Pneumatic / Electric		Item no. <u>Semi – mobile design</u> Pneumatic / Electric		Size of trolley	Working height above floor level
137027	141125	132977	141045	200 kg	600 x 400	720 mm
137028	141126	137124	141046	200 kg	600 x 400	920 mm
137029	141127	137125	141047	300 kg	600 x 400	720 mm
137030	141128	137126	141048	300 kg	600 x 400	920 mm
137031	141129	137127	141049	400 kg	600 x 400	720 mm
137032	141130	137128	141050	400 kg	600 x 400	920 mm
137033	141131	137129	141051	500 kg	600 x 400	720 mm
137034	141132	137130	141052	500 kg	600 x 400	920 mm

	n no. ry design	ltem no. Semi - mobile design		Load capacity	Size of trolley	Working height above floor
Pneumatic	: / Electric	Pneumatic	/ Electric			level
137035	141133	137131	141053	200 kg	800 x 600	720 mm
137036	141134	137132	141054	200 kg	800 x 600	920 mm
137037	141135	137133	141055	300 kg	800 x 600	720 mm
137014	141136	137134	141056	300 kg	800 x 600	920 mm
137039	141137	137135	141057	400 kg	800 x 600	720 mm
137040	141138	137136	141058	400 kg	800 x 600	920 mm
137041	141139	137137	141059	500 kg	800 x 600	720 mm
137042	141140	137138	141060	500 kg	800 x 600	920 mm



stationary version



semi - mobile version

Power demand: Pneumatic 6 bar / electr. Lifters up to 200 kg 230 V as from 300 kg 400 V. Other models / dimensions / loads as well as control elements on request.





Loading with trolley Item 137147

Lifter HPS-F HES-F

Front loading – stationary

Suitable for ergonomic working at mounting working stations, machines

Load capacity up to 2.000 kg

Option – on request tiltable up to 25 degrees



Item 135846

Loading with industrial truck as fork

lifter or pallet truck

			Stationary design		Working height above floor level
137147	142586	500 kg	1.200 x 800	720 mm	
135846	142587	500 kg	1.200 x 800	920 mm	

Power demand: Pneumatic 6 bar / electr. lifters up to 200 kg 230 V as from 300 kg 400 V Other models / dimensions / loads as well as control elements on request.



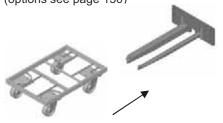


Lifter **HPM-F** HEM-F

Front loading mobile trolley lengthwise

Adapted for trolley BOR (trolley for KLT) page107

Standard control element hand lever on device (options see page 130)



Item no. Pneumatic design	ltem no. Electric design	Load capacity	Size of trolley	Working height above floor level
137051	142570	200 kg	600 x 400	720 mm
134489	142571	200 kg	600 x 400	920 mm
137053	142572	300 kg	600 x 400	720 mm
137054	142573	300 kg	600 x 400	920 mm
137055	142574	400 kg	600 x 400	720 mm
137056	142575	400 kg	600 x 400	920 mm
137057	142576	500 kg	600 x 400	720 mm
137058	142577	500 kg	600 x 400	920 mm

Item no. Pneumatic design	ltem no. Electric design	Load capacity	Size of trolley	Working height above floor level
137059	142578	200 kg	800 x 600	720 mm
137060	142579	200 kg	800 x 600	920 mm
137061	142580	300 kg	800 x 600	720 mm
137062	142581	300 kg	800 x 600	920 mm
137063	142582	400 kg	800 x 600	720 mm
137064	142583	400 kg	800 x 600	920 mm
137065	142584	500 kg	800 x 600	720 mm
137066	142585	500 kg	800 x 600	920 mm

Power demand: Pneumatic 6 bar / electr. lifters up to 200 kg $\,$ 230 V $\,$ as from 300 kg $\,$ 400 V Other models / dimensions / loads as well as control elements on request.





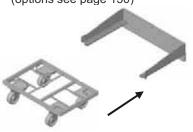


Lifter HPM-F HEM-F

Front loading – mobile trolley crosswise

Adapted for trolley BOR (trolley for KLT) page 107

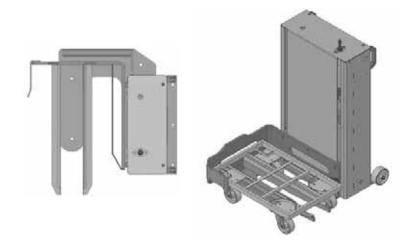
Standard control element hand lever on device (options see page 130)



Item-no. Pneumatic design	ltem-no. Electric design	Load capacity	Size of trolley	Working height above floor level
137075	142554	200 kg	600 x 400	720 mm
137076	142555	200 kg	600 x 400	920 mm
137077	142556	300 kg	600 x 400	720 mm
137078	142557	300 kg	600 x 400	920 mm
137079	142558	400 kg	600 x 400	720 mm
137080	142559	400 kg	600 x 400	920 mm
137081	142560	500 kg	600 x 400	720 mm
137082	142561	500 kg	600 x 400	920 mm

Item-no. Pneumatic design	ltem-no. Electric design	Load capacity	Size of trolley	Working height above floor level
137083	142562	200 kg	800 x 600	720 mm
137084	142563	200 kg	800 x 600	920 mm
137085	142564	300 kg	800 x 600	720 mm
137086	142565	300 kg	800 x 600	920 mm
137087	142566	400 kg	800 x 600	720 mm
137088	142567	400 kg	800 x 600	920 mm
137089	142568	500 kg	800 x 600	720 mm
137090	142569	500 kg	800 x 600	920 mm

Power demand: Pneumatic 6 bar / electr. lifters up to 200 kg 230 V as from 300 kg 400 V Other models / dimensions / loads as well as control elements on request.

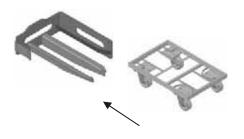


Hubgerät HPS-R HPT-R HES-R HET-R

Side loading right stationary / semi - mobile trolley lengthwise

Adapted for trolley BOR (trolley for KLT) page 107

Standard control element hand lever on device (options see page 130)



Stational	no. r <u>y design</u> c / Electric	Semi - mol	no. bile design c / Electric	Load capacity	Size of trolley	Working height above floor level
137148	141141	133466	141061	200 kg	600 x 400	720 mm
137149	141142	134642	141062	200 kg	600 x 400	920 mm
137150	141143	137198	141063	300 kg	600 x 400	720 mm
136085	141144	137199	141064	300 kg	600 x 400	920 mm
137152	141145	137200	141065	400 kg	600 x 400	720 mm
137153	141146	137201	141066	400 kg	600 x 400	920 mm

Stational	n no. r <u>y design</u> c / Electric	Item <u>Semi i</u> Pneumatio		Load capacity	Size of trolley	Working height above floor level
140620	141147	137204	141067	200 kg	800 x 600	720 mm
140621	141148	137205	141068	200 kg	800 x 600	920 mm
140622	141149	137206	141069	300 kg	800 x 600	720 mm
140623	141150	137207	141070	300 kg	800 x 600	920 mm
140624	141151	137208	141071	400 kg	800 x 600	720 mm
140625	141152	137209	141072	400 kg	800 x 600	920 mm



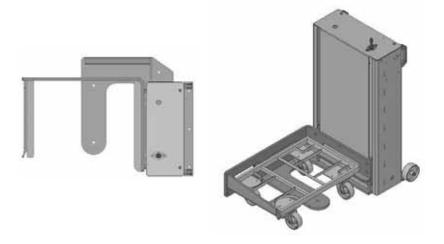
stationary design



semi mobile design

Power demand: Pneumatic 6 bar / electr. lifters up to 200 kg 230 V as from 300 kg 400 V Other models / dimensions / loads as well as control elements on request.





Lifter HPS-R HPT-R HES-R HET-R

Side loading right stationary / semi - mobile trolley crosswise

Adapted for trolley BOR (trolley for KLT) page 107

Standard control element Hand lever on device (options see page 130)



	no. r <u>y design</u> c / Electric	Semi - mo	no. <u>bile design</u> c / Electric	Load capacity	Size of trolley	Working height above floor level
139511	141153	137709	141073	200 kg	600 x 400	720 mm
139512	141154	139635	141074	200 kg	600 x 400	920 mm
139513	141155	139636	141075	300 kg	600 x 400	720 mm
139514	141156	139637	141076	300 kg	600 x 400	920 mm
139515	141157	139638	141077	400 kg	600 x 400	720 mm
139516	141158	139639	141078	400 kg	600 x 400	920 mm

10011	no.	Item	no.	Load	Size of	Working height
<u>Stational</u>	ry design	Semi - mobile design		capacity	trolley	above floor
Pneumation	c / Electric	Pneumation	c / Electric			level
137156	141159	139640	141079	200 kg	800 x 600	720 mm
137157	141160	139641	141080	200 kg	800 x 600	920 mm
137158	141161	139642	141081	300 kg	800 x 600	720 mm
137159	141162	139643	141082	300 kg	800 x 600	920 mm
137160	141163	139644	141083	400 kg	800 x 600	720 mm
137161	141164	139645	141084	400 kg	800 x 600	920 mm



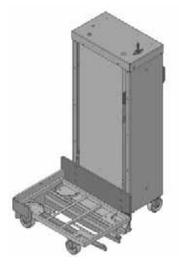
stationary design



semi – mobile design

Power demand: Pneumatic 6 bar / electr. lifters up to 200 kg 230 V as from 300 kg 400 V Other models / dimensions / loads as well as control elements on request.



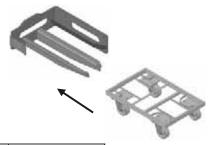


Lifter **HPM-R** HEM-R

Side loading right mobile lengthwise

Adapted for trolley BOR (trolley for KLT) page 107

Standard control element Hand lever on device (options see page 130)

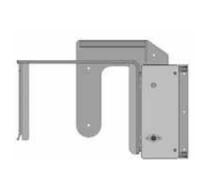


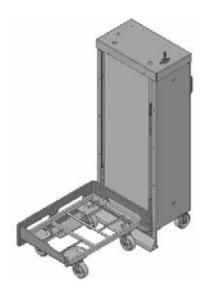
Item no. Pneumatic design	ltem no. Electric design	Load capacity	Size of trolley	Working height above floor level
137172	142540	200 kg	600 x 400	720 mm
137173	142541	200 kg	600 x 400	920 mm
137174	142542	300 kg	600 x 400	720 mm
137175	142543	300 kg	600 x 400	920 mm

Item no. Pneumatic design	ltem no. Electric design	Load capacity	Size of trolley	Working height above floor level
137180	142544	200 kg	800 x 600	720 mm
137181	142545	200 kg	800 x 600	920 mm
137182	142546	300 kg	800 x 600	720 mm
137183	142547	300 kg	800 x 600	920 mm

Power demand: Pneumatic 6 bar / electr. lifters up to 200 kg 230 V as from 300 kg 400 V Other models / dimensions / loads as well as control elements on request.







Lifter HPM-R HEM-R

Side loading right – mobile crosswise

Adapted for trolley BOR (trolley for KLT) page 107

Standard control element Hand lever on device* (options see page 130)

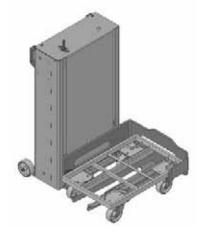


Item no. Pneumatic design	ltem no. Electric design	Load capacity	Size of trolley	Working height above floor level
139523	142532	200 kg	600 x 400	720 mm
139524	142533	200 kg	600 x 400	920 mm
139525	142534	300 kg	600 x 400	720 mm
139526	142535	300 kg	600 x 400	920 mm

Item no. Pneumatic design	ltem no. Electric design	Load capacity	Size of trolley	Working height above floor level
139529	142536	200 kg	800 x 600	720 mm
139530	142537	200 kg	800 x 600	920 mm
139531	142538	300 kg	800 x 600	720 mm
139532	142539	300 kg	800 x 600	920 mm

Power demand: Pneumatic 6 bar / electr. lifters up to 200 kg $\,$ 230 V $\,$ as from 300 kg 400 V $\,$ Other models / dimensions / loads as well as control elements on request.



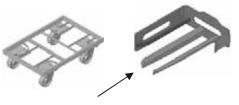


Lifter HPS-L HPT-L HES-L HET-L

Side loading left stationary / semi - mobile trolley lengthwise

Adapted for trolley BOR (trolley for KLT) page107

Standard control element Hand lever on device (Options see page 130)



Item Stationar		ltem no. semi - mobile design		Load capacity	Size of trolley	Working height above floor
Pneumatic	/ Electric	Pneumatic	/ Electric			level
137220	141165	133465	141085	200 kg	600 x 400	720 mm
137221	141166	137269	141086	200 kg	600 x 400	920 mm
137026	141167	137270	141087	300 kg	600 x 400	720 mm
136084	141168	137271	141088	300 kg	600 x 400	920 mm
137224	141169	137272	141089	400 kg	600 x 400	720 mm
137225	141170	137273	141090	400 kg	600 x 400	920 mm

	no. r <u>y design</u> / Electric	Item no. <u>semi - mobile design</u> Pneumatic / Electric		Load capacity	Size of trolley	Working height above floor level
137276	141171	137228	141091	200 kg	800 x 600	720 mm
137229	141172	137277	141092	200 kg	800 x 600	920 mm
137230	141173	137278	141093	300 kg	800 x 600	720 mm
137231	141174	137279	141094	300 kg	800 x 600	920 mm
137232	141175	137280	141095	400 kg	800 x 600	720 mm
137233	141176	137281	141096	400 kg	800 x 600	920 mm



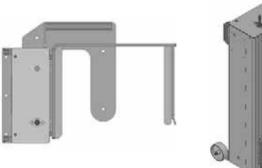
stationary design

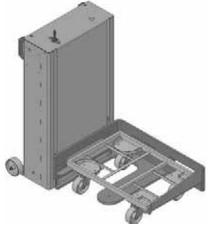


semi - mobile design

Power demand: Pneumatic 6 bar / electr. lifters up to 200 kg 230 V as from 300 kg 400 V Other models / dimensions / loads as well as control elements on request.







Lifters HPS-L HPT-L HES-L HET-L

Side loading left stationary / semi - mobile crosswise

Adapted for trolley BOR (trolley for KLT) page 107

Standard control element Hand lever on device (options see page 130)



	no. r <u>y design</u> c / Electric	Item no. <u>Semi - mobile design</u> Pneumatic / Electric		Load capacity	Size of trolley	Working height above floor level
139535	141177	137708	141097	200 kg	600 x 400	720 mm
139536	141178	139624	141098	200 kg	600 x 400	920 mm
139537	141179	139625	141099	300 kg	600 x 400	720 mm
139538	141180	139626	141100	300 kg	600 x 400	920 mm
139539	141181	139627	141101	400 kg	600 x 400	720 mm
139540	141182	139628	141102	400 kg	600 x 400	920 mm

Item	no.	Item no.		Load	Size of	Working height
Stational	ry design	Semi- mok	oile design	capacity	trolley	above floor
Pneumation	c / Electric	Pneumatic / Electric				level
139541	141183	139629	141103	200 kg	800 x 600	720 mm
139542	141184	139630	141104	200 kg	800 x 600	920 mm
139543	141185	139631	141105	300 kg	800 x 600	720 mm
139544	141186	139632	141106	300 kg	800 x 600	920 mm
139545	141187	139633	141107	400 kg	800 x 600	720 mm
139546	141188	139634	141108	400 kg	800 x 600	920 mm



stationary design



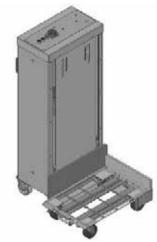
semi – mobile design

Power demand: Pneumatic 6 bar / electr. lifters up to 200 kg 230 V as from 300 kg 400 V Other models / dimensions / loads as well as control elements on request.

MATERIAL IN FLOW

LIFTERS





Lifter **HPM-L** HEM-L

Side loading left mobile lengthwise

Adapted for trolley BOR (trolley for KLT) page 107

Standard control element Hand lever on device (options see page 130)



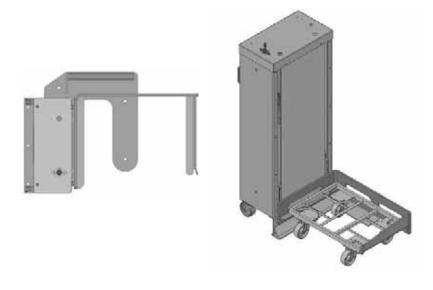


Item no. Pneumatic design	ltem no. Electric design	Load capacity	Size of trolley	Working height above floor level
137244	142524	200 kg	600 x 400	720 mm
137245	142525	200 kg	600 x 400	920 mm
137246	142526	300 kg	600 x 400	720 mm
137247	142527	300 kg	600 x 400	920 mm

Item no. Pneumatic design	ltem no. Electric design	Load capacity	Size of trolley	Working height above floor level
137252	142528	200 kg	800 x 600	720 mm
137253	142529	200 kg	800 x 600	920 mm
137254	142530	300 kg	800 x 600	720 mm
137255	142531	300 kg	800 x 600	920 mm

Power demand: Pneumatic 6 bar / electr. lifters up to 200 kg 230 V as from 300 kg 400 V Other models / dimensions / loads as well as control elements on request.



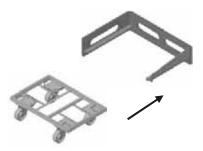


Lifter HPM-L HEM-L

Side loading left mobile trolley crosswise

Adapted for trolley BOR (trolley for KLT) page 107

Standard control element Hand lever on device (Options see page 130)



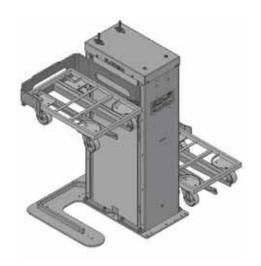
Item no. Pneumatic design	ltem no. Electric design	Load capacity	Size of trolley	Working height above floor level
139547	142516	200 kg	600 x 400	720 mm
139548	142517	200 kg	600 x 400	920 mm
139549	142518	300 kg	600 x 400	720 mm
139550	142519	300 kg	600 x 400	920 mm

Item no. Pneumatic design	ltem no. Electric design	Load capacity	Size of trolley	Working height above floor level
139553	142520	200 kg	800 x 600	720 mm
139554	142521	200 kg	800 x 600	920 mm
139555	142522	300 kg	800 x 600	720 mm
139556	142523	300 kg	800 x 600	920 mm

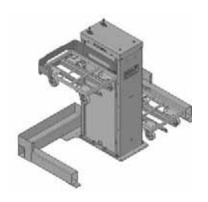
Power demand: Pneumatic 6 bar / electr. lifters up to 200 kg $\,$ 230 V as from 300 kg $\,$ 400 V Other models / dimensions / loads as well as control elements on request.

MATERIAL IN FLOW

LIFTERS



item 141869



item 141763

Lifter HPS-D HES-D

Gemini - Double stationary

Adapted for trolley BOR (trolley for KLT) resp. BOZ page107 resp. page 112

Designed for ergonomic working on assembly work stations and machines

Several lifting capacities available

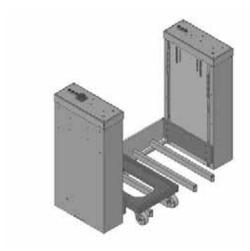
Various load carriers available (forks, platform, bracket or similar) - adapted to your trolley

Various control elements available (hand lever, pedal switch, external control panel or automatic mode with sensors)

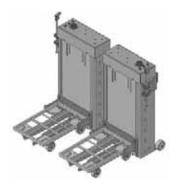
Item Pneumatic		Load capacity per lifter	Size of trolley	Adaption of trolley / Control element	Working height above floor level
141869	142608	200 kg	600 x 400	BOR lengthwise Hand lever	720 mm
142605	142609	200 kg	600 x 400	BOR lengthwise Hand lever	920 mm
142606	142610	200 kg	630 x 430	BOZ lengthwise Hand lever	720 mm
142607	142611	200 kg	630 x 430	BOZ lengthwise Hand lever	920 mm

Power demand: Pneumatic 6 bar / electr. lifters up to 200 kg 230 V as from 300 kg 400 V Other models / dimensions / loads as well as control elements on request.

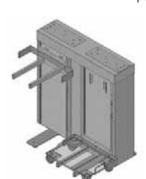




item 130065



item 137607



item 130754

Item Pneumatic		Load capacity per lifter	Size of trolley	Adaption of trolley / Control element	Working height above floor level
137292	142548	200 kg	600 x 400	BOR Trolley lengthwise Hand lever	720 mm
130065	142549	200 kg	600 x 400	BOR Trolley lengthwise Automatic mode with sensors	720 mm
139578	142550	200 kg	600 x 400	BOR Trolley lengthwise Hand lever	720 mm
137607	142551	200 kg	600 x 400	BOR Trolley lengthwise Automatic mode with sensors	720 mm
137293	142552	300 kg	600 x 400	BOZ trolley lengthwise Hand lever	920 mm
130754	142553	300 kg	600 x 400	BOZ Trolley lengthwise Automatic mode with sensors	920 mm

Power demand: Pneumatic 6 bar / electr. lifters up to 200 kg 230 V as from 300 kg 400 V

Other models / dimensions / loads as well as control elements on request.

Lifter HPS-T HES-T

Twin lifter – stationary

Adapted for trolley BOR (trolley for KLT) resp. BOZ

- see page 107 and 112

Designed for ergonomic working on assembly work stations and machines

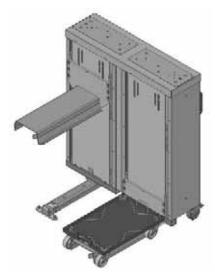
Several lifting capacities available

Various load carriers available (forks, platform, bracket or similar) – adapted to your trolley

Various control elements available (hand lever, pedal switch, external control panel, or automatic mode with sensors)

MATERIAL IN FLOW

LIFTERS



Item 130331



Item 133035



Item 128211

Lifter **HPM-T HEM-T**

Twin lifter mobile

Adapted for trolley BOR (trolley for KLT) resp. BOZ

- see page 107 and 112

Designed for ergonomic working on assembly work stations and machines

Several lifting capacities available

Various load carriers available (forks, platform, bracket or similar) - adapted to your trolley

Various control elements available (hand lever, pedal switch, external control panel, or automatic mode with sensors)

Item Pneumatic	no. / Electric	Load capacity per lifter	Size of trolley	Adaption of trolley / Control element	Working height above floor level
130331	142513	200 kg	610 x 420	BOR Trolley lengthwise Automatic mode with sensors	870 mm
130035	142514	500 kg	630 x 430	BOZ trolley lengthwise Hand lever	905 mm
128211	142515	200 kg	600 x 400	BOR trolley lengthwise Hand lever	940 mm

Power demand: Pneumatic 6 bar / electr. lifters up to 200 kg 230 V as from 300 kg 400 V Other models / dimensions / loads as well as control elements on request.



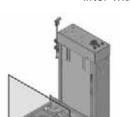


item 135058 lifter with tilter

Lifter Further versions

Further lifters can be manufactured individually according to your request.

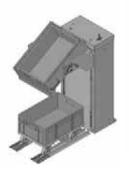
.



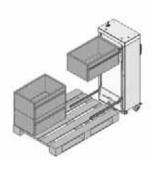
item 135561 to traverse



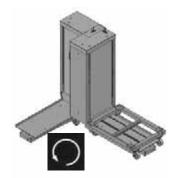
item 140656 with housing – safety door



item 139320 for tilting



item 130730 to shift KLT



item 136159 can be swivelled up to 360 degrees



item 135963 with work cycle line



item 140480 Rack feeder

Other models / dimensions / loads as well as control elements on request.

MATERIAL IN FLOW

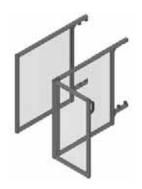
LIFTERS



item 140491 KLT-deposit



housing for protection



housing with automatic protection safety door

Lifter **Accessories**

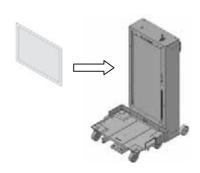
Reasonable accessories



item 140384 panel fixture can be swivelled



bumper – Stop bar



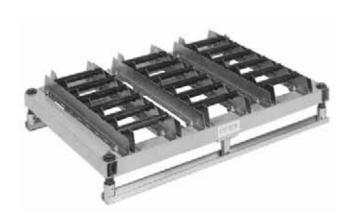
magnetic vision window for writing or for operation manuals

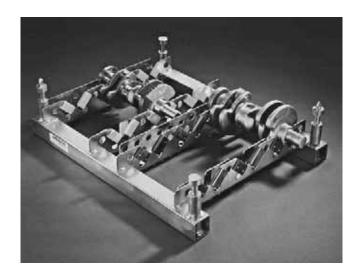
Further types / accessories on request



NOTES

WORKPIECE CARRIERS





Tailor-made quality: From small and light to large and heavy – the geometry of the workpieces determines the design of the carrier systems. In times of constantly growing requirements, they have become indispensable in automated production.

Workpiece carriers serve to take up workpieces. They carefully and accurately transport parts of all sizes to their destination. Fixed carriers are particularly suitable for large-scale production, while the flexible designs are particularly suitable for small / medium-scale production.

Workpiece carriers have many names: Tray, WC, WCP...

At BLOKSMA, they are individually designed according to their respective task:

- To protect the products against damage during transport
- To ensure a precise positional arrangement to facilitate automatic feeding of processing or assembly machines
- In order to make it easier to remove or put back the workpieces, also in the case of manual work
- Can also be deployed in some cases for further work stages such as processing, assembling, equipping, painting, etc.

BLOKSMA workpiece carriers are available in standard sizes or specially adapted to meet your needs:

- Durable constructions manufactured from steel, stainless steel, aluminium or in a mixed construction form
- In the most diverse of designs and sizes
- Perfectly adapted to the part to be taken up
- With fixed or varied parts holding fixtures
- With metal or plastic holding elements



WORK PIECE CARRIER SYSTEMS - Product overview



Work piece carriers for light, small and **High-precision components** WTB

153



Work piece carriers for heavy and big components WTR

154

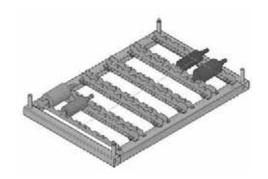


Work piece carriers in wire resp. wire sheet metal combination WTD

155

Check List – Layout

Parts	
Dimensions of parts length / width / height	
Part structure	
Waved / discoid	
Geometrically undefined	
Please attach drawing / sketch	
Weight of part	
Sample part provided	yes/no



Features of workpiece carrier

Requested size of carrier/tray	
Length / width / height	
Parts handling	
- Manual handling	yes / no
- Automated handling	yes / no
- Position of pickup of tray?	
- Delicate spots to be considered	yes / no
Required spacing / distances	
Given cavity tolerances	
Need of protection of parts	
Stackable	yes / no
- Anti-twist protection requried	
- Precision stacking in the tower	
Washing qualities	yes / no
- Cleaning medium?	
- Part to be pivoted?	
Surface requirements	
- Steel - zinc-plated	
- Steel - powder coated	
- Stainless steel – electro-polished	
- Aluminium anodized	
- Aluminium natural finish	
Additional requirements /	
Quantity of carriers/trays required	
· · · · · · · · · · · · · · · · · · ·	



WORKPIECE CARRIERS



item 130365

Workpiece Carriers WTB

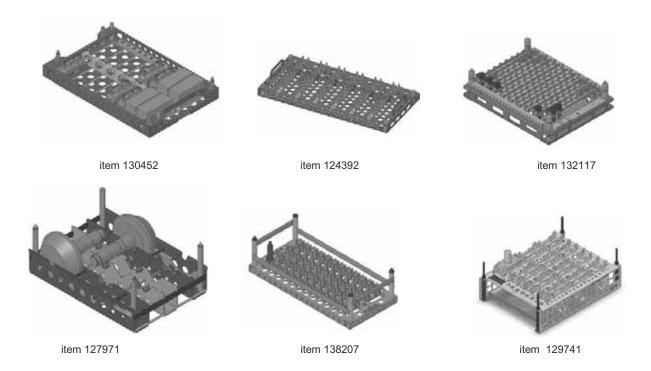
for light, small and high-precision components

Adapted for automated production

For high-precision and delicate components

Seating elements adapted to products to be carried

Made of steel, stainless steel, aluminium or a combination thereof

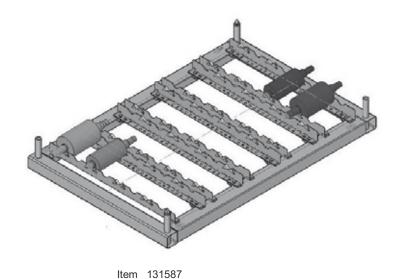


Due to the geometric shapes of the components/parts, the workpiece carriers are designed individually according to customer's requirements.

During the past 40 years, BLOKSMA has developed and produced more than 2.300 different kinds of workpiece carriers.

MATERIAL IN FLOW

WORKPIECE CARRIERS



Workpiece Carriers WTR

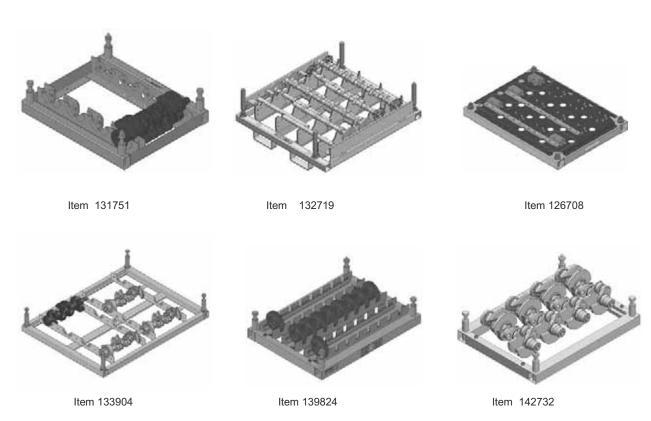
for heavy and big components

Adapted for automated production

Adapted for heavy components

Seating elements adapted to products to be carried

Made of steel, stainless steel, aluminium or a combination thereof

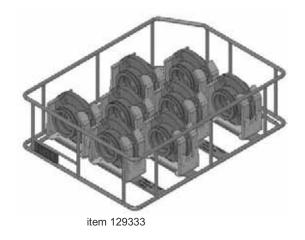


Due to the geometric shapes of the components/parts, the workpiece carriers are designed individually according to customer's requirements.

During the past 40 years, BLOKSMA has developed and produced more than 2.300 different kinds of workpiece carriers.



WORKPIECE CARRIERS



Workpiece Carriers WTD

in wire resp. wire - sheet metal combination

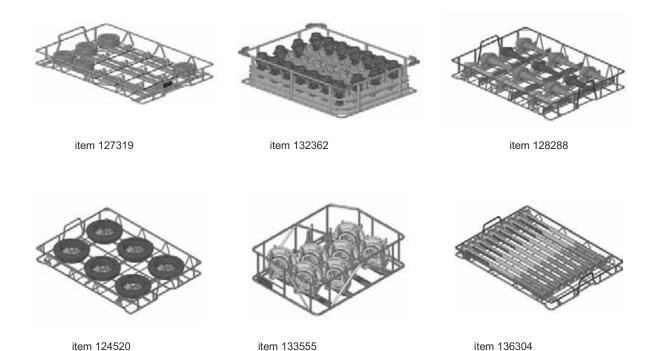
Adapted for automated production

Very high positioning accuracy

Good washing qualities

Seating elements adapted to products to be carried

Made of steel, stainless steel, aluminium or a combination thereof



Due to the geometric shapes of the components/parts, the workpiece carriers are designed individually according to customer's requirements.

During the past 40 years, BLOKSMA has developed and produced more than 2.300 different kinds of workpiece carriers.

SUPERMARKETS

Goods for daily needs can be purchased at the supermarket.

Nowadays, this term is used in companies to describe areas in which the material required for assembly and production is provided in a structured manner – in the smallest of spaces, always ready to be collected and always in the volume required.

BLOKSMA supermarkets fulfil a multitude of the most diverse requirements. They are primarily designed for the provision of goods that are stored on trolleys and are intended for immediate consumption.

"First in, first out" is a daily demand; Kanban planning can be implemented at low costs. The length of the floor track determines the volume of products that is to be provided and should not be fallen below or exceeded.

At this point, further elements such as height adjustable labelling systems or so-called min-max displays are helpful.



BLOKSMA is your competent partner for daily as well as special solutions and is constantly developing further. Profit from our experience as well:

- All supermarket elements have a modular design and are precisely tailor-made to the customer's requirements.
- Mounting or bonding to the floor can be foregone in many cases, thus increasing flexibility.
- Comfortable monorail system: Only one wheel pair is ever driven.

Additional applications are possible without any problems whatsoever, for example

- Stop function on the discharge side
- Superstructure with overhead rolling racking paths complete with passing function
- Dust-tight design

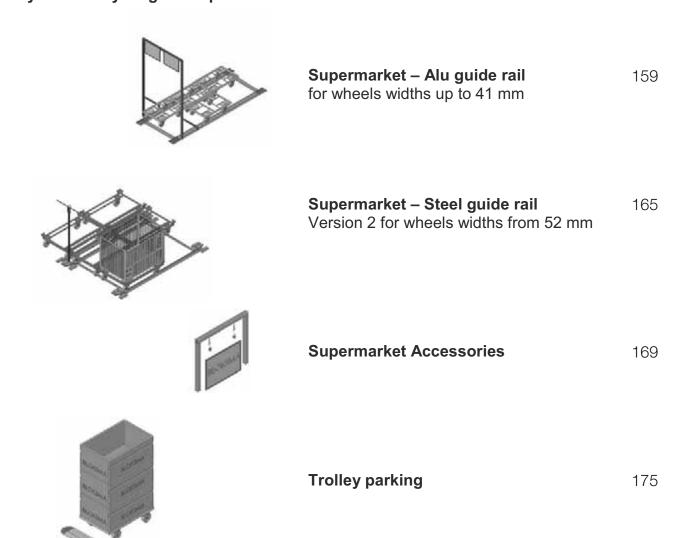
The most recent developments even ensure that your goods always move independently to the discharge side.

Ask us!



SUPERMARKETS - Product Overview

We design your supermarket – and deliver it pre-customized! But you can buy single components as well.





Supermarket – with housing / under roof 179

Check List - Layout Supermarket

Dimensions of trolley Width mm Track width SPW mm Wheel width С mm Length mm Length distance wheels R mm Χ Excess length swivel castor mm Clearance mm Wheels Castors ☐ 2 swivel / 2 fixed castors ☐ 4 swivel castors Wheel quality - coating (PA / PP rubber or similar) With stopper / brake □ yes □ no Directional lock existing □ yes □ no feed from crosswise Wheel brand Wheel diameter mm Number of trolleys side by side units Number of trolleys in a row units Feed of trolley ☐ short side □ long side feed from lengthwise Housing (open) □ yes □ no Height of housing mm Housing (closed) □ yes □ no Height of housing mm ☐ Plexiglass ☐ sheet metal Hanging labeling Covering Doors □ yes □ no Tag (track identification) □ yes □ no Tag both sides □ yes □ no Min-Max-identification □ no □ yes Labelling □ yes □ no ☐ front □ back □ standing □ hanging Standing ☐ with feet ☐ from ceiling ESD version □ no □ yes ☐ G2 (Steel) ☐ G3 (Alu) Type

housing (open)

tag one side

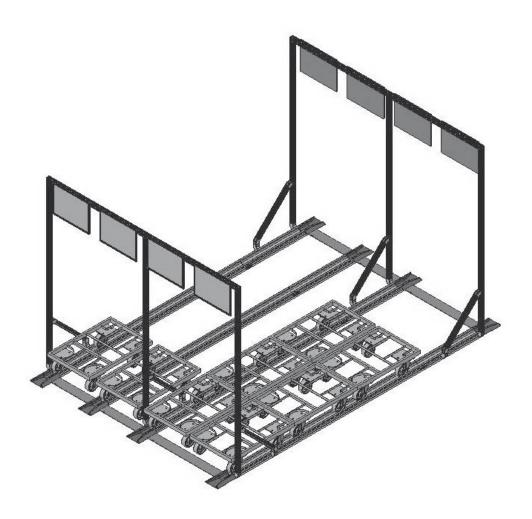
tag both sides

housing (closed)



SUPERMARKET ALUMINIUM GUIDE RAIL - G3

Wheel rail on one side - Alu guide rail for trolleys, wheel width up to 41 mm



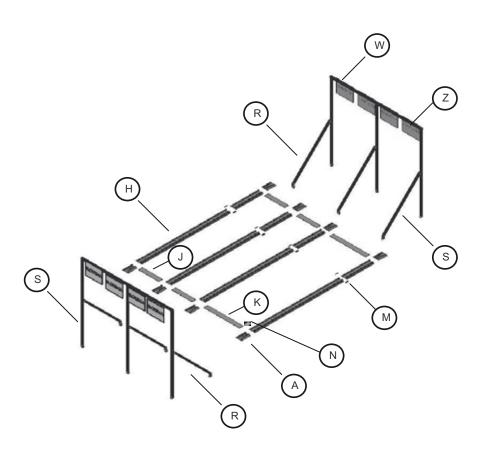
Supermarket Alu guide rail

- ✓ Optimal and visual overview
- ✓ Standardized FIFO and KANBAN Supermarket systems
- ✓ Ensures exact positioning of the material close to where it is used
- ✓ Modular system hence expandable✓ Can also be installed under existing shelf setups
- ✓ Missing parts can be seen immediately
- ✓ Control no more over production

SUPERMARKET ALUMINIUM GUIDE RAIL - G3

Supermarket G3 – Aluminium

Installation



	_
Α	Entry element
Н	Guiding rail
J	Connecting element
K	End plate
М	Connector
N	Return stop
R	Vertical modul right
S	Vertical modul left
W	Cross profile
Z	Placard frame

Labelling possibilities



Н hanging via cross profile







SUPERMARKET ALUMINIUM GUIDE RAIL – G3



Supermarket G3 - Aluminium

For trolleys with wheel width 41 mm maximum

Modular system

Single components Infeed elements and guiding rails

Item no.	Description	Model
138124	Infeed element FIFO-Alu- guide	EBA – EFEOD



Item no.	Description		Model
138125	Aluminium guide rail	600 mm	EBA – LSCHD
138126	Aluminium guide rail	1.000 mm	EBA – LSCHD
138127	Aluminium guide rail	1.200 mm	EBA – LSCHD
138742	Aluminium guide rail	1.800 mm	EBA – LSCHD
138128	Aluminium guide rail	2.000 mm	EBA – LSCHD
138129	Aluminium guide rail	2.400 mm	EBA – LSCHD
138130	Aluminium guide rail	3.600 mm	EBA – LSCHD
138318	Aluminium guide rail	6.000 mm	EBA – LSCHD



Other lengths on request.

SUPERMARKET ALUMINIUM GUIDE RAIL – G3



Supermarkt

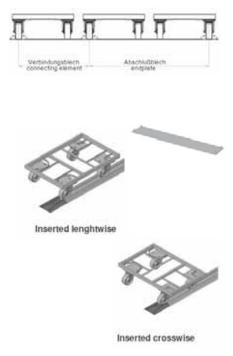
G3 - Aluminium

For trolleys with wheel width 41 mm maximum

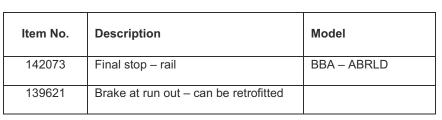
Modular system

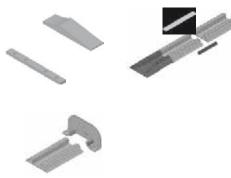
Single components connecting elements – stoppers – etc.

Item No	Description	Model
138131	Connecting element - BBA-STVED Inserted lengthwise	Trolley 600 x 400 catalogue page 107
139184	End plate - BBA-STVED Inserted lengthwise	Trolley 600 x 400 catalogue page 107
139602	Connecting element- BBA-STVED Inserted crosswise	Trolley 600 x 400 catalogue page 107
139608	End plate - BBA-STVED Inserted crosswise	Trolley 600 x 400 catalogue page 107
139604	Connecting element - BBA-STVED Inserted crosswise	Trolley 800 x 600 catalogue page 109
139610	End plate - BBA-STVED Inserted crosswise	Trolley 800 x 600 catalogue page 109
139565	Connecting element - BBA-STVED Inserted lengthwise	Trolley 630 x 430 catalogue page112
139612	End plate - BBA-STVED Inserted lengthwise	Trolley 630 x 430 catalogue page 112
138735	Connecting element- BBA-STVED Inserted crosswise	Trolley 630 x 430 catalogue page 112
136914	End plate- BBA-STVED Inserted crosswise	Trolley 630 x 430 catalogue page 112



Item No.	Description	Model
139003	Return stop	EBA – RSEOD
138759	Connecting element guide rails	BBA – LASCD







SUPERMARKET ALUMINIUM GUIDE RAIL – G3



Supermarkt G3 - Aluminium

For trolleys with wheel width 41 mm maximum

Modular system

Single components vertical moduls and cross profiles

Item No.	description	Model
140007 140005	Vertical module consisting of 1 aluminium profile, vertical, 2100 mm, stabilzer bar, connecting angle left-hand right- hand	For trolleys BOK 600 x 400 short side 800 x 600 long side BBA – SEMLD BBA – SEMRD
140008 140006	Vertical module consisting of 1 aluminium profile, vertical, 2100 mm, stabilzer bar, connecting angle left-hand right hand	For trolleys Bodenroller BOK 600 x 400 long side BBA – SEMLD BBA – SEMRD
139770 139771	Vertical module consisting of 1 aluminium profile, vertical, 2100 mm, stabilzer bar, connecting angle left-hand right-hand	For trolleys BOZ 630 x 430 short + long side BBA – SEMLD BBA – SEMRD



Item No.	description	Model
	Cross profile - Aluminium profile 30 x 30 mm Labelling from ceiling or with vertical moduls possible	ETP – ALPRE Length in mm
	Cross profile - Aluminium profile Ø mm Labelling from ceiling or with vertical moduls possible	ETP – ALPRU Lenght in mm
	Cross profile - Round with slots Aluminium profile Ecoshape Ø mm Labelling from ceiling or with vertical moduls possible	ETP – ALPEC Length in mm

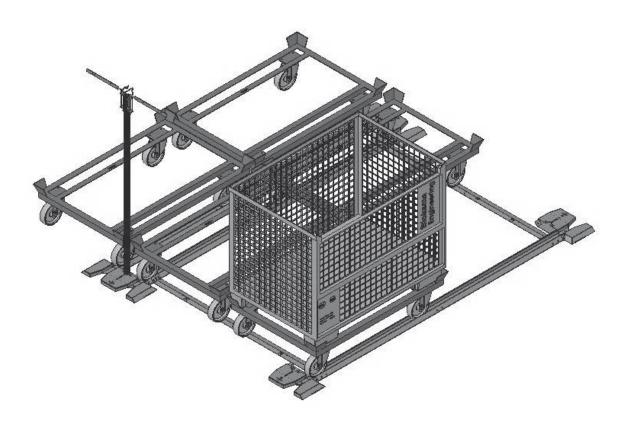


MATERIAL IN FLOW

NOTES



Wheel guidance on one side – mono and dual track system for trolleys with wheel widths up to 39 and from 41 mm

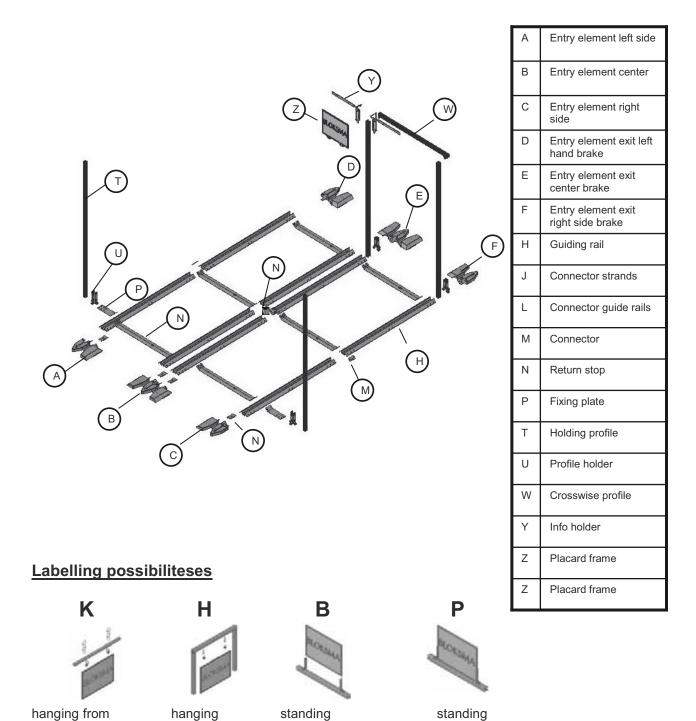


Supermarket Steel guide rail

- ✓ Optimal and visual overview
- ✓ Standardized FIFO and KANBAN Supermarket systems
 ✓ Ensures exact positioning of the material close to where it is used
- ✓ Modular system hence expandable
- ✓ Can also be installed under existing shelf setups
- ✓ Missing parts will be immediately notice
- ✓ Control no more overproduction

Supermarket

G2 – Steel Installation



via cross profile

ceiling

via cross profile

via cross profile



Wheel guidance on one side - mono and dual track system



Item No.	Description	Model
137605	Entry element, left side	BBA – EFELZ
137598	Entry element, center	BBA – EFEMZ
137602	Entry element, right side	BBA – EFERZ

Item No.	Description	Model
139583	Entry element exit left side with brake	BBA – AFELZ
139584	Entry element exit center with brake	BBA – AFEMZ
139585	Entry element exit right side with brake	BBA – AFERZ

Item No.	Description			Model
139587	Guiding rail steel	SW52	600 mm	EBA – LSCHZ
139588	Guiding rail steel	SW52	1.000 mm	EBA – LSCHZ
139590	Guiding rail steel	SW52	1.200 mm	EBA – LSCHZ
139372	Guiding rail steel	SW52	2.000 mm	EBA – LSCHZ
137597	Guiding rail steel	SW52	2.400 mm	EBA – LSCHZ

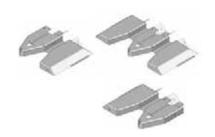
Other lengths and materials (Alu, V2A, pre zinc-coated steel) on request

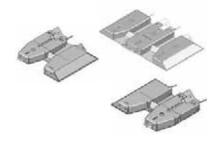
Supermarket G2 – Steel SW 52 mm

Adapted to trolleys with max. wheel width max. 52 mm

Item no. refter to max. 52 mm wheel width (please request other sizes)

Modular system







Wheel guidance on one side - mono and dual track system



Supermarket

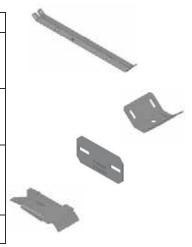
G2 - Steel SW 52 mm

For trolleys with wheel widths max. 52 mm

The listed item numbers refer to wheel widths 52 mm maximum (other widths on request)

Modular system

Item no.	Description	Model
	Connector - strands To be adapted to track width / distance wheels to overall dimensions of trolley	BBA – STVEZ
	Connector - guide rails To be adapted to track width / distance wheels to overall dimensions of trolley	BBA – SVMOZ
135459	Connecting link – to increase length of guide rails To be adapted to track width / distance wheels to overall dimensions of trolley	BBA – LASCZ
138085	Return stop on entry element	EBA – RSEOZ



Item no.	Description	Model
139586	Vertical module height 1.500 mm; incl. end cover	BBA – SEMMZ
135890	Identification tag holder incl. fastening	BBA – INFOH





SUPERMARKET ACCESSORIES ASSEMBLY GROUP

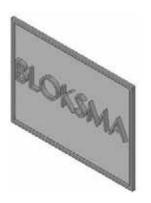
SupermarketLabelling - Identification

Assembly group Consisting of:

Placard frame including Fixing material

Item-No.	H	Item-No.	P	Description	Model
142641	138763	142659	142677	A3 Placard frame yellow	
142642	138761	142660	142678	A4 Placard frame yellow	BPL – PLA
142643	140682	142661	142679	A5 Placard frame yellow	
142644	142636	142662	142680	A3 Placard frame red	
142645	140674	142663	142681	A4 Placard frame red	BPL – PLA
142646	140679	142664	142682	A5 Placard frame red	
142647	142637	142665	142683	A3 Placard frame white	
142648	140675	142666	142684	A4 Placard frame white	BPL – PLA
142649	140680	142667	142685	A5 Placard frame white	
142650	142638	142668	142686	A3 Placard frame blue	
142651	140676	142669	142687	A4 Placard frame blue	BPL – PLA
142652	140681	142670	142688	A5 Placard frame blue	
142653	142639	142671	142689	A3 Placard frame green	
142654	140677	142672	142690	A4 Placard frame green	BPL – PLA
142655	140683	142673	142691	A5 Placard frame green	
142656	142640	142674	142692	A3 Placard frame black	
142657	140678	142675	142693	A4 Placard frame black	BPL – PLA
142658	140684	142676	142694	A5 Placard frame black	

Single parts for hanging labelling please refer to page



Supermarket

Accessories

Components for labelling

Assembly group Placard frame consisting of:

Placard frame Slice and closure clip

Single components - Placard frame

Item-No.	description	Model
138767 138766 138765	A3 Placard frame yellow A4 Placard frame yellow A5 Placard frame yellow	EPL – PLAKY
142494 139987 139731	A3 Placard frame red A4 Placard frame red A5 Placard frame red	EPL – PLAKR
142632 139988 139990	A3 Placard frame white A4 Placard frame white A5 Placard frame white	EPL – PLAKW
142633 139757 139911	A3 Placard frame blue A4 Placard frame blue A5 Placard frame blue	BBA – PLAKB
142634 139758 139992	A3 Placard frame green A4 Placard frame green A5 Placard frame green	BBA – PLAKG
142635 139989 139993	A3 Placard frame black A4 Placard frame black A5 Placard frame black	BBA – PLAKS



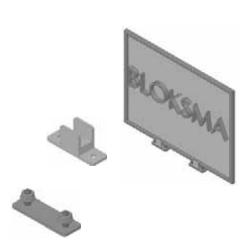
Supermarket

Accessories

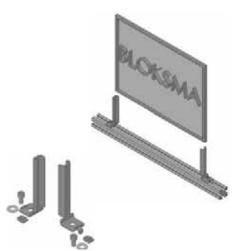
Components for labelling

Single components - Fixing elements I

Item-No.	Description	Model
140196	Fixture for placard frame - standing -	EPL – INFHS
141332	Plate plus accessories	EPL – ANSCH



Item-No.	Description	Model
142113	Fixture for placard frame - standing -	BPL – INFHS



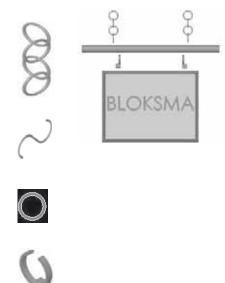
Supermarket

Accessories

Components for labelling

Single components - Fixing elements II

Item-No.	Description	Model
142405	Link chain 30 mtr	EPL – KEGLI
142404	Look – hook for link chain	EPL – HAKOO
142406	Fixing tube	EPL – ALPRU
142403	Fixing for placard frame at fixing tube	EPL – INFHR



Item-No.	Description	Model
138768	Hang up hook	EPL – HAKOO
125686	Bail	EPL – ÖSENS
133427	Nut M6 8-er Nut	EPL – HAMUO











Supermarket Accessories

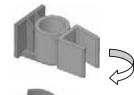
Components for labelling

Single components - Fixing elements III

Item-No.	Description	Model
140870	Suspension hook	EPL – INFHH
142415	Placard - frame Magnetic	EPL – INFHM
142416	Placard frame - fixture Can be vertically swiveled	EPL – INFHD
142403	Fixture for placard frame at fixing tube	EPL – INFHQ
142418	Placard frame – fixture Can be glued or screwed vertically on the wall	EPL – INFHK
139727	Placard frame - fixture Can be glued or screwed vertically on the wall	EBA – LASCDI













MATERIAL IN FLOW

NOTES



Correct positioning of each trolley - no danger of accidental move





Trolley parking

- √ To prevent accidental move of trolley
- √ To ensure the correct storage area
- ✓ To provide ideal optical overview



Parking lots

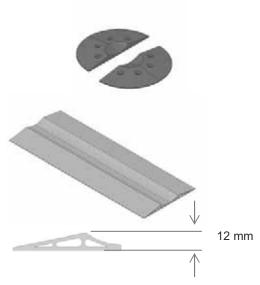
Safe parking of the trolleys at the work place – no danger of an accidental move

Single components for selfassembly

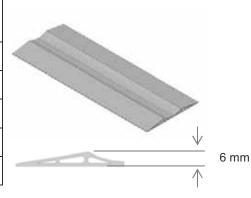
Modular system

Item-No.	description	Model
138729	End piece for parking lot	EPA – ENDKA

Item-No.	description		Model
138730	Parking rail, aluminium Height 12 mm	400 mm	EPA – SCHIE
138755	Parking rail, aluminium Height 12 mm	600 mm	EPA – SCHIE
138756	Parking rail, aluminium Height 12 mm	800 mm	EPA – SCHIE
138757	Parking rail, aluminium Height 12 mm	1.200 mm	EPA – SCHIE
138758	Parking rail, aluminium Height 12 mm	2.400 mm	EPA – SCHIE



Item-No.	description		Model
141774	Parking rail, aluminium Height 6 mm	400 mm	EPA – SCHIE
138755	Parking rail, aluminium Height 6 mm	600 mm	EPA – SCHIE
141775	Parking rail, aluminium Height 6 mm	800 mm	EPA – SCHIE
139981	Parking rail, aluminium Height 6 mm	1.200 mm	EPA – SCHIE
139982	Parking rail, aluminium Height 6 mm	2.400 mm	EPA – SCHIE







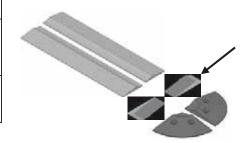
Parking lots

Safe parking of trolleys at the work place – no danger of an accidental move

Single components for self-assembly

Modular system

Item no.	description	Model
139983	Transition piece (content: 2 pieces))	EPA – ÜBGAP
139984	Transition piece (content: 4 pieces)	EPA – ÜBGAP



Item no.	description	Model
138789	Distance piece end cap parking lot Wheel Ø 101 – 150 mm 20 mm width	EPA – SCHIE
138790	Distance piece end cap parking lot wheel Ø 150 – 180 mm width 30 mm	EPA – SCHIE
138800	Distance piece end cap parking lot wheel Ø larger 180 mm Width mm	EPA – SCHIE





Parking lots

Safe parking of trolleys at the work place - no chance of an accidental move

Ready for use

Modular system

BG-Parking lot

Item no.	Description		Model
139559	BG-parking lot consisting of	400 mm	ZPA – KOMPH
	end cap and rail		
	BG-parking lot	600 mm	
139560	consisting of		ZPA – KOMPH
	end cap and rail		
	BG-parking lot	800 mm	
139561	consisting of		ZPA – KOMPH
	end cap and rail		
	BG-parking lot	1.200 mm	
139562	consisting of		ZPA – KOMPH
	end cap and rail		

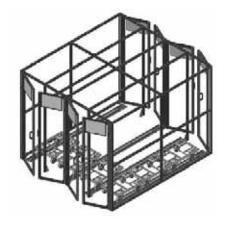


Floor marking - adhesive tapes

Item no.	Description		Model
137791	Fluor marker tape		ZUB – MARBA
137731	Width 50 mm, length 50 m	red	
137792	Fluor marker tape		ZUB – MARBA
137732	Width 50 mm, length 50 m	white	
137793	Fluor marker tape		ZUB – MARBA
137793	Width 50 mm, length 50 m	light blue	
137794	Fluor marker tape		ZUB – MARBA
137794	Width 50 mm, length 50 m	yellow	
137795	Fluor marker tape		ZUB – MARBA
137793	Width 50 mm, length 50 m	green	
137796	Fluor marker tape		ZUB – MARBA
137790	Width 50 mm, length 50 m	black	
137797	Fluor marker tape		ZUB – MARBA
137797	Width 50 mm, length 50 m	blue	
137798	Fluor marker tape		ZUB – MARBA
	Width 50 mm, length 50 m	orange	
137799	Fluor marker tape	·	ZUB – MARBA
137799	Width 50 mm, length 50 m	black/yellow	



SUPERMARKET - WITH HOUSING



item 140039



item 139228 With superstructure (roller conveyor)

Supermarket

Additional versions

Generally, our supermarkets are made according to customers' requirements.

For supermarket stations:

Supermarket - monorail

Supermarket - dual track.

Housing with metal sheet / wave grid or synthetic panel

Superstructure with roller conveyor or similar available



item 138482

Additional versions on request

BLOKSMA Engineering - a name that has become a synonym for professional material flow and sophisticated workpiece carriers.

Irrespective of their size, sector and products, we advise companies in all issues concerning material flow, workpiece carriers and general cargo handling.

We are more than happy to present our diverse solutions and optimisation options for YOUR OPTIMUM MATERIAL FLOW.

We optimise existing plants and production processes and help you to reduce the "hidden extra production costs" that are becoming ever more important.

Staff from our service team as well as our system consultants are happy to help you with your detailed individual solutions tailored to your requirements.



Everything from one source

- 1 Transport cabinet with trolley
- 2 Milkrun C frame with trolley
- 3 Floor trolley with workpiece carrier
- 4 Front loading lifting device
- 5 Rolling shelving with inclined depositing rack
- 6 Complete U shaped assembly workstation

- 7 Driven belts
- 8 Kanban shelves with roller conveyors
- 9 Lifting device
- 10 Rolling shelving
- 11 Assembly workstation
- 12 Enclosed supermarket
- 13 Supermarket

- 14 Enclosed milkrun taxi wagon
- 15 Floor trolley with workpiece carrier
- 16 Container transfer device for C-KLT
- 17 Shelf with integrated rail station ship to dock
- 18 Milkrun portal wagon with trolley
- 19 Adapter pallet with trolley



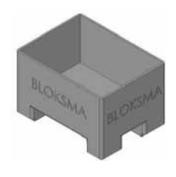
COMPLETE SYSTEMS - Product overview

EVERYTHING FROM ONE SOURCE



All about KLT Boxes, size 600 x 400 mm KSY - KLT

182



All about GLT Boxes, size 800 x 600 mm KSY - GLT

183



All about PALLET CAGES / EURO PALLETS of size 1.200 x 800 mm KSY - GIBO

184

KLT

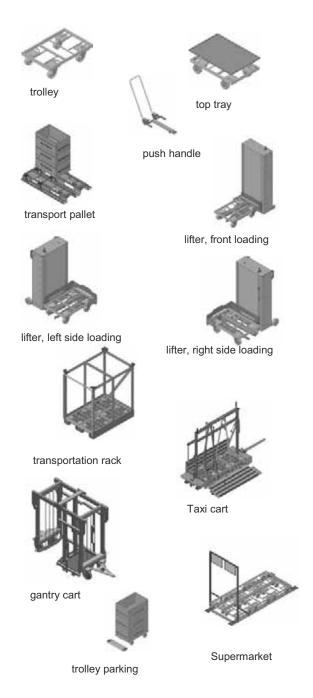


Complete Systems

KSY KLT KLT, size 600 x 400 mm

Our products match – no problems as to serial interfaces or compatibility

	T	
Products	Item no.	See page
Trolley	137787	107
Top tray for trolley	139956	107
Handle	139211	115
Transport pallet	136629	123
Lifters, front loading	135031	131
Lifters, right side loading	133466	136
Lifters, left side loading	133465	140
Transportation rack	137393	123
Taxi cart	138632	119
Gantry cart	138056	120
Supermarket / Monorail		165 and following pages
Trolley parking	139559	175 and following pages





GLT

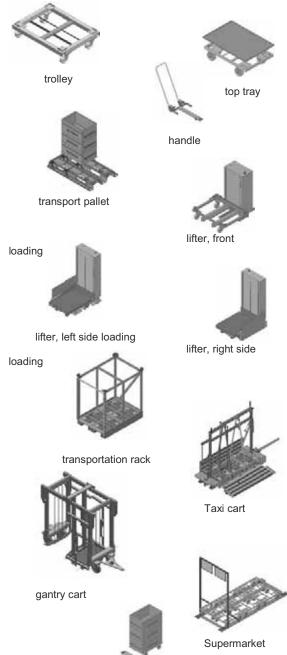


Complete Systems

KSY GLT GLT, size 800 x 600 mm

Our products match – no problems as to serial interfaces or compatibility

	T	
Products	Item no.	See page
Trolley	139125	109
Top tray for trolley	140626	107
Handle		115
Transport pallet	136629	123
Lifters, front loading	137014	131
Lifters, right side loading	140622	136
Lifters, left side loading	137230	140
Transportation rack	137393	123
Taxi cart 3 x trolley 600 x 400 mm or 1 x trolley 800 x 600 mm and 1 x trolley 600 x 400 mm	138632	119
Gantry cart	139571	120
Supermarket / Monorail		165 and following pages
Trolley parking	139560	175 and following pages



trolley parking

PALLET CAGES

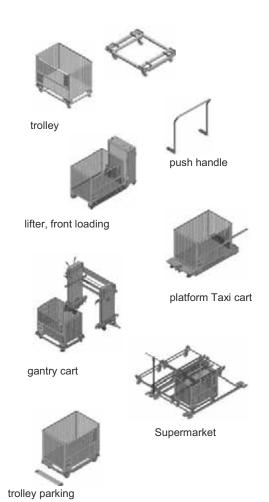


Complete Systems KSY pallet cages

size 1.200 x 800 mm

Our products match – no problems as to serial interfaces or compatibility

Products	Item no.	See page
Trolley	138267	113
Push handle	136674	115
Lifters, front loading	137147	133
Platform Taxi cart	133191	121
Gantry cart	138270	120
Supermarket / Dual track		165 and following pages
Trolley parking	139561	175 and following pages

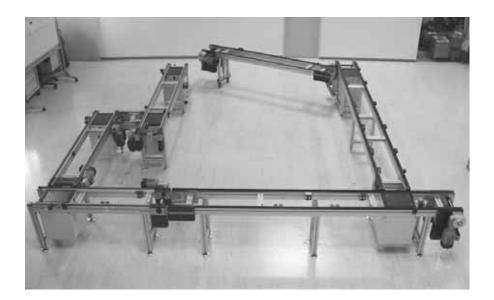




NOTES

Continuous material flow is the decisive process in the value creation chain. Based on the main value streams, all secondary value streams such as prefabrications, preassemblies and suppliers must be integrated in to the flow. Therefore, each material flow must be planned reliably and implemented in a standardised manner in order to guarantee first-in-first-out (FIFO), short and stable lead times, increased process quality, just-in-sequence requirements and the necessary flexibility.

BLOKSMA manual production systems supplement the material flow portfolio with individual components for the areas of workstation linking, provision and further processing through to complete assembly lines. Handling applications can thus be significantly reduced and the material flow can be speeded up in closed circulation systems, even in those connected to external service providers and suppliers.



Whether individual or standardised, we adapt our material flow system to your wishes and requirements.

Combined with BLOKSMA's broad user experience, ideal tailor-made material flows are introduced at our customer's premises that actively support and stabilise the implementation of lean activities.

Many supplementary BLOKSMA products are realised in order to optimise the material flow. Some examples reflect the spectrum and diversity of the options:

- Workstations for assembly, packaging or checking
- Shelving systems for material provision
- Material wagons as a link between supermarket and workstation
- Manual linking by means of conveyor tracks
- Demand-oriented assembly lines all from one source



FURTHER PRODUCTS - Product Overview

Accessories	188
Workstations APS	189
Material provision MBR	190
Material provision trolley MWA	191
Complete assembly lines MLK	192

MATERIAL IN FLOW

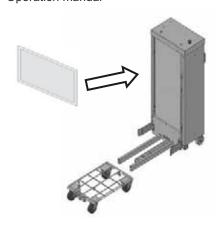
FURTHER PRODUCTS

Accessories

Vision window magnetic

Item- No.	Description	Model
142407 142411	A3 Placard frame yellow A4 Placard frame yellow	EPL – PLAM Y
142408 142412	A3 Placard frame red A4 Placard frame red	EPL – PLAMR
142409 142413	A3 Placard frame blue A4 Placard frame blue	EPL – PLAMB
142410 142414	A3 Placard frame green A4 Placard frame green	EPL – PLAMG

Operation manual







item 139438



item 138925



item 138339

Other models on request.

Please ask for our check list.

Workstations APS

for assembly, inspection and packing

Workstations according to customers' requirements

Standard products made unique

For standing or sitting work, height adjustable desk for every demand

With power / air supply

With integrated material provision, roller conveyor

Wide range of accessories, lighting, grab containers, information boards, footrests



item 137795



item 138813



item 138445

Other models on request.

Please ask for our check list.

Material Provision -Racks MBR

for Supermarkets or production lines

Rack systems according to customers' requirements

Standard products made unique

Stationary or mobile

Adaptable, even later on when requirements change

For light and heavy loads

With roller conveyors / grab containers

For Kanban/ FiFo processes

ESD version on request

Can be linked with work stations

Wide range of accessories, labeling, brake, etc.



item 140699





item 136634

Material Trolley

MWA

Link between Supermarket and workstation

Material trolley according to customer's requirements

Standard products made unique

Adaptable, even later on when requirements change

For light and heavy loads

Levels of shelves adjustable

With suspension device for grab container

With traverse for long or limp goods

ESD version on request

Wide range of accessories, labeling, information boards, brakes



item 137803



item 139410



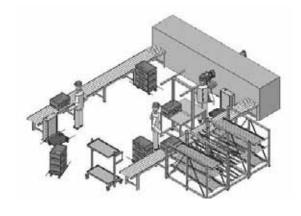
item 137799

Other models on request.

Please ask for our check list.

MATERIAL IN FLOW

FURTHER PRODUCTS

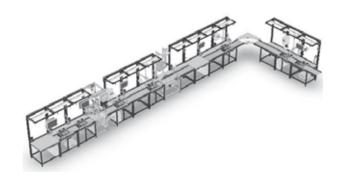


item 138338

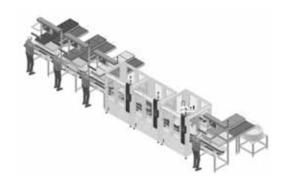
Complete **Assembly Lines MLK**

Adapted to your requirements and everything from one source

We will do the set-up – just let us know your task.



item 137589



item 136911



item 136622

Other models on request. Please ask for our check list.



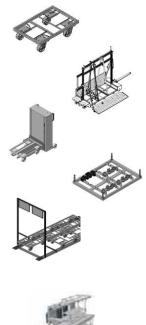
RÜCKINFO / COUPON REQUEST FOR ADDITIONAL INFORMATION

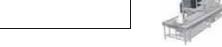
Firma /	
Company	
Ansprechpartner /	
Contact	
Abteilung /	
Division	
Straße /	
Street	
PLZ & Ort	
Zip code and city	
Telefon /	
Phone	
Fax /	
Fax	
E-Mail /	
E-mail	

Bitte kreuzen Sie die entsprechenden Felder an, von denen Sie weitere ausführliche Informationsmaterialien erhalten möchten.

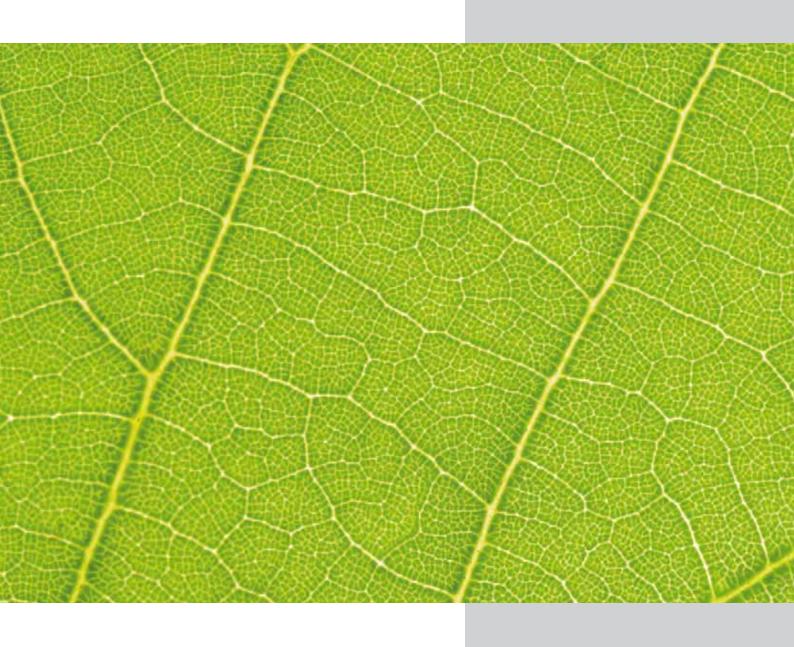
Should you request additional information on our products, please mark the appropriate box with an X and return form to us. Thank you.

Bodenroller /	
Trolleys	
Transportlogistik	
Transportlogistic / Milkrun	
Hubgeräte /	
Lifters	
Werkstückträger-System /	
Worpiece carrier systems	
Supermarkt / Bahnhöfe	
Supermarket / Stations	
Komplette Systeme	
Complete Systems	
Weitere Produkte /	
Additional Products	
	•





Antwort an / Response by: Fax +49 (0) 7181 98556-42











BLOKSMA ENGINEERING GmbH Daimlerstraße 7-9 73660 Urbach Deutschland

Tel. +49 (0) 7181 98556-0 Fax +49 (0) 7181 98556-42

E-Mail: mail@bloksma.de www.bloksma.de