

Roles of Industrial Engineering in Garments Factory

Industrial engineering (IE) plays a vital role in the apparel industry, that's why [Industrial engineering job](#) roles are very important for garments factory. When we need to reduce cost and improve work efficiency in this competitive era, the apparel industry hires an Industrial Engineer to do that job smartly. Apparel manufacturing industry is growing quickly by applying **IE** in their facility. In this article I am giving a **list of IE activities** in garments factory which will help you to understand the Roles of Industrial Engineering in Garments Factory.

Objectives of Industrial Engineering (IE) in the Apparel Industry

1. To increase productivity
2. Process improvement by motion reducing.
3. Reduce work in process (WIP) and remove the bottleneck.
4. Increase efficiency of operations
5. Reduce man machine ratio
6. Process improvement to reduce cost, waste and rejection Reduce wastage and defects
7. Fill up Key Performance Indicator ([KPI](#)) target.
8. Keep workplace and environment safe
9. Production planning and implementation
10. Evaluate operator and staff performance, disciplinary matters, training needs, and their career development.
11. Set the target and draft and design layout of machine, materials, and workspace to illustrate maximum efficiency, using drafting tools and computer.
12. Monitor factory performance in terms of quality, delivery, cost-efficiency and target improvements with the internal factory team and taking necessary corrective action.
13. Manpower balancing, target setting, and monitoring achievements.

Daily Activities and Duties of an Industrial Engineer in the Apparel Industry

1. Collect line loading plan from the Planning Department
2. Attend in [Pre-Production \(PP\) meeting](#)
3. Collect size set sample and make operation bulletin accordingly.
4. Collect Operation Bulletin and make a paper layout
5. Discuss with Maintenance in-charge regarding machine, folder, attachment and Technical personnel for technical issues.

6. Make discussion with a floor in-charge about layout according to paper layout
7. Check Daily Non-productive time (NPT) and reduce machine breakdown time.
8. Make layout according to paper layout
9. Make line balancing according to target and capacity study during 2 - 3 days of layout
10. Find out the bottleneck process and solve it
11. If needed make 1-hour production study in required process
12. Everyday input and output monitoring
13. Give daily production target and follow up production achievement.
14. Hourly production follow-up
15. Everyday 5S related activities monitoring
16. Cross check thread consumption for every new style.
17. Ensure up to 65%-70% efficiency.
18. Workstation design
19. Operators motion development by correcting faulty motion.
20. Reduce worker absenteeism and turnover rate
21. 5 pcs flow by reducing WIP
22. Reduce line setting time or throughput time.
23. Proper utilization of manpower by reducing unnecessary helping process.
24. Establish a meeting in-between QC and operators regarding critical points of the style while layout.
25. Prepare daily Man/ Machine report
26. Developing cut to ship ratio.
27. Work to reduce absenteeism and operator turnover

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