



Granodiorite (Litice type) – building stone, gravel aggregates for HPC and HSC concrete and crushed stone for road works

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In the top of anticline structures sub-Cretaceous sediments in region of East Bohemia emerged granodiorite body formed by light pink biotitic granodiorite (Litice type) with light aplitic granodiorite dikes erupted into biotitic gneisses with calcareous marble thin layers into Zábřeh serie. These rocks are quarried on two localities: from the half 14th century in Litice nad Orlicí (granodiorite) up today and on the Černá skála Hill near Potštejn (aplitites with granitized biotitic gneisses) from the 1960s. Both localities are very important for construction in the region.

The petrographic and petrologic rock characteristics, their physical properties and time depended moisture capacity and vaporization in standard conditions are determinate for above two localities. It is studied influence of the of rock fabric anisotropy on shape factor of aggregate grains in the biotitic gneisses and in granodiorite and physical properties of gravel aggregates and crushed stone from above localities. There are presented examples of application of rocks, gravel aggregates and crushed stone in civil engineering.