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The Influence of Moisture Conditioning on Hamburg Wheel Tracking Test Results

Authors: Hussain Al-Baghli

Abstract: The Hamburg Wheel Tracking Test (HWTT) was conducted to evaluate the resistance to moisture damage of two asphalt mixtures: an optimized rubberized asphalt mixture and an HMA mix with anti-stripping additives. The mixtures were subjected to varying numbers of moisture conditioning cycles and then tested for rutting depth. The results showed that the optimized rubberized asphalt mixture met the requirements for medium to heavy traffic in accordance with Kuwait's Ministry of Public Works specification. The number of moisture conditioning cycles did not significantly impact rutting development for the rubberized asphalt. The HMA asphalt samples showed a significant reduction in strength and did not satisfy the HWTT criteria after the moisture conditioning cycles.

Keywords: rubberized asphalt, Hamburg wheel tracking, antistripping, moisture conditioning

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