

WASTE ALERT!



Waste is the dollar costs of time and materials that consume resources, but don't add any actual value to the printed product, or result in product that is unacceptable to the customer is known as *the printer's hidden factory of waste*. These occurrences and activities must be eliminated, reduced, and integrated.

1. **Ignorance of the Current State:** lack of knowing and understanding the current state of equipment and processes; conditions, capabilities, performance, quality, and methods. What's really happening?
2. **Process Instability:** failure to keep equipment and processes at an essential state of reliability and performance due to lack of effective critical cares and maintaining necessary conditions.
3. **Defective Product:** Time and materials wasted producing defective product then re-run the job. Waste from product defects includes employee time spent, materials, and equipment utilized inspecting and sorting defective product, and in identifying, handling, segregating non-conforming product.
4. **Overproduction:** overproduction is when the amount produced by a process is earlier or more than the next process or customer needs or can handle. The result is large amounts of product spending long periods of time in WIP. Symptoms of overproduction include pulling jobs off equipment in the middle of a production run to make room for another job, production overtime that customers don't pay for, large amounts of floor space clogged with skids of WIP, process bottlenecks, and warehouses filled with finished goods inventory.
5. **Waiting:** processes and people waiting for other processes and people to complete activities, scheduled downtime, equipment breakdowns, defective product, and inaccurate and incomplete job information are all non-value-added waste.
6. **Non-utilized People:** Includes not utilizing people's abilities, input, creativity, and teamwork. Waste of people is caused by antiquated thinking, departmental silos, resistance to change (*not invented here*), fear of repercussions to new ideas, lack of timely feedback, poor hiring practices, and little or no investment in training and education.
7. **Transporting:** time spent and extra equipment utilized to valet information, tooling, materials, supplies, and WIP around the plant is non-value-added waste.
8. **Inventory and WIP:** the dollar cost for time and resources; excessive raw materials, lots of work-in-process, and warehouse full of finished goods waiting to be delivered to customers.
9. **Motion Waste:** includes time wasted searching for and retrieving tooling and materials, getting around equipment and processes, making numerous equipment adjustments due to poor operation of equipment mechanisms, quick-fix quality activities due to unacceptable materials and job components. Other causes for excess motion are adjustments due to broken and poorly functioning tools, ineffective color management, abnormal equipment conditions, and lack of teamwork and process organization.
10. **Extra-Processing:** extra time spent on jobs processing due to, quick-fixing quality-related problems, redundant actions and activities required due to poor job planning, fixing errors and mistakes, inadequate materials, and sudden mechanical problems from substandard press and equipment conditions.