Locomotive Inspections and the Interpretation of the Results
Regulating Agency’s

- Department of Transportation Federal Rail Administration (USDOT FRA)
- California Public Utility Commission (PUC)
Inspection Resources

- FRA Rule 49 Parts 200 to 399
- RDS Locomotive Inspection Scheduling System (LISS)
- Locomotive Manufacturing Maintenance Information (MI)
Inspection Intervals

- Daily inspection. Rule 229.21 Operator
- 92 day inspection. Rule 229.25 Mechanic
- 368 day inspection. Rule 229.27 Mechanic
- 736 or 1104 day inspection. Rule 229.29 Mechanic
Daily Inspection

- All Fluids; engine oil and water, air compressor oil, governor oil.
- Perform air Brake test.
- Walk around inspection.
- These should be completed every shift
Mechanic Inspections

- 92, 368,736, and 1104 day inspections
- All Safety devices tested
- All electrical components inspected
- All wiring inspected; loose or chaffed.
- All air components tested or changed
- Clean electrical contacts and generator
- Change all air, oil and fuel filters.
- Complete visual inspection.
Overloaded Generator
Heat Cracks From Wheel Slip
Hollow Tread

Reads 5/32"

(3/16" or More - Condemnable)

Hollow Tread
False Flange

Wheelset with false flange negotiating crossing portion.
Excessive Track Contact

TYPICAL HEUMANN TYRE PROFILE
Thin Flange

Worn Profile

New Profile

Radius of Flange Tip Less Than 5 mm

Sharp Flange
Flange and Track Wear
Joint Bar
Wheel Lathe
New Wheel

Wheel Flange with Proper Width

High Wheel Flange

Wheel Flange with Proper Height

Thin Wheel Flange

Side View. Not to scale.
Correct Wheel to Rail Contact