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Sustainable and versatile: KRONE eCool Liner

KRONE will be using various exhibits at the IAA Transportation to demonstrate the great versatility of the Cool Liner refrigerated semi-trailer. The all-electric Cool Liner with BPW ePower generator axle and the Thermo King Advancer A-500e AxlePower refrigeration unit with battery pack is a particularly sustainable innovation. The Cool Liner with Multitemp equipment, which is characterized by a new, swivelling baffle wall and an innovative transverse partition wall to create different temperature zones in the body, is also represented. An integrated low coupling also enables CO2-saving long lorry use.

KRONE Cool Liner with Thermo King AxlePower

In order to achieve a high level of sustainability, especially for inner-city refrigerated transport, KRONE supplies the Cool Liner with the all-electric Thermo King Advancer A-500e AxlePower refrigeration system, including battery pack. In this technological approach, the trailer is equipped with a recuperating generator axle, which supplies a battery pack mounted under the body with electrical energy. This energy storage unit supplies the all-electric Thermo King refrigeration unit with power during the journey via intelligent control electronics, meaning that this Cool Liner variant does not require a diesel unit in the refrigeration system. A Type 2 charging socket also enables external charging of the battery and parallel operation of the refrigeration system via a 400 V shore power supply.

With the Cool Liner with Thermo King AxlePower, the refrigeration unit emits neither CO2 nor particulate matter during operation. Another positive effect is the lower noise emission of the purely electrically powered refrigeration unit, which also makes night deliveries possible. Thanks to this sustainable concept, this Cool Liner is particularly suitable for inner-city refrigerated transport, but is not limited to this type of transport.

Another advantage of the Cool Liner with electric cooling is the more even weight distribution thanks to the significantly lighter bulkhead unit and the arrangement of the battery pack underneath the body. This reduces the risk of overloading the drive axle of the tractor unit when the trailer is partially

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loaded.

Flexible Multitemp equipment in the KRONE Cool Liner Multitemp

The Cool Liner Multitemp is designed to offer as much freedom as possible in the design and handling of multi-chamber systems. One example of this is the new installation technology, thanks to which the mounting positions of the additional evaporators can be flexibly adapted to a wide range of customer requirements. Space-saving evaporator protection is also available on request. Another benefit of the flexible Multitemp equipment is the revised, ATP-tested Isowall cross partition wall, which can be positioned along the entire length of the vehicle and can be opened and closed with little effort thanks to the innovative balancer technology.

Full of detailed improvements: the KRONE Cool Liner

All Cool Liners on the KRONE trade fair stand in Hanover present themselves at the cutting edge of technology with their numerous detailed improvements. One highlight is the optionally available, redesigned rebound plate. Not only has its stability been improved, but it can also be swivelled to the side in just a few simple steps, which makes regular vehicle cleaning and service work on the refrigeration unit much easier, especially in refrigerated transport.

The lighting concept has also been completely revised. For the interior lighting, KRONE has opted for an LED light specially developed for the Cool Liner as standard, which significantly increases the illumination of the trailer. Road safety is also significantly improved by the serially installed outline stop lights at the top rear of the rear frame. These can optionally be replaced by outline stop/indicator lights, which supplement the flashing side marker lights in terms of road safety. Optional peripheral lighting at the top rear also ensures a high level of user-friendliness and safety. The generous illumination of the rear area behind the vehicle significantly facilitates handling during loading and unloading, especially when operating the tail lift.

The rear doors of the Cool Liner have an optimized door seal, which not only guarantees a high level of body tightness but, in combination with the low door handle position, also ensures user-friendly door opening forces. The KRONE double-decker/lashing rail concept integrated into the body is a tried and tested standard: combined with a continuous lashing rail underneath and split lashing rails between the double-decker guide rails, it enables the transported goods to be reliably secured at all times. Another plus point of the double-decker/lashing rail concept is its exemplary, HACCP-compliant cleanability.

Stability and practicality on the ramp and at sea

The high stability of the Cool Liner is based on the robust, continuous chassis with double-T side members and additional diagonal reinforcements at the rear. Thanks to this design, any impact energy occurring on the ramp is absorbed by the chassis and the body remains protected. The flexible impact protection concept at the rear also contributes to this: The customer can choose from an extensive modular system to optimize the impact protection system for their application. In addition to various robust rubber buffers, shock-absorbing roll-compression buffers are also available. If the subsequent use of the vehicle requires it, the new impact protection concept also enables individual subsequent adjustments to be made to the impact protection equipment - without any changes to the chassis.

In addition, rear area monitoring with integrated, automatic braking of the vehicle can be integrated into the impact protection system. Optional bolted ship mounting brackets round off the equipment package.

Telematics as standard

KRONE equips all refrigerated vehicles in the Cool Liner series with KRONE Telematics KSC ProPlus Cool as standard. The system offers monitoring of the location, the rear door, the operating data, the cooling temperature, the cooling machine and the coupling status as well as error messages from the brake system. In addition, KRONE Telematics KSC ProPlus Cool handles the complete document management: both the dispatcher and the driver can connect to the KRONE Telematics Box via WLAN and retrieve the required data.

On request, KRONE Telematics is also available with a two-way function and/or integrated KRONE temperature recorder and can also be combined with the KRONE Smart Tyre Pressure Monitoring System (TPMS) and the capacitive tank sensor of the diesel tank.

Perfectly adapted to different transport situations

With its extensive range of additional equipment, the Cool Liner can be flexibly adapted to any transport task. For example, loading and unloading on the ramp can be significantly accelerated and simplified with electronic air suspension. The levelling system, which can also be operated from the body as an option, ensures that the trailer floor and ramp remain at the same height, regardless of the current loading or unloading situation or the additional weight of incoming forklifts.

Another useful feature is the KRONE DWC system (Dynamic Wheel Base Control), which automatically reduces the wheelbase when cornering by relieving the third axle of the semi-trailer, thereby optimizing cornering performance.

In addition, during partial loading and unloading, which is commonplace in distribution, the trailer's drawbar load and thus the drive axle load of the tractor unit is noticeably reduced.

Visit us at the KRONE stand!

IAA Transportation 2024 | 17.09.-22.09.2024

Hanover Fair | Hall 27 | Stand C40 | Outdoor area N41, Q41, P43

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