

A photograph of a white waste disposal truck with a large, dark grey, perforated pipe lying horizontally in the foreground. The truck is parked on a concrete surface in front of a building with large windows. The image is framed by a white diagonal line that splits the scene into two parts.

CASE STUDY

**LOW-MAINTENANCE AND
SHOCK-ABSORBING**

**JÄGER GROUP DEVELOPS
RELIABLE PROTECTION
FOR WASTE DISPOSAL VEHICLES**

CHALLENGE



Needed: **Tough and reliable protection** for waste containers

Search for an **elastic, dimensionally stable material**



Cost efficient material and manufacturing process required



SOLUTION

The installed steel shaft is covered by an **elastic impact roller**



Perfect material selection thanks to comprehensive knowledge

Subsequent adjustment of material and manufacturing process to **optimize costs**



RESULT



Waste containers remain intact

Complaints to the waste management companies are **eliminated**



Price and delivery time improvements





PROTECT GARBAGE CANS FROM WEAR AND TEAR

They are the busy machines that empty the garbage from our garbage cans at least once a week: waste disposal vehicles!

ZÖLLER-KIPPER GmbH from Mainz is Europe's largest manufacturer of hydraulic lift and tipping vehicles for waste emptying and collection. Zöller turned to its supplier of many years, Jäger Gummi und Kunststoff GmbH with which they jointly developed some of the articles that are installed in the so-called „lifter“.

A lifter is the area responsible for lifting and emptying the garbage cans - usually at the rear of a garbage truck. This time Zöller nee-

ded a component that would provide the refuse collection vehicles with special protection.

This is because when the waste container was lifted to the top and emptied in the waste disposal vehicle, it struck the top of the vehicle's stop, which could not absorb the impact. For this reason, Zöller needed a protective jacket for the steel shafts used in the process.

CHALLENGE



LONG-LASTING PROTECTION FOR WASTE CONTAINERS WANTED

The steel shafts must be encased so that a spring effect is achieved. In this way, waste containers would no longer be damaged and vehicle operators would no longer be exposed to the risk of injury from the defective garbage cans.

After the materials experts at Jäger Gummi und Kunststoff tested various materials and geometries, they first produced a PU molded part that fitted the shaft perfectly. They tested various hollow chambers and hardness

levels. They then created a mold for casting polyurethane. The prototypes of the impact roller were subjected to several practical tests on vehicles with full waste containers. Despite the technically successful solution, the customer wanted a different solution as the PU component was very cost-intensive due to the casting process. Jäger therefore developed an alternative.



ROBUST, COST-EFFECTIVE IMPACT ROLLER FOR WASTE DISPOSAL VEHICLES

The Jäger engineers thought ahead and produced an EPDM profile of identical construction. Thanks to its good resistance to weathering, EPDM is particularly suitable for outdoor applications, such as in waste disposal vehicles. In addition, the elastic material is an inexpensive yet durable material. The

unit price could also be reduced, due to the of the EPDM component's fast extrusion process.

The new solution went into series production after it had been thoroughly tested and approved in joint practical tests at the customer's site.

RESULT



WELL-PROTECTED WASTE CONTAINERS

Thanks to the EPDM solution, production times for the impact roller have been reduced and Jäger Gummi und Kunststoff is able to always rapidly deliver the component to Zöller.

With the elastic impact roller on the steel shaft, the waste containers are now protected from scratches and wear. In addition, the vehicle price remains low thanks to the cost-

effective EPDM solution. The disposal companies now save the additional costs of customer complaints and frequent replacement of waste containers while maintaining the low vehicle price. Last but not least, the house owners are happy about intact and nice-looking waste garbage cans.



CONTACT



*Your contact for
the impact roller:*

Oliver Geißler
from the Frankfurt location

Contact us:

Jäger Gummi und Kunststoff GmbH

Wilhelm-Röntgen-Straße 28

63477 Maintal

Tel. +49 6181 94030

E-Mail: frankfurt@jaeger-gk.de