



## Overview

The client is one of the leading train manufacturers, maintainers and train refurbishers in the world; employing 31,500 people worldwide with 23,800 in Europe.

The client was awarded the contract to refurbish the complete District Line 78 stock totalling 65 X 6 car units.



## Problem

The client was encountering concerns delivering the required units on time to the customer, which was leading to high levels of liquated damages. On a required takt time of a 12 hour line move, the company was averaging a cycle time in excess of 28 hours to move the line.

*"This is the best training program I have ever been exposed to"*

**Role: Methods Manager**





# Solution

Project 7 deployed a two phased approach to support the throughput. Firstly Project 7 trained leading methods engineers and production team leaders in 5 basic lean tools: 5s, Visualisation, 7 Wastes, Yamazumi and Kaizen. Following on from this class room training, Project 7 led the team through an on the job training program, which applied the classroom training in a real life situation.

## Results

---

1. Line move time reduced from 28 hours to 11 hours. 61% reduction.
2. Headcount reduction of 14 operators through waste elimination. 10% Reduction
3. A total of £1,600,000 savings identified and implemented.
4. ROI of 9 : 1 agreed
5. Material cost reduction of £100,000 per unit set identified.
6. 55% increase in lean manufacturing tools understanding.

## Lessons Learned

---

1. A better understanding of current state and data analysis would have prevented wasted time agreeing KPI improvements.
2. If class room training is not followed up with practical on the job training the knowledge retention is reduced by 30% within 6 weeks.
3. Early engagement of the shopfloor staff will result in smoother implementation and sustainability of the improvements identified.