Wheel Shelling Progression

- Month 1: Good Wheel
- Month 9: Fatigue Cracks +29,000 miles
- Month 13: Shells +55,000 miles
- Month 16: Fully Shelled +76,000 miles

Note: Percentages represent major repair and maintenance cost for freight car equipment.
Paired Wheelset Removals
Removals by AAR Interchange Rule

- Bearing: 23%
- Safety: 0.4%
- Axle: 0.1%
- Other: 0.0%
- Wheel: 77%

Note: Percentages represent the cumulative number of wheelset removals, by sub-group and specific sub-group.
Paired Wheelset Removals

Wear

- Flange Thin: 25%
- Rim Thin: 6.5%
- Tread Worn: 1.8%
- Flange Vertical: 0.0%
- Flange High: 66%
Paired Wheelset Removals by Car Type

- C - Covered Hopper
- P,Q,S - Intermodal
- T - Tank
- G,J - Gondola
- A - Eq. Box
- F - Flat
- V - Autorack
- H,K - Hopper
- E - Eq. Gon
- B - Box
- R - Refer

2008 Wheelset Removals

Umler Car Type
Paired Wheelset Removals by Car Type

Wheelset Removals per Million Car Miles

Umler Car Type

- P,Q,S - Intermodal
- T - Tank
- F - Flat
- C - Covered Hopper
- A - Eq. Box
- B - Box
- E - Eq. Gon
- V - Autorack
- G,J - Gondola
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