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Krone: new rear underrun guard as of March

Significantly more protection due to completely new design

Werlte, March 2, 2021 – Starting in March, Krone will gradually equip its vehicles with the newly designed rear underrun guard, which significantly increases passive safety in traffic.

The introduction of the new rear underrun guard is based on the amendment of the EU directive UN/ECE-R 58 ÄS 03, which will come into force for all commercial vehicle manufacturers throughout Europe on 1 September 2021. The background to this is the German basic accident research study GIDAS (German In-Depth Accident Study), according to which 60 percent of all rear-end collisions "cars on trucks/trailers" end fatally. To meet the new requirements, Krone has developed a new rear underrun guard generation. The primary development goal was to reduce fatal outcomes by up to 78 percent and serious injuries by up to 49 percent in rear-end collisions with passenger cars.

The new EU directive requires up to a twofold increase in force absorption, longer lever arms and a reduction in the maximum distance to the road surface from 550 mm to 450 mm. In order to meet the requirements, the Krone developers have not only used high-strength fine-grain steels with higher material thicknesses, but have also completely redesigned the entire rear underrun guard range. The resulting modular system for the Profi Liner, Mega Liner, Cool Liner and Dry Liner series as well as for the Load Carrier trailers relies on bolted instead of welded connections - with a whole range of advantages for the fleet operator:

- the complete redesign of the rear end, the use of higher quality materials and the modified system suspension provide considerably more safety in traffic;
- the new construction is stronger and more durable due to the higher material quality.

Furthermore, the new underrun guard beam is galvanised, additionally cathodic dip painted (KTL) and finally powder coated and thus provided with maximum corrosion protection;

- the retrofitting of optional add-on parts such as skids to protect the underrun guard beam, ECE warning signs and night parking warning signs is made considerably easier;
- In the event of damage, the new rear underrun guard is easier to repair and the supply of spare parts is logistically cheaper, faster and more reliable thanks to the reduced number of parts.

However, the significantly higher safety and better strength have influences on the product characteristics that cannot be avoided. For example, the weight of the new rear underrun guards in the standard range increases by an average of around 22 kg. Due to the larger dimensions required by law, the higher weight and the use of higher material grades, there is an additional price starting at 200 euros - depending on the model and equipment. In addition, the driving characteristics are also affected: Since a 100 mm smaller distance to the ground is prescribed, the rear underrun guard is exposed to an increased risk of contact, which can have a negative effect in ferry traffic, for example. Therefore, Krone offers optional skids on the underrun guard beam to protect the trailer.

For the first model variants, the new plus in safety is already available from March, half a year before the legally required deadline. Thanks to the early changeover to the new rear underrun guard generation from the modular system, Krone can thus already provide its customers with the improved accident protection.



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

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