

## **CLASSICAL AND MODERN METHODS FOR DETERMINING THE ADHESIVENESS OF ROAD BITUMENS**

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**Abstract.** The improvement of bitumen adhesiveness is a current practice all over the world, especially when acid (siliceous) aggregate is used. The adhesiveness is defined as the capacity of a binder to cover the aggregates without dispersing itself when is touching the water or the traffic aggressions. The estimation of the capacity of bitumen coverage in the laboratory can be done in different ways, some more elaborate, others more simplistic but more empirical. The European standard EN 12697-11 regulates three testing methods for the determination of affinity between aggregate and bitumen: rolling-bottle-test, static water storage, detachment in boiling water. This paper aims to review some of the methods of road bitumen adhesion to aggregates, some approved and currently used in practice, others not approved, but interesting from a scientific point of view and with the potential to be implemented, eventually. These adhesiveness methods are: Rolling Bottle Test Method (RBTM), the quantitative method, like classical methods and the "Average Percentages of Black" (APB) method, the PHP program method, as the new methods. In the following I will approach each method separately, explaining the principle of each method and how the adhesiveness is actually determined.

**Keywords:** *bitumen, adhesiveness, capacity of coverage.*