

# Daikin Industrial Factory

## Visit: Neemrana - Overview

- **Company:** Daikin India Pvt. Ltd.
- **Location:** Neemrana, Rajasthan
- **Industry:** HVAC (Heating, Ventilation, and Air Conditioning)
- **Purpose of Visit:**
  - Understanding manufacturing processes and automation in air conditioning production.
  - Exploring lean manufacturing, energy efficiency, and quality control measures.
  - Observing Daikin's sustainability and green energy initiatives.

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# Problem Statement: Key Challenges Identified

During the visit, we identified several key challenges impacting Daikin's operational efficiency. These include bottlenecks, workforce productivity, sustainable energy use, and inventory recording issues.

## Bottlenecks

Analyzing **bottlenecks** in the supply chain and factory workflow.

## Workforce Productivity

Evaluating **workforce productivity** and machine downtime impact.



## Data Analysis:

- Production Data:** Units manufactured per hour, defective rate, machine uptime vs. downtime.
- Energy Consumption:** Power usage per unit production, renewable energy sources utilization.
- Supply Chain & Inventory:** Inventory turnover ratio, stock delays, procurement issues.
- Labor Efficiency:** Worker output per shift, training effectiveness, absenteeism trends.
- Quality Control Data:** Defect types, rejection rate, compliance with global standards.



# Major Observations: Key Findings

Our factory visit revealed several qualitative insights. These observations highlight areas for process improvement and enhanced efficiency.

## 1 Manual Handling

Manual handling of materials increases cycle time in specific areas of the factory.

## 2 Layout Inefficiencies

Layout inefficiencies cause unnecessary material movement and worker fatigue.

## 3 Lack of Standardization

The lack of standardized work instructions leads to process variations.





# Insights and Recommendations: Actionable Strategies

Based on our findings, we propose actionable recommendations. Prioritized by impact and feasibility, these strategies aim for tangible improvements.

1

## Automated Handling

Implement automated material handling. This system could reduce cycle time by 15%.

2

## Layout Redesign

Redesign the factory layout to optimize material flow and reduce wasted steps.

3

## Standardized Instructions

Develop standardized work instructions to reduce variations and ensure consistent quality.





# Project Stats:

