

ASTM Rater Calibration Task Force

**Report to the ASTM
Technical Guidance
Committee**

April 18, 2001

ASTM Rater Calibration Task Force Background

- Established by the ASTM Technical Guidance Committee at the request of the Test Monitoring Board
- Tasked to develop and recommend a process which would allow “calibration” of those individuals responsible for the subjective evaluation of engine deposits using currently available resources
(Scope)

ASTM Rater Calibration Task Force

Task Group Members

- **Chairman - Zack Bishop**

- **Committee Members**

- **The Chair has received invaluable input from industry including the past Chair, past members and interested ASTM, CRC, and SAE members.**

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Definition - Rating

- The subjective quantification of surface distress and deposits found in internal combustion engines and drive mechanisms generally produced by lubrication products including:
 - Rust
 - Varnish
 - Sludge
 - Carbon
 - Distress

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Definition - Rater

- **The Individual tasked with the responsibility to subjectively determine the deterioration of engine parts and drive train mechanisms subjected to petroleum products using industry recognized techniques**
- **Generally**
 - **Rust, Varnish, Sludge, Carbon and Distress**

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Definition - Workshops

- **Workshops are Industry (generally ASTM or CRC) coordinated gatherings in a central location where industry raters can interact and, using industry accepted rating techniques, subjectively evaluate specific engine and drive train parts with the goal of normalizing individual approaches and viewpoints to a consensus value.**

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Activity to Date

- Some formal meetings
- Innumerable telcons and electronic transmissions.
- Support and guidance from all stakeholders
 - Producers, Users, General Interest (Labs)
- Details upon request only

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RECOMMENDATIONS

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Recommendations - Calibration Process

① Internal or company training

- Participating organizations or companies must have an established and documented process for training raters internally and each rater must have completed this process.
- Each rater must be categorized as either a Category I or Category II by their parent organization or company.
- Records must be kept documenting internal training completion and classification.

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Rater Categories

■ Category I

- An individual whose rating results (reference and non-reference) are used in final test reports that support the quality level of experimental fluids and/or whose ratings are used to support the quality level of marketable products.

■ Category II

- All other individuals who do not fit into Category I.

ASTM Rater Calibration Task Force Recommendations - Calibration Process

- ② Category I raters, to achieve calibration, must attend and contribute to a minimum of one (1) ASTM or CRC industry rating workshop or make-up session each year
 - Ratings must be in the deposit or distress area where calibration is sought.
 - Ratings must be used in the generated statistical data at that workshop

ASTM Rater Calibration Task Force Recommendations - Calibration Process

③ Records will be kept in a central location identifying those individuals who have achieved Category I status along with proof of qualifications.

- Name of individual**
- Proof of internal training (Company supplied)**
- Date for attendance and contributions to an industry workshop**
- Rating areas**

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HOW TO GET STARTED

ASTM Rater Calibration Task Force Recommendations - How to get Started

- ① Agree with the recommendations of the ASTM Rater Calibration Task Force and the qualifications required for a Category I Rater**
- ② Request surveillance panels identify in their respective procedures that all subjective ratings must be accomplished by Category I raters. (Effective date to be set by S.P.)**

ASTM Rater Calibration Task Force Recommendations - How to get Started

- ③ Recommend that TMC be assigned the responsibility of maintaining a central data base where Category I raters are identified along with documentation of their qualifications. This data base will be available to Industry**

- ④ Initially require only documentation of internal training in the establishment of Category I Status**

ASTM Rater Calibration Task Force Recommendations - How to get Started

- ⑤ Once an ASTM or CRC industry rating workshop is held, then all category I raters must have attended along with contributions to maintain status.**
- ⑥ New raters will only require internal training until an ASTM or CRC industry rating workshop is conducted**

ASTM Rater Calibration Task Force Recommendations - How to get Started

- ⑦ Category I raters not able to attend workshops must, **within 30 days of the workshop**, coordinate a makeup session with a qualified Category I rater that attended the workshop. Parts will be rated by each rater providing comparison numbers. This data will be then submitted to the Central Data Base. **Documenting** this action in this time frame will allow continued Category I status for the rater in question

ASTM Rater Calibration Task Force Recommendations - How to get Started

- ⑧ The organization charged with maintaining the data base for category I raters will, from time to time, review the effectiveness of the category I process and, if necessary, make recommendations to the Technical Guidance Committee for improvements**