

## **ASSESSMENT OF POLISH ROAD AGGREGATES PROPERTIES CONSIDERING EUROPEAN STANDARDS REQUIREMENTS**

### **B. Bogdanski**

MSc, C.E., Director of Road Laboratory in Poznan, PL  
General Directorate for National Roads and Motorways

### **M. Slowik** \*

PhD, C.E., Assistant Professor, Poznan University of Technology, PL

\* Poznan University of Technology, Institute of Civil Engineering, 5 Piotrowo  
St. PL 60-965 Poznan, Poland, e-mail: mieczyslaw.slowik@put.poznan.pl

### *ABSTRACT*

The paper contains results of laboratory research programme of aggregates used in hot asphalt mixtures production. The aggregates were collected 11 various domestic quarries. In 2004 Poland became a member of European Union. As a consequence of this event, Polish Standards concerning road materials and technology have been systematically replaced by European Standards. It was very important to check out if Polish aggregates are able to satisfy European Standards requirements.

The aggregates were obtained from crushing various types of rock i.e. basalt, gabbro, granite, melaphyre, quartzite, dolomite, limestone and dolomitic limestone.

The main purpose of the research work was to compare laboratory test results and values required by European Standards: resistance to frost, water absorbability, abrasion test according to micro-Deval, AAC and Los Angeles methods, Polished Stone Value (PSV), Shape Index and Flakiness Index. However, comparative analysis of aggregate properties achieved by various laboratory methods recommended by European Standards, has also been performed.

*KEY WORDS:* Aggregate, physical and mechanical properties, European Standards