

Enhance Productivity Using Method Study in Sugar Industry

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Abstract: The rationale of this work is to put forward upgrading areas in the industry to perk up its productivity by analyzing the problems coupled with it. Acknowledged problems were deciphered by using method study principles. The production process does not have efficient work procedure and workers are exaggerated by superfluous fatigue, so the industry not able to perk up productivity. Improvement was achieved by reducing the cycle time, combining the workstations and tumbling the worker's fatigue. The work conceded out deals with enhancing productivity in sugar production industry. Being a harsh entrant and to be divergent from contenders, the firm has to amplify productivity to convenes its customer requirements. Productivity enhancement is very important factor for a firm to endure and to accomplish breakthroughs.

Keywords: Worker, Flow process chart, Plant layout, Productivity.

I. INTRODUCTION

The study scrutinized the problems allied in the sugar production in the standpoint of work study which can trim down the production time, operation time and eradicate non-productive process. The work presented here is done in a large scale industry which betrothed in production of sugar. This work seized initiative to put into action method study techniques to perk up the work process in order to rally the customer demand. As the customer's demand is high, the firm has to boost productivity. The company turns out of assortments of sugar according to the requirement of the customers. The work resolved on recuperating productivity by plummeting worker's fatigue and work procedure implicated in the every operation.

II. PRODUCTIVITY

Method study appends value and enhances the productivity by eradicating gratuitous operations, avoidable delays and other forms of devastate. It is in actual fact fretful with verdict better ways of doing things. The design of workplace is pitiable in such a way that the workers are exaggerated by superfluous fatigue and indecent exploitation of material and machine. The industry does not have an proficient work procedure for convinced process.

III. PLANT LAYOUT

It is the product based layout which consist of many lines in which one line has a conveyor for conveying shells to boiler and lingering shells conveyed to stock. Line two has a pipe for turning over sugarcane juice to sugarcane storage tank and other tank also coupled with it to blend chemicals. Line three has many sugarcane juice heaters. Line four has many chambers to formulate sugar. The major raw materials are requisite for sugar production specifically sugarcane chemicals. All materials cross the threshold at diverse workstations.

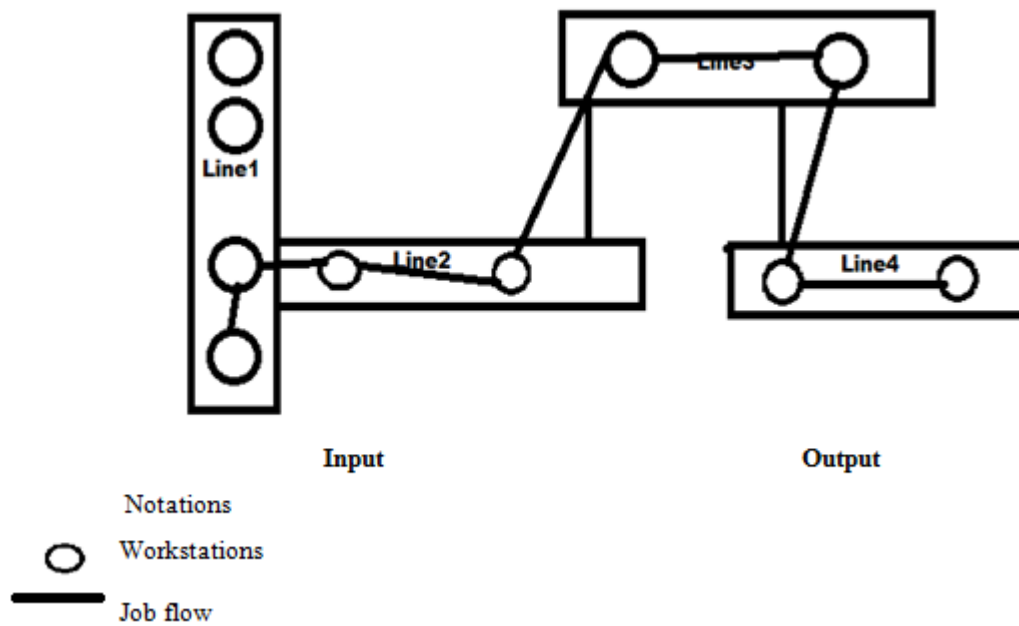


Fig 1 Plant layout

All workstations précised in four lines in keeping with the sequence. At first station ,sugarcane goes through. After dealing out, job elated to preceding station. We recommended to consign plant outline in two lines. One is upright and other is flat. It condenses basic time of enduring process to fabricate sugar. While enduring, many operators are idle. Worker hours condense next productivity gets better.

Flow process of raw material to finished sugar is constructed. The flow process consists of all the process but it does not have delay which will be explained in detail in the flow process chart. All operations are revealed in process flow chart.

Table 1 Process flow chart

S.No.	Process	○	□	➔	▽
		Process flow chart symbols			
1.	Cutting				
2.	Transportation				
3.	Milling				
4.	Transportation				
5.	Juice storage tank				
6.	Transportation				
7.	Mixing Chamber				
8.	Transportation				
9.	Heaters				
10.	Transportation				
11.	Crystalizers				
12.	Transportation				
13.	Sugar production chambers				
14.	Storage				

IV. CONCLUSION

After realizing the recommended enhancement ideas, the firm is able to raise its productivity. It will advance the contemporary process by sinking the number of workstations, transportations, mingling the operations and tumbling the worker's fatigue. From the above symposium it can be concluded that the process can be enhanced based on method study, work procedure and proper deployment of workers.

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