

Rail Wear and RCF

A Severe Contact Environment

- Pressures higher than many bearings
- Usually loaded beyond the original elastic limit of the materials
- Contacts are open to the environment: water and other contaminants
- Maintenance must control wear and crack growth to maintain safety



Potential Solutions

- Modelling can help understand how and where failure will happen
- New steel microstructures offer resistance to wear and cracking
- Lubrication and friction management can reduce stresses to slow or stop failure