The facts are clear: additives in gasoline protect the engine, especially the sensitive valves and valve seats. We run the engine on LPG, which meets the requirements of the standard DIN EN 589 valid in Europe, where the incorporation of these protective agents, which are contained in gasoline, is prohibited. All major car manufacturers and engine developers have recognized this in the meantime and equip the OEM versions with specially hardened valves and valve seats, if the production process allows that, or, as the Korean manufacturers, invest in appropriate systems that allow for the subsequent adding LPG. And this is precisely the moment where ERC comes into play: The North German manufacturer of highly effective additives has developed, with help of Gaslube Special, a product that is able to enrich gas, as far as possible, with protective agents, which can also be found in gasoline.

To determine the effectiveness of specially designed LPG additive for valve protection, a long distance test was run in cooperation with TÜV Nord in Hannover. Its results could astound even a veteran LPG technician: After more than 100,000 kilometers of journey with gas only operation, the valves are virtually as new ones and no excessive wear, as it almost always occurs in the gas operation, was found by the TÜV Nord technicians during their regular measurements.

This had far-reaching consequences: a leading manufacturer of Korean cars changed control cycles, within periodic inspection schedules, of the valve clearance of LPG vehicles from 15,000 kilometers to 90,000 kilometers due to the additive produced by ERC. If we calculate the average workload, which is saved here, then those alone 90,000 kilometers, depending on the particular workshop wages, generate savings of up to 1500 euros.

In addition, even the insurance industry has recognized the benefits of the additives from Northern Germany: Most of the guarantee insurers grant up to seven years warranty for the vehicles which are permanently operated with additives made by ERC. Even second-hand vehicles, which are to be converted to LPG, can take advantage of a vehicle warranty up to 180,000 kilometers, which refers to the gas components and gas-related damages.

Based on these findings, ERC initiated an extensive road test with a Kia Cee’d (2.0 liters) over a distance of 100,000 kilometers. After each 15,000 kilometers the vehicle was inspected at TÜV Nord in Hannover. The TÜV employee controlled valve clearance and after that sealed the parts relevant for the test such as gas control unit, OBD input port, engine control unit and the valve cover, so that tampering with the vehicle was impossible. After a distance of slightly more than 100,000 kilometers it was found what had been previously apparent: the valve clearance has been hardly worsened and instead a protective layer was built around the valves as a result of the use of the additives.

Veronika Wanot, responsible for the project at the ERC: "An endurance test under real conditions, also in the road traffic is always more meaningful for us than just a test stand run. Finally, our additives are used in engines on the road and we do not have to keep them in the laboratory, waiting for the test."

The result of emission measuring on the test stand was that the lpg additive „GasLube special” did not negatively influence emissions.