



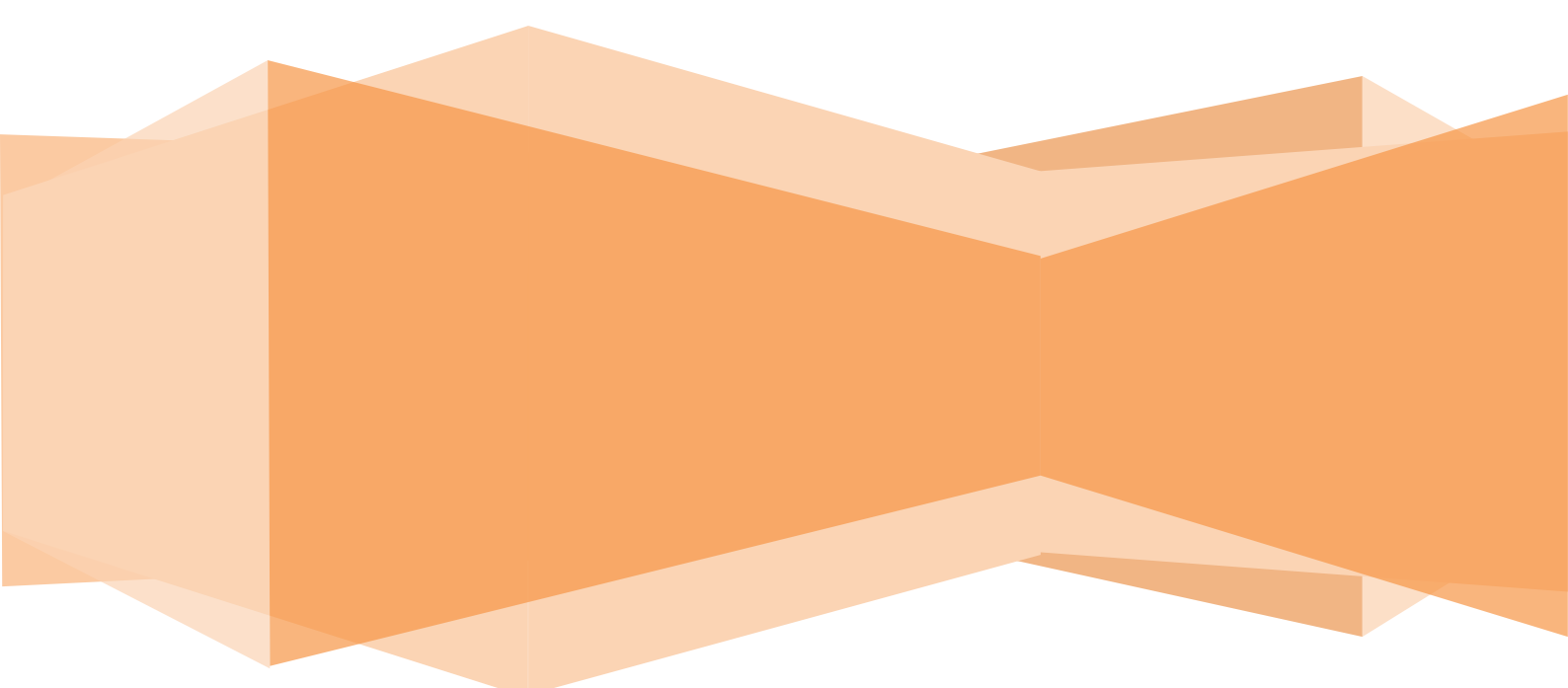
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# **ROBOTIC WELDING ROBOTICS**

**PLC BASED SOLUTION**





## **Project Description:**

A robotic arm was built to perform spot welding operation on train coaches along a 25metre long track. The robotic arm was built to be able to move along the track and perform around 1000 spot welding operations. This project was designed as master slave architecture. 100 different types of coaches could be operated upon as the robotic arm was programmed for each type of coach.

## **Products Used:**

Mitsubishi PLC

## The Challenge:

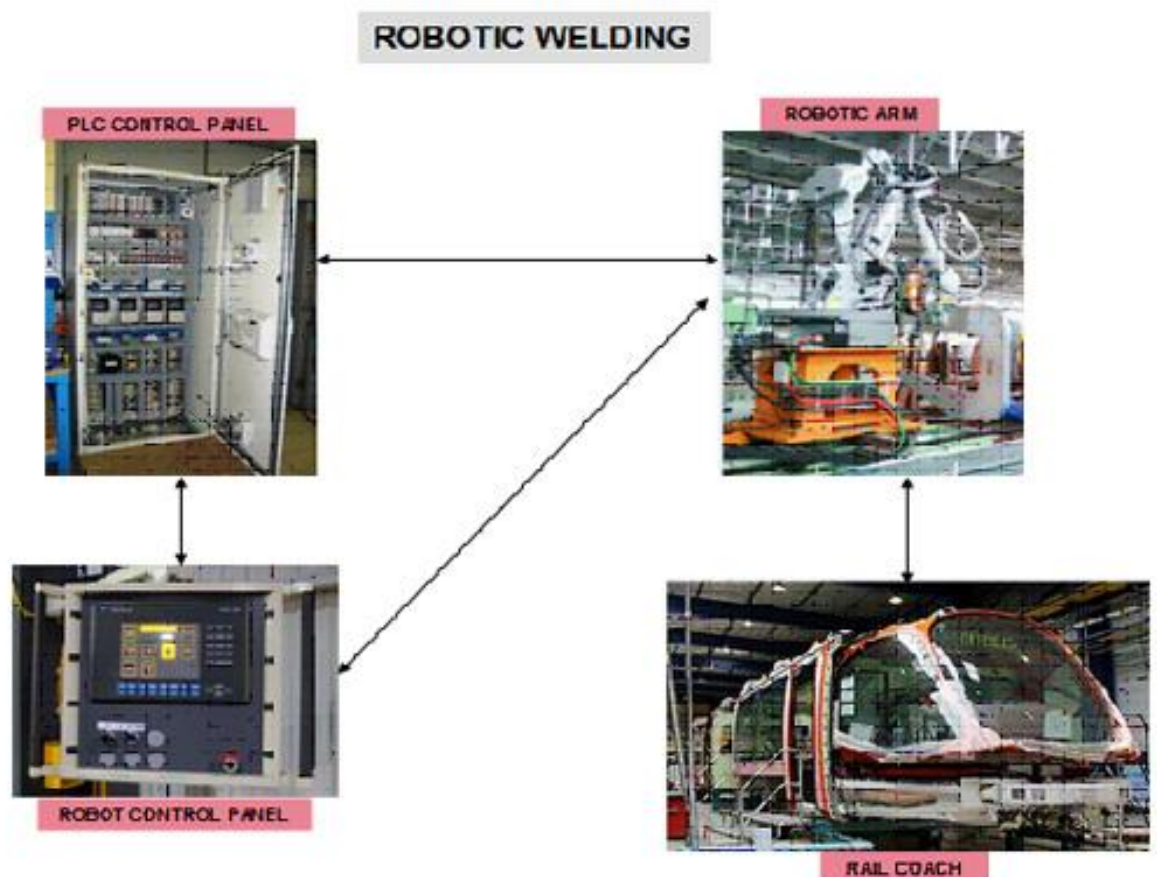
To develop a Data Acquisition and Control System for a Robotic Welding Unit using Mitsubishi PLC.

## The Solution:

Master Slave Architecture was used to develop a highly reliable Data Acquisition and Control System for the Robotic Welding System resulting in a

“New and Improved system using which we could deliver a higher-quality rugged system.

## Schematic Block Diagram



## **FEATURES:**

The Master Slave Architecture was successfully developed in the quickest possible time with all hardware integrated effortlessly. The Mitsubishi PLC proved to be the best option for developing this project.