

# Rail Car Component Testing and Evaluation

CTLGroup has been serving the rail industry for over 40 years. Our team is composed of mechanical engineers, metallurgical engineers, metallurgists, and highly skilled test technicians. We work closely with railroads, rapid transit authorities, railway component manufacturers, railway and transit consultants, contractors, highway transportation equipment suppliers, and government agencies, delivering expert services that include:

- Complex, large-scale testing of parts and components
- Customized product development, quality assurance, and problem assessment testing
- Testing vehicle components to industry specifications
- Data acquisition of field service conditions
- Data analysis and part/component performance evaluation

We provide clients with in-depth metallurgical and mechanical services, such as:

- Root cause and failure analysis
- Materials characterization and selection
- Microstructure, heat treatment and casting quality
- Weld evaluation
- Corrosion and material degradation
- Mechanical design and integrity
- Field evaluation and joint inspections

## Rail Industry Testing Standards and Accreditation

- American Railway Engineering and Maintenance-of-Way Association (AREMA)
- Local authority specifications
- ISO 17025 approved facility

## Vehicle Component Testing

- Bolsters, side frames, and brake beams
- Draft gear, couplers, knuckles, and yokes
- Fabricated trucks
- Locomotive engine components
- Trailer king pin assemblies
- Transit car components
- Suspension components
- Side bearings
- Friction wedge systems
- Primary suspension pads

