

OHD L-55 METHOD OF TEST FOR HAMBURG RUT TESTING OF COMPACTED HOT-MIX ASPHALT (HMA)

Use AASHTO T 324 with the following exceptions:

1. Warm mix asphalt (WMA) shall also be tested with this procedure.
2. Add OHD L-14 to the referenced documents and replace references to AASHTO T 166 with OHD L-14.
3. Specimens may be 6 inch diameter [150 mm] compacted in the lab using the Superpave Gyrotory Compactor (SGC) or 6 inch diameter [150 mm] roadway field cores.
4. PMW software uses these points to measure rut:

Point	Location (in)	Location (mm)
Beg.	0	0
1	1/2	12.7
2	1 3/10	33.0
3	2 1/10	53.3
4	2 9/10	73.7
5	3 7/10	94.0
6	4 1/2	114.3
7	5 3/10	134.6
8	6 1/10	154.9
9	6 9/10	175.3
10	7 7/10	195.6
11	8 1/2	215.9
End	9	228.6

- a. Points 5, 6, and 7 rut depths are averaged for the mid-point plot with outliers removed. This average is used for reporting the rut test result.
 - b. Point 6 is the rut plotted for the Stripping Inflection Point (SIP).
5. When using laboratory prepared specimens, compact the specimen average percent air (P_a) to 7.0 ± 1.0 as detailed in OHD L-14.
6. The water bath and therefore test temperature shall be $122 \pm 2^\circ\text{F}$ [$50 \pm 1^\circ\text{C}$].
7. Set the end point for maximum point rutting to abort a test in the software as 18.00 mm.
8. Perform a run using at least the minimum number of passes required by specifications.
9. If less than 8.00 mm of rut at mid-point, rut testing is complete. Report the result.
10. If a run ruts more than 18.00 mm at mid-point, the results cannot be reported.
 - a. PMW software may show less than the specification rut limit but with fewer passes as the 18.00 mm limit might be exceeded before the required number of passes is complete.
11. If a run is less than or equal to 18.00 mm and more than 8.00 mm at mid-point, average the mid-point rut depths for two runs.

12. If a wheel bumps up significantly during a run, discard that run's test result and perform another run. This indicates that one of the two specimens has significantly more or less rutting than the other.
13. Report the average of one or two wheel runs as applicable, to 0.01 mm at mid-point rut depth.
14. Report the required number of passes at the mid-point rut depth as required by specifications.
15. Stripping Inflection Point (SIP) may optionally be computed and reported for information.

Revision Date	Revision Description
08/15/14	Method completely replaced to reference AASHTO T 324 and OHD L-14 with exceptions.