

**A STUDY ON THE FIELD APPLICATION OF ULTRA-THIN
HOT MIX ASPHALT WITH CSM MODIFIER FOR
SUSTAINABLE ROAD IN KOREA**

Y.I. Kim

Hansoo Road Industry Co., LTD, Daejeon, South Korea

N. Moustapha

Hansoo Road Industry Co., LTD, Daejeon, South Korea

ABSTRACT

This study is about Ultra-thin hot mix asphalt paving method applied in Korea which is called Recover asphalt. This method is applied for different purposes: extension of life cycle of roads, restoration of road functions and reducing of traffic noise. This research was carried out for evaluation of field application of ultra-thin hot mix asphalt pavement within 2cm thickness by production, transportation and compaction of asphalt mixture based on CSM modifier with max aggregate size 5mm. The mix design of this method was performed according to the Marshall method and the following tests were carried out: Marshall Stability, Indirect Tensile Strength Ratio (TSR), MMLS3 (third-scale Model Mobile Loading Simulator Test), Hamburg Wheel Tracking and Acceleration Pavement Test (APT). Through field application, productivity in asphalt plant, compaction properties by combination of compaction equipment, tire-road surface noise measurements by CPX method and long-term road performance were evaluated.