



**ALABAMA DEPARTMENT OF TRANSPORTATION
CONSTRUCTION BUREAU**

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Construction Information Memorandum No. 5 - 2020

TO: Region Engineers

ATTN: Area Operations, Construction, Materials, and Local Transportation Engineers

FROM: Kyle M. Leverette, PE *KML*
State Construction Engineer

RE: Checking Asphalt Spread Rate when using MRD

In past HMA laydown classes, a common topic of discussion regarding spread rate checks is how to accurately perform this calculation when using a material remixing device (MRD) as part of the paving operation. As you may know, the tonnage capacity in the MRD and associated hopper insert can reach 25-30 tons for some models. This tonnage must be deducted from the ticket totals prior to making the lbs/sy spread rate calculation since it is not yet placed on the roadway. The key to calculation accuracy is how to estimate this tonnage.

Before paving operations begin, the Project Manager and Contractor should agree on the best method to estimate this tonnage. Since the Contractor has a vested interest in the rate check being as accurate as possible, he should be willing to make his best effort in this endeavor. We have been assured by equipment manufacturers that experienced MRD and paver operators should be able to coordinate their efforts to insure accurate rate checks. One practice that has been suggested is to fill the MRD, the hopper insert, and the auger chamber at paving startup, then approximate that amount of mix *. If the amount is 1.5 loads, that tonnage would be subtracted from the spread rate calculation. Upon each spread rate check, the mix should be run to these same levels and the same tonnage deducted from the calculation. Whatever method is chosen, consistency is critical.

Based on discussions in training sessions, we understand that the Contractor is sometimes directed to run the MRD completely empty when calculating a spread rate. Experience has shown this to be a poor practice which can lead to segregation of the mix. A better practice is to simply run the mix in the MRD to a predetermined level as described above. In no case should the hopper insert be run empty as this will likely cause segregation and other surface blemishes behind the paver.

Please insure that your inspectors are aware of this guidance in this CIM. Revisions will be made to the Construction Manual in the near future.

KML/JLB/jlb
Attachment

pc:	Mr. George Conner, PE	Mr. Ed Austin, PE	Mr. William Adams, PE
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	ALBCA	ACIA	ACEA
			CIM File

* Inspectors should not climb on equipment to observe the level of mix; rely on the Contractor to perform this task.