T8E – ISB Viscosity Equivalency Matrix

- Industry would like to ask ASTM for funding of the Equivalency Matrix
- This process is initiated by the Surveillance Panel
  - Request details to be discussed in today's meeting
- After receiving the request:
  - TMC will communicate with the Board of Directors
  - Test labs will be contacted confidentially for pricing information
  - Total Spend Request would be established
  - Revert to the SP the total number of labs and stands meeting the TMC funding requirements and can participate in the funded request.
- Details will then be confirmed by the SP and forwarded to TMC for decision
  - If accepted, the request will be forwarded to ASTM Finance & Audit Committee
  - All decisions made by TMC BoD and ASTM Finance & Audit Committee are final

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- If funding request is approved by ASTM, TMC will notify SP and the testing program may commence
- TMC will arrange the testing through purchase order agreements with the test labs
  - The POs will detail all necessary terms and conditions
- If testing has not commenced within 3 months of the anticipated start date, the TMC BoD or ASTM Finance & Audit Committee may review the request to see if the funding need still exists and is appropriate.
  - If either condition is not met, the funding request may be withdrawn

Request Details

- Detailed background and description covering the need and justification for a new or revised ASTM standard:
  - The ISB Viscosity Test Method was developed as an ASTM Standard during PC-12 to replace the Mack T-8E (ASTM D5967) and Mack T-11 (ASTM D7156) due to limited hardware availability. To maintain the existing Heavy Duty Engine Oil Categories in ASTM D4485, the industry needs to identify equivalency limits between these tests. In support of PC-12 limit setting for the ISB Viscosity, equivalency will also be useful to the process.

Request Details

- Description of work already conducted including some form of risk analysis.
  - The precision matrix for the ISB Viscosity Test provides data to develop equivalency with the Mack T-11 but does not provide data for equivalency to the older Mack T-8E. There were two test results during development shared for comparison with T-8E. The industry must generate additional data to establish this equivalency, which also helps setting limits for PC-12B in ASTM D4485.
  - When the Mack T-8E test is no longer available (currently estimated around 2029), then these equivalency limits may also be used to maintain licensing for CH-4, CI-4 and all ACEA heavy duty engine oil categories. If we don’t generate these data now, we will need it eventually.

Request Details

- The anticipated amount of testing and an initial list of test laboratories interested in participating.
  - Which labs are willing to participate:
    - SwRI and Intertek
  - Stats group recommendation:
    - Stats group recommendation – 7 Tests (attached presentation separately):
      - Running three (3) 108-hour ISB Viscosity tests and four (4) Mack T-8E tests

Proposed Matrix	T8-E	ISBV108
RO1005	plenty	1+3
Tech1 15W-40 base oil 1	2	1+0
Tech1 15W-40 base oil 2	2	1+0
	Run T8-E in one lab if possible	

Request Details

- Any additional stakeholder commitments such as statements of financial or in-kind support from other industry organizations.
  - Two pairs of test results were donated by a test lab from test development. Funding was requested from API; however, none is available in 2025. A much more significant amount of data was funded by all three trade organizations (API, EMA and ACC) to establish equivalency between T-11 and ISB Viscosity. Additionally, data from the ISB Viscosity BOI/VGRA matrix funded by API and ACC will be leveraged with the testing requested, i.e. these are the results by which the Mack T-8E data will be compared.

Request Details

- Timeline for completion of the testing including start date, duration and projected end dates.
  - Start date:
    - Labs feedback when they would be able to start testing.
    - Feedback from supplier of Tech 1 on when blend will be available.
  - Duration:
    - Labs feedback on time required to run 4 T-8E’s.
  - Projected end dates:
    - Start date + Duration