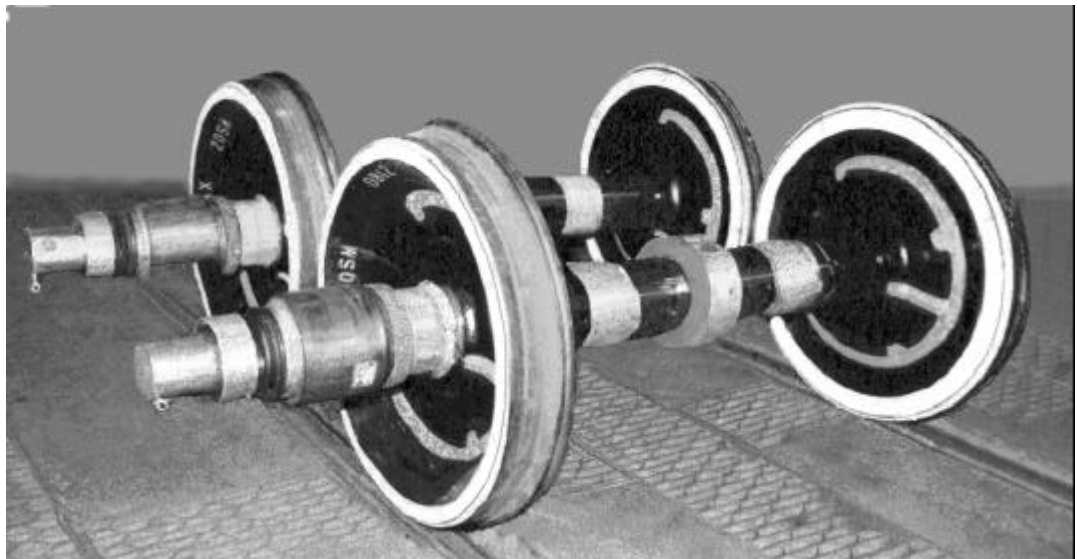


Centre for Surface Transportation Technology

Railway Instrumented Wheelsets

CSTT is the custodian and operator of Canada's only pair of railway instrumented wheelsets. When mounted on in-service railway cars, these instruments measure the forces and moments at the rail/wheel contact point continuously in all three axes.



Railway instrumented wheelsets

Features

- continuous measurement of forces and moments in three axes
- digital data acquisition

Applications and benefits

- rail/wheel contact point measurements
- input load measurement for optimization of car and component designs
- track monitoring and evaluation

Railway instrumented wheelsets

Specifications

- capacity: 100-tons per wheelset
- wheel diameter: 36"

Instrumentation and data acquisition

- digital 32-channel data acquisition system

Some current/recent uses

- curving forces in spiral tunnel
- measuring axle load on a new series of grain cars

Recent client

CP Rail System

Centre for Surface Transportation Technology

Canada spends proportionally more on transportation than any other industrialized country. The Centre for Surface Transportation Technology offers its clients unique expertise and facilities to improve the productivity, competitiveness, reliability and safety of railway and road transportation.

Rail and road transportation companies, vehicle designers and manufacturers, military and commercial vehicle owners, lumber and mining companies, consultants and contractors, municipalities, highways departments and regulatory agencies use the Centre for Surface Transportation Technology. CSTT conducts engineering research using full-scale facilities and performs field tests of commercial rail and road vehicles.

Instrumented wheelsets mounted on grain car
The Centre can also be your entry point to an extensive range of other NRC technologies and services, from aerodynamics to machinery monitoring, to advanced manufacturing techniques, to intelligent vision systems. Call us!

Further information

Rail vehicle facilities and certification

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