

**RAILWAY COACH FACTORY**

A REPORT ON

PROJECT PERFORMED

AT

**TECHNICAL TRAINING CENTRE**

**RCF**

KAPURTHALA

TOWARDS PARTIAL FULFILLMENT

OF

SUMMER TRAINING

BY

**Gurpreet Singh**

(PROJECT TRAINEE)

(B. Tech., 3rd Year, MECHANICAL Engineering)

ACET College, Amritsar

FROM 9th June’16 to 21st July’16

**DECLARATION**

I hereby declare that the Industrial Training Report entitled **Quality Improvement through Deployment of Kaizen Event Methodology** is an authentic record of my own work as requirements of 2-months Industrial Training during the period from **21st May 2016 to 15th July 2016** for the award of degree of B.Tech. (Mechanical), ACET-Amritsar College of Engineering. & Technology, Amritsar, under the guidance of **Mr. Balaji Srinivasan G**.

(Signature of student)

**Mr. Arvind Kalia**

(1400657)

**Date:** 15th July 2016

Certified that the above statement made by the student is correct to the best of our knowledge and belief.

**Head of Department**

**(Signature and Seal)**

**CERTIFICATE**

This is to certify that **Mr. Arvind Kalia** has completed the 2-Month Industrial Training during the period from **21st May 2016** to **15th July 2016** in our Industry as a Partial Fulfillment of Degree of Bachelor of Technology in Mechanical Engineering.

**Date:** 15th July, 2016

**Balaji Srinivasan G**

**(Divisional Manager, BES)**

**ACKNOWLEDGEMENT**

At the very beginning I would like to express my deepest gratitude to the **TATA Motors Ltd, Sanand Plant** for providing me the opportunity to complete my Summer Internship program and prepare this report within the scheduled time.

During the period of my internship work, I have received generous help from many quarters, which I would like to put on record here with deep gratitude and great pleasure.

First and foremost, I am grateful to my Project Guide, **Mr. Balaji Srinivasan G (Divisional Manager, Business Excellence Services)**. He allowed me to encroach upon his precious time freely right from the very beginning of this Project work till the completion of my internship. His guidance, encouragement and suggestions provided me necessary insight into the research problem and paved the way for the meaningful ending of my project work in a short duration. Without his constant support and valuable advices from time-to-time, it would have not been possible to complete the work in an appropriate manner.

My special gratitude goes to **Mr. Jigar Desai (Sr. Manager) and Mr. Priyank Jain (Manager KPO)** for their modern outlook and meticulous supervision to carry out the job perfectly. They acted as a constant support system during the course of my Internship program.

I am grateful especially to **Mr. Siddharth Ray (Shop Head, TCF Shop), Mr. Amrut Patil (Manager TCF Shop) and Mr. Brijesh Modasara (Assistant Manager TCF Mfg. quality)** for their sincere co-operation and support for giving me the opportunity and always help and support me both technically and professionally. Their guidance and support in the respective shop floor had a huge impact in my project findings.

Also I am highly grateful to the HR Department, especially **Ms. Ritu Negi (Manager)** for providing me this opportunity to work in this prestigious organization.

Lastly I would like to express my sincere thanks to the whole **TATA family**, whosoever were linked with my project work directly or indirectly. Any omission in this brief acknowledgement does not mean lack of gratitude. I will try my best to polish the professional and technical skills that I have learnt during this period of time, so that this Internship program would have a great impact on my career.

**Arvind Kalia**

**OBJECTIVE**

The purpose of the project was to improve productivity and quality levels of the Final Mechanical line using KAIZEN Methodology and other associated work measurement techniques. Tata Motors Limited had introduced some new products to market and therefore was undergoing changes to carry out production as per the demand of the product. In order to do so it was necessary that Final Mechanical line should be productive enough to provide a good quality product on time to the customers.

In the initial faces of the project, TQM (Total Quality Management) studies were carried out to measure the work content and standard times of the operation were carried out. Process mapping was done and the assembly operations were studied along with the Training. In order to achieve the results Lean manufacturing strategies were used. In order to increase the productivity and quality Kaizen tool was used.

* ICA & PCA for respective issues were taken.
* Suggesting and implementing necessary process/methods/system improvements resulting in manpower savings, loss/waste, etc. thus resulting in productivity improvements.

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