

# RAIL CAR DUMPER RAILS & TRACKS



## Overview:

Boltstress Ultrasonics were awarded the job of removing and re-installing several bolted joint locations of rail car dumper rails and tracks. This involved the loosening, replacement and re-installation of over 3000 bolts. Due to the repeated number of tightening and loosening operations, approximately 24,000 actions were completed.

## Preparation:

Our customer, Boltstress Ultrasonics Pty Ltd, chose the Norbar EvoTorque® Battery Tool on the basis it performs flawlessly in a manner of demanding environments, something as a business we had originally set out to achieve. Additionally, Boltstress Ultrasonics had specific qualifying criteria the tool needed to meet, including for it to be transducerised, to be able to collect and record torque and angle data, to have a reliable and proven robust gearbox assembly and battery performance which could sustain a good number of successive bolting operations. Of course, the package wouldn't be complete without our offering of a technical support package comprising of Norbar technical and design engineers.

## Results:

The on board transducer meant every bolt had precisely the right amount of torque applied - this was verified by the Boltstress Ultrasonics instruments. Data management provided hard evidence of applied torque - streamed in real-time to the QA department. All in all, a satisfied customer and job well-done.

## Application

Replacement of >3000 bolts of Rail Car Dumper rails and tracks.

## Solution

EvoTorque® Battery Tool provided the best fit solution for the customer, Boltstress Ultrasonics Pty Ltd.



Image of Rotary O-type dumper



Rotary O-section bolt installation



Tension analysis with Ultrasonics