

Guidelines for the reconditioning of light alloy wheels for passenger cars

In January 2023, the BRV, the Federal Association of Tire Retailers and Vulcanisers, published the new guidelines for the reconditioning of light alloy wheels for passenger cars.

Reconditioning means the professional restoration of the wheel with regard to optical defects by polishing, local grinding, rounding of notches, priming if necessary, filling with paint and varnishing. In particular, this involves superficially visible defects which, if the wheels were left untreated, would lead neither to technical restrictions nor to relevant defects in the course of a general inspection.

From this, the following should be noted:

- Wheels with cracks must be replaced immediately.
- Heat application and build-up welding of any kind are not permitted.
- Reverse deformation of the material is not permitted.
- A damage depth in the metal of no more than 10 % of the cross section (rim flange width), but in no case more than 1 mm, may not be exceeded.
- Professional preparation up to the maximum depth of damage is only permissible in the range of 50 mm in radial direction from the outer rim flange.
In the area above 50 mm, only preparation of the paint layers is permissible.
- Mechanical treatment (except for local grinding), e.g. of wheels with a high sheen finish is not permitted due to the reduction in wall thickness.
- The contact surface of the wheel, wheel mounting holes and center hole must not be prepared or painted. No metal may be removed from the inner surface of the spokes and the rim bed.
- A maximum temperature of 100°C must not be exceeded during painting work.
- The processing of wheels with blasting equipment as well as the thermal paint stripping is not permitted. When stripping paint from wheels, it must be ensured that there are no demonstrable changes in the material structure and their properties are demonstrably not changed.
- Wheels that have already been reconditioned must not be reconditioned again.

When reconditioning alloy wheels, it is advisable to obtain legally binding confirmation that the official guidelines have been observed and complied with. The reconditioned wheels are to be marked by the company carrying out the reconditioning with a suitable foil sticker on the inside of the wheel so that it cannot be lost.

In order to avoid corrosion, it is recommended that slight damage be repaired with clear varnish.