



Test Monitoring Center

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1K/1N Information Letter No. 04-2
Sequence No. 24
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ASTM consensus has not yet been obtained on this information letter. An appropriate ASTM ballot will be issued in order to achieve such consensus.

TO: Single Cylinder Diesel Mailing List

SUBJECT: Implementation of 1N TLHC Correction Factor

During two teleconferences held April 12, 2004 and May 26, 2004 the Single Cylinder Surveillance Panel approved the 1Y3998 cylinder liner for use in 1N testing. The 1Y3998 liner is the only liner acceptable for use in any 1N test started on or after May 1, 2004. A TLHC performance offset exists with this liner that necessitates a correction factor. Any 1N test using a 1Y3998 liner is required to add – 1.135 to the transformed TLHC test result (in addition to any lab severity adjustment that might exist) before back-transforming for the final reported percent TLHC test result.

The updated sections of ASTM Test Method D 6750 are attached.

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Attachment

c: ftp://ftp.astmtmc.cmu.edu/docs/diesel/scote/procedure_and_ils/1k-1n/il04-02.pdf

Distribution: Email

(Revises Test Method D 6750-02 as modified by Information Letter 04-01)

- 9.3.4 *Cylinder Liner*—Use a 1Y3555 liner for 1K testing. Use a 1Y3998 liner for 1N testing. Use only liners having a surface finish of 0.4 to 0.8 μm . Remove the protective grease with mineral spirits, then clean the liner bore with a hot water/detergent solution (see 7.5) and rinse with hot water.
- 13.1.3 Reporting Top Land Heavy Carbon (TLHC) and Transformed Top Land Heavy Carbon (TTLHC):
- 13.1.3.1 Convert TLHC percent to transformed units: $\text{TTLHC} = \ln(\text{TLHC}+1)$
- 13.1.3.2 If the test is a 1N test using a 1Y3998 liner, add the industry correction factor:
 $\text{TTLHC} + (-1.135)$
- 13.1.3.3 Add any lab severity adjustment
- 13.1.3.4 Convert the transformed total back to TLHC percent:
 $\text{final TLHC} = \exp(\text{final TTLHC}) - 1$

Renumber old section 13.1.3 and subsequent sections accordingly.