

Exte Rail PRODUCTS & REFERENCES



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Cover photo: Courtesy of NetRail

ExTe Introduction

For more than a hundred years, we have successfully developed and delivered products for safe cargo securing. We select systematic design and production solutions that produce maximum safety in the function.

ExTe of today has 80 employees and a turnover of approximately 23 M Euro. Of the turnover, roughly 75 per cent is derived from the highway sector and around 25 per cent from the rail sector.



If you are active in the sector of rail transportation of forest products, we believe you will find this brochure informative and interesting. Our aim is to secure cargo as safe as possible at lowest possible LCC.

In the first half of this brochure, you'll find a listing of our main rail customers so far, and in the latter half a little bit more detailed descriptions of our most common rail products.

As a hint to better understand the following pages, SR 12 stands for a high strength steel timber bunk that is guaranteed to hold a static and dynamic load of 12 ton per bunk. One can then only guess what SR 8 and SR 6 stands for. The term "timber bunk" means a bolster with two stanchions (hence, it takes minimum two timber bunks to carry one pile/bundle of logs).

If you have any questions, please do not hesitate to contact us.

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Rail Freight Company: Green Cargo AB (former Swedish State Railway, SJ)



Facts:

Wagon type: Lnps. 22.5 ton axle load. Approval authorities: Swedish track and safety authorities, Norwegian track and safety authorities Year of delivery: 1988-1993 Number of wagons: 1,020 two-axle wagons Number of timber bunks: 5,400 Number of support bolsters: NA Number of end walls: NA

The SR12 timber bunk was designed and developed for this operators need in the latter half of the 1980-ties. After some 30 years with around 300 load trips per year in an operational environment considered being one of the roughest in Europe (both regarding terminal handling and climate), the original equipment is still going strong.



Rail Freight Company: Green Cargo AB (former Swedish State Railway, SJ)



Facts:

Wagon type: Lnps. 22.5 ton axle load Approval authorities: Swedish track and safety authorities, Norwegian track and safety authorities Year of delivery: 2005 and 2016 Number of wagons: 165 two axle wagons Number of timber bunks: 990 Number of support bolsters: 330 Number of end walls: 330



Rail Freight Company: Green Cargo AB



Facts:

Wagon type: Laaps. 25 ton axle load Approval authorities: Swedish track and safety authorities Year of delivery: 2003-2004 Number of wagons: 186 twin platform wagons with two axles per platform Number of timber bunks: 2,232 Number of support bolsters: 744 Number of end walls: NA



Rail Freight Company: Green Cargo AB



Facts:

Wagon type: Sgnss 22.5 ton axle load Approval authorities: Swedish track and safety authorities Year of delivery: 2019 Number of wagons: 35 Number of timber bunks: 315 Number of support bolsters: 105 Number of end walls: 70



Rail Freight Company: TÅGAB (Tågåkeriet i Bergslagen AB)



Facts:

Wagon types: Sgnss / Sns-x 22,5 ton axle load and Rps 20 ton axle load Approval authorities: Swedish track and safety authorities, Norwegian track and safety authorities Year of delivery: 2005-2022 Number of wagons: 99 bogie wagons Number of timber bunks: 862 Number of support bolsters: 364 Number of grapple protections: 100 Number of end walls: 70



Rail Freight Company: TÅGAB (Tågåkeriet i Bergslagen AB)



Facts:

Wagon type: Kbps-x, 2-axle with 22.5 ton axle load Approval authorities: Swedish track and safety authorities, Norwegian track and safety authorities Year of delivery: 2015 Number of wagons: 28 Number of timber bunks: 112 Number of grapple protections: 56



Rail Shipping Company: Svea Skog (Swedish State Forestry, operated by TÅGAB)



Facts:

Wagon type: Sgnss 22.5 ton axle load Approval authorities: Swedish track and safety authorities, Norwegian track and safety authorities Year of delivery: 2010 Number of wagons: 18 bogie wagons Number of timber bunks: 180 Number of support bolsters: 126 Number of end walls: NA



Rail Freight Company: Former OBAS and Peterson Rail AB. Now operated by Hector Rail AB and TÅGAB



Facts:

Wagon type: Sgnss. 22.5 ton axle load and Rps 20 ton axle load Approval authorities: Swedish track and safety authorities, Norwegian track and safety authorities Year of delivery: 2005 - 2010 Number of wagons: 60 bogie wagons Number of timber bunks: 548 Number of support bolsters: 368 Number of end walls: 94

ExTe SR12

Rail Freight Company: TX (TX Logistik AB/AG). Wagons currently operatded by Hector Rail AB and BLS Rail



Facts:

Wagon type: Sgnss. 22.5 ton axle load Approval authorities: Swedish track and safety authorities, Norwegian track and safety authorities Year of delivery: 2007-2009 Number of wagons: 75 bogie wagons Number of timber bunks: 690 Number of support bolsters: 348 Number of end walls: 26



Rail Freight Company: Hector Rail AB



Photo: Courtesy of NetRail.

Facts:

Wagon type: Sgnss. 22.5 ton axle load Approval authorities: Swedish track and safety authorities, Norwegian track and safety authorities Year of delivery: 2006-2022 Number of wagons: 317 bogie wagons Number of timber bunks: 2,561 Number of support bolsters: 990 Number of end walls: 586



Rail Freight Company: Former CargoLink AS. Currently operated by Hector Rail AB and BLS Rail



Facts:

Wagon type: Sgnss. 22.5 ton axle load Approval authorities: Norwegian track and safety authorities, Swedish track and safety authorities. Year of delivery: 2009 - 2010 Number of wagons: 41 bogie wagons Number of timber bunks: 282 Number of support bolsters: 159 Number of end walls: 82



Rail Leasing Company: Three T/Railcare (and former Inlandsgods). Currently operated by TÅGAB



Facts:

Wagon type: Srrs 22.5 ton axle load, Sps/Rs. 20 ton axle load and Rps 20 ton axle load Approval authorities: Swedish track and safety authorities Year of delivery: 2007 - 2008 Number of wagons: 77 bogie wagons Number of timber bunks: 382 Number of support bolsters: 191 Number of end walls: 40



Rail Freight Company: Inlandståget AB/IBAB



Facts:

Wagon type: Laaps 22,5 ton axle load Approval authorities: Swedish track and safety authorities Year of delivery: 2012 Number of wagons: 10 twin platform wagons with two axles per platform Number of timber bunks: 80 Number of support bolsters: 40 Number of end walls: NA



Rail Freight Company: KiwiRail



Facts:

Wagon type: FE/FEG 14 - 18 ton axle Approval: KiwiRail, New Zealand Year of delivery: 2011 - 2020 Number of wagons: 570 bogie wagons Number of timber bunks: 2,734 Number of support bolsters: NA Number of end walls: NA



Rail Freight Company: KiwiRail



Photo: Courtesy of KiwiRail.

NEW and OLD



Facts:



Rail Freight Company: Grenland Rail AS



Photo: Courtesy of RS Mekaniske AS in Elverum, Norway.

Wagon type: Sgnss 22,5 ton Approval authorities: Norwegian and Swedish track and safety authorities Year of delivery: 2021 Number of wagons: 26 bogie wagons Number of timber bunks: 160 Number of support bolsters: 90 Number of end walls: NA

Facts:



Rail Leasing Company: VTG (for Trätåg AB/Hector Rail AB)



Facts:

Wagon type: Sgnss 22,5 ton axle load Approval authorities: Swedish track and safety authorities, Norwegian track and safety authorities Year of delivery: 2012 Number of wagons: 200 bogie wagons Number of timber bunks: 1800 Number of support bolsters: 600 Number of end walls: 400



Rail Leasing Company: Wascosa AG (for TÅGAB)



Facts:

Wagon type: Sgnss 22,5 ton axle load Approval authorities: Swedish track and safety authorities, Norwegian track and safety authorities Year of delivery: 2016 Number of wagons: 28 bogie wagons Number of timber bunks: 252 Number of support bolsters: 84 Number of end walls: 56



Rail Freight Company: CargoNet AS



Facts:

Wagon type: Rps 20 ton axle load Approval authorities: Swedish and Norwegian Year of delivery: 2020 Number of wagons: 10 Number of timber bunks: 90 Number of grip protections: 30 Number of End Walls: 20



Rail Freight Company: Green Cargo AB



Facts:

Wagon type: 40' Sgmmnss 22,5 ton Approval authorities: Swedish track and safety authorities Year of delivery: 2022 Number of wagons: 44 bogie wagons Number of timber bunks: 264 Number of support bolsters: 88 Number of end walls: 88



Rail Leasing Company: TRANSWAGGON AG (through Tatrawagonka)



Facts:

Wagon type: Snps 22,5 ton axle load Approval authorities: TSI Year of delivery: 2015 - 2022 Number of wagons: 409 bogie wagons Number of timber bunks: 4,908 Number of Winch System 602: 4,090



Customer: Container d.o.o., Slovenia (SR8 used for 20' and 30' timber cassettes)



Facts:

Wagon type: NA Approval authorities: TSI Year of delivery: 2017-2019 Number of 20' cassettes: 402 Number of timber bunks: 1,608 Number of Winch System 602: 1,206





Customer: MHS, Poland (SR8 used for 20' timber cassettes)



Facts:

Wagon type: NA Approval authorities: TSI Year of delivery: 2014 - 2015 Number of 20' cassettes: 21 Number of timber bunks: 84 Number of Winch System 602: 60



Rail Leasing Company: TRANSWAGGON AG



Facts:

Wagon type: Laaps and Snps. 20 and 22.5 ton axle load Approval authorities: German track and safety authorities, DB and EBA. Year of delivery: 1997-2018 Number of wagons: 800 platform wagons Number of timber bunks: 6,530 Number of Winch System 602: 1,120



Rail Freight Company: Vida Timber AB



Facts:

Wagon type: Kbps. 20 ton axle load Approval authorities: Swedish track and safety authorities Year of delivery: 2006 - 2010 Number of wagons: 60 two axle wagons Number of timber bunks: 360 Number of support bolsters: NA Number of end walls: NA



Rail Freight and Leasing Companies: VIDA, NetRail, Rail-X, TÅGAB, Structon and CargoNet



Facts:

Wagon type: Kbps, Os, Rs and Rps 20 ton axle load Approval authorities: Swedish and Norwegian Year of delivery: 2017-2021 Number of wagons: 80 Number of stanchions: 1,800 Number of grip protections: NA Number of End Walls: NA

SR Steel (OVAKO)

Rail Freight Company: Green Cargo AB, for OVAKO traffic



Facts:

Wagon type: Smmnps. 22.5 ton axle load Approval bodies: Swedish track and safety authorities Year of delivery: 2017 Number of wagons: 60 bogie wagons Number of bunks: 240

SR Steel (SSAB)

Rail Freight Company: Green Cargo AB, for SSAB traffic



Facts:

Wagon type: Smmnps. 25 ton axle load Approval bodies: Swedish track and safety authorities Year of delivery: 2019 Number of wagons: 41 Number of bunks: 164 ExTe

PRODUCT DESCRIPTIONS

In the following, ExTe's most common rail products are rudimentary described. It is important to note that the weights indicated can vary pending on the desired loading gauge (height and width) and on what type of fastening system that will be used.

All of ExTe's timber bunks, stakes and support bolsters are manufactured using high strength steel with a tensile between 700 and 1,400.

ExTe has three base models of rail timber bunks with different characteristics. Height, width and fastening system can vary pending on customer request and wagon type in question.

In addition to the SR Series of bunks, ExTe also offers different systems such as the ExTe Universal, Multi and 602 Winch System, etc.



SR12 Timber Bunk



The SR12 timber bunk is very common in Scandinavia. Since 1988, tens of thousands bunks of this type have been delivered and attached to a great variety of different new or old wagon types. Pending on customer, loading area varies from 5.3 m² to 9.5 m².



ExTe SR12 timber bunk can carry a load of 12 ton each and can be attached to most flat wagons / container wagons. This even if the wagon type only has two outer frame sills (like most Sgnss designs). The weight is approximately 200-280 kg per bunk pending loading gauge and fastening system.

SR12 HC Timber Bunk



The SR12 HC timber bunk is developed foremost for 40' to 45' long bogie wagons and is designed for up to 11 m2 loading area.

Facts:

The SR12 HC timber bunk can carry a load of over 12 ton each and can be attached to most types of flat wagons / container wagons. This even if the host wagon only has two outer frame sills (like most Sgnss and 40' Sgmmns). The weight per bunk is between 250 to 290 kg

pending loading gauge and fastening system. Furthermore, the stanchion itself is designed in two parts. Both easily replaced at timber terminals and are designed to brake before a wagon itself is damaged or tipped over by a drunk terminal operator.

SR8 Timber Bunk



The photo above is showing SR8 bunks with European G2 loading pofile. This design is also available in G1, Iberian and UK loading gauges. Photo: Courtesy of SETG.

Facts:

ExTe SR8 timber bunk can carry a load of 8 ton each and can be attached to most flat wagons / container wagons. This even if the wagon type only has two outer frame-sills (like most Sgnss designs). The weight is from 160 kg pending loading gauge and fastening system.

The SR8 timber bunk (and the SR6 timber bunk described on the following page), is well suited for the more restrictive continental European loading gauge. The bolster design of the SR8 bunk also makes the bunk suitable for only two sill wagons and for the transport of sawed lumber packages, pressed boards, etc besides timber.

SR6 Timber Bunk



Since the mid 1990-ties, close to 7,000 timber bunks of the SR6 design have been delivered to various European customers.



ExTe SR6 Timber Bunk can carry a load of 6 ton each and can be attached most types of flat wagons / container wagons. The weight of this bunk is from 130 kg pending upon desired loading gauge, fastening system, etc.
ExTe SR Steel



Bolster for OVAKO's products

Bolster for SSAB's products



Facts:

The SR Steel family is designed to carry cold or hot steel slabs or rods with a temperature of up to 700° C . One single bolster can carry a load of up to 40 ton. Width of bolsters and height of stanchions can vary pending customer needs. Weight per bolster is between 210 kg to 370 kg depending on design.

ExTe Universal



Facts:

ExTe Universal is designed for the use in covered or open lorries or rail wagons. This 8 ton design is very suitable in freight corridors where i.e. lumber (sawed boards), pressed boards and palleted cargo is transported in one direction, and timber/pulp wood in the opposite direction. The stanchions are of fold-down type.

The weight of this bunk is from 180 - 220 kg pending upon desired height and width. A pair of bunks can handle a log pile weighting 16 ton. The handling concept is as smart as it is simple.





The ExTended container spigots (the equipment pictured above) lift containers above timber bunk bolsters and support bolsters.

Facts:

ExTe Multi is a flexible solution for the efficient transport of containers, timber and sawed lumber. ExTe has developed this system (based on either the SR12 or SR8 timber bunk designs) in order to make the transport of timber, containers and lumber possible on the same wagon without the need for any alterations to the wagon.

Due to loading gauge reasons, this design is especially suitable to meet most common rail transport needs within the Scandinavian forest industry. With this equipment, a wagon can in a very flexible manner alter between the transport of timber, containers and lumber. Handling of containers can be done either by forklifts or reach-stackers.

SR2 and SR3 Stanchions



ExTe SR2 in standard UIC sockets. More than 1,800 stanchions have been delivered since 2017.

ExTe's Maxi Socket. More than 50,000 Socket have been delivered since 1996. Both SR2 and SR3 stanchions are suitable for this socket.



Facts:

ExTe SR2 stanchion is designed in strength to fit the standard UIC sockets on common European flat wagons. The weight of this stanchion is 24 kg.

ExTe SR3 stanchion is designed in strength to better match ExTe's strong Maxi Socket. The weight of this stanchion is 27 kg.

The Maxi Socket provides for a secure and strong inter-fit between ExTe's SR2 and SR3 Stanchions and the wagon. The weight of the Maxi Socket is 11 kg.

Fastening Systems



Bolted fastening with or without rubber pucks. At this time, around 12,000 timber bunks with this fastening system have been delivered.

Over-yoke fastening with bolts with or without rubber pucks. Over 8,000 timber bunks have been delivered with this fastening system up till today.



Clamp fastening is a system used on around 6,500 timber bunks so far. This fastening type is also commonly used on ExTe's highway products (exceeding 250,000 timber bunks world wide).

Fastening Systems



Facts:

The SR12, SR8 and SR6 timber bunk designs can be used on most, if not all, types of flat wagons and container wagons. The attachments of the timber bunks onto wagons are done by the use of either clamp fastenings, bolt fastenings or yokes with bolts. Sometimes attached to a fastening plates bolted or welded to the wagon sills.

ExTe Support Bolsters (for wagon protection and fast unloading)



Facts:

ExTe's support bolsters protect wagon frames from the forces of unloading machines / grapples and also make faster unloading possible.

In tests, ExTe's heavy-duty bolster withstood vertical loads of 27 ton in the middle (when mounted on a Sgnss alike frame structure with only two outer frame sills). The weight of the support bolster is between 120 to 190 kg pending fastening system and width. The support bolster is attached to the wagon by clamp fastenings or bolt fastenings.





The piping design.

Facts:

ExTe also produces end walls and end wall sockets for rail applications. One design is using piping for the grid and one design is of flat wall type. The end walls and sockets are entirely manufactured in high strength steel. The flat wall design.



Winch System 602



This Winch System is very popular among European rail operators.

Facts:

The 602 Winch System is commonly used by European rail operators. The system includes a winch, a ten meter 6 ton lashing belt with triangle and a hook. The winch and the hook can either be bolted or welded onto the wagon, and the weight is in total around 9 kg. Throughout the past twenty years, more than 40,000 systems of this type have been delivered to the rail industry.

Special Designs



Facts:

Beside our mainstream load securing products, ExTe also offers related products based on specific customer requests. Example of such products are bunks for steel pipes and rods (picture 1). Shown in picture 2 is a bunk with fall-down stachions. Picture 3 shows example of ExTe load securing equipment for the needs of track authorities / track maintenance companies and picture 4 shows ExTe's container spigot beams for flat wagons modified to container wagons.

As the role, these products are manufactured using high strength steel. For ExTe, the costumer is always king, and we are listening. If a customer's desire is technically and economically feasible, ExTe will design, test and manufacture accordingly.

ExTe Testing



Facts:

Normally, a new design is borne after customer dialog and the customers' approval of final drawings. After that FEManalyzes are carried out, new products are always prototyped and tested in ExTe's laboratory in order to measure structural behavior and braking points. Finally, the products are tested in field conditions as test units. This always takes place ahead of any market introduction and series deliveries. Normally, ExTe's rail products are approved by rail authorities as integrated parts of a wagon approval (new wagon designs or after major modifications).

All of ExTe's stanchion and bunk designs fulfill TSI requirements regarding high strength stanchions and side mounted stanchions.

Durability in real life.



Facts:

ExTe Rail's products are designed to withstand rough operational conditions and over a long period of time offer low LCC. However, they are not designed to win a beauty contest after 20 some years of tough operation. The aim is instead to design products that can withstand overforces without causing stopping faults.

Rail Customers

CargoNet, CFL Cargo, DB Cargo, EWS, Feve, GFR, Green Cargo, Grenland Rail, Hector Rail, Inlandståget, KiwiRail, Medway, Nordiska Tåg, Railcare, Trätåg, TXL, TÅGAB, Vida

ERR, Nacco, NetRail, OnRail, Rail-X, TRANSWAGGON, VTG, Wascosa

Astra Rail, Container d.o.o., DDSV, Gniewczyna, Greenbrier, Inveho, Tatravagonka

Bane Nor, Buffers, Euromaint, ExTe Vertriebs, MHS, Midwaggon, OVAKO, Strukton Rail, Sveaskog, Swemaint, Trafikverket



Certificates

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