

"Gheorghe Asachi" Technical University of Iasi, Romania



OPPORTUNITIES FOR VALORIZATION OF STEEL SLAGS

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Abstract

Using slag in steel making represents a challenge for road construction industry and decreasing environment interactions also. Steel making slag wit granulations of < 10 mm, which today have not a sure solution, represents the research object. The technological research solutions have aimed reducing CaO free content in these slugs, and reducing slug fraction with granulation of <10 mm also, and using these slugs in asphalt mixtures. Evaluating the impact of using steel making slugs shows an increasing of sustainable development indicator named "materials efficiency", with 2.18%. Technical economical analysis regarding using steel making slag by Romanian steel industry showed that the best variant (the bigger slag reusing rate, the smallest reusing investment time, and the best inside profitableness) is "Station of making available liquid slag from secondary metallurgical LF type".

Key words: ecologica, economic, impact, roads, slag, steel works

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