

RETEXTURING WITH SHOT BLASTING AS AN ASPHALT PAVEMENT SURFACE PRESERVATION TOOL

C. Plati *

Senior Research Engineer, National Technical University of Athens (NTUA)

K. Georgouli

Pavement Research Engineer, National Technical University of Athens (NTUA)

B. Cliatt

Pavement Research Engineer, National Technical University of Athens (NTUA)

A. Loizos

Professor, National Technical University of Athens (NTUA), GR

* NTUA, Laboratory of Highway Engineering, 5, Iroon Polytechniou St., Zografou, Athens 15773, Greece, cplati@central.ntua.gr

ABSTRACT

Skid resistance is a major concern for road authorities as it affects pavement serviceability and road user safety. Pavements must have an adequate level of skid resistance, so that users are able to avoid skidding and loss of control of their vehicle. Factors such as traffic loads, weather conditions and aging of materials tend to degrade the pavements skid resistance. On this basis, road authorities have been searching for effective methods to preserve pavement surface at acceptable levels that if possible require limited need for road closure. One such method used to maintain pavement surface skid resistance is the shotblasting technique. In the present study a preliminary investigation takes place regarding the effectiveness and performance of the shotblasting method for the retexturing of an asphalt pavement surface. For this purpose, skid resistance and macrotexture measurements were performed both before and after the implementation of the shotblasting method along trial motorway sections. The collected data was processed and analyzed in order to investigate the impact of the method on skid resistance as well as on pavement macrotexture. The related findings and results are presented and discussed thoroughly.

KEY WORDS: Pavements, skid resistance, texture, shotblasting, preservation.