

CASE STUDY

CONTACT

Marketing Department
Marketing@bnsflogistics.com
+1-855-481-9658

BNSF Logistics
1600 Lakeside Pkwy, Suite 100
Flower Mound, TX 75028
www.bnsflogistics.com

Tank Car Modification Design

Company Profile

Multiple tank car leasing firms that maintain fleets of “legacy” tank cars across North America.

Business Challenge

Government agencies such as the FRA and Transport Canada frequently update tank car regulations to incorporate new safety protocols or advancing technological practices. These updated regulations force tank car leasing companies to either retire or modify their existing fleet.

The majority of these tank cars have plenty of life left in them, so car owners approach BNSF Logistics to quickly engineer design modifications to allow their cars to keep running while maintaining compliance with their respective government agencies.

Solution

BNSF Logistics engineers carefully review governing car requirements to deliver a compliant design modification for each tank car. Designs often include calculations and/or stress analysis using Finite Element Analysis (FEA), as well as full detail drawings.

Process/Procedure

These modifications are completed by first reviewing existing information on the tank cars (including build date, original builder, and tank car design configuration). This initial review enables the engineering team to efficiently address the following:

- Develop the appropriate scope of work that fully satisfies customer requirements
- Generate engineering drawings to deliver a complete design package to the customer
- Economically manage the customer’s tank car fleet while addressing governmental agency requirements.

BENEFITS ACHIEVED

- Increased value of asset for resale
- Increased revenue to client after completing required capital improvement on existing tank car fleet
- Maximized the value of the customers’ rail fleet and increased customer satisfaction

