Scope:

This test method is the procedure for establishing the field target density for compaction control of bituminous mixtures.

Referenced Documents:

MT Materials Manual:

MT 321 Determining Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures – “Rice Gravity”

Procedure:

Determine the maximum specific gravity of un-compacted bituminous paving mixtures in accordance with MT 321 - “Rice Gravity”.

When two (2) maximum specific gravities of field samples have been determined using MT 321, average the results. Use the average for the field target Rice Gravity density. This target is effective retroactive to the start of plant mix production on the project.

Maintain documentation of the Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures (MT 321) to determine the target density and all changes during the contract.

When four (4) field Rice Gravities are completed, average the four (4) test values. If a change of 0.5 pound per cubic foot (8.0 kg per cubic meter) or greater is calculated change, to the new average Rice Gravity. This change is effective at the time the last sample was obtained. Notify applicable Department personnel (e.g. Project Manager, Lab Supervisor, Lead Inspector) immediately of effective change with day, time and tonnage of the change.

As each additional field Rice Gravity is completed, add the results to the sum of the previous three (3) gravities and compute an average. If a change of 0.5 pound per cubic foot (8.0 kg per cubic meter) or greater is calculated from the last field target density, change to the new average Rice Gravity. This change is effective at the time the last sample was obtained.