

How to Optimize a Workbench to Maximize Productivity

In factory environments it is imperative that workbenches meet the needs of the employee and enhance the job being performed. Workbenches are designed for various manual processes, but without complementary tools output efficiency will not be optimized. In order to maximize workbench efficiency incorporating tools that promote quick turnaround time, higher quality of work and minimal down time should be established.



One of the best ways to promote quick turnaround time is the use of an [Andon display board](#), which tells the status of a workstation or line. Such sign boards have the capability of showing what the plan is for the shift or day, how many pieces have actually been produced, and whether the line is ahead or behind the pace based on the takt time (how long it should take to produce one unit). Workers can see this and work harder toward their goal, while managers and colleagues can see work cell progress and help out if needed.

In order for a worker to produce high quality product he or she must be comfortable and organized. Anti-fatigue mats should be placed around the work cell and work benches should be adjustable to user height. Workers will suffer less fatigue and be able to correctly accomplish the task at hand. Brighter lighting can help improve productivity by making things easier to see so operators can make tool changes quickly, and inspectors can more easily see detail on the part that is being inspected. Light color temperature in the daylight color range (around 6500°K) is ideal. Good lighting reduces eye fatigue to help operators maintain high accuracy and reduce scrap. An advantage of [LED light bars](#) is that many of them are made of durable polycarbonate, aluminum or steel enclosures with acrylic lenses so users don't have to worry about installing ballasts for fluorescent tubes or building protective enclosures.



Minimizing down time can be accomplished by visually and/or audibly signaling for assistance. One solution is the usage of [audible alarms](#) that use different tones to alert an operator when a particular condition arises. Different tones can be set-up to have different meanings, such as signaling that help is needed. One enhancement that can make alarms even more effective are [annunciators](#) that can play messages that specifically say what the problem is rather than just sounding an alarm. For example, the message could say "Station one is running low on carton boxes." Another solution is using a [manual signal tower](#) to visually show status updates. By using a manual signaling tower a worker can save time by visually alerting a supervisor without leaving the work station.



As factories become more visual, overall productivity rises because employees want to do their best in meeting targets for their own work station. As workers strive to reach their goals issues that hinder or prevent them from being reached will arise. Keeping in mind lean manufacturing concepts will help improve the situation by producing quick turnaround time and higher quality of work, with less down time.

ABOUT PATLITE

Founded in 1947, PATLITE is a leading provider of innovative LED status indicating lights, sound alarms, visual and audible communication network systems and solutions which enhance the safety, security and comfort of workplaces and communities.

The company's products and services help improve the quality control, productivity and safety of industrial automation, commercial, municipal and governmental customers. PATLITE has more than 600 employees and the wholly-owned sales subsidiaries in the USA, Germany, Singapore, Korea, and China.

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