R **Products**

Product information
TOTAL ASSORTMENT

The ROTHSCHENK-Principle
Load securment 360°

As a specialist for professional load securing, we ensure the safe transport of goods all over the world. No matter whether you are transported by road, rail, air or water.

We carry a wide range of proven standard products, configure them to meet individual customer requirements or develop, plan and produce unique solutions using fabric, film and webbing.

- over 30 years of experience in the field of load securing

- innovative, certified and CTU Code compliant products

- customer oriented & solution competent

- well trained and longtime employees

- Rothschenk quality "Made in Germany

- high quality & tested materials

- consulting by experienced load securing experts

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Rothschenk White Line dunnage bags are used, for example, in truck shipping. The Rothschenk White Line dunnage bags have been developed with a focus on the cost savings for the customer. This is demonstrated by the weight-optimized material thicknesses and a constructively modified structure of the load securing equipment.

Which load you want to secure is a relevant factor when choosing the right dunnage. Rothschenk White Line dunnage bags are the right choice for goods with a smooth surface of the packaging, e.g. cardboard boxes or white goods. In addition, they are ideal for use in disposable shipping due to reduced material usage.

Most loading schemes can be implemented with standardized formats. We offer sizes, which are very interesting in terms of price due to the large number of items (delivery by pallets only, delivery time by arrangement).

Info

The correct application of (R) Bag White Line you can see on our Youtube channel!

Benefits

✔ DEKRA certified

✔ Moisture resistant

✔ Environment friendly, 100% recyclable

✔ Freely accessible valve position

✔ Easy & flexible to use

✔ Fast filling thanks to Rothschenk filling systems

✔ Available in all common standard sizes

(R) Bag White Line

Technical data
- Material: the outer padding, with a weight of 80g/sqm, is made of coated polypropylene tape fabric (PP). the inner padding, with a material thickness of 62 μm, is made of polyethylene film (PE)
- Valve: SMART Valve
- Filling: with filling adapter
- Environmental note: common disposal of PP and PE, full recyclable, unproblematic at incineration

Standard versions

(R) Bag White Line

Standard versions	Unit per pallet
600 x 1.200 mm	770
900 x 1.200 mm	670
900 x 1.800 mm	510

Filling R] Bag Red Line

Filling adapter for SMART valves
- with quick fill gun incl. Quick Connect and Plastic adapter
- for standard compressed air connection
  Item no. 21896

Filling adapter for SMART valves
- with quick fill gun incl. Quick Connect and Aluminium adapter
- only available as single part
  Item no. 23600

Filling adapter for SMART valves
- with 700 mm hose and Quick Connect Adpater made of plastic
- incl. hand blower with 2 batteries, 1 charger, 1 shoulder strap
  Item no. 21941

Available upon request

(R) Bag White Line

Standard versions	Unit per pallet
600 x 500 mm	1130
600 x 600 mm	1090
600 x 700 mm	1040
600 x 900 mm	1000
600 x 1.500 mm	680
600 x 1.800 mm	600
600 x 2.100 mm	520
600 x 2.400 mm	460
600 x 2.600 mm	410
600 x 2.750 mm	390
900 x 600 mm	1000
900 x 900 mm	720
900 x 1.500 mm	610
900 x 1.650 mm	570
900 x 2.100 mm	480
900 x 2.200 mm	450
900 x 2.250 mm	450
900 x 2.400 mm	420
900 x 2.600 mm	390
900 x 2.750 mm	370
900 x 3.000 mm	360
1.000 x 1.000 mm	650
1.000 x 1.200 mm	610
1.000 x 1.500 mm	550
1.000 x 1.800 mm	460
1.000 x 2.100 mm	440
1.000 x 2.400 mm	380
1.000 x 2.600 mm	360
1.200 x 1.200 mm	500
1.200 x 1.500 mm	475
1.200 x 1.800 mm	410
1.200 x 2.100 mm	380
1.200 x 2.250 mm	370
1.200 x 2.400 mm	360
1.200 x 2.600 mm	330
1.200 x 2.750 mm	310
1.200 x 3.000 mm	300
1.500 x 1.500 mm	380
1.500 x 1.800 mm	330
1.500 x 2.000 mm	310
1.500 x 2.100 mm	300
1.500 x 2.400 mm	275
1.500 x 2.600 mm	260
1.500 x 2.750 mm	240
1.500 x 3.000 mm	220

(R) Bag Red Line

Rothschenk standard dunnage bags effectively protect your cargo from damage during transit to the destination. They are universally used for securing cargo, e.g. used in trucks, containers, railway or ships. Especially where there are no, or only limited lashing options, our dunnage bags are an ideal and flexible solution.

Our standard dunnage bag (R) Bag Red Line, in all standard sizes, is ideal for filling voids up to 400 mm and our 3D variety for filling voids up to 800 mm. The valve is easily accessible to the user positioned in the folded edge towards the corner, with the container door open. Our different filling systems allow for quick and flexible inflation of the dunnage bag. (R) Bag Red Line complies with US AAR guidelines.

Info

View our application of (R) Bag Red Line on our YouTube channel!

Advantages

✔ complies with US AAR guidelines

✔ resistant to mechanical damage

✔ moisture resistant

✔ environmentally friendly, 100% recyclable

✔ easy & flexible to use

✔ easy accessible valve position

✔ fast filling with Rothschenk filling systems

✔ available in all standard sizes

® Bag Red Line

Technical specifications
- Material: outer bag weight 90g / m2, made of coated polypropylene material (PP)
  inner bag is made of polyethylene film (PE) with a material thickness of 80µm
- Valve: SMART valve
- Filling: with filling adapter
- Environmental note: common disposal of PP and PE, fully recyclable, simple combustion

Standard Designs

® Bag Red Line LEVEL 1
- for voids of approx. 50 to 400 mm

Item no.	Length x Width	Packaging unit per pallet
21877-A1	600 x 900 mm	900
21878-A1	600 x 1.200 mm	750
21915-A1	900 x 900 mm	680
21879-A1	900 x 1.200 mm	600
21880-A1	900 x 1.800 mm	450
21881-A1	900 x 2.100 mm	440
21882-A1	900 x 2.400 mm	400
21916-A1	1.200 x 1.200 mm	450
22019-A1	1.200 x 1.500 mm	400
21883-A1	1.200 x 1.800 mm	360
21884-A1	1.200 x 2.100 mm	360
21934-A1	1.200 x 2.250 mm	340
21885-A1	1.200 x 2.400 mm	320
22020-A1	1.500 x 1.500 mm	330
22021-A1	1.500 x 2.100 mm	220
22022-A1	1.500 x 2.250 mm	260
22023-A1	1.500 x 2.400 mm	250

® Bag Red Line 3D
- for voids up to 800 mm

Item no.	Length x Width x Depth	Packaging unit per pallet
22968	1.450 x 900 x 560 mm	190
22338	2.200 x 900 x 560 mm	140
22154	2.400 x 900 x 560 mm	140
22926	2.600 x 900 x 300 mm	140
22932	3.200 x 1.000 x 800 mm	85

® Bag Red Line LEVEL 1
- for voids of approx. 50 to 400 mm
- with adhesive strip on both sides for securing the bag to the load or the container wall

Item no.	Length x Width	Packaging unit per pallet
22435	900 x 1.800 mm	350
23087	1.200 x 2.400 mm	225
22236	1.500 x 2.250 mm	210
22237	1.500 x 2.400 mm	200

Filling (R) Bag Red Line

Filling adapter for SMART valve
- with quick filling gun incl. Quick connect adapter made of plastic
- for standard compressed air connection
Item no. 21896

Filling adapter for SMART valve
- Quick Connect adapter made of aluminum
- robust design
- only available as a single part
Item no. 23600

Filling adapter for SMART valve
- with 700mm hose and quick connect adapter made of plastic
- incl. Hand blower with 2 batteries, 1 charger, 1 shoulder strap
Item no. 21941

(R) Bag Pro Line is our robust standard dunnage bag for filling larger voids and spaces in your cargos. Thanks to the higher material thickness, it is more abrasion or puncture resistant. (R) Bag Pro Line is available for filling voids up to 400 mm and as 3D variant for filling voids up to 800 mm, in all common standard sizes.

In addition, we offer a whole range of application-oriented special solutions for the (R) Bag Pro Line family. Made-to-measure, reusable solutions, special equipment, eyelets, straps and much more. In addition, our different filling systems allow for quick and easy inflation of the dunnage bag.

Info

View our application of
(R) Bag Pro Line 3D on our
YouTube channel!

Advantages

✔ higher puncture resistance

✔ higher abrasion resistance

✔ less sensitive to edges

✔ moisture resistant

✔ environmentally friendly, 100% recyclable

✔ easy & flexible to use

✔ special designs, also with reusable valve possible

✔ fast filling thanks to Rothschenk filling systems

✔ available in all standard sizes

® Bag Pro Line

Technical specifications
- Material: outer bag made of coated polypropylene tape (PP) material weight 155g / m2
  inner bag is made of polyethylene film (PE), with a material thickness of 100µm
- Valves: SLIM: flexible one-way hose valve with self-adhesive closure
  TURBO: flexible, self-closing disposable hose valve
- Filling: with filling adapter
- Environmental note: common disposal of PP and PE, fully recyclable, simple combustion

Standard Designs

® Bag Pro Line with SLIM valve
- for voids of approx. 50 to 400 mm

Item no.	Length x Width	Packaging unit per pallet
10032	600 x 1.000 mm	500
10057	700 x 1.000 mm	500
11017	700 x 1.600 mm	400
10050	900 x 1.200 mm	350
11943	900 x 1.800 mm	300
10094	1.000 x 1.200 mm	300
10737	1.000 x 1.850 mm	250
10108	1.000 x 2.100 mm	200
10113	1.000 x 2.400 mm	200
10135	1.200 x 1.800 mm	200
10137	1.200 x 2.000 mm	100
10142	1.200 x 2.200 mm	200
10189	1.800 x 2.400 mm	125
10199	2.000 x 2.400 mm	100

® Bag Pro Line with TURBO valve
- for voids of approx. 50 to 400 mm

Item no.	Length x Width	Packaging unit per pallet
21199	900 x 1.800 mm	250
21112	1.000 x 1.200 mm	350
20951	1.000 x 1.800 mm	250
21899	1.000 x 2.200 mm	250
21987	1.000 x 2.400 mm	200
21147	1.200 x 2.000 mm	250
22349	1.200 x 2.100 mm	200
22209	1.200 x 2.400 mm	150
22120	1.800 x 2.000 mm	100
21912	1.800 x 2.250 mm	200
22586	2.000 x 2.400 mm	100
22121	2.000 x 2.400 mm	100

📞 You also get (R) Bag Pro Line & (R) Bag Pro Line 3D in further versions. Just give us a call, we look forward to advise you.
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® Bag Pro Line 3D with SLIM valve
- for voids up to 800 mm

Item no.	Length x Width x Depth	Packaging unit per pallet
10335	1.100 x 900 x 600 mm	200
14911	1.600 x 1.100 x 700 mm	100
22891	1.800 x 1.200 x 600 mm	100
14357	2.000 x 1.000 x 800 mm	100

® Bag Pro Line 3D with TURBO valve
- for voids up to 800 mm

Item no.	Length x Width x Depth	Packaging unit per pallet
21848	2.300 x 900 x 600 mm	80
22211	1.600 x 1.600 x 400 mm	100
22165	2.800 x 1.200 x 800 mm	75
22492	2.800 x 1.200 x 800 mm	75

Filling (R) Bag Pro Line

Filling adapter for SLIM valve
- with aluminum gun and 10 mm tube
- for standard compressed air connection
Item no. 11377

Filling adapter for TURBO valve
- with quick filling gun incl. Plug nipple & adapter
- for standard compressed air connection
Item no. 21036

Filling adapter for TURBO valve
- with 700mm hose and adapter
- incl. Hand blower with 2 batteries, 1 charger, 1 shoulder strap
Item no. 21284

(R) Bag S.A.M.

Designed for reefer containers with no lashing points. No problem for our S.A.M.

S.A. M. is the abbreviation for "System of Anti-Slip Material". Especially developed for temperature-controlled shipments and on standard freight containers, reefer containers and fixed vehicle body-tuned restraint system, is always used when smooth walls and missing lashing points make the load securing conditions considerably more difficult. Your load unit is firmly enclosed with two side (R) bags and two tarpaulins. S.A. M. has an anti-slip coating on the two side (R) bag's.

Info

View the application of (R) Bag S.A.M. on our YouTube channel!

Advantages

✔ certified by the AAR for loads up to 20 tons

✔ certified by the TÜV Rheinland Academy

✔ no lashing equipment, lashing rails or lashing eyelets are required

✔ moisture resistant

✔ quick and easy application

✔ works in temperature-controlled transports

✔ individually adaptable for different versions

✔ fast filling thanks to Rothschenk filling systems

✔ available in all standard sizes

(R) Bag S.A.M.

Technical specifications

- Material: outer bag is made of coated polypropylene tape (PP), weight: 155g / m2
  - inner bag is made of polyethylene film (PE), with a material thickness of 100µm
- Valve: TURBO: flexible, self-closing, one-way hose valve
- Filling: with filling adapter
- Environmental note: common disposal of PP and PE, fully recyclable, simple combustion

Standard Designs

(R) Bag S.A.M.
- for EP 5 block from 1,000 mm height

Item no.	Length x Width	Packaging unit per pallet
21051	850 x 2.300 mm	50

(R) Bag S.A.M.
- for EP 5 block from 2,100 mm height

Item no.	Length x Width	Packaging unit per pallet
21310	1.950 x 2.300 mm	25

You also get (R) Bag S.A.M. in further versions.
Just give us a call, we look forward to advise you.
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Filling (R) Bag S.A.M.

Filling adapter for TURBO valve
- with quick filling gun incl.
  Plug nipple & adapter
- for standard compressed
  air connection
Item no. 21036

Filling adapter for TURBO valve
- with 700mm hose and adapter
- incl. Hand blower with 2 batteries,
  1 charger, 1 shoulder strap
Item no. 21284

Certification

Certified by the TÜV Rheinland Academy, for a retention force of up to 10,000 daN.

Certified by the AAR, for loads up to 20 tons.

Our prefabricated containment systems for container shipping considerably increase the safety of your shipment and ensure that your cargo arrives at its destination without damage. They can be used for rear cargo securing of e.g. Drums, Big Bags, IBC's or wooden boxes used in overseas containers (20, 40, 45 feet). Depending on the version, they are fully height adjustable. Rothschenk Container Lashings are particularly time-saving and easy to use.

Individual certification of your cargo
Our container lashings have been extensively tested and certified in a variety of dynamic driving tests. In cooperation with independent auditors, we create individual certificates for your shipments. At your place or in designated facili - ties. Just give us a call, we look forward to advise you.

Technical specifications:
- Vertical strap width: 38mm / 50mm
- Horizontal strap width: 38mm / 50mm
- Vertical attachment: pointed hook with safety catch
- Horizontal attachment: buckles (see lashing accessories)

- Number of cross straps: 2s / 3s / 4s
- Vertical standard length: 2,600mm
- Horizontal standard length: 3,100mm

Info

You can see the correct applica- tion of our container lashings on our YouTube channel!

Advantages

✔ certified by the TÜV Rheinland Academy

✔ CTU code compliant for many shipments

✔ fast and easy handling in daily user routine

✔ secures cargo reliably and effectively

✔ fully height-adjustable and expandable, depending on the version

✔ safety - employees are protected when opening the container

[R] ROTHSCHENK

User information on the restraint system

[R] Lashing 2x2

two-sided claw hooks / securement / fully adjustable

Restraint System for Load Securement
in intermodal transport according to the CTU-Code

Seegebiet A, B, C
Sea area A, B, C

The basis for the indication of restraining forces is the IMO / ILO / UNECE Code of Practice for Packing of Cargo Transport Units as of 2014. Basically, for containers built from 1997, a lashing point load capacity of 1000 daN can be assumed. The owner of the container can give you information about the actual load values. Since the load capacity of the lashing points in the container can vary depending on the manufacturer, we recommend using the (R) lashing systems based on the G & H GmbH Rothschenk loading instructions. The retention forces listed in the table are based on the acceleration values given in the Code of Practice in Chapter 5 Table 5.3 and the possible friction coefficients for different material combinations. In order to determine the coefficients of friction that occur during your transport, you can refer to the information in the EN 121915-12011-06 table. Vertical movements of the load units may require additional safeguards to prevent damage to the load units. When loading, pay attention to the maximum payload and the permissible load distribution.

Notes on loading:

Safety instructions for the user:
➢ Use protective clothing required according to the risk assessment of your workplace.
➢ The (R) lashing systems should only be used by trained personnel or in accordance with the loading instructions issued by G & H GmbH Rothschenk.
➢ The belts of the (R) lashing systems are under high tension during loading and unloading. Avoid injury by the buckles when cutting through the straps.
➢ If you have any questions, please contact G & H GmbH Rothschenk.

Requirements for the container:
➢ According to the CTU code, the container should be checked and safe to transport.
➢ The container floor should be undamaged, swept clean and free from oils or greases.
➢ The lashing points used in the load securing container should not be damaged.

Requirements for the load:
➢ The loading units should be able to absorb the forces occurring during transport.
➢ The loading units should be stable during loading and unloading.
➢ Since there may be some load on the load units during transport, edge protectors may be needed on sensitive load units.

Possible retention force in kg per double - sided (L) lashing point in Container of 1000 daN = (R) lashing 2x2 then 8000 daN BC

	Street		Railway	Ocean Area A	Ocean Area B	Ocean Area C
µ/FG	0,8 FG	0,5 FG	0,5 FG	Cz 0,5	Cz 0,3	Cz 0,2
0,1	11420	20000	20000	32000	29620	21050
0,2	13330	26660	26660	40000	33330	22220
0,3	16000	40000	40000	53330	38090	23520
0,4	20000	80000	80000	80000	44440	25000
0,5	26660	*	*	160000	53330	26660
0,6	40000	*	*	*	66660	28570

Possible retention force in kg per double sided (R) lashing at lashing point strength in kg Container of 1500 daN = (R) lashing 2x2 then 12000 daN BC

	Street		Railway	Ocean Area A	Ocean Area B	Ocean Area C
µ/FG	0,8 FG	0,5 FG	0,5 FG	Cz 0,5	Cz 0,3	Cz 0,2
0,1	17140	30000	30000	48000	44440	31570
0,2	20000	40000	40000	60000	50000	33330
0,3	24000	60000	60000	80000	57140	35290
0,4	30000	*	120000	120000	66660	37500
0,5	40000	*	*	*	80000	40000
0,6	60000	*	*	*	100000	42850

Possible retention force in kg per double sided (R) lashing at lashing point strength in kg Container from 2000 daN = (R) Lashing 2x2 then 16000 daN BC

|	Street		Railway	Ocean Area A	Ocean Area B	Ocean Area C
µ/FG	0,8 FG	0,5 FG	0,5 FG	Cz 0,5	Cz 0,3	Cz 0,2
0,1	22850	40000	40000	64000	59250	42100
0,2	26660	53330	53330	80000	66660	44440
0,3	32000	80000	80000	106660	76190	47050
0,4	40000	*	160000	160000	88880	50000
0,5	53330	*	*	*	106660	53330
0,6	80000	*	*	*	133330	57140

* The maximum load weight is directly related to the max. The payload and the permissible load distribution of the CTU or the coefficient of friction is higher than the acceleration coefficient.

## Usage Variants (R) Lashing Container
Examples of loading situations

📞 You also get (R) Lashing Container in further versions. Just give us a call, we look forward to advise you. Rothschenk Sales Team **+49 (0) 9335 9715 – 77**
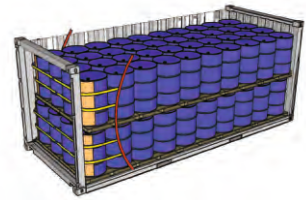
[R] Lashing CONTAINER two-part
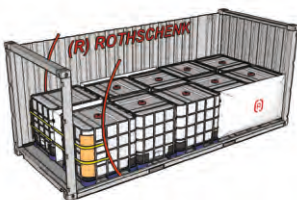
Single-level loading
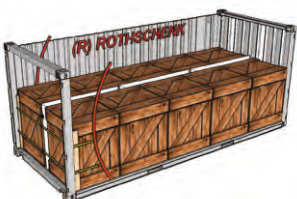up to goods height approx.1200mm: CV 500

Single-level loading
over goods height 1200mm: CV 1000

[R] Lashing CONTAINER three-part
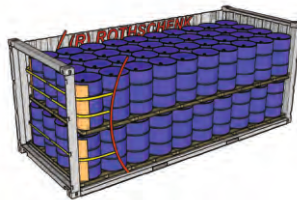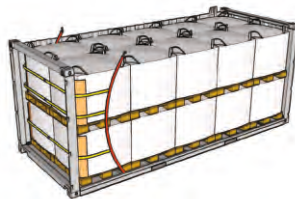

Double stack loading CV 1200 (variable)

Double stack loading
certified lashing for soft packaging

[R] Lashing CONTAINER four-part

Double stack loading
CV 1650 (500/650/500)
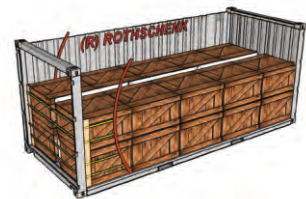
Low double stack loading
CV 1200 (250/600/250)

(R) Lashing Full Safety is our full-area container restraint system designed to safely hold sensitive and small packages away from the door. It is available as a restraint system with incorporated tarpaulin or incorporated dunnage bag and different belt thicknesses.

Info

You can see the correct application of (R) Lashing Full Safety on our YouTube channel!

Advantages

✔ ideal for sensitive & small packages that cannot be secured elsewhere

✔ tested webbing in different thicknesses

✔ holds the packaging securely away from the door

✔ available in standard sizes and in custom sizes

(R) Lashing FULL SAFETY

(R) Lashing FULL SAFETY with dunnage bag

Technical specifications
• Material: made of robust PP ribbon fabric
• incl. Incorporated dunnage bag
• incl. BIG valve for filling
• incl. Sewed lashing web

Standard Designs

Webbing 32 mm
• Dimensions of dunnage bag: 1,500 x 2,400 mm
Item no. 22367 | unit per pallet 125 pcs.

Webbing 50 mm
• Dimensions of dunnage bag: 1,500 x 2,400 mm
Item no. 23267 | unit per pallet 125 pcs.

Filling dunnage bag
Filling adapter for BIG valve
• for quick filling gun
• for standard compressed air connection
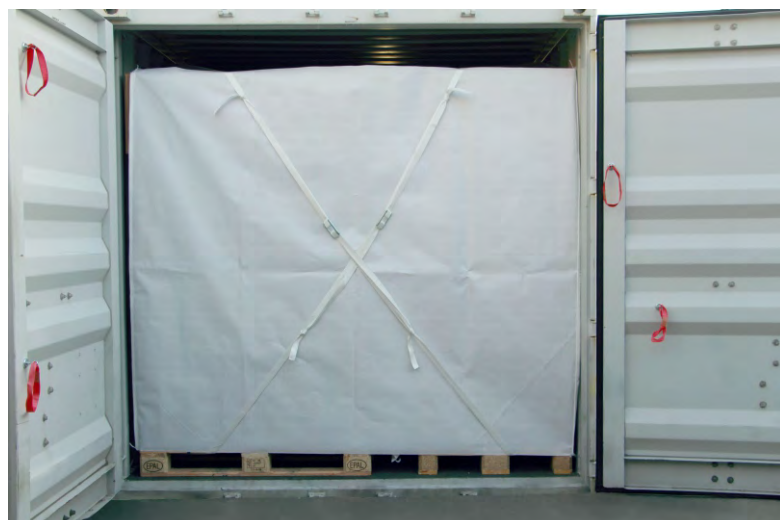Item no. 13567

Filling adapter for BIG valve
• with 700mm hose
• incl. Hand blower with 2 batteries, 1 charger, 1 shoulder strap
Item no. 21356

(R) Lashing FULL SAFETY with tarpaulin

Technical specifications
• Material: made of robust PP ribbon fabric
• incl. Sewed lashing web

Standard Designs

Webbing 32 mm
• Dimensions of tarpaulin: 2,000 x 2,200 mm
Item no. 19145 | unit per pallet 100 pcs.

Webbing 35 mm
• Dimensions of tarpaulin: 2,100 x 2,200 mm
Item no. 21119 | unit per pallet 100 pcs.

You also get (R) Lashing Full Safety in further versions. Just give us a call, we look forward to advise you.
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(R) Lashing **WEB**

Our woven polyester disposable straps are well suited for disposable lashings e.g. reliably secured in containers, rail cars or on flat racks. We offer (R) Lashing WEB in different breaking strengths by meter. Our straps are easily cut to the required length. They are certified by the TÜV Rheinland Academy and ensure the safety of your shipment.

Advantages

✔ certified by the TÜV Rheinland Academy
✔ CTU code compliant

✔ cost-effective
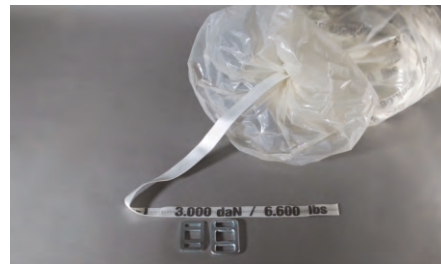✔ can be cut to the required length
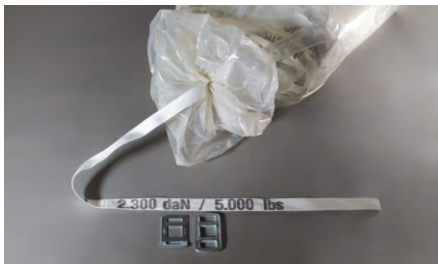
Webbing 32 mm
Linear strength: 2,300 daN
System strength of the belt
• with buckle (R) 3516: 2.820 daN
• with buckle (R) 3030: 4,170 daN
Item no. 17391 I unit 250 m per bag / 5,000 m per pallet

Webbing 35 mm
Linear strength: 3,000 daN system
Strength of the belt
• with buckle (R) 3516: 3.620 daN
• with buckle (R) 4040: 4.640 daN
Item no. 14783 I unit 250 m per bag / 3,500 m per pallet

Webbing 38 mm
Linear strength: 3,500 daN
System strength of the belt
• with buckle (R) 4040: 5,250 daN
Item no. 17337 I unit 200 m per bag / 4,000 m per pallet

Webbing 40 mm
Linear strength: 5,000 daN system
Strength of the belt
• with buckle (R) 4040: 6.060 daN
Item no. 12008 I unit 200 m per bag / 2,000 m per pallet

Webbing 50 mm
Linear strength: 3,000 daN
System strength of the belt
• with buckle (R) 5020P: 4.070 daN
• with buckle (R) 5050: 4,980 daN
Item no. 10909 I unit 250 m per bag / 4,000 m per pallet

Webbing 50 mm
Linear strength: 6,000 daN system
Strength of the belt
• with buckle (R) 5050: 6.720 daN
Item no. 14223 I unit 150 m per bag / 2,100 m per pallet

Lashing Accessories
Everything you need to install our lashing systems.

Belt buckle (R) 3516 / width 35 mm
Item no. 11347 I pack 250 per box

Belt buckle (R) 3030 DF / width 35 mm
Item no. 12314 I pack 100 per box

Belt buckle (R) 4040 DF / width 40 mm
Item no. 11526 I pack 80 per box

Belt buckle (R) 5020 / width 50 mm
Item no. 10003 I pack 100 per carton

Belt buckle (R) 5050 DF / width 50 mm
Item no. 11505 I pack 50 per box

Claw hook with webbing securement
• up to 35 mm I **Item no. 21771 I pack 100 per box**
• up to 50 mm I **Item no. 11387 I pack 50 per box**

Ratchet
Item no. 12128

Ratchet tensioners
• up to 40 mm bandwidth I **Item no. 16075**

Webbing scissor
• made of stainless steel
Item no. 17426

Magnets
• hand force approx. 41kg I **Item no. 17378**

Positioning
• for (R) lashing container I **Item no. 18773**

You also get (R) Lashing TOOLS in further versions.
Just give us a call, we look forward to advise you.
Rothschenk Sales Team **+49 (0) 9335 9715 – 77**

Our edge protection products will help prevent damage to your load and the straps used to secure it. They ensure that the forces are transferred evenly to the load, effectively protecting the cargo from damage and protecting the lashing straps simultaneously.

Edge Protection cut to length
• this is particularly suitable for soft packaging and small packaging units such as
  bagged goods, octa bins, big bags and building materials

® Edge Protection K 190x190
• Material: plastic double-web plate (PE)
• sold by the meter: max. 6m in length

Item number	Length	Leg Lengths	Strength	Packaging unit per pallet
11466	300 mm	190 x 190 mm	19 mm	500
11149	500 mm	190 x 190 mm	19 mm	240
11148	800 mm	190 x 190 mm	19 mm	125
10284	1.000 mm	190 x 190 mm	19 mm	125
11165	1.200 mm	190 x 190 mm	19 mm	125
11100	6.000 mm	190 x 190 mm	19 mm	75

® Edge Protection K 120x120
• Material: plastic double-web plate (PE)
• sold by the meter: max. 6m in length

Item number	Length	Leg Lengths	Strength	Packaging unit per pallet
13506	300 mm	120 x 120 mm	12 mm	1.000
11532	500 mm	120 x 120 mm	12 mm	500
12159	800 mm	120 x 120 mm	12 mm	250
10285	1.000 mm	120 x 120 mm	12 mm	250
11859	1.200 mm	120 x 120 mm	12 mm	250

☎ You also receive (R) Edge Protection K190x190 an K120x120 in other versions. Just give us a call, we look forward to advise you. Rothschenk Sales Team **+49 (0) 9335 9715 - 77**

-19-

Edgeboards
• universally applicable

ⓡ Edge Protection K 173x137
• Material: Polypropylene
• Weight: 275 g
• Max. Belt width: 75 mm

Item number	Length	Leg Lengths	Packaging unit per pallet
23456	150 mm	173 x 137 mm	1.200

ⓡ Edge Protection K 185x140
• Material: Polypropylene
• Weight: 285 g
• max. Belt width: 50 mm

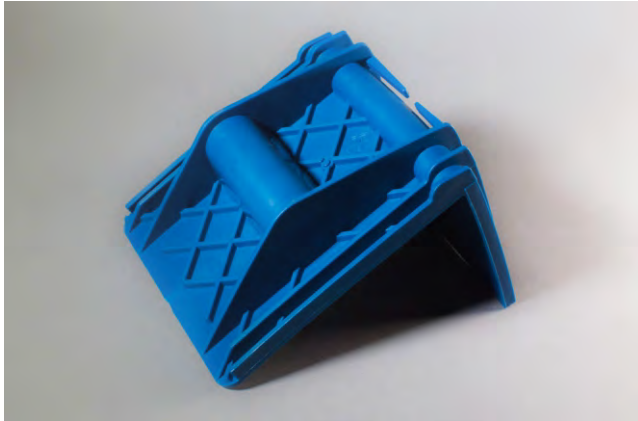| Item number	Length	Leg Lengths	Packaging unit per pallet
11062	150 mm	185 x 140 mm	1.210

ⓡ Edge Protection K 95x95
• Material: Polypropylene
• Gewicht: 70 g
• max. Belt width: 50 mm

Item number	Length	Leg lengths	Packaging unit per pallet
11736	130 mm	95 x 95 mm	2.200

Edgeboards
• especially for paper rolls

® Edge Protection K 145x135
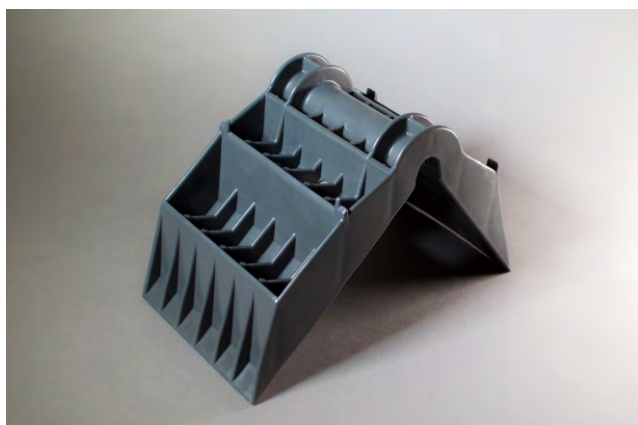 • Material: Polypropylene
  • Weight: 160 g
  • max. Belt width: 55 mm

Item number	Length	Leg Lengths	Packaging unit per pallet
10975	80mm	145 x 135 mm	960

® Edge Protection K 180x60
  • Material: Polypropylene
  • Weight: 260 g
  • max. Belt width: 50 mm

Item number	Length	Leg Lengths	Packaging unit per pallet
16721	150 mm	180 x 60 mm	1.152

® Edge Protection K 135x175
  • Material: Polypropylenee
  • Weight: 360 g
  • max. Belt width: 75 mm

Item number	Length	Leg Lengths	Packaging unit per pallet
17953	135 mm	135 x 175 mm	576

Edgeboards
• especially for sensitive edges

® Edge Protection K 185x60
• Material: Polypropylen
• Weight: 260 g
• max. Belt width: 55 mm

Item number	Length	Leg Lengths	Packaging unit per pallet
20689	150 mm	185 x 60 mm	576

Edge Protection made of cardboard
• for the formation of loading units on the pallet

® Edge Protection P 45x45
• Material: Cardboard

Item number	Length	Leg Lengths	Strength	Packaging unit per pallet
13683	100 mm	45 x 45 mm	4 mm	17.800
13286	700 mm	45 x 45 mm	4 mm	4.000

📞 You also receive (R) Edge Protection P 45x45 in individual length.
Just give us a call, we look forward to advise you.
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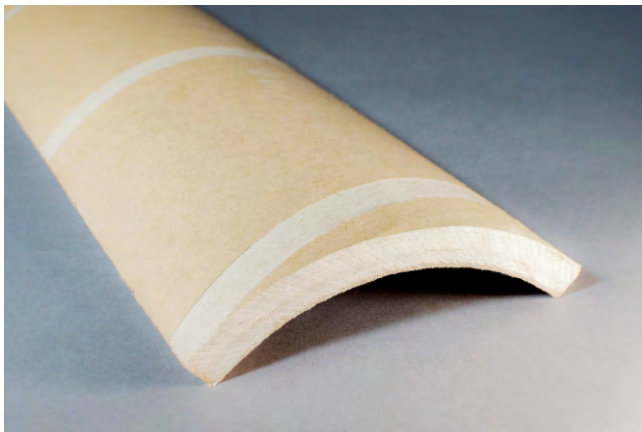### ® Edge Protection P 100x100
• Material: Cardboard

Item number	Length	Leg Lengths	Strength	Packaging unit per pallet
16024	365 mm	100 x 100 mm	8 mm	1.600
11604	600 mm	100 x 100 mm	8 mm	1.000
14097	800 mm	100 x 100 mm	8 mm	800
10944	1.000 mm	100 x 100 mm	8 mm	600

📞 You also receive (R) Edge Protection P 100x100 in individual length.
Just give us a call, we look forward to advise you.
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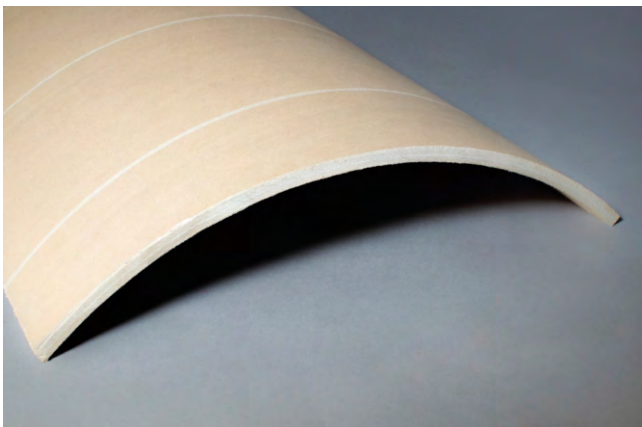
(R) Edge Protection

Edge Protection segments
• For use in containers in combination with our container lashings.

(R) Edge Protection segment P 200, for securing e.g. IBCs or bagged goods.

(R) Edge Protection segment P 610, for securing e.g. 200 liters drums.

(R) Edge Protection P 200
• Material: several layers of paper glued together

Item number	Length	Diameter	Strength	Packaging unit per pallet
22972	1.000 mm	200 mm	15 mm	500

(R) Edge Protection P 610
• Material: several layers of paper glued together
• Weight: 2,80 kg

Item number	Length	Diameter	Strength	Packaging unit per pallet
23754	550 mm	610 mm	10 mm	120
21426	850 mm	610 mm	10 mm	120

Paper Honeycomb Panel

(R) Paper Honeycomb Panel is a stable and resistant liner board made from hexagonal honeycomb structure. The lightweight honeycomb panel is suitable for stabilization or separation of heavy products during storage and transport. It is lightweight and extremely resilient, has a high-pressure resistance, is easy to handle and 100% recyclable.

In addition, (R) Paper Honeycomb Panel offers many other uses:
- needs-based outer packaging
- damping material
- corner protection
- weight distribution
- other applications

Standard Designs

® Paper Honeycomb Panel
- Material: cardboard
- Cell widths: 10/22/25 mm
- Pressure resistant: 150 kpa - 800 kpa

Item number	Length x Width	Strength	Packaging unit per pallet
20839	2.280 x 1.150 mm	20 mm	68
22959	1.000 x 500 mm	70 mm	200
22472	1.000 x 200 mm	150 mm	200

You also receive (R) Paper Honeycomb Panel in other versions.
Just give us a call, we look forward to advise you.
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ⓡ Drum Securement

Properly securing liquids in drums on pallets can be a challenge on every shipment. Due to their shape, drums are difficult to grip and cumbersome to handle.

With our drum securement, you can quickly and easily create one safe loading unit with one or two drums and a pallet. (R) Lashing Drum Securement can be used with polyester strapping band and composite band as a disposable system, as well as with one-piece lashing strap as a returnable system.

Info

You can see the correct application of our Drum Securement on our YouTube channel!

Advantages

- ✔ certified as a stable load unit
- ✔ can be installed by a single person
- ✔ CTU compliant also for Hazmat
- ✔ can be used as a disposable or reusable system
- ✔ quick and easy application due to prefabrication

ℝ Drum Securement

Standard versions

for 200 liters steel drum
- Material: Polyester (PES)
- Diameter: 600 mm

Item no. 20569 | VE: 100 pieces per carton

for 120 liters plastic drum
- Material: Polyester (PES)
- Diameter: 540 mm

Item no. 22224 | VE: 100 pieces per carton

for 200 liters plastic drum
- Material: Polyester (PES)
- Diameter: 600 mm

Item no. 20569 | VE: 100 pieces per carton

one-piece lashing strap
- for reusable use

Item no. 20524

📞 You also receive (R) Drum Securement in other versions. Just give us a call, we look forward to advise you. Rothschenk Sales Team **+49 (0) 9335 9715 - 77**

Use variants

Single-drum securement

Double-drum securement

One-way system

Reusable system

(R) Anti-Slip

Whenever the load slips during transportation, it is the result of simple physical principles. Our anti-slip products effectively counteract these principles with non-slip, quality-tested materials by simply increasing the coefficient of friction.

(R) Anti-Slip Paper

Advantages

✔ Anti-slip material made of coated paper

✔ great as an upper or intermediate layer for pallet packaging

✔ environmentally friendly, 100% recyclable

✔ increases friction

Technical specifications
- Material: cardboard with anti-slip coating
- Thickness: 0.4 mm
- Temperature resistance: -20 ° C to 120 ° C

Standard Designs

Item number	Strength	Length x Width	Packaging unit per pallet
16968	0,4 mm	1.200 x 800 mm	2.000
17312	0,4 mm	1.200 x 1.000 mm	2.000

📞 (R) Anti-Slip Paper is also available in alternative versions.
Just give us a call, we look forward to advise you.
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® Anti-Slip

® Anti-Slip Mat

Advantages

✔ increases friction

✔ meets the requirements of VDI Guideline 2700ff, page 3.2, pages 9 and 15

✔ by using (R) Anti-Slip Mat, the number of lashing straps required is reduced

✔ Rubber material is suitable for unprotected applications under the influence of weather

Technical specifications
• Material: PU-bonded rubber granulate mat
• Thickness: 3-8 mm
• Pressure capacity: between 100 and 120t / m2 depending on thickness
• Sliding friction value: 0.6 μ to 0.9 μ, depending on the material pairing tested
• Temperature resistance: -30 ° C to 100 ° C

Standard Designs

Item number	Strength	Length x Width	Packaging unit per pallet
11006	3 mm	800 x 100 mm	4.800
12135	3 mm	13.600 x 150 mm	120
13144	4 mm	2.400 x 100 mm	500
11235	4 mm	5.000 x 100 mm	200
11996	5 mm	150 x 100 mm	4.800
11092	8 mm	200 x 100 mm	5.760
12286	8 mm	300 x 200 mm	1.000
11124	8 mm	1.200 x 100 mm	1.200
10949	8 mm	2.400 x 200 mm	200
10898	8 mm	5.000 x 250 mm	75

☎ (R) Anti-Slip Mat is also available in alternative versions.
Just give us a call, we look forward to advise you.
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Info

According to VDI guideline 2700ff, page 3.2, pages 9 and 15, the maximum load of anti-slip mats should be selected so that the material thickness does not exceed 30% deformation.

® Ratchet Straps

With our two-part ratchet straps made of polyester fabric and claw hooks, you can easily and quickly secure your load on transport vehicles. Our ratchet straps are equipped with high-quality, solid ratchets. Choose between pressure ratchet or ergonomic long-lever ratchet with label protection pocket.

Info

View the correct application of our two-part ratchet straps on our YouTube channel!

Advantages

✔ Polyester straps with low elongation

✔ certified

✔ easy & quick to install

✔ robust strap construction for longer durability & high abrasion resistance

✔ our ratchet straps comply with EN 12195-2

Standard Designs

(R) **Ratchet Strap** 2-part
with pressure ratchet and claw hook

Technical specifications
- Preload force: STF 300 daN
- Manual force: SHF 50 daN
- Load capacity in straight line: 2,500 daN
- Resilience in strapping: 5,000 daN
- Strap material: polyester
- Length (total / fixed end / loose end): 8.0 / 0.4 / 7.6 m
- Width: 50 mm
- Strap elongation: <5%

Item no. 11088 I 200 pieces per pallet

(R) **Ratchet Strap** 2-part
with ERGO long-lever pull ratchet and claw hooks

Technical specifications
- Pre-tensioning force: STF 500 daN
- Manual force: SHF 50 daN
- Load capacity in straight line: 2,500 daN
- Resilience in strapping: 5,000 daN
- Strap material: polyester
- Length (total / fixed end / loose end): 8.0 / 0.4 / 7.6 m
- Width: 50 mm
- Strap elongation: <5%

Item no. 12036 I 200 pieces per pallet

📞 You can also receive (R) Ratchet Straps in other versions.
Just give us a call, we look forward to advise you.
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[R] Truck Lash

[R] TruckLash is specially designed for truck transport. It is suitable as a load restraint for different types of cargo; however, the focus is soft-side trailers. It is used for lateral load securing of heavy load units that cannot be loaded to the sides, such as sacks, big bags, or IBC's. It can also be used as head or tail lashing. Due to the special design with a retaining strap placed over the goods, it is possible to load the cargo to accommodate the load weight distribution.

In practice, pallets and/or simple ratchet straps are often used to fill voids in in the cargo area. The disadvantage is that the pallets are then not available to be used as pallets and many of them must be used to achieve the actual securing effect. In addition, the [R] TruckLash prevents pallets from damaging the goods.

Another application is the securing of double stacks. To optimize the maximum payload, double stacks should be loaded whenever possible. Securing a second layer is always a challenge.

The certified [R] TruckLash (with steel beaded drums) is used like a head/ tail lashing. The shipper can achieve the optimum axle weight distribution. An increase of 27% more cargo is achieved by doing this.

Application example with drums

1. Truck loaded to the beginning of the double deck

2. hook in Truck Lash, fix it to the drop sides

3. double deck loaded. Place anti-slip mats underneath

4. lash down the double deck. Use edge protection

5. complete loading. Fill gaps with dunnage bags

Further Examples

[R] TruckLash can be used for:

- Double deck loading of stable cargo such as drums and IBCs

- Securing of soft packaging like Big Bags and bagged goods with a head- and bay lashing

- Single-layer loading of soft Packaging, like BigBags and bagged goods as a block formation at the end wall and laterally secured

Info

View the correct application of our [R] Truck Lash on our YouTube channel!

Advantages

- ✔ up to 27% more charge
- ✔ designed as reusable system
- ✔ cost effective purchase
- ✔ double-deck loading possible
- ✔ suitable for loading BigBags
- ✔ quality „Made in Germany"
- ✔ no use of pallets for filling voids
- ✔ Can be used on intermodal transport

® Battery tensioner

Lash strap and strapping - One cordless tensioner for everything?

A battery powered tensioner cannot be used for all strapping applications. Strap and lashing straps are entirely different in structure.

The structure and material mix of the strap can be completely different and, the correct strap tensioner is very important to ensure that the strap does not slip and that the maximum pre-tensioning force can be achieved. Different belt brake structures are required for different applications.

For this reason, Rothschenk has developed the right tensioner for each application and it's "Made in Germany".

The combination of proven Milwaukee or Bosch technology and a tensioner made of 100% "Made in Germany" aluminum, results in the lightest and most innovative device on the market. To ensure that it can cope with even the toughest everyday use, the clamping device is supplied as a set with two high-quality lithium-ion batteries and a matching quick charger.

The focus of our development was on sustainable optimization for daily use. We reduced the weight of the clamping device by approx. 30% compared to other devices on the market.

Devices optimized for the application

- • [R] LT38eP: Our strongest tensioner in the "Performance" version, for particularly demanding applications, optimized for strap widths of 32-40 mm and pre-tensioning forces of 100-800 daN. Weight: approx. 2.8 kg.

- • [R] LT38e: Our tensioner for lashing systems (White, Red and Pro Lash), optimized for strap widths of 32-38 mm and pre-tensioning forces of 100-600 daN. Weight: approx. 2.8 kg.

- • [R] ST25e: Our tensioner for strapping (composite and woven), optimized for strap widths up to 25 mm and pre-tensioning forces of 50-400 daN. For easier processing of the strapping band, an automated cutting unit is installed. Weight: approx. 2.5 kg.

Info

View the correct application of our battery tensioner on our website!

Advantages

- ✔ up to 30% lighter than conventional devices on the market
- ✔ 20 torque steps
- ✔ reproducible torque
- ✔ automatic belt brake
- ✔ ergonomic one-hand operation
- ✔ quality „Made in Germany"
- ✔ Li-Ion battery - no self discharge
- ✔ brands basic devices

Special features

Preselectable torque levels

Forward and reverse selectable

Automatic belt brake

Ergonomic one-hand operation

Professional complete set

How to find us?

ROTHSCHENK

Bad Kissingen

Frankfurt
am Main

A3

Kulmbach

A7

A70

Bamberg

Würzburg

A3

A3

Neustadt
an der Aisch

Nürnberg

A81

Heidelberg

Rothenburg
ob der Tauber

A6

A6

Heilbronn

A7

Stuttgart

Ingolstadt

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