# ENGINUITY SINCE 1893













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PRODUCT RANGE AND TERMINOLOGY

TECHNICAL SPECIFICATIONS

KEY FEATURES

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STANDARD PRODUCT SPECIFICATIONS



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#### PRODUCT RANGE

### **CURTAINSIDER PRODUCT RANGE**

#### **STANDARD**



- SCSX+/90-12/27
- SCS M / 90 12 / 27
- SCX X / 125 12 / 27
- SCD X / 90 12 / 27
- SCD M / 90 12 / 27
- SCH X / 125 12 / 27

#### LIGHT



- SCL X / 150 12 / 27
- SCL M / 150 12 / 27

#### COIL



- SCC X+ / 125 12 / 27
- SCC M / 125 12 / 27

#### **AIR CARGO**



■ SCAM/80-12/27

#### **PAPER**



• SCP X / 125 - 12 / 27

#### **TRUCK & TRAILER**



- CAU M / 2900
- CAN M / 2950





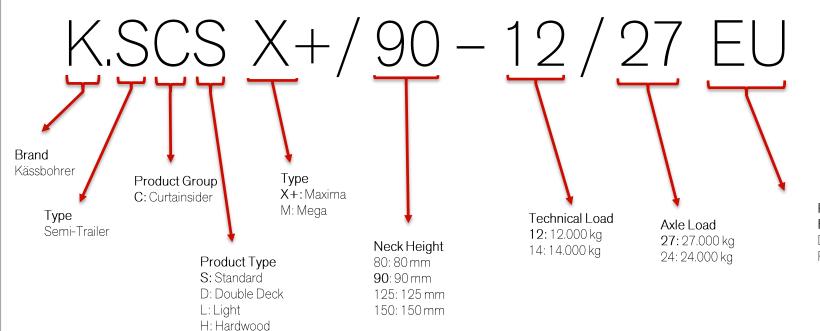




#### KÄSSBOHRER CURTAINSIDERS

### PRODUCT CODE

A: Air Cargo C: Coil P: Paper X: Extensive



Registration Country

EU: Europe DE: Germany

DE: Germany PL: Poland, etc.



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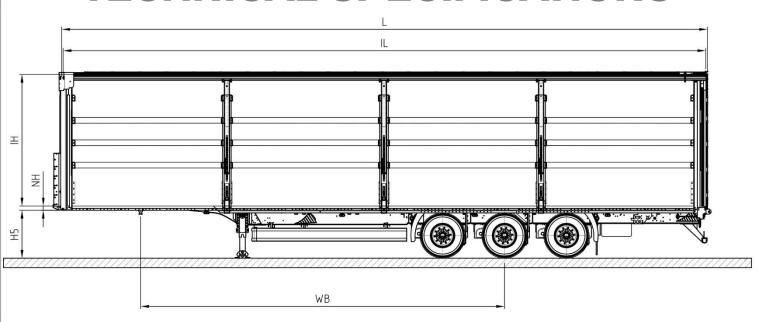


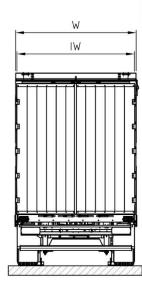




### K.SCS X+ / 90 - 12 / 27

## **TECHNICAL SPECIFICATIONS**





#### 1- Total Length

13.680 mm

2- Inner Length

13.610 mm

3-Inner Height

2.800 mm

#### 4-5th Wheel Height

1.100 mm

5- Neck Height

90 mm

6- Euro Pallet Capacity

34 units

#### 7 - Internal Width

2.480 mm

8- Tare Weight (±%3)

6.610 kg

9-Volume

 $94,5 \, \text{m}^3$ 



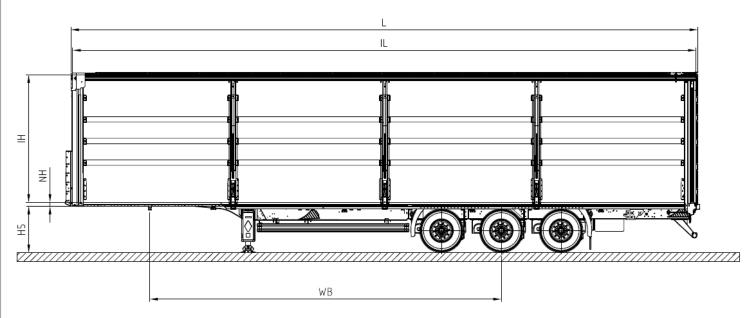


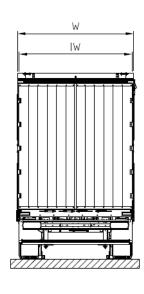




#### K.SCS M / 90 - 12 / 27

## **TECHNICAL SPECIFICATIONS**





1- Total Length

13.680 mm

2- Inner Length

13.610 mm

3-Inner Height

2.950 mm

4-5th Wheel Height

950 mm

5- Neck Height

90 mm

6- Euro Pallet Capacity

34 units

7 - Internal Width

2.480 mm

8- Tare Weight (±%3)

6.360 kg

9-Volume

 $99,6 \, \text{m}^3$ 



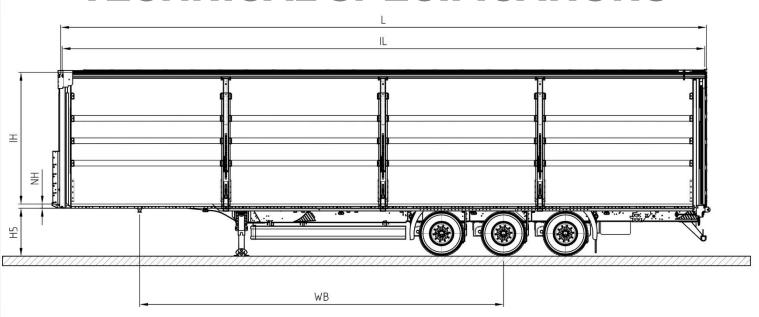


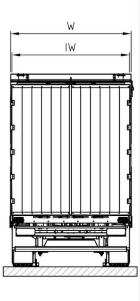




#### K.SCX X / 125 - 12 / 27

# **TECHNICAL SPECIFICATIONS**





1- Total Length

13.680 mm

2- Inner Length

13.610 mm

3-Inner Height

2.690 mm

4-5th Wheel Height

1.150 mm

5- Neck Height

125 mm

6- Euro Pallet Capacity

34 units

7 - Internal Width

2.480 mm

8- Tare Weight (±%3)

6.560 kg

9-Volume

90,8 m<sup>3</sup>





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## K.SCS X+ / 90 - 12 / 27

## **AREAS OF USAGE**

#### General Loads such as;

- Classic Euro-Pallet loadings
- Spareparts / Packings
- Furniture
- Clothes and other textile products
- Automotive spare parts with cages
- White goods









### K.SCS X+ / 90 - 12 / 27

## **RUNNING GEAR**









### **LANDING LEGS AND KING-PIN**

Kässbohrer curtainsiders has Jost brand landing legs which has 24 tonnes permissible load capacity (12 tonnes load capacity for each leg).

The landing legs comply ISO 1726 norms.

Kässbohrer curtainsiders has 2 inch Jost brand king-pin.

The king-pin capacity of SCS and SCX are 12 tonnes.



King-pin



Fifth wheel coupling



Landing legs





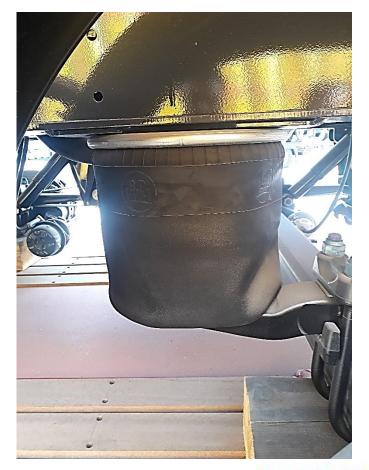


## **AIR SUSPENSIONS**

There are 2 air bellows for each axle.

Air bellow model depends on axle brand and axle type.

Standard SCS M ramp height -from ground to trailer floor- is 1.180 mm. Depends on the customer demand, ramp height can be higher than 1.180 mm.











## **HANGER BRACKET**

#### Axle Linkages

Axles are connected to hanger bracket with screw nut connection.

All curtainsiders' hanger brackets are connected to chassis with welding connection.



All curtainsiders are equipped with standard Wabco EBS Modulator.

SCS and SCX can be equipped with Premium EBS Modulator.











# KEY FEATURES BRAKE SYSTEM

Anti-Lock Braking System(ABS) and Roll Stability Support(RSS) suitable for UN ECE R13 regulation. EBS 2S / 2M braking system of WABCO brand with electropneumatic dual-circuit that contains power supply and voltage supply(24N) through brake light.

Kässbohrer SCS and SCX curtainsiders are equipped with **disc brake**.

Mega curtainsiders which has 19.5 inch wheel size are equipped with 370 mm brake dimensions.

Maxima curtainsiders which has 22.5 inch wheel size are equipped with 430 mm brake dimensions.

SCS and SCX can be equipped with drum brake.







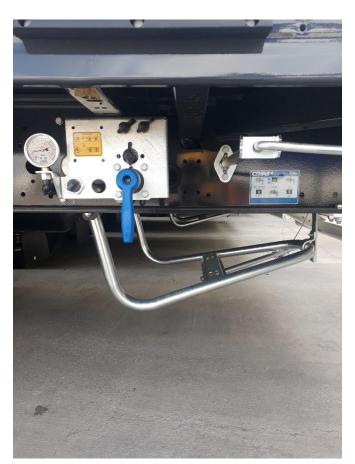


# CONTROL VALVE AND AUTO RESET FUNCTION

Haldex Colas control valve mounted on the rear and left hand side of the trailer.

Trailer can be lifted and lowered with control valve for loading and unloading operations.

Kässbohrer SCS and SCX curtainsiders are equipped with **Auto Reset function** therefore the control valve returns automatically to driving position when the speed exceeds over 15 km/h.









## **ELECTRIC SYSTEM**

Kässbohrer SCS and SCX curtainsiders are equipped with **ASPÖCK Europoint III** lightning installation with 24V LED side position lamp and 2 x 7 and 1 x 15 pin sockets in compliance with Regulation UN ECE R48 and ADR Legislation.

SCS and SCX curtainsiders can be equipped with different types and different brands electrical systems depends on the customer demands.







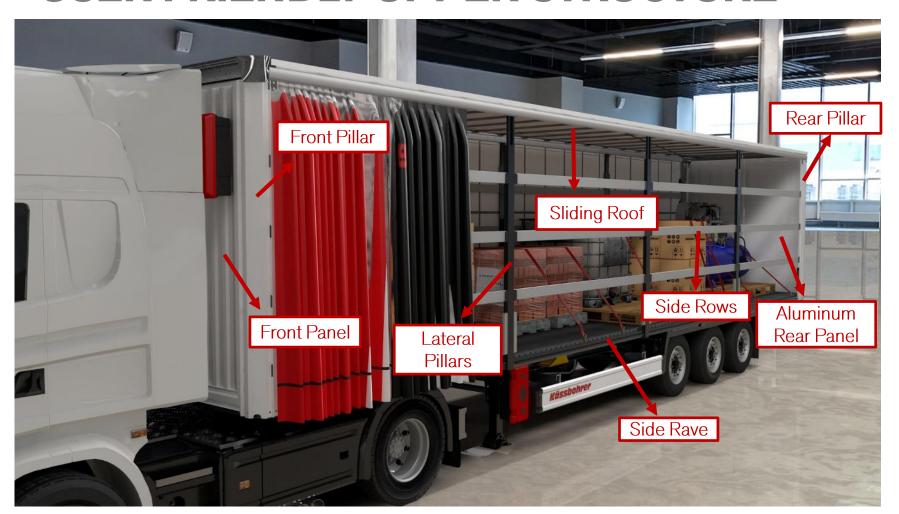






### K.SCS X+ / 90 - 12 / 27

## **USER FRIENDLY UPPER STRUCTURE**









# ALUMINIUM REAR DOORS WITH UNIQUE DESIGN

- New generation rear door with 2 units of wings, hidden lock mechanism and four pair of protected hinges to enhance
- Specially designed; light but robust aluminium profile door provides maximum life performance.

lightness and durability.















# ALUMINIUM REAR DOORS WITH UNIQUE DESIGN

- With its fifteen detachable parts, in case of any damage relevant part can be replaced easily.
- Fast serviceabillity with the bolted and riveted connections.







# TRAILER INDOVATION 2017 WINNER CATEGORY SAFETY



# **REAR DOOR TYPES**



Aluminium rear door



Container rear door







# KTL COATING FOR PROLONGED LIFECYCLE



- Cataphoretic coating (KTL) application to chassis frame to withstand adverse weather conditions and tough road conditions.
- Zinc-phosphate tri-electron cataphoretic coating provides protection against rust perforation with 10 years warranty.
- Kässbohrer gives cataphoretic coating to all steel structure parts in curtainsiders.











## **EASE OF USE SLIDING ROOF SYSTEM**

Reinforced sliding roof suitable for CodeXL certification

Equipped with both steel and plastic materials

Effortless sliding ability with minimum forces

Additional two ways of sliding roof option for the loading and unloading operations with the most efficient way











# ROOF LIFTING OPTIONS FOR YOUR JUST-IN-TIME OPERATIONS

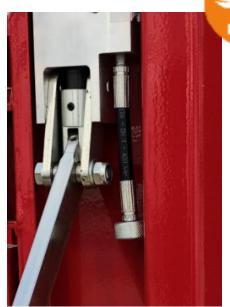
SCS and SCX provide roof lifting options with lighter design for the customers who demand higher volumes to carry their goods

Fastest level adjustment operations are possible with a stopper part only

500 mm roof lifting can be given for loading and unloading purposes. In addition to that; up to 4 x 50 mm roof lifting is possible during driving

All parts can be replaced seperately











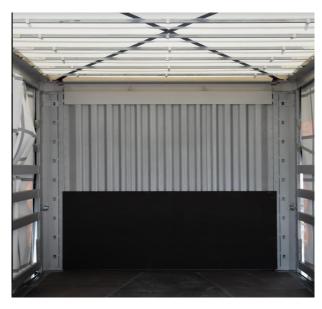
# STRONGEST FRONT PANEL WITH ANTI-CORROSION PROTECTION

Cataphoretic dip coated steel front panel with additional protection by means of a **1.220 mm-high** and **12 mm thick** plywood plate and steel corner supports.

KTL coated steel front panel provides anti-corrosion protection and more robust upperstructure for heavy loading operations.

There are two load lashing rings on the steel front panel which has 10 kN load capacity.

Easy to mount different accessories such as document box, document pocket or fire extinguisher box on the front panel.











# STRONGEST FRONT PANEL WITH ANTI-CORROSION PROTECTION

In case of any damage relevant part can be replaced easily because of its detachable design.











## **DETACHABLE COUPLING SECTION**

Coupling section consists six parts and parts are connected each other with screw nut connections and/or rivet connections.









#### **KEY FEAUTERS**

### **ROBUST AND STRONG CHASSIS**

- The most **robust** and **strong** chassis in the market which is produced with S460 MC steel ensures the longevity of Kässbohrer trailers
- As standard, Phenol resin coated, 30 mm thick and water resistant plywood floor can support 7.200 kg forklift axle load
- Optional reinforced Phenol resin coated, 30 mm thick and water resistant plywood floor can support 8.000
   kg forklift axle load











#### K.SCS X+ / 90 - 12 / 27

# SECURE YOUR LOADS WITH KÄSSBOHRER









# MULTI-POINT LOAD LASHING SYSTEM WITH 2.5 TONNES CAPACITY

K-Fix is a multipoint load securing system which has 118 pairs of lashing points in the side raves.



K-Fix enables fastening of the loads from 236 different strapping points, with 2.5 tonnes load securing capacity each.

K-Fix can be used with or without side boards.

K-Fix system is compatible with standard sizes of lashing straps and pallet stopper option.













# DURABLE HUCKEPACK DESIGN FOR EFFICIENT INTERMODAL OPERATIONS

- Kässbohrer provides durable and reinforced huckepack handling points for the safest train loading operations
- Suitable for P400, P386, P390 or P395 profile code tunnels and e, f, g, i wagon types





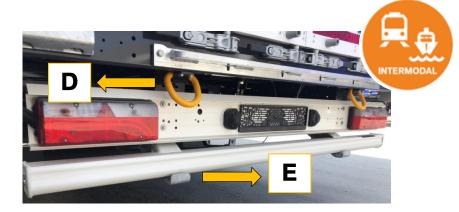




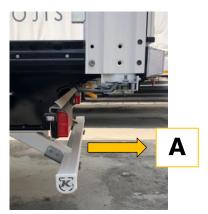


# PERFECT PERFORMANCE FOR UNACCOMPANIED FERRY OPERATIONS

- [A] Galvanized and painted bumper is positioned 300 mm inside of the trailer.
- Reinforced chassis on king pin section
- [B] Plastic ramp buffer on coupling console
- [C] Extra cover to close sliding plate section
- [D] 4 x 2 units Ro-Ro rings
- [E] 2 pieces of ferry skids made of galvanized steel
- 1 meter high wooden planks are integrated inside rear door both left and right side









C

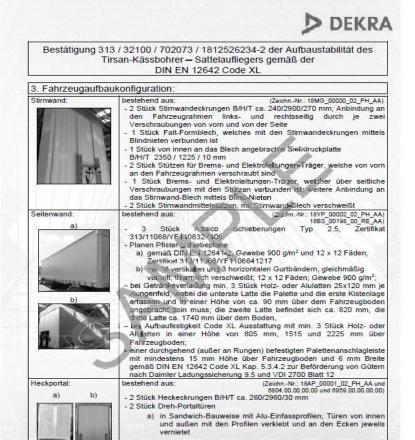






### **CERTIFICATIONS**

- All Kässbohrer curtainsider bodies are fully equipped in accordance with EN 12642 (Code XL).
- For load securing standards specific to the automotive industry, involving pallet cages, euro pallets and smallsized carriers, Kässbohrer's options include **Daimler Load-Securing 9.5**, one of the main guidelines for automobile component transportation.
- Load securing certifications for beverage transportation, with standardized boxes placed on euro pallets, for tyres and octabins are among the options supplied with your Kässbohrer.



Nieten vernietet - für Variante a) und b):

b) aus je 6 Aluprofilen B/H/T ca. 205/3000/20 mm AlMgSi 0,5
 F22 mit Alu-Einfassprofilen von außen und innen mit je 14

zwei Drehstangenverschlüssen je Türblatt; Anbindung der Drehtüren an

die Heckeckrungen mittels 5 Scharnieren je Türblatt









#### K.SCD M / 90 - 12 / 27

# DOUBLE DECK OPTION FOR DIFFERENT KIND OF LOADS

Suitable for Mega / Maxima+ semi-trailers. Has 67 Euro-Pallet capacity and up to 10.600 kg capacity on double deck.

- Standard Double Deck System brand: Wistra
- Optional Double Deck System brand: All Safe
- 5 x 2 sliding pillars
- 24 x double-deck profiles
- Profile storage box under chassis.









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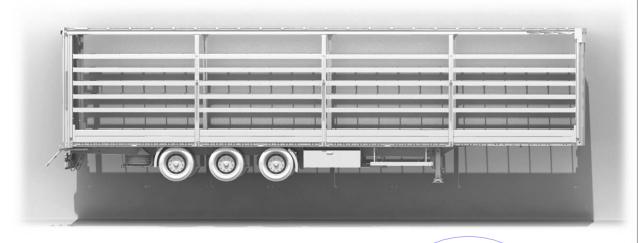


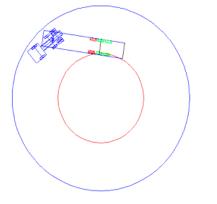


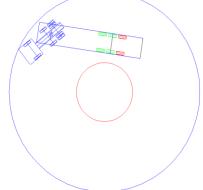
# 1<sup>ST</sup> / 3<sup>RD</sup> AXLE LIFTING & SELF STEERING OPTIONS

With 1st and/or 3rd axle lifting, your Semi-Trailer will save its tyres while empty.

The 3<sup>rd</sup> Self-Steering axle option provides maneuverability for urban use, provides comfortable driving at turning points.















# OPTIONAL EQUIPMENT AXLE LIFTING TYPES

Axle lifting control can be choosen from trailer or from truck cabinet.



Kässbohrer type axle lifting



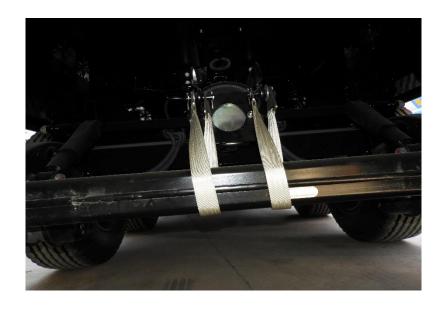
Hanger bracket type axle lifting







# OPTIONAL EQUIPMENT **AXLE LIFTING TYPES**



Kässbohrer type axle lifting



Hanger bracket type axle lifting







## **ALUMINUM SIDE BOARDS**

• 600 or 800 mm aluminum side board, manufactured by extrusion method with a cross-section specifically designed for Kässbohrer. Unless otherwise stated, there are curtain / tarpaulin hooks on the side board.





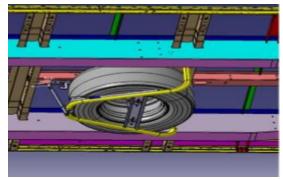




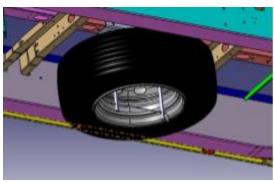


## **SPARE WHEEL HOLDERS**

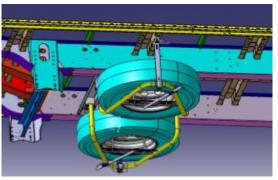
 Swedish type, Winch type or Basket type spare wheel holders are positioned front or behind of the trailer depends on the customer choice.



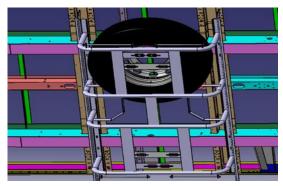
Swedish type



Winch type



Swedish type



Basket type

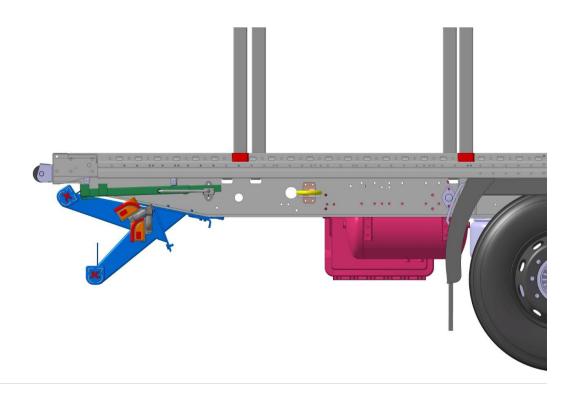








## **FOLDABLE BUMPER**



- Suitable for A1 wagons
- Duo trailer combinations







## PALLET STOPPER





- Pallet stoppers protect Euro pallets to slide
- Pallet stoppers are compatible with Automotive Transport Certificate







# OPTIONAL EQUIPMENT FORKLIFT BARRIER

SCS and SCX curtainsiders can be equipped with metal forklift barriers or plastic forklift barriers.

Both forklift barriers are connected to the vehicle with screw nut connection.

In case of any damage, forklift barriers can be replaced easily.











## REAR ENTRANCE PROTECTION STEEL



600 mm floor protection cover at the rear entrance







# OPTIONAL EQUIPMENT LASHING RINGS



 Heavy Duty Lashing Rings with 5 tonnes Capacity



 U Type Lashing Rings with 2,5 tonnes Capacity







## REAR ENTRANCE WIDTH

Lower Extension (600 mm)

Rear extending pillar system is providing 600 mm total extension at the lower side of the pillars. At total, loading width will be 3.080 mm at the lower side.

Lower & Top Extension (600 mm)

Rear extending pillar system is providing 600 mm total extension at the lower and top sides of the pillars. At total, loading width will be 3.080 mm.



Rear pillar can be extended max. 300 mm







# ROOF CURTAIN AND SIDE CURTAINS WITH ANTI-THEFT PROTECTION





Different sizes anti-theft curtains available with woven wire to ensure load security

- 1800 (200x200mm) 1200 (200x200mm)
- 1800 (150x150mm) 1200 (150x150mm)
- 1800 (120x120mm) 1200 (120x120mm)







## **DHOLLANDIA TAILLIFT**





- Equipped with Dhollandia SMR.20 model rear loading platform with 2.000 kg permissible load capacity
- Taillift can be controlled by 2 hand buttons with spiral cable
- Platform Depth: 1.700 mm, Voltage: 24V







# OPTIONAL EQUIPMENT REAR RAMP BUFFERS



Roll Type Ramp Buffer and Lock Protection



 L Type Steel Ramp Buffer and Steel Lock Protection







# OPTIONAL EQUIPMENT REAR RAMP BUFFERS



Short Steel Ramp Buffer



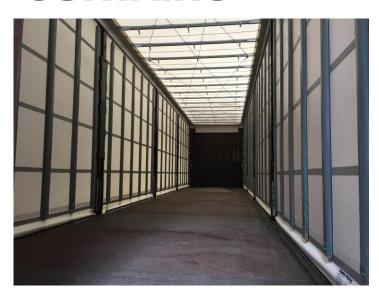
Roll Type Ramp Buffer and Long Lock Protection







## ALUMINIUM / STAINLESS STEEL VERTICAL PLANK INTEGRATED SIDE CURTAINS





 Code XL and Beverage Transport Certification  Code XLS Curtain with Tyre Transport Certification







## K-PILLAR: REINFORCING LOAD SECURITY

Extra Pillars screwed on side rails, protect lateral pillars from pressure of loads such as carpets.

K-Pillar can be mounted into several points to K-Fix side rave.

K-Pillar secures the load while cruising and increases cruise safety in different road conditions, transforming lateral pressures on walls into downward pressure on the floor.









## FIRE EXTINGUISHER BOXES



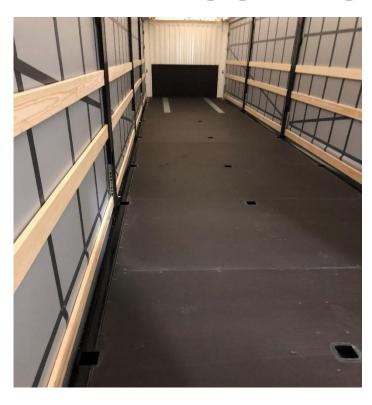








## PILLAR POCKETS AND STORAGE





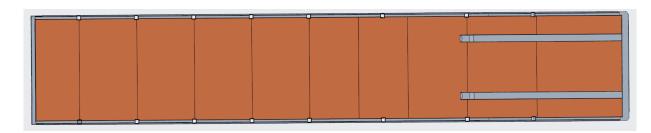
- 81 x 81 mm pillar pockets with different position combinations on side raves and on middle of the floor.
- Pillar storage can be chosen.



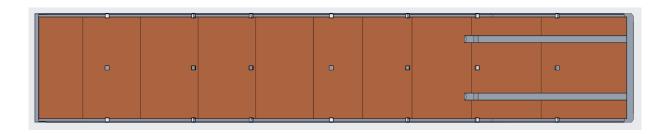




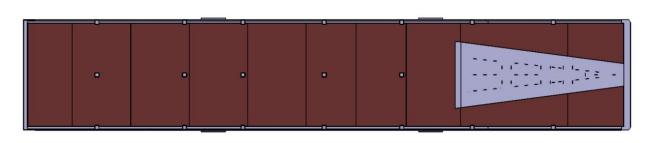
## **PILLAR POCKETS**



8x2 Pillar Pockets



7x3 Pillar Pockets



■ 7x2 + 5x1 Pillar Pockets







# OPTIONAL EQUIPMENT BOX OPTIONS



 450 x 480 x 600 mm Small Plastic Toolbox





 1.500 mm Steel KTL Coated Food Box





 1.500 mm Steel KTL Coated Toolbox







# OPTIONAL EQUIPMENT **BOX OPTIONS**



Pallet Box for 30, 24 and 8 units



Double Deck Storage Box



Front Wall Storage Box







## **LANDING LEG OPTIONS**





 Roller Feet Heavy Duty Landing Legs Foldable Rear Landing Legs





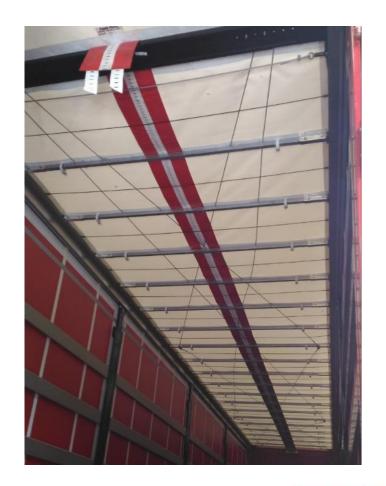


## RSAB(Roof Safety Air Bag)

The Roof Safety Air Bag is a certified and proven system for preventing water and ice sheet formation on semi-trailer curtain.

The roof curtain is raised using the RSAB system. This allows water to run off directly and preemptively prevents dangerous ice formation on the roof.







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## STANDARD CONFIGURATION

#### **Axles**

3 x 9 tonnes capacity BPW EAC (ECO Air Compact) disc brake axles

#### **King Pin**

Jost brand, 2" diameter king pin has 12 tonnes king pin capacity

#### **Electric System**

Aspöck Europoint III lighting installation with 24V LED side position lamp and  $2 \times 7$  and  $1 \times 15$  pin sockets, in compliance with Regulation UN ECE R48 and ADR

#### **Brake System**

EBS 2S / 2M braking system of Wabco brand with elec tro-pneumatic dual-circuit that contains power supply (RSS) and voltage supply (24N) through brake light

#### **Landing Gear**

Jost mechanical landing gear with 24 tonnes of permissible load capacity









## STANDARD CONFIGURATION

#### K-Fix

K-Fix has 118 holes per side rave which increases load lashing varieties. Each load strapping point has a load capacity of 2,5 tonnes

#### **Chassis**

Made of high quality and high strength S460 MC steel.

#### **KTL Frame**

All steel parts are KTL Coated and provides protection against rust perforation with 10 years warranty.

#### **Floor**

Phenol resin coated, 30 mm thick and water resistant plywood flooring that can support 7.200 kg forklift axle load in compliance with DIN EN 283.

#### **Front Panel**

KTL coated steel panel and 1.220 mm plywood protection plate









## STANDARD CONFIGURATION

#### **Rear Panel**

Aluminum rear door with hidden locks

#### Roof

Edscha brand, one-way sliding roof system is included

#### **Tensioner for Side Curtain**

Rear tensioning rod to tighten the side curtain after it is closed

#### **Lateral Pillars**

3 pairs of sliding lateral pillars on sides

#### **Auto Reset Function**

The control valve returns automatically to driving position when the speed exceeds over 15 km/h









## STANDARD CONFIGURATION

#### **Mudguard Type**

Anti-spray mudguard in compliance with Regulation 109/2011-EU

#### **Underrun Protection**

Lateral protection device made of KTL coated steel profile can be folded upwards according to with Regulation UN ECE R73

#### **Side Curtain**

900 gr/m<sup>2</sup> material (Fire Proof Fabric according to ISO 3795 1989).

#### **Roof Curtain**

Sliding roof curtain made of 680 gr/m<sup>2</sup> material (Fire Proof Fabric according to ISO 3795 1989)

#### **Tyres**

European brand according to Kässbohrer's choice









## **MOST PREFERRED OPTIONS**

#### **Roof Type**

Two ways sliding roof from both front and rear

#### **Spare Wheel Holder**

Spare wheel holders

#### **Axle Lifting**

1st and 3rd axle lifting options

#### **Side Curtain Tensioner**

Front and Rear tensioner

#### **Roof Lifting**

Mechanical roof lifting 500 mm for loading purposes and up to 4 x 50 mm roof lifting for driving purposes









## **MOST PREFERRED OPTIONS**

#### **Certificates**

DC 9.5 Automotive, Beverage, Tyre Transport, Octabin Transport Certifications

#### **Smart Solutions**

Smart Board, Tyre Pressure Monitoring(IVTM), Tyre Inflation System(PSI), Brake Pad Wear Indicator, Hubodometer, Tailguard, Optiload/Optiturn, Immobilizer, Telematics, Door Lock Control etc.

#### **Boxes**

Different types and sizes boxes such as plastic toolbox, steel toolbox, stainless steel toolbox, food box, pallet box, document box, document pocket, etc.

#### **Floor Capacity**

Reinforced floor with 8 tonnes axle load capacity









## **MOST PREFERRED OPTIONS**

#### **Rear Ramp Buffers**

L type, L+T type, Roller type, Roller+T type, etc.

#### **Pallet Box**

Schoch brand 24 or 30 unit pallet box

#### **Tail-Lift System**

Tail-Lift System (Dhollandia SMR 2.000 KG - 2.500 kg)

#### **Accessories**

Lashing rings, load stopper bars, water tank, ADR plate, customs clearance, customs cable & holders, working lamps, manometer, ferry rings, ferry skids, forklift barriers, storage for side rows, forklift carrier, RSAB, etc.











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