## Self-assembly of linings with predetermined breaking point

for professional wear protection solutions



Lining of the discharge chute of a mixer truck with function plates



Detailed view of dishcarge chute with function plates without screw fixing

The use of plate material made of polyurethane for the most diverse tasks is standard practice. As a rule, polyurethane materials are used wherever resistance to wear, non-stick properties, reduction of frictional coefficients etc. are required. The plates are mounted in different ways. This can be done mechanically by screwing and/or by adhesive bonding.

In the case of repair, a complplete plate is exchanged. The disadvantages of this approach are, specifically:

- In the case of screw fastening, constructive boreholes must be drilled, whose arrangement also causes corresponding expenditure. A further disadvantage of screw fastening may be the arrangement of the screws in the flow of the bulk material.
- Adhesive bonds require precise preparation of the substrate. This should be metallically clean and as a rule free of dust and grease. This is also a cause of significant expenditure that must be repeated each time in the case of repair.

## One solution that saves time and costs is the function plate

The problem outlined above can be solved by a wear-proof polyurethane plate that is provided with an adhesive-friendly functional layer on the back. The low strength values of the functional layer give rise to a predetermined breaking point in the composite material with unique advantages in the case of disassambly.

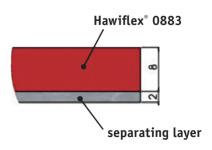
One half thereby remains on the removed polyurethane plate and the other half on the substrate. Relining can now take place with significantly reduced expenditure for the pretreatment of the substrate. Only loose parts need to be removed, which is simple. Otherwise the "original functional layer" offers a well-prepared surface for the new lining. Elaborate thermal and mechanical processes for stripping off the original lining are avoided by this method. It is usual on building sites to warm up the rear of the steel part with an open flame in order to loosen the lining. The health hazard associated with this is avoided by the new PUR plate with functional layer and environment

pollution is reduced considerably.

Gluing can be carried out using commercially available contact adhesives. The use of elaborate special adhesives can be dispensed with. This means simple application in the familliar order:

## apply – allow to dry 15 minutes – press on – ready for use

The geometrical shape of the plates is unlimited and can be optimised case by case and designed for the actual worn area. This results in savings due to the reduced use of materials compared to the complete exchange of the standard format plates.



Hawiflex® composite material with functional layer