

### SYSTEM

# CONFIGURATOR

## **BOX VAN**

**Load restraint Made in Germany** 

**Custom-made load restraint systems** 



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# What you get at allsafe











#### **Safety**

- positive locking load restraint certified safety
- best practice goods produced with tried and tested processes
- weight optimized products for law conformant security
- allsafe systems deliver extra stability to vehicle body

#### **Brand name products**

- superior reliability Made in Germany
- proven safety through dynamic road tests with full loads
- extensive endurance tests guarantee long life performance
- 2 year product guarantee with inspection manual and speedy spare parts service.

#### **User-friendly**

- easy-to-use products with an ergonomic design
- ready-to-install systems with pre-assembled blocking devices
- 24 hour production, including free packaging and delivery within Germany
- numerous configuration possibilities through a wide range of components

#### Time-saving

- intelligent systems allow quick loading processes
- system certification allow for quicker load restraint controls
- just-in-time delivery reduces your storage costs
- volume optimization by doubling the loading area

#### **Image**

- market needs incite us to move towards the latest technologies
- engineering and production at allsafe sites Fuerstenwalde and Engen – Made in Germany
- original products certified by allsafe
- customized products with your part number and customer logo



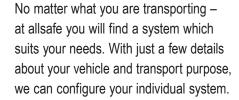
# The System Configurator for box vans











The QR-Code leads you to the respective assembly and installation manuals.

You're already using one of our systems? Then we'd be happy to hear your ideas and challenges. That is how new and even better system solutions are generated.

With our senior engineers and a modern production site in Engen, Germany you can expect quick and individual reactions to your demands.

Challenge us - we can do it!



We can do it all, however extra-ordinary allsafe with system





# JF-system Securing roll containers

Today food, flowers and textile rentals are being distributed on sorted and consigned roll containers from factories or logistic centers.

The mobile racks allow for easy loading and unloading, but securing them can be a real challenge!

With the JF-system you can latch the roll container with a fitting on the side walls at any position.

Securing is done with a few flicks of the wrist.

# Suitable for securing:

- roll containers
- cooling containers
- shelves
- flower racks
- 1 The roll containers can be loaded and secured to the right or left of the vehicle with a middle aisle being built. Roll containers can be loaded and unloaded without unloading or moving other containers to the side.
- **2** Closed with one flick of the wrist guaranteed load capacity of 500 daN even at -30°C. Only KERL JF can do that.
- **3** Whether you're transporting full or partial loads every situation is possible. Roll containers in the middle aisle can be secured with our KIM shoring pole.

### Your advantages:

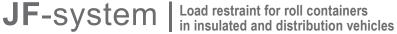
- tidiness in your vehicle
- fully adjustable
- compatible with all common roll containers













#### **Description**

The system consists of allsafe Airline guide tracks and the KERL JF fittings which enable full adjustment to ensure positive locking for roll containers.

Extra load restraint equipment is also available such as the KIM shoring poles, straps and fittings.

#### Airline guide track

Adhesive Airline guide track for securing roll containers



#### Advantages of adhesive Airline tracks:

- cost saving through adhesive technology
- mounting holes in Airline milling allows for exact fixation on wall with just a few screws to support the glue hardening process
- compatible with KERL JF fittings
- integrated Airline milling
- extensive variety of accesorries available



TIP

Order the JF- milled-out section directly! This allows an easy insertion of KERL JF fix on the bulkhead and the insertion of non removable fittings.

#### KERL JF snap

#### Snap-in connector



The KERL JF snap provides the highest securing force of the KERL JF family: it secures positively in the airline track and thanks to the fine 12.5 mm grid, the KERL JF snap fits almost all trolleys.

#### Advantages of the KERL JF snap end fitting:

- Highest securing force
- Fits all standard trolleys





#### ▶ KERL JF – the heart of the new JF-system

#### Clamp fitting



This new and improved clamp fitting is like no other, when it comes to blocking forces with its certified 500 daN loading capacity. With this masterpiece, roll containers can hold up to 1.000 kg towards the rear and up to 625 kg towards the front. Operation temperature: -30 to 80°C.

Besides the three selectable widths

- 25 mm (compatible with common roll containers used in the food and linen rental industries)
- 35 mm (compatible with common roll containers used for flower racks)
- **45 mm** (compatible with common EURO-stillage on wheels) you have the choice of fittings that can be inserted anywhere in the track, or fittings which can only be removed from the milled-out section, which serves as an anti-loss and theft protection.

#### **KERL JF fix**

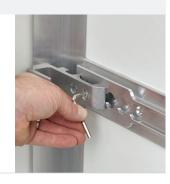
#### **End fitting**



The end fitting KERL JF fix secures the first roll container towards the bulkhead and is inserted in the milled-out section of the Airline guide track – even if the track is mounted up to 55 mm away from the bulkhead.

#### Advantages of end fitting KERL JF fix:

- cost saving through quick installation
- system solution which is compatible with other fittings



#### KERL JF slide

#### Stepless connector



The novel extension to the JF-system is the one and only KERL JF slide. It can move freely within the Airline guide track and can be used to connect light-weight roll containers in combination with KERL JF. With KERL JF slide you can connect two roll containers without any additional restraint in the track direction. KERL JF is needed to allocate the securing force of all containers. KERL JF slide can be inserted at the bulkhead or in the milled-out section of the track.



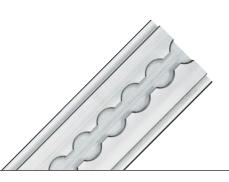
#### JF-system accessories

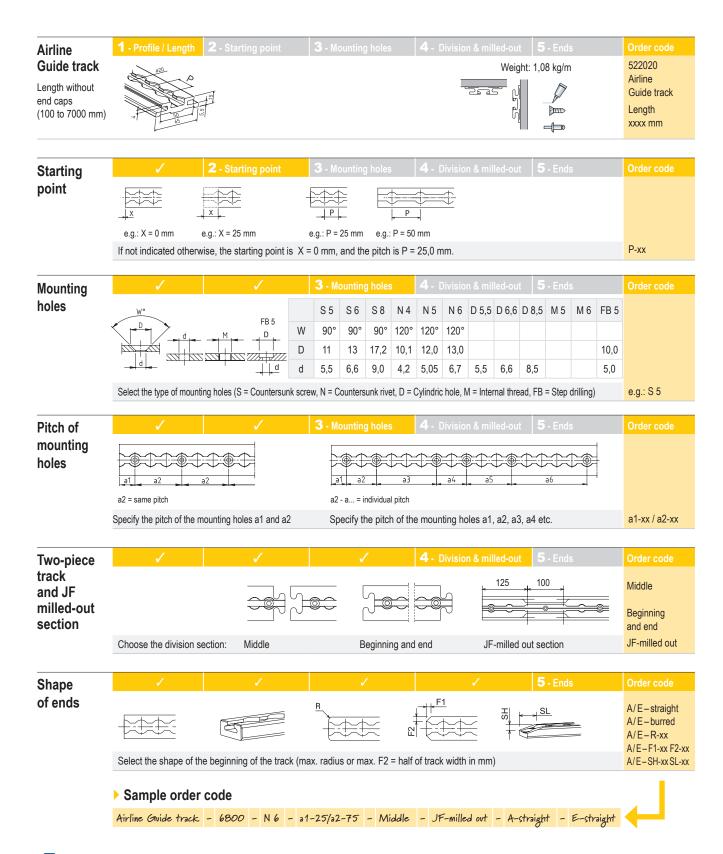
#### Securing

- when securing roll containers in the middle aisle, we suggest using our special KIM shoring poles horizontally.
- when securing loading equipment or diverse goods, we suggest using straps with KERL fittings.



# JF-system | Components in detail







#### **KERL JF** snap 512285-0001 for roll containers with up to 25 mm bars KERL JF snap 25 mm Load capacity: \*\* x 600 daN non-removable y 500 daN BC according to EN 12195-1 for roll containers with 512285-0002 up to 35 mm bars KERL JF snap 35 mm Load capacity: \*\* x 600 daN non-removable y 500 daN BC according to EN 12195-1 for roll containers with 512285-0003 up to 45 mm bars KERL JF snap 45 mm Load capacity: \*\* x 600 daN non-removable y 500 daN BC according to EN 12195-1 **KERL JF** 512014 For roll containers with bars KERL JF 25 mm up to 25 mm Load capacity: 500 daN -0001 removeable -0004 n. removable For roll containers with bars 512014 up to 35 mm KERL JF 35 mm Load capacity: 500 daN -0002 removeable -0005 n. removable For roll containers with bars 512014 up to 45 mm KERL JF 45 mm Load capacity: 500 daN -0003 removeable -0006 n. removable

Insert and remove at any position



Removeable

Non removable

Non removable

# JF-system | Components in detail

KERL JF fix	1 - Width		Order code
	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	For roll containers with bars up to 25 mm Load capacity: 500 daN	512017-0001 KERL JF fix 25 mm
0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	For roll containers with bars up to 35 mm Load capacity: 500 daN	512017-0002 KERL JF fix 35 mm
	4 6 6 1115	For roll containers with bars up to 45 mm Load capacity: 500 daN	512017-0003 KERL JF fix 45 mm

KERL	1 - Width			Order code
JF slide	63	13 0 ( 8)	For roll containers with bars up to 25 mm Load capacity: 0 daN in track direction 500 daN in y-direction	512016-0001 KERL JF slide 25 mm
	66	13 155 L	For roll containers with bars up to 35 mm Load capacity: 0 daN in track direction 500 daN in y-direction	512016-0002 KERL JF slide 35 mm
	74	13. 14.	For roll containers with bars up to 45 mm Load capacity: 0 daN in track direction 500 daN in y-direction	512016-0003 KERL JF slide 45 mm

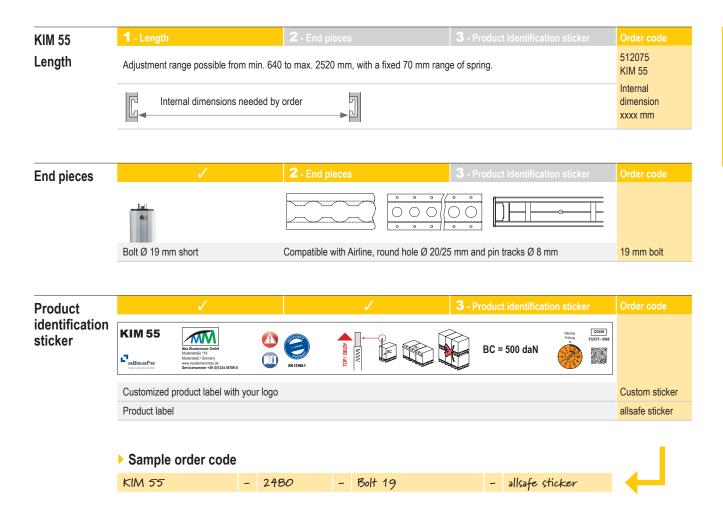
#### ▶ Sample order code

KERL JF - 35 - Non removable



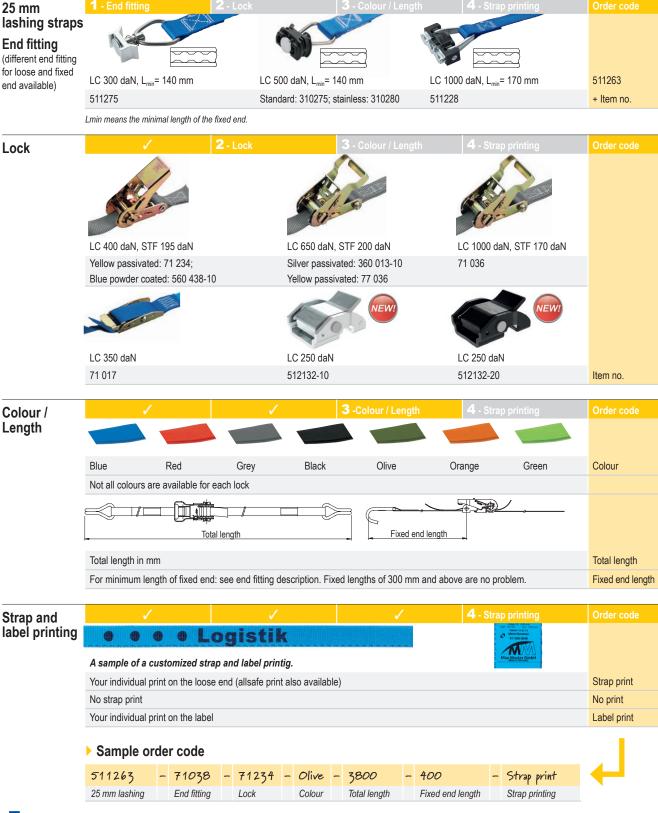








## JF-system | Components in detail





### all:change KERL JF | JFsnap



For all kinds of companies and facilities. For everybody who wants to focus on their core business.





You return the damaged or worn-out items to us. We inspect, repair or swap them to new and send them back to you.



### Your advantages:

- Sustainable concept for all-time-use of any product
- Instrumental to support energy management systems as per ISO 50001, energy audits as per EN 16247 and regulation (EG) No. 1221/2009 (EMAS)
- It's easy and saves you money.







# ATD-system Double your loading space

The ATD double-deck system optimizes how you use your space and is also suitable for securing loads in box vans. Its second level makes it ideal for transporting loads of different heights, as well as goods that cannot be stacked. The beam function is selected so that the loading beam can be moved upwards in 25 mm increments yet can still be securely locked in position. The pallets are simply placed on the loading beams. When not in use, the beams can be stowed under the roof to save space.

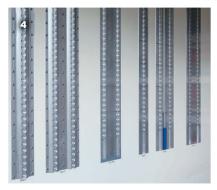
#### Suitable for:

- loading on a second level
- **1** Beams can easily be stowed under the roof to save space.
- 2 Select the ATD beam space with an asymmetric head so that it can be stowed away even more neatly under the roof
- **3** The entire width of the vehicle can be used.
- **4** Compatible with all common double-deck track systems.









### Your advantages:

- ergonomically optimized, therefore easy and quiet in use
- perfectly tailored to your needs
- light and robust
- particularly high load capacity



Further information under: www.allsafe-ATD.info



# ATD-system | The new beam generation

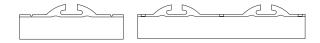
#### **Description**

The ATD double-deck-system optimizes how you use your space and is suitable for securing loads in box vans and trailers. Its second level makes it ideal for transporting loads of different heights as well as goods that cannot be stacked.



#### ATD-I Airline tracks

ATD-I tracks for gluing and screwing in place



#### ATD-II Airline tracks

ATD-II tracks for flush insertion into the side wall



#### ATD-F Airline tracks

ATD-F-tracks to be riveted, screwed oder glued into a slot in the side wall



Double and single tracks are available in a number of variations. Depending on the task and the properties of the vehicle, different ATD track profiles can either be attached to or precisely integrated into the side walls.

The ATD track profiles can be glued, riveted, screwed in place or welded. Large contact surfaces and specially optimized adhesive profiles ensure a strong adhesive bond.

- minimum track installation height
- small pitch of 25 mm
- ATD loading beams can be individually adapted to the height of the load
- open profile form of the tracks guarantees easy cleaning and complies with the German regulation on the hygiene of foodstuffs (LMHV)



#### ▶ ATD-Classic loading beam

90 mm high



For normal loads up to 1 t

- Heads with symmetrical or asymetrical design for optimized headroom
- the classic option

ATD-II and ATD-F-style loading beams include innovative plastic gliders. They make operation of the beams quiet, so you can load and unload your truck in noise sensitive areas or in the night.



#### ▶ ATD-Heavy-duty loading beam

For extra heavy loads



For particularly high loads

- Heads with symmetrical or asymetrical design for optimized headroom
- can withstand loads up to 1.35 t



#### ATD-Space loading beam

Space-saving



Extremely flat profile, loading height increased by 60 mm; for use when space is tight.

can withstand loads of up to 1 t



The label printed with your logo ensures better distribution and identification of your brand name.



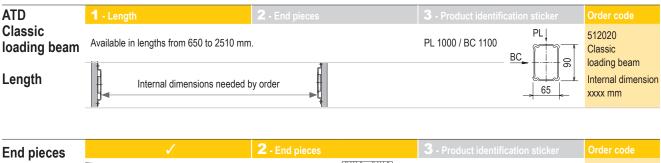
ATD-II decking beams and ATD-F Airline tracks are PIEK certified. PIEK certified enables noise reduced operation (e.g. for inner-city night deliveries)

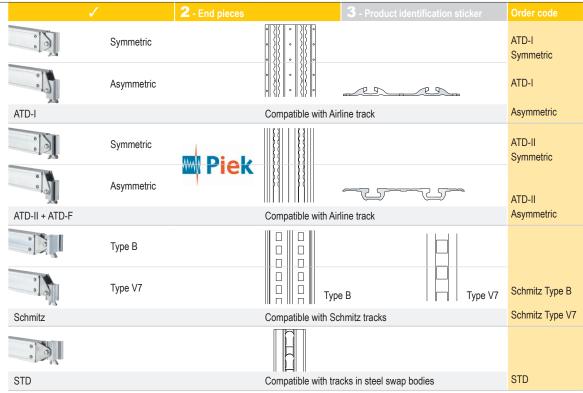


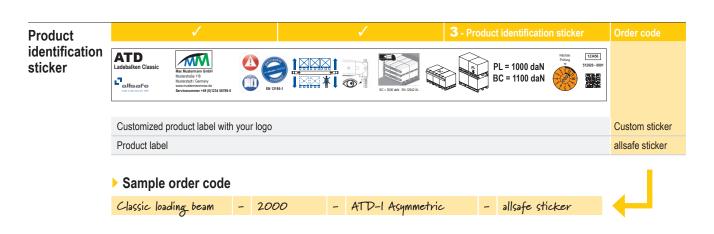
# ATD-system | Components in detail



#### Classic – compatible with every application



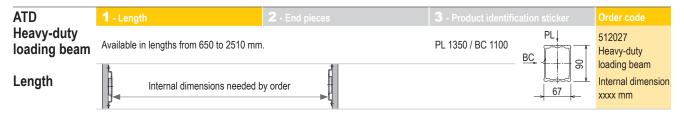


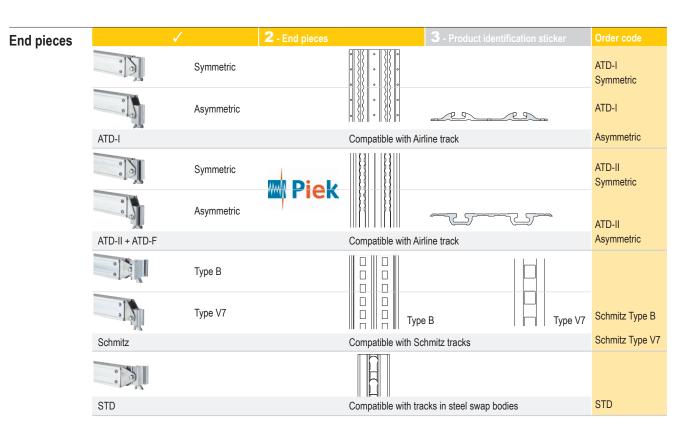


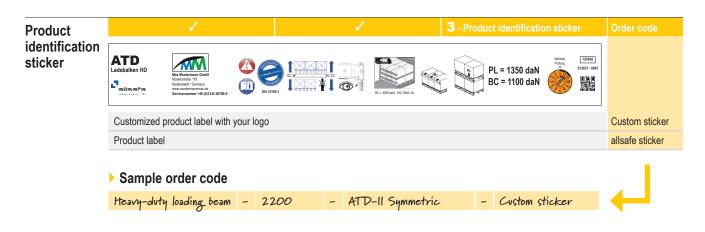




#### Heavy-duty - for particularly high loads





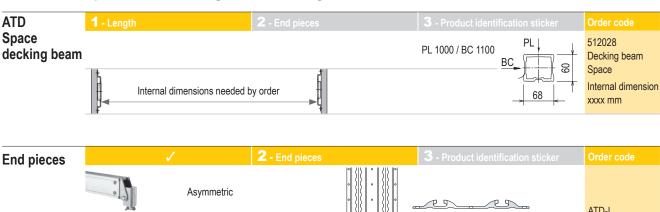


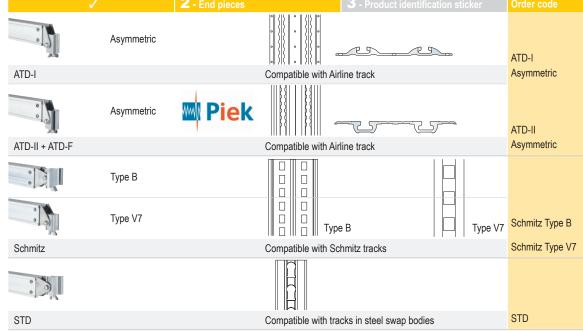


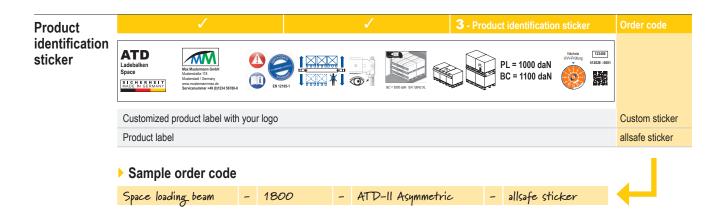
# ATD-system | Components in detail



#### Space - for more height in the loading area











#### Available from 220 to 1960 mm - for vertical mounting

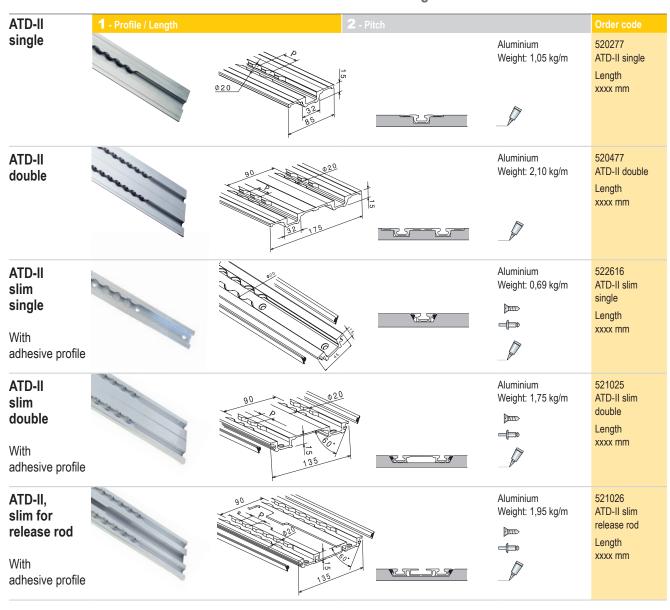
ATD-I	1 - Profile / Length	2 - Pitch	1		Order code
single	The state of the s	05 60.8 05 N	29	Aluminium Weight: 1,12 kg/m  (hum) ————————————————————————————————————	520077 ATD-I single Length xxxx mm
ATD-I double	Separate Separate	78 99 02 N	25.25	Aluminium Weight: 2,09 kg/m	520177 ATD-I double Length xxxx mm
ATD-I glueable, single	No. of the last of	020		Aluminium Weight: 1,02 kg/m	520820 ATD-I glueable single Length xxxx mm
ATD-I glueable, double	STATE OF THE PARTY	90 020 0	25 25	Aluminium Weight: 2,19 kg/m	520821 ATD-I glueable double Length xxxx mm
ATD-F single		φ20 P		Aluminium Weight: 0,88 kg/m	520421 ATD-F single Length xxxx mm
ATD-F double		90 020		Aluminium Weight: 1,83 kg/m	520422 ATD-F double Length xxxx mm
ATD-F for release rod	S. D.	0020		Aluminium Weight: 1,90 kg/m	521309 ATD-F release rod Length xxxx mm



# ATD-system | Components in detail



#### Available from 220 to 1960 mm - for vertical mounting

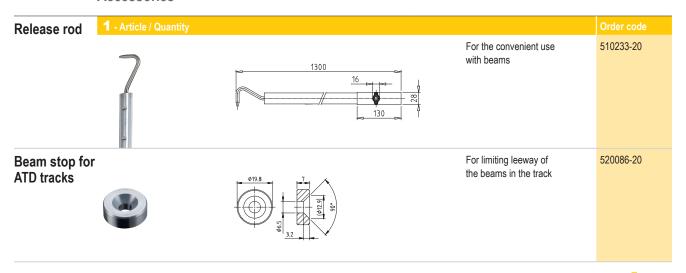


1	✓ ·	2 - Pitch	Order code
	P		
	e.g.: P = 25 mm e.g.: P = 50 mm		P-25
	Unless specified otherwise, the pitch P = 2	5.0 mm	P-50



## **ATD**-system

#### **Accessories**



#### ▶ Sample order code

Beam stop 520086-20







### STD-system

# Light-weight loading beams in steel swap bodies

The STD double-deck-system is suitable for securing loads in steel swap bodies.

Its second level makes it ideal for transporting loads of different heights as well as goods that cannot be stacked.

The beam function is selected so that the loading beam can be moved upwards in 50 mm increments and still be securely locked in position. The pallets are simply placed on the loading beams.

When not in use, the beams can be stowed under the roof to save space.

#### Suitable for:

- loading on a second level
- **1** Optimizing the loading capacity of steel box vans.
- **2** Beams can easily be stowed under the roof to save space.
- **3** Use the entire height of the box, even if goods cannot be stacked.







### Your advantages:

- increased load capacity due to lower total weight
- ergonomically optimized, therefore easy to use
- no corrosion, even in salty environments
- high load capacity



STD-system | Double-deck loading in steel box vans

#### **Description**

The STD-system optimizes how you use the space in steel box vans. It can also be used as a positive locking restraint device. Its second level makes it ideal for transporting loads of different heights as well as goods that cannot be stacked.



#### > STD beams

#### Robust loading beams



- easy to use
- light-weight
- high load capacity of up to 1350 daN

### Depending on requirements, you can select from two beam variations:

STD Classic loading beam - for loads of up to 1 t per beam

STD Heavy-duty loading beam - for loads of up to 1.35 t per beam



Also suitable for Krone steel swap bodies! (existing operating rod is compatible)



#### ▶ Pallet stop\*

#### Rear load restraint



To secure the load to the rear, the last STD loading beam is secured with Pallet stops.



Three Pallet stops are attached to the last STD loading beam. Once the STD loading beams have been loaded, the Pallet stops are manoeuvred easily into the restraint position.



Before unloading, the Pallet stops are moved to the park position. In this position, the STD loading beams can be stowed under the roof.

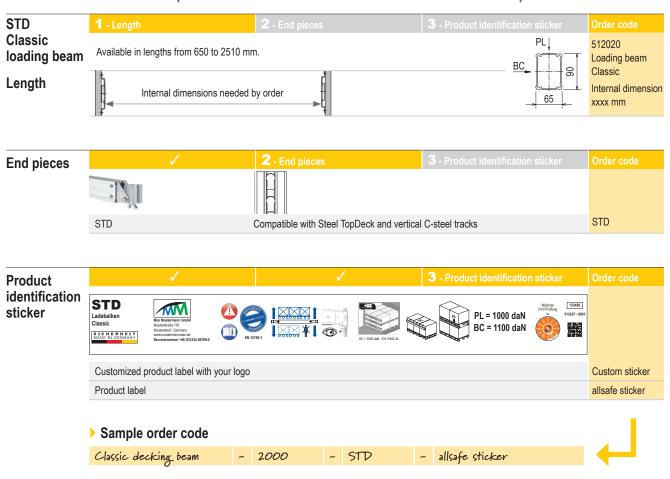


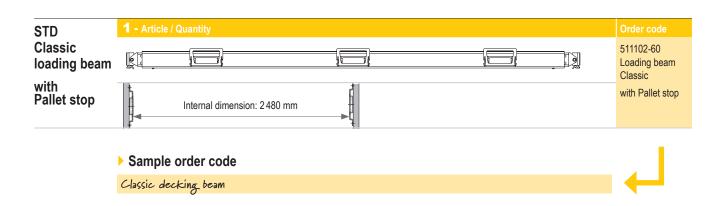
<sup>\*</sup> Pallet stop feature is available fpr all double deck beams.

# STD-system | Components in detail



#### Classic – compatible with vertical C-steel tracks and Krone steel swap bodies

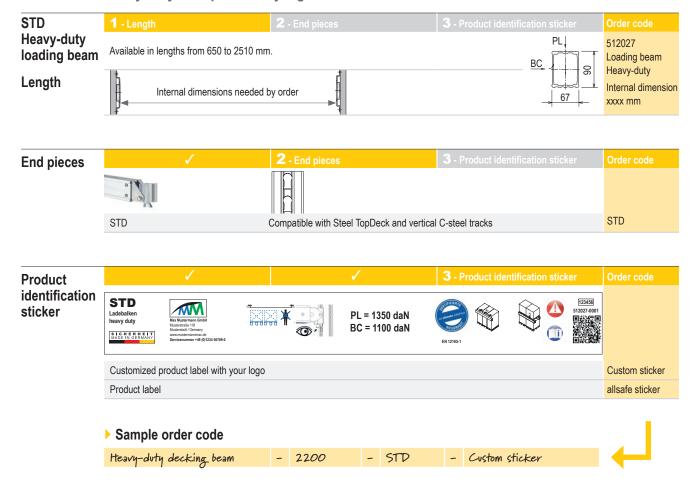








#### Heavy-duty - for particularly high demands







### **BERND** has arrived

### The best thing since sliced bread

BERND provides a fast, flexible way of restraining rolling systems and trolleys of all kinds.

It's the perfect solution for direct store delivery of fresh and dry goods, foodstuffs, and frozen products.

BERND's components are perfectly matched to your transportation and vehicle needs, taking up very little payload and ensuring that your valuable goods are kept highly secure.

The rows inside the vehicle can be adjusted as necessary, making it possible to pick orders for individual unloading points – which saves time and prevents mix-ups.

#### **Product highlights:**

#### Fast

Move dollys into the row and secure them in no time at all

Ideal for direct store delivery Pre-pick orders during loading in the rows

#### Flexible

Fast, easy installation and removal; for example, if pallet goods need to be loaded

#### Versatile

All rows can be loaded at different heights.



Space-saving, anti-twist extra-long support for more manoeuvring space when loading and unloading





### **BERND**

### Rear load restraint: Keeps food in its place

But not only for groceries. And especially even if the vehicle is only partly loaded.

BERND secures your valuable load reliably after every unloading stop, no matter how many dolly towers are left in one load lane – even if there is only one tower left. BERND will release the next dolly towers quickly at your next stop, so your driver has a maximum of convenience with unsecuring the load.

By the way: BERND has lo-lose parts, the rearward securing bar will swing under the roof and is parked there during loading and unloading.









# BERND – Clean and tidy:

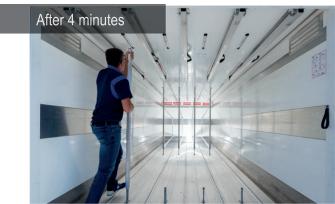
Easy installation and removal for exceptionally tidy solutions

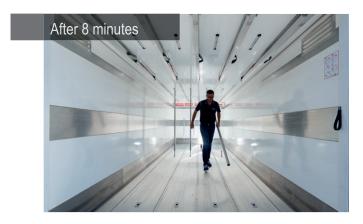
The daily delivery tour is done, but prior to closing time the vehicle has to be cleaned.

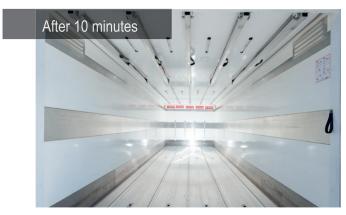
You are lucky if BERND is working with you: it is disassembled and taken out of the vehicle very quickly, so you can start cleaning immediately. Thanks to easy-to-use roof parking feature and lightweight system components, BERND is very easy to handle. The ergonomically designed blocking bars will be re-assembled quickly and easily, so BERND is "ready for take of" for the next day.

Have a nice evening!













Perfectly matched components from our KIM ranges ensure maximum ease of use and reliability.

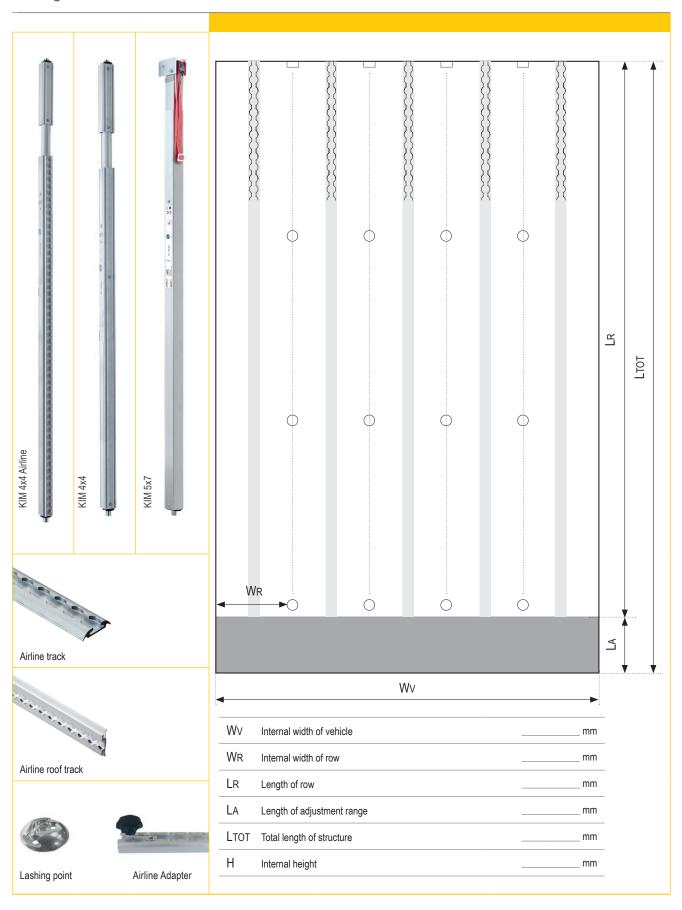


A wide range of tracks and lashing plates is available for connection inside the vehicle – so you can find the right solution to suit your needs.



KIM locking bars are stowed securely under the roof for loading and unloading.

# Configurator







# AJS-system

# Load restraint system for curtainsiders

You take a glimpse at your newest loading list and think "how is that all going to hold?" Ultimately, you do not want to spend hours tying down the tires, stillage, palletes, package freight or big-bags just to keep them in place.

With the AJS-system you can safely and effectively solve every transport challenge in seconds. Hundreds of latching points offer a good base for diverse securing components such as straps, shoring bars, and beams.

The tight pitch of the highstrength steel tracks allow for close anchorage.

With just a few hand movements, you can divide your vehicle into different departments, whether it is in the longitudinal or lateral direction.

The AJS-system can easily be retrofitted. Simply replace your wooden slats with AJS lashing profiles. When the AJS beams are not needed, they can be parked between the stanchions.

#### Suitable for:

- big bags and octabins
- FIBC and barrels
- packed goods
- tires
- **1** The tight pitch of the lashing profile allows positive locking through straps.
- 2 CP3 protectors fill gaps.
- **3** Form locking load restraint secured with KAT AJS shoring beams and rachet straps.







### Your advantages:

- hundreds of latching points allow variability
- load distribution made easy
- load secured in seconds





### **Description**

The system consists of AJS lashing profiles, KAT AJS shoring beams and cross straps for positive locking of goods. Further accessories such as CP3-protector, straps and KERL fittings are also available.







# Load distribution (with a load gap towards the front wall)

The load gap can be secured with 3 KAT AJS 900 or as an alternative 2 KAT AJS 2800.

The prerequisite for this is one row of AJS lashing profile with bolt fixation.

#### Load restraint requirements according to VDI 2700ff. in a 13,60 m Trailer Code XL:

- diagonal cross restraint between two pillars (see figure 1)
- load segmentation: KAT AJS after 4 pallets rows (see figure 2)
- pallet stroke bar on both sides with Code L

## ▶ The following items are necessary for load restraint:

Article	1 space between the pillars	4 spaces between the pillars 27t	4 spaces between the pillars 27t with loading gap
AJS lashing profile	2 rows	2 rows	2 rows
AJS lashing profile with bolt fixation		1 row	1 row
KAT AJS 900	2 pieces	9 pieces*	12 pieces*
Diagonal cross straps		4 pair	4 pair

<sup>\*</sup> Option: 6 KAT AJS 2800

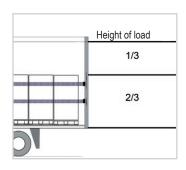
### > AJS lashing profile with AJS bolt fixation and AJS brackets

#### To secure in the pillar pockets



AJS lashing profiles should always be equiped with fixation bolts. These bolts are put into holes in the slat holders to achieve sufficient load transmission into the construction of the vehicle.

2 rows of lashing profile are enough if the load is not higher than 2/3 of the inner height of the trailer. If the load is higher, three rows of lashing profiles are required.





The KAT AJS 900 can be parked between the pillars, with the AJS holders, and the AJS lashing profile can be used without any restrictions. Due to the flat design of the AJS holders, the entire width of the vehicle remains unaffected. The AJS holders can be easily clamped onto the AJS lashing profiles. Tools are not required.

### ► CP3 protector

#### To be clipped into the AJS lashing profile

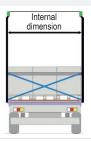


A load gap is built when goods are loaded on CP1-CP9 pallets. With the help of CP3-protectors the gap can be closed off and your goods can be optimally secured.

### Cross straps

#### Connection between AJS lashing profiles and anchor points



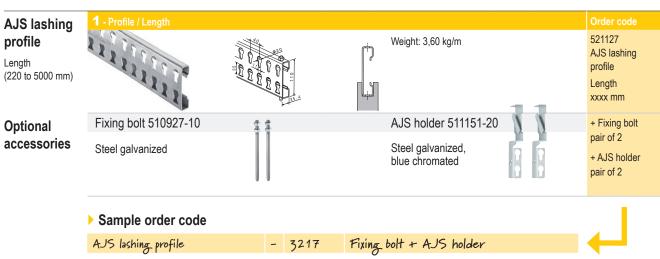


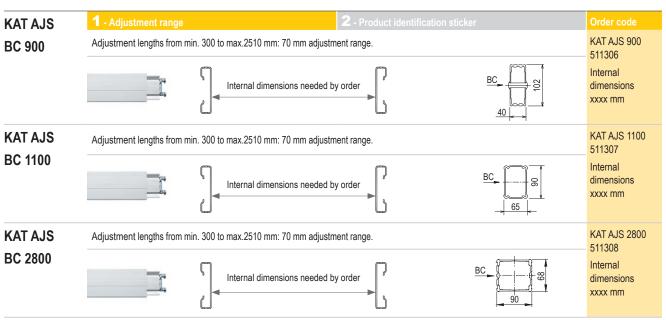


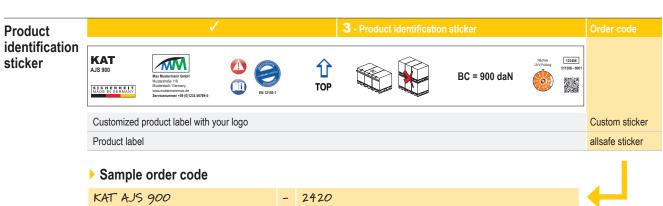
# AJS-system | Components in detail



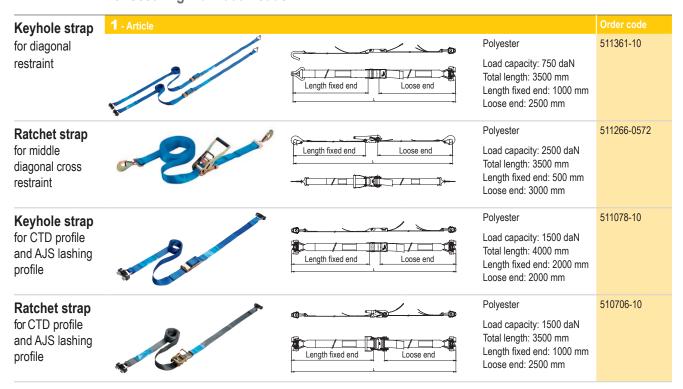
#### For securing and segmentation of loads







#### For securing individual loads



#### **Accessories**

KERL AJS 300	1 - Article			Order code
		917.5 177.5	Steel, Aluminium	511275 PU - 0012 pcs. - 0040 pcs. - 0080 pcs.
KERL AJS 1000 for CTD profile and AJS lashing profile		41 80 80	Steel, KTL Load capacity: 1000 daN in compliance with EN 12640	511242 PU - 0004 pcs 0012 pcs 0040 pcs.
KERL AJS 25 for AJS lashing profile and CTD profile	Olo	77 27 27 27 33 33	Steel galvanized  Load capacity: X: 400 daN Y: 1000 daN	512191 PU - 0004 pcs. - 0012 pcs. - 0040 pcs.



# **AJS-**system | For your individual AJS-system we need the following information:

System	Freight type	granular (e.g. su	ıgar, salt)	packaged goo	ds s	oft packaging (e	e.g. chemical goods)	$\Box$
	2. Load capacity?			< 18.000 k		001 - 27.000 kg	> 27.000 kg	Ħ
	3. Bulkhead EN 12642				Cod	e L	Code XL	一
	4. Does the load exceed 2/3 of	the inner trailer height (fi	g. 1)			YES	NO	
	5. Inner dimension of the trailer	(fig. 3)						_ mm
	6. Number of stanchion grids?	1 stanchion grid	2 stanchio	on grids	3 stanchion gr		4 stanchion grids 27t (incl. certificate)	
	7. In which direction do you want to secure the goods? towards rear towards front					to the side		
	8. Distance between the pillars (fig. 2)?					_ mm		
	How many rows of lashing pro	files do you have in each	stanchion grid?			2 rows	3 rows	
	10. Should one row of AJS lashing	profile have AJS bolt-fixa	tion?			YES	NO	
							Height of the load	
Fig. 1	stanchion grid 1	stanchion grid 2	stanchion	grid 3	stanchion gr	id 4	1/3	$\overline{\uparrow}$
							2/3	
	Cross straps			00				
Straps	10. Number of straps (over-cent	er strap 511361-10) for s	ide restraint using	the diagonal cro	oss method			Pairs
	11. Number of straps (ratchet st	ap 511266-0572) toward	ds the front wall (fi	g.1)				_ pcs.
Shoring-	12. Number of KAT AJS 900							
elements	3. Number of KAT AJS 1100				_ pcs.			
	4. Number of KAT AJS 2800						_ pcs.	
	14. Number of NAT Add 2000					_ pcs.		
Accessories	15. Number of AJS brackets for	KAT AJS 900						_ pcs.
	16. Number of CP3-protectors							_ pcs.
	17. Number of cross straps (511078-10) for strapping of goods					_ pcs.		
	18. Number of ratchet straps (510706-10) for strapping of goods					_ pcs.		
	19. KERL AJS 1000							_pcs.
	20. KERL AJS 25 (512191)							_pcs.
Fig. 2	inner dimensions	Fig	inner	dimensions				

# AJS-system | Combinations

	AJS lashing profile 521127	AJS holder 511151
KAT AJS 900, 1100, 2800	•	•
Bolt fixation 510927-10  KERL AJS 25	•	
512191 KERL AJS 1000	•	
511242 KERL AJS 300	•	
511275  Keyhole strap 511078-10	•	
Satchet strap	•	
510706-10  AJS holder 511151-20	•	





# CTD-system Doubles your loading space

A packed gearbox can take up almost half of your loading space and you have no room on the side or on top for transporting palletized goods. So you complete your route well below the allowed loading capacity and transport plenty of air while you're at it.

With the CTD-system, you gain a second deck where you can load up to 13 extra tons!

If you primarily carry palletized goods you actually double the load capacity from 33 to 66 pallet places.

The loading beams can also be used for positive locking load restraint. When decking beams are not needed, they can be parked between the pillars.

Depending on the configuration.

The CTD-system can be built or retrofitted into a curtainsider with suitable double deck pillars.

#### Suitable for:

- for loading on a second level
- **1** Doubles volume. Room for 66 pallets up to 1.5 m high and 400 kg. Load capacity of upper deck amounts to 13,200 kg.
- **2** Easy to handle beams with single-telescope
- **3** Beams parked between the pillars. It doesn't get easier than that.







## Your advantages:

- fast second loading level
- parking of the light-weight decking beams
- reduce your operating and labour costs





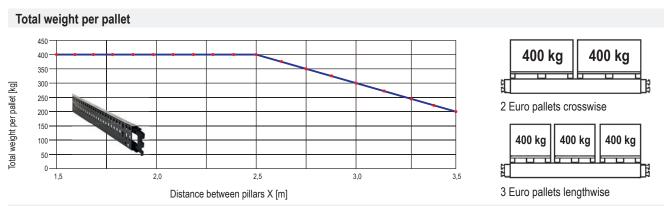
for use in double deck pillars for securing pallets on two levels. It can also be used as a garment transport system or with KERL fittings.





To achieve the maximum payload of the CTD-III decking beams, we recommend a grid size of 2,42 m for pillars. Consequently six euro pallets can be positioned in each stanchion area. CTD-III decking beams which are not in use can be parked between the pillars. Larger pillars intervals enable loading from the rear and the side.

### ▶ Payload diagram for CTD-III side beams

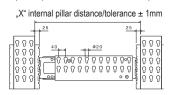


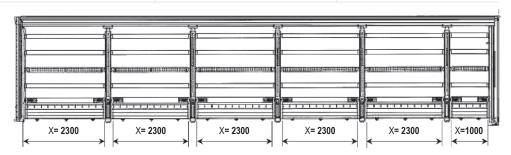
#### ▶ CTD-III side beam

# Between the pillars

	Payload per side beams daN	Max. payload per Euro pallet in kg
X = to 2,49 m	1250	400
X = 2,5 to 2,99 m	1125	300
X = 3,0 to 3,5 m	875	200

Length calculation CTD-III side beam (example for a trailer at 13,6 m)





## ▶ CTD-III decking beam

#### Between the CTD side beams



Length mm	Weight kg	Payload per decking beam daN	Remark
2210 - 2530	7,5	see CTD-III side beam	Length is secured by securing latch

### ▶ CTD-III Keyhole track

#### With rivets or weld joint on the stanchion



For applications with slats and lashing profiles which can be hung in the pillars



#### **KERL AJS 25**

#### For the stanchion



For slats or lashing profiles which can be hung in the stanchion in keyhole track with help of the KERL AJS 25. With the help of KERL AJS 25, slats or lashing profiles can be hung in the pillar keyhole track.





# CTD-system | Components in detail



CTD-III
side
beam



Steel, KTL surface treatment free of chromium (VI)

oad capacity: 400¹ daN	Length:	511380-xxxx
Weight: < 16,80 kg	X = 0 - 2499 mm	

Load capacity: 3001 daN	Length:
Weight: 16,80 - 20,00 kg	X = 2500 - 2999 mm

CTD-III
decking
beam



		Order code
Load capacity: 400 <sup>1</sup> daN Weight: 8,8 kg	Length: 2210 - 2530 mm	510800-10
Load capacity: 300 <sup>1</sup> daN Weight: 8,8 kg	Length: 2210 - 2530 mm	510800-11
Load capacity: 200¹ daN Weight: 8,8 kg	Length: 2210 - 2530 mm	510800-12

<b>KERL AJS 25</b>
for CTD- and
keyhole track







Steel galvanized,

# PU - 0004 pcs. - 0012 pcs.

512191

511380-xxxx

- 0012 pcs. - 0040 pcs.

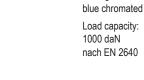
511242

# **KERL AJS 1000** for CTD- and keyhole track





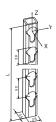




PU - 0004 pcs. - 0012 pcs. - 0040 pcs.

# CTD-III keyhole track





Weight: 2,2 kg Length: 1300 mm Steel, S420 blank

521161-10

CTD-III keyhole panel





Weight: 2,2 kg Steel, 521161-11
Length: 1300 mm S420 KTL surface treatment free of chromium (VI)

Steel galvanized, blue chromated 520294-25

<sup>&</sup>lt;sup>1</sup> The load capacity refers to one Euro palette space

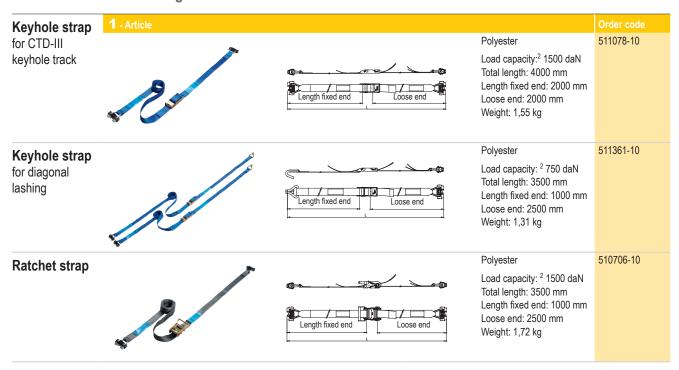
#### **Accessories**





# CTD-system | Components in detail

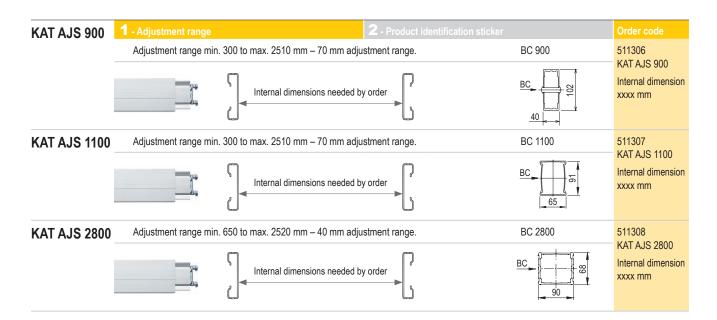
#### For securing individual loads

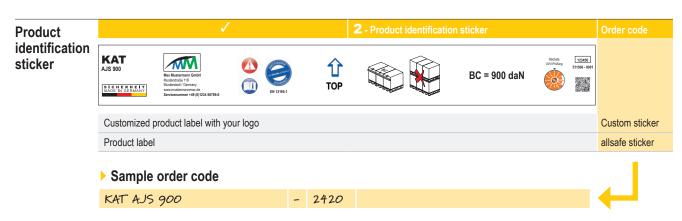


AJS	1 - Article		Order code
lashing profile	22222	Steel galvanized, blue chromated Length: 220 - 5000 mm Weight: 3,60 kg/m	521127-xxxx Length xxxx mm

<sup>&</sup>lt;sup>2</sup> The load capacity details refer to daN when strapping.





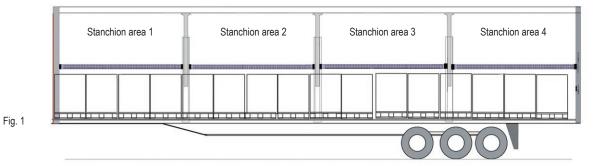




CTD-system | For your customized CTD-system we need the following information:

#### **System**

1.	Number of stanchion areas (Fig. 1)	pcs.
2.	Number of lashing profile rows	pcs.
3.	Distance between the pillars (Fig. 2)	X =mm
4.	Number of CTD-III decking beams	pcs.



"x" distance between the stanchion area/tolerance ± 1mm

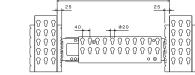


Fig. 2

#### Shoringelements

5. Number of KAT AJS BC

#### **Accessories**

6.	Number of KERL AJS 1000	pcs.
7.	Number of KERL AJS 25	pcs.
8.	Number of CTD-III keyhole track L=1300 mm	pcs.
9.	Number of CTD-III keyhole panel	pcs.
10.	Number of AJS strap sets	pcs.

# CTD-system | Combinations possibilities

	Pillar Hesterberg	CTD-III keyhole profile 521161	CTD-III side beam 511380	CTD-III keyhole panel 520294	AJS lashing profile 521127
CTD-III side beam 511380	•	•			
CTD-III decking beam 510800	•	•	•	•	•
KAT AJS	•	•	•	•	•
KERL AJS 25 512191	•	•	•	•	•
KERL AJS 300 511275					•
KERL AJS 1000 511242		•	•	•	•
Keyhole strap 511078 / 511361	•	•	•	•	•
Ratchet strap 510706	•	•	•	•	•
AJS holder 511151 N					-





#### CRS Ergo floats into position – and does not require an operating strap.

- pull the easy-to-grip lever
- push the floating beam towards the load and
- lock in place with the lever.

Thanks to the newly developed floor bolt, the CRS Ergo beam centres itself (almost) automatically in the floor track.



# CRS Ergo-system

## Ergonomic for your back, secure and fast

For all stable packaging units there is now the perhaps the most ergonomic load securing system ever:

With CRS Ergo, attaching load securing becomes child's play. Almost effortlessly, the beams can be pushed against the load and locked quickly and securely. The shape and position of the operating lever allows operation with just one hand, while the second hand easily pushes the bar against the load. The new Ergo operating mechanism allows the beam to hang freely from the vehicle ceiling, so that the operator's back muscles are protected. When loading and unloading the vehicle, the CRS Ergo beams can be parked under parked under the ceiling as usual. This does not yet work by itself,

but we are working on it.

#### Suitable for:

- bottle crates and barrels
- all kinds of stable packaging units
- 1 The CRS Ergo beams are particularly easy to move
- 2 The height-adjustable crossbars can be securely parked in standard holder when not in use.
- 3 Securing and unlocking the beam with the easy-to-grip Ergo operating lever.







Also with full service! Find out more about all:change:



### Your advantages:

- loads of up to 28 tons can be secured
- every CRS Ergo beam is locked and unlocked individually with ergonomic hand lever
- ergonomic and quick use
- no lose or down-hanging parts
- shoring beams are stowed securely even on bumpy roads





# CRS-system Universal restraint system

The CRS barrier beam system is suitable for securing stable packaging units of all kinds.

It combines maximum safety with high load-capacity.

Made from strong aluminium profiles, the barrier beams are guided in rails on the vehicle ceiling and can be parked under the ceiling to save space when loading and unloading the vehicle.

The high load capacity guarantees safety even with heavy loads.

#### Suitable for:

- bottle crates or barrels
- all kinds of stable packaging units
- **1** Simple handling is guaranteed thanks to the ergonomic design.
- **2** Easy loading and unloading by stowing the beams under the roof.
- **3** The height of the shoring poles can easily be adjusted.







Auch mit vollem Service! Hier über all:change informieren.



### Your advantages:

- loads of up to 28 tons can be secured
- ergonomic and quick use
- shoring beams are stowed securely even on bumpy roads
- coordinated system components



# CRS-systems | Load restraint for pallets in trucks



The system consists of several vertical beams, which are linked together horizontally by shoring poles. Steel or aluminium perforated tracks are used to anchor them in the roof and floor.



#### Roof / floor tracks

#### Airline track (aluminum) or steel tracks



Enable positive locking anchoring to the floor and roof.





Tilly floor track is the first self-cleaning round hole track available: Dust intruded into the track will be removed automatically when a shoring pole is brought into position. Also, Tilly is covered so less dust gets into the track anyways.





Alternatively, CRS system is available with aluminium airline tracks.



We are pleased to configure your individual system!

### ▶ CRS Ergo shoring beams

#### Robust securing beams



Using the operating lever, the beams can be raised by approx. 50 mm and moved freely in the ceiling track.



### ▶ Shoring poles and shoring beams

#### Securing the load horizontally



Shoring poles are available in 3 versions:

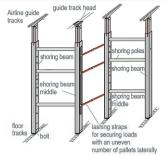
- permanently mounted to the beam
- removable
- particularly robust with KAT AJS cross-beams

If poles are not being used, they can be conveniently stowed away, but are always at hand.



### **Straps**

#### For securing the load laterally



If there are an uneven number of pallets, they can be secured by attaching lashing straps between the central shoring beams.



### ▶ CRS-system accessories

#### Securing and space-saving storage

- roof holder is used to store the beams. Also available for retrofitting
- shoring poles
- shoring pole holders
- KAT AJS shoring beam set, consisting of 3 beams with holders
- release rod makes it easier to stow the CRS-shoring beams, particularly if the vehicle has a high roof

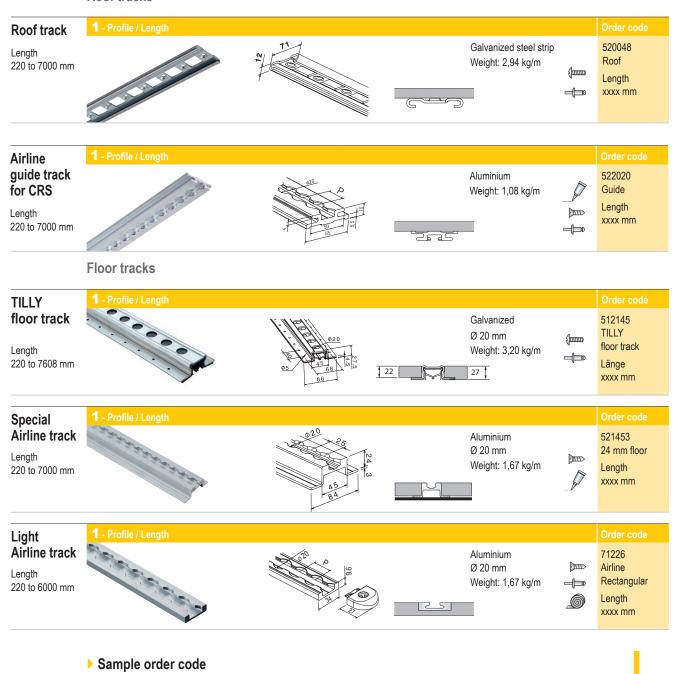




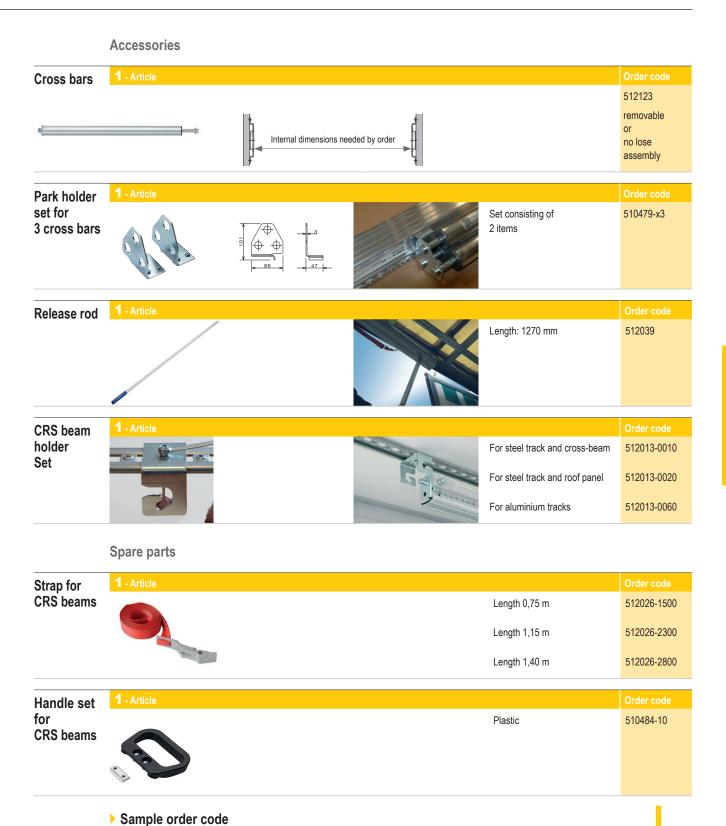


#### **Roof tracks**

TILLY



- 6000



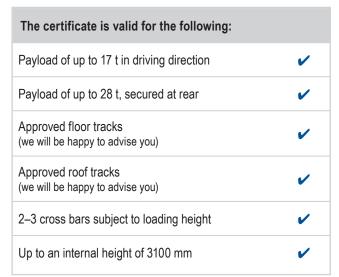


CRS beam holder 512013-0010

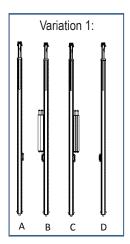
# **CRS**-systems | Certification

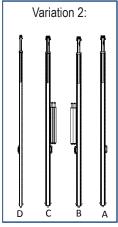
The CRS-system offers you maximum safety. Certification available upon request.



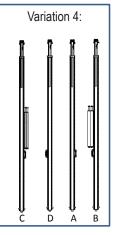


#### **Variations**









#### Variation for special usage







# **CRS-**systems To create your individual CRS-system, we require the following information:

Application	1.	3 rows of pallets next to each other	2 rows of pallets next to each other	
	2.	Do you need a certificate? (see criteria on page 52)	YES	NO
Please note: The fo	ollowin	g information has a bearing on the validity of the certific	cate. Please feel free to discuss this with us.	
Vehicle information	3.	Payload?	kg	
intormation	4.	Load capacity (code L / XL / none)?	kg	
	5.	Length of the loading area floor?	mm	
	6.	Internal height of the vehicle?	mm	
Roof and		Required floor tracks (see page 50):		
floor tracks	8.	Number and length of floor tracks*:		
	9.	Pitch? 50 mm (standard)	40 mm Calculate number	
	10.	Required roof tracks (see page 50):		
	11.	Number and length of roof tracks*:		
	12.	Calculate number automatically		
	13.	Track centre distance	mm	
		* Floor and roof tracks are available in the standard lengt	ths of 2000, 3000 and 6000 mm or customized to you	r required length.
Application	14.	In which direction should the load be secured?	Towards the rear	Towards the front and rear
and system details	15.	Will partial gaps sometimes be present**?	YES	NO _
uctans	16.	Your system will be delivered assembled. Please select	t a construction variant. Construction variant:	
	17.	Beam holder?	YES	NO
	18.	Where should the roof holders be attached?	Cross member	Roof panel
	19.	Do you want to add cross bars?	YES	NO
	20.	2-row system designed with	KAT AJS	Spring slat loader
	21.	Number of cross bars:	pcs.	
	22.	Straps for securing number of pallets?	YES	NO
		Length strap: 900 – 1000 mm	pcs.	
		Length strap: 1300 – 1700 mm	pcs.	



 $<sup>^{\</sup>star\star}\textsc{Additional beams}$  are required when loading with gaps.

Accessories AJS	41	CTD accessories	50
Accessories ATD	23	CTD-III decking beam	48
Accessories CRS	59	CTD-III keyhole panel	48
Accessories CTD	50	CTD-III keyhole track	48
Airline guide track	8	CTD-III side beam	48
AJS accessories	35	CTD pillars	49
AJS lashing profile	40, 50	CTD-system	44
AJS straps	41	JF-system	4
AJS-system	36	KAT AJS 4	0, 51
allsafe	2	KERL AJS 25	48
ATD accessories	23	KERL AJS 1000	48
ATD decking beam Classic	18	KERL JF	9
ATD decking beam Heavy-duty	19	KERL JF fix	10
ATD decking beam Space	20	KERL JF slide	10
ATD-system	14	KERL JF snap	9
ATD-F	21	KIM 55	11
ATD-I	21	STD decking beam Classic	28
ATD-II	22	STD decking beam Classic with Pallet stop	28
BERND	40	STD decking beam Heavy-duty	29
BERND Configurator	35	STD-system	24
CRS- / CRS Ergo-system	54		
CRS spare parts + tracks	61		
CRS accessories	61		

# Order number overview

1 1101111001 0 101 11011	
310275	12
310280	12
360 013-10	12
510233-20	23
510479	61
510484-10	61
510706-10	41, 43, 50
510800	48, 53
510927-10	40, 43
511078	53
511078-10	41, 43, 50
511102-60	28
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512026	61
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520422	21
520477	22
520820	21
520821	21
521025	22
521026	22
521127	40, 43, 50, 53
521161	48, 53
521309	21
521453	60
522020	8, 58
522616	22
560 438-10	12
71 017	12
71 036	12
71226	60
71 234	12
77 036	



# Meaning of the icons



countersunk screw

riviting

glueing

taping

welding

flat head screw



