“RBMEC”

Roller Bearing Manufacturers Engineering Committee
Purpose & Members

- To support the AAR WABL Committee in the development and administration of technical standards
- To provide recommendations to the AAR WABL Committee for bearing performance improvement opportunities
- Members:
  - Brenco, SKF, FAG, NTN, and The Timken Company
Recent RBMEC Activities

- Revisions and updates to various Specifications, including
  - M-942 (Roller Bearing Greases)
  - M-934 (Freight Car Journal Roller Bearings)
  - M-959 (Lubrication Seals for Freight Car Journal Roller Bearings)
  - M-924 (Journal Roller Bearing Adapters for Freight Cars)

- Development of an improved MD-11 reporting system based upon “Failure Progression Mode” (root cause) analysis
Recent RBMEC Activities (cont’d)

- Provide appropriate AAR manual update information
  - Maintenance information (“Service Limits”)
- Suggested bearing performance improvement opportunities
  - Mandatory “fitted” applications on axles with toleranced dust guard diameters
  - Require “fitted” applications on all 286GRL equipment
  - Continue to work on removal criteria and condemning limits for wheels (wheel impact effect on bearing performance)
- Mandatory replacement of frame keys
Recent RBMEC Activities (cont’d)

- Development of an “AAR List of Approved Grease and Seal Combinations”
- Updates to Manual Section G-II for the Class L and Class M Bearings
Rule 36 CRB Data

Total Bearing Removals

Thousands

2001 2002 2003 2004 2005
Rule 36 CRB Data
WMC 11 – Removed Good Condition

2001: 410,576
2002: 375,711
2003: 402,402
2004: 428,503
2005: 582,486
Rule 36 CRB Data

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<tr>
<th>Year</th>
<th>WMC 4 - Defective</th>
<th>WMC 32 - Submerged</th>
<th>WMC 33 - Derailment Damage</th>
<th>WMC 50 - Overheated</th>
<th>WMC 93 - Loose/Cocked Seal</th>
<th>WMC 97 - Loose Backing Ring</th>
<th>WMC 99 - Damaged Seal</th>
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