

Mechanical Designer

The mechanical designer will participate in the design of structures and various mechanical systems and components for railway vehicle such as locomotives, passenger cars, freight cars and maintenance equipment. He will use AutoCAD or Inventor to elaborate conceptual designs and produce manufacturing drawings.

Under the responsibility of a mechanical engineer and as part of the design team, the mechanical designer will undertake the following tasks:

- Design modifications to the structure or mechanical equipment of rail vehicles.
- Perform layout studies and design attachments and brackets as per the applicable standards and design requirements.
- Design bolted assemblies, weldments and sheet metal components in carbon steel, low alloy or stainless steels.
- Select hardware and other components as per the engineer's instructions.
- Create the bill of materials for the manufacturing of components and assemblies and for their installation on railway vehicles or stationary installations.
- Produce drawings for modification, manufacturing, assembly and installation of railway vehicle components.
- As required, develop shop and installation instructions.
- Occasionally, take measurements in the field and provide shop technical support for the manufacturing and installation of mechanical components or systems.

Skills and Experience:

- DEC or bachelor's degree in mechanical design.
- Good knowledge of a 3D modeling software: Inventor, Solidworks or other.
- Bilingual, English and French.
- Experience in the railway or transportation industry is an advantage.
- Knowledge of the FRA, APTA, AAR, SAE, ASME, CSA or Transport Canada standards are of interest.

Required Qualities:

1. Effective communicator and ability to work as part of a team.
2. Interest in acquiring and applying new techniques and knowledge.