

INFRARED TECHNOLOGY FOR THE REMEDIATION AND RECYCLING OF ROAD DRESSING

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Rezumat. *Lucrarea își propune să informeze cu privire la utilizarea tehnologiei infraroșu (IR) pentru repararea drumurilor pe timp friguros și nu numai. Tehnologia de remediere a defectiunilor aparute la îmbracamintile rutiere bituminoase datorita fenomenului de îngheț-dezghet, a traficului intens și greu, capacității portante necorespunzătoare se realizează prin utilizarea surselor de încălzire cu raze infrarosii. Remedierile au caracter permanent și nu provizoriu, lucrările au o perioadă de garanție de cel puțin 24 de luni, iar costurile anuale se reduc semnificativ printr-o mentenanță cu caracter preventiv executată prin intervenții rapide ce opresc agravarea stării de degradare și o mentenanță corectivă de calitate superioară.*

Abstract. *The paper aims to inform about the use of infrared (IR) technology to repair roads in cold weather and beyond. The technology for repairing faults in bituminous road dressing due to the frost-thaw phenomenon, intense and heavy traffic, inadequate carrying capacity is achieved by using infrared heating sources. Remedies are permanent, not temporary, the works have a warranty period of at least 24 months, and annual costs are significantly reduced by preventive maintenance executed through rapid interventions, stopping the aggravation of the degradation state and having a corrective maintenance of superior quality.*

Keywords: Technology; Infrared; Repairing; Bituminous road

1. Introduction

Infrared (IR) technology is a method of remediation of asphalt coating by controlled heating of the defective area, followed by scarification, regeneration, hot-fill, leveling and compacting.

Applications of IR technology are used to repair the following defects: peelings, potholes, corrugations and ridging, streaking surfaces, intervention levels and downhill, spallings, cracks, alligator cracking, longitudinal rut, local settlements [1], [2].

Advantages of IR Technology:

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