

A Case-Study on implementation of Double Deep ASRS on Production Line of "Household Utility"

Disclaimer: The information provided is our study and implementation of the services to our customers. The customer name is not disclosed considering the security reasons.

Keywords: Double Deep ASRS, Production Line, Space Management, Resource Management, improve Efficiency.

Introduction

The case in consideration is concerning the efficiency of the "Production Line" and its improvisation with effectively utilising the resources.

Case Presentation

This case is concerning a Goa based client, engaged in manufacturing of "Household Utility". The study on the manufacturing operations found the glitch points, we also found that the improper resource utilisation with wastage of certain resources without calculating the value of resource utilisation.

Large amount of time was also wasted considering the activities required for production of 1000 machines per day. The study reveals following statistics:

- Time consumed for cooling was 48 hours
- Moulding capacity 450 per shift
- Mezzanine storage required as the ground storage was not enough
- High manpower required to perform the above activity: 30 men per shift
- Skilled manpower required to monitor the unskilled labour
- N number of Handling equipments required

The unnecessary manual intervention was increasing the cost of production without change in the production cycle.

Management and Outcome

The above situation led management to search for a solution to improve the efficiency either in the production line or on the resource management

Considering the study and the future expansion - ASRS implementation proposal was accepted positively. Implementation of ASRS took almost 3 months, which helped them in positively restructuring the resource management. This implementation resulted in downsizing their human resource required for the production line and also provided them with ground space to setup new departments. The advantages seen in the implementation of the Double Deep ASRS:

- No. of machine per shift: 1300

- No skilled manpower required
- Totally 3 human resources required (as against 10+ persons)
 - Issue-side: 2 resources
 - Receipt-side: 1 resource
- Space required: half of what was required at initial stage
 - No Handling Equipments required

Discussion

The focus points are operations & the resources involved, and not the production output (at initial stage after ASRS implementation). ASRS implementation gave platform to think on the additionally created resources like the place, human resources and more. Alternatively the company has to think on the additional equipments used before ASRS implementation and utilisation of HR available.