



20. September 2022

KRONE: WORLD PREMIERE OF THE BOX LINER AUTOMATIC

container chassis with automated pre-setting

Krone will be showcasing what their next-generation trailers will look like at the IAA Transportation 2022 in Hanover under the key areas of "sustainability, digitalisation, automation and electrification". The extent to which the "automation" megatrend in trailer construction has already advanced is highlighted by the Krone Box Liner eLTU 50 Traction Automatic prototype. It can be automatically preset to different container sizes.

The Krone Box Liner eLTU 50 Traction container chassis is the technological basis for automated container handling. It was launched in 2020 and can be used to transport various container loads ranging from a 20' container flush with the rear or centrally via two 20' containers to a 40' or a 45' container (with a special permit). This versatile gooseneck chassis also complies with regulations in all countries that prescribe a height limit of 4 m.

The Krone Box Liner eLTU 50 Traction Automatic, which will be celebrating its world premiere at the IAA Transportation 2022, stands out from the standard model at first glance due to numerous details. It features more sensors, rugged air cylinders, precise and sturdy automated locking mechanisms in place of the classic twistlocks, a smooth-running compressed air motor to drive the rear extension and a locking system for the rear extension with two air cylinders. In addition, the innovative container chassis impresses with its extensive, reliable electronic and pneumatic control technology. Krone collaborates closely in this area with Aucos, the expert in the field of container locks and semitrailer couplings.

Safe working environment – thanks to the remote control from the driver's cab

The key feature of the innovative Box Liner Automatic is the automated pre-settings option. The driver

can conveniently initiate the setting of the container chassis for the container transported by pressing a button on the remote control from the truck cab.

An example: The chassis is flush with the rear at the 20' position. Two 20' containers must be accommodated, however. The driver simply presses the "2 x 20'" button in the cabin and the various necessary steps are carried out automatically: the rear extension is automatically moved to the 2 x 20' position by the compressed air motor. The container mounts for 2 x 20' are positioned in the mounting position and any mounts that are not required for this purpose are lowered. Finally, the front latch in the 2 x 20' double arm is raised, since it is a gooseneck chassis.

The Box Liner Automatic is now ready for mounting, the two 20' containers are positioned and then locked at the push of another button on the remote control from the driver's cab. The locking procedure is finally acknowledged with a control lamp and the brake release. Thanks to this bundled technology, the Box Liner Automatic can quickly drive away from the loading site. For the port drayage, the efficiency is expected to increase by about ten percent. This makes it possible to replace six trailers with conventional container chassis with five trailers with the Box Liner Automatic.

Compared to the standard procedure, the new Box Liner Automatic technology from Krone represents a quantum leap. All of the previously required manual activities performed by the driver to adjust the container chassis are now a thing of the past. For the driver, this not only represents reduced physical strain, but also significant safety improvements. The risk of injury is also reduced, since it is no longer necessary to climb in and out of the vehicle, and the driver no longer has to walk in heavily frequented areas.

This also prevents the misalignment of the chassis and container at the same time, which not only saves time, but also costs: If the container chassis cannot be lowered, since the setting is incorrect, the driver must reposition the container chassis and readjust it. The container lift operation that is not completed is usually still charged, however.

Box Liner eLTU 50 Traction: solid basis

The Box Liner eLTU 50 Traction with the innovative traction rear end forms the basis of the automated technology. It enables an excellent fifth-wheel load even with 20' containers loaded flush with the rear. Another advantage of this design includes recessed lights in the rear beam, which minimise damage when approaching ramps. Since manually extendable underrun protection would not be an option for 45' containers on an automated chassis, the rear extension is extended to the 45' lock using a compressed air motor. The advanced base vehicle has also made automation much easier here.

On the road to autonomously operated container chassis

The Krone Box Liner eLTU 50 Automatic is the first multifunctional gooseneck chassis to feature automated operation at this level. It opens up a new dimension of user-friendliness, combined with improved process times in the terminal as well as in the depot. It also saves a considerable amount of time for each container lift operation, which in turn significantly lowers costs for the operator.

Series production of the Krone Box Liner eLTU 50 Traction Automatic is slated to start in 2024. The further evolution of automation in container handling has also already been mapped out: Krone is already planning preparations for digital control of the Box Liner Automatic for autonomous semitrailer truck combinations.

Visit us at the Krone trade fair stand!



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

SIMON RICHENHAGEN

Phone [+49 5951 209-8216](tel:+4959512098216) · E-mail: simon.richenhagen@krone.de