



## Hidden costs of continuous inkjet coders

When evaluating CIJ (continuous inkjet) technology for your unique production line, it is important to have full transparency into the total cost of ownership. Like any marking and coding solution, from laser to carton coding to labeling, CIJ technology has hidden costs that can add up in a significant way over the life of the machine.

It is helpful for a manufacturer to look at the following hidden costs that impact their total cost of ownership when comparing systems.

### 1

#### LABOR AND SOLVENT COSTS ASSOCIATED WITH FREQUENT PRINTHEAD CLEANINGS

For consistent print quality, most CIJ systems recommend weekly cleanings in order to clear the build up of dust and debris – common in most production environments – from the printhead nozzle. This required maintenance downtime cuts into your bottom line each and every week and doesn't include the wasted labor costs associated with long periods of start-up time after routine cleaning has been completed.

Few CIJ providers flush both the nozzle and gutter. Some older systems even require a scab of ink to form on the nozzle to keep their ink line sealed or a mechanical screw to join the nozzle to the gutter to keep air from fluid lines during shutdown.

Look for printers with auto cleaning features to cut down on time needed for operator shutdown procedures and increase productivity. The industry's best cleaning interval standard is up to three months – anything less than that is an indicator that you will have frequent issues with print quality.

## 2

### DOWNTIME CAUSED BY SERVICE REPAIR VISITS

Common maintenance of CIJ printers includes periodic refreshing of fluids and filters to keep the printer running at peak performance with optimal print quality.

Without the ability to monitor dirty air filters, dirty fluid filters and ink degradation resulting from harsh environments and aging, you are at risk of experiencing increasingly poor print quality and even printer failure. Usually, the issue is not addressed until it is already too late and unforeseen stoppages must occur.

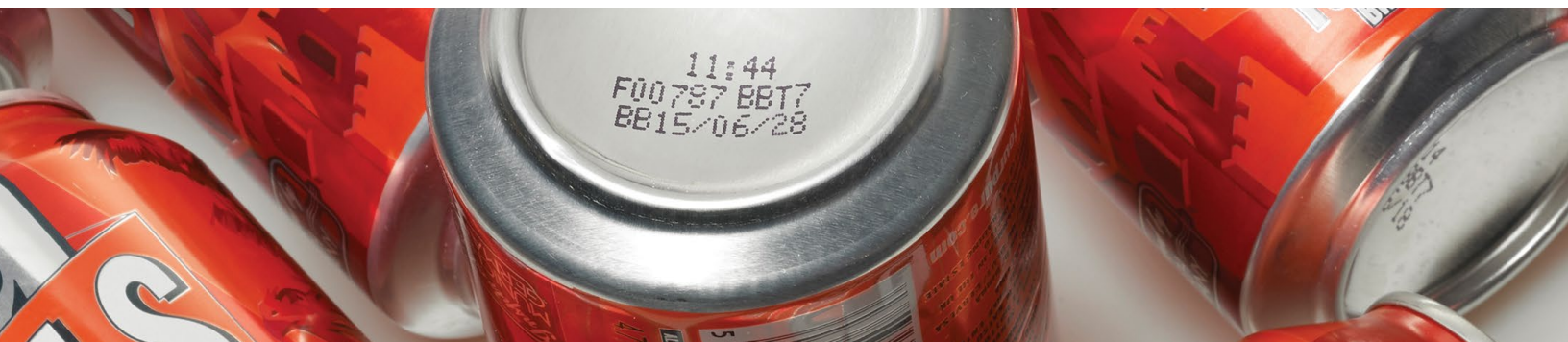
Proactively avoid downtime by evaluating technology options that include automatic system monitoring features. Predictive maintenance brings manufacturers closer to 100% avoidance of unscheduled downtime.

## 3

### CONSUMABLES

Ink is one expected consumable when considering an inkjet technology. Other consumables to anticipate are parts, specifically pumps, which will need replacing throughout the life cycle of the printer as it begins to exhibit wear through poor print quality. The need to replace pumps, and ultimately the degradation of print quality, can be avoided with consistent monitoring of the pump power, or how freely ink is moving through the service filter.

When choosing a CIJ printer, it is important to determine whether the pump needs to be replaced with every service interval or if it is expected to last the entire life of the machine. If the printer uses throwaway pump designs, you'll need to factor in how this impacts your bottom line.



# 4

## SKILLED LABOR FOR PREVENTATIVE MAINTENANCE

Normal wear and tear is inevitable on CIJ technology, yet consistent preventative maintenance increases the lifespan of your printers. The knowledge and training required to maintain these systems means more time investment in your team or a monetary investment for field servicing from your technology provider.

Instead look for machines with self-service modules that guide operators through the maintenance process with step-by-step onscreen instructions, eliminating the need for extra training.



# 5

## CHANGEOVER TIME

It is not uncommon that a single CIJ machine is used on several different products with different coding requirements in order to meet customer demands. This could incur costs if your line operators must shut down a line and input new messaging before starting up production again. Most CIJ systems do not have the ability to store line settings for future use, making it a manual messaging input each time products are changed over.

In your evaluation, make it a priority that your printer allows for ample storage of product line and messaging settings. Prompted fields can help guide the user through message creation and editing, eliminating user error and the need for additional training. Better yet, make retrieval quick and easy with the capability to pre-program each line setting with a meaningful name. Having these features at the top of your list will get you closer to an effortless product changeover process.



## CONCLUSION

These are just five hidden costs to consider when evaluating a continuous inkjet technology. There are plenty of other marking and coding alternatives available and as a provider of CIJ, high resolution printing, thermal inkjet and thermal transfer overprinters, we are happy to answer questions or be your go-to resource.

Contact us today to discuss the best options for your operation.