3370205 ASPHALT CONCRETE FRICTION COURSE
COMMENTS FROM INTERNAL/INDUSTRY REVIEW

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Comments: (Internal 6-14-20)
Just make sure the 4 goes away. It does not appear to be struck and I assume it should be.

4. The Between-Laboratory Precision Values described in Table 334-75 are include ($P_{3/8}$, P_4, and P_8) with a maximum difference per FM 1-T 030 (Figure 2)
5. Table 334-64 (Master Production Range) is replaced by Table 337-2.
6. The mixture will be accepted on the roadway with respect to surface toleran

337-10 Failing Material.
Meet the requirements of 334-5.9. For FC-5, use the Master Production Range defined in Table 337-2 in lieu of Table 334-64.

Response:
(Wayne Rilko) The Track Changes strikethrough line is at the same height as the horizonal line in the '4'. The revised references to the MPR are correct. It is now Table 6.

Thank you for the thorough review.

Redline

337-6.2 FC-5: Meet the requirements of 334-5 with the following exceptions:
1. The mixture will be accepted with respect to gradation ($P_{3/8}$, P_4, and P_8), and asphalt binder content (P_b) only.
2. Testing in accordance with AASHTO T 312-192 and FM 1-T 209 (and conditioning prior to testing) will not be required as part of 334-5.1.1.
3. The standard LOT size of FC-5 will be 2,000 tons, with each LOT subdivided into four equal sublots of 500 tons each.
4. The Between-Laboratory Precision Values described in Table 334-75 are modified to include ($P_{3/8}$, P_4, and P_8) with a maximum difference per FM 1-T 030 (Figure 2).
5. Table 334-64 (Master Production Range) is replaced by Table 337-2.
6. The mixture will be accepted on the roadway with respect to surface tolerance in accordance with 334-5.8. No density testing will be required for these mixtures.

Final
337-6.2 FC-5: Meet the requirements of 334-5 with the following exceptions:
1. The mixture will be accepted with respect to gradation (P-3/8, P-4, and P-8), and asphalt binder content (Pb) only.
2. Testing in accordance with AASHTO T 312-19 and FM 1-T 209 (and conditioning prior to testing) will not be required as part of 334-5.1.1.
3. The standard LOT size of FC-5 will be 2,000 tons, with each LOT subdivided into four equal sublots of 500 tons each.
4. The Between-Laboratory Precision Values described in Table 334-7 are modified to include (P-3/8, P-4, and P-8) with a maximum difference per FM 1-T 030 (Figure 2).
5. Table 334-6 (Master Production Range) is replaced by Table 337-2.
6. The mixture will be accepted on the roadway with respect to surface tolerance in accordance with 334-5.8. No density testing will be required for these mixtures.

Redline

337-10 Failing Material.

Meet the requirements of 334-5.9. For FC-5, use the Master Production Range defined in Table 337-2 in lieu of Table 334-64.

Final

337-10 Failing Material.

Meet the requirements of 334-5.9. For FC-5, use the Master Production Range defined in Table 337-2 in lieu of Table 334-6.

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Comments: (Industry via email 7-16-2020)
I noticed that there exists a mistake in the word “entrain” used under specs shown below highlighted-
337-9.1 Fiber Supply System: Use a separate feed system to accurately proportion the required quantity of mineral fibers into the mixture in such a manner that uniform distribution is obtained. Interlock the proportioning device with the aggregate feed or weigh system to maintain the correct proportions for all rates of production and batch sizes. Control the proportion of fibers to within plus or minus 10% of the amount of fibers required. Provide flow indicators or sensing devices for the fiber system, interlocked with plant controls so that the mixture production will be interrupted if introduction of the fiber fails. When a batch plant is used, add the fiber to the aggregate in the weigh hopper or as approved and directed by the Engineer. Increase the batch dry mixing time by 8 to 12 seconds, or as directed by the Engineer, from the time the aggregate is completely emptied into the pugmill. Ensure that the fibers are uniformly distributed prior to the addition of asphalt rubber into the pugmill. When a drum-mix plant is used, add and uniformly disperse the fiber with the aggregate prior to the addition of the asphalt rubber. Add the fiber in such a manner that it will not become entrained in the exhaust system of the drier or plant.
337-9.2 Hydrated Lime Supply System: For FC-5 mixes containing granite, use a separate feed system to accurately proportion the required quantity of hydrated lime into the mixture in such a manner that uniform coating of the aggregate is obtained prior to the addition of the asphalt rubber. Add the hydrated lime in such a manner that it will not become entrained in the exhaust system of the drier or plant.
337-9.2.1 Method A - Dry Form: Add hydrated lime in a dry form to the mixture according to the type of asphalt plant being used. When a batch plant is used, add the hydrated lime to the aggregate in the weigh hopper or as approved and directed by the Engineer. Increase the batch dry mixing time by eight to twelve seconds, or as directed by the Engineer, from the time the aggregate is completely emptied into the pugmill. Uniformly distribute the hydrated lime prior to the addition of asphalt rubber into the pugmill. When a drum-mix plant is used, add and uniformly disperse the hydrated lime to the aggregate prior to the addition of the asphalt rubber. Add the hydrated lime in such a manner that it will not become entrained in the exhaust system of the drier or plant.
The word entrain needs to be replaced with “ entrapped/ entangled” to reflect the correct

meaning of the specification.

Response:
(Wayne Rilko) Entrained is correct. In engineering, entrainment is the entrapment of one substance by another substance. Another definition is to draw in and transport (something, such as solid particles or gas) by the flow of a fluid. The spec. references fiber or hydrated lime caught up in an air/gas (exhaust) stream. Although entrapped could be used, no change is needed.