

## **RUBBER-BITUMEN GRANULATE FOR ASPHALT PAVEMENTS – LABORATORY COMPARATIVE ANALYSIS**

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### *ABSTRACT*

Use of scrap rubber-tyre has been known since 1960-ties. The applications were limited mainly to the State of Arizona, USA. The increasing amount of cars, and rubber tyres inseparably connected, in the world caused the need for solving the problem of recycling the tyres, and the components, especially the rubber. The method developed by McDonald in 1960-ties in Arizona to modify bitumen with rubber granulate became the most popular, widely used in many countries, last years.

The paper presents a new product developed in Europe - a rubber-bitumen granulate. It is a rubber modified bitumen which is produced in the form of fine particles granulate. Main advantage of this innovative product is the ease of its application for asphalt mixture modification.

The results of tests in IBDM comparing properties of asphalt mixtures with SBS modified binders or with rubber-bitumen granulate will be presented. The testing programme included performance based tests of low temperature cracking TSRST, stiffness modulus, fatigue cracking and rutting.

*KEY WORDS:* asphalt mixtures, rubber, bituminous binders, performance tests