

# insignia's guide to: Improving Continuous Ink Jet Reliability



As the most common method for coding date and traceability information, Continuous ink jet (CIJ) or small character coding technology continues to improve making it easier to use than ever before.

Smarter system technology, improved printhead design and innovative ink formulations have all added to cleaner and more reliable outcomes for users.

Still, a coding failure will halt production and the resulting downtime, rework and loss of production can be considerably higher than the cost of the printer or consumables. So, what more can a user can do to boost CIJ reliability and safeguard their production schedules?

This guide looks at the top 5 things a user can do to improve the dependability of your continuous ink jet system.

## 1. EDUCATE YOUR TEAM FOR CORRECT SYSTEM OPERATION

Some breakdowns are caused inadvertently by new team members being unfamiliar with correct use of the continuous ink jet system, and a production line is complex enough without having to worry about internal cross training of operators to navigate complex menus on printing equipment.

Periodic training of operators, by your CIJ system supplier, on the use, cleaning and maintenance, along with the best way to access common parameter changes, is an important contributor to trouble-free operation and longer equipment life.



## 2. CORRECT MOUNTING OF PRINTHEAD

As both vibration and static can create issues which impact print quality, it is important the continuous ink jet printheads are correctly mounted.

Printheads should be mounted securely with brackets which allow them to be easily removed as required and ensuring they are refitted in the same position each time. In the case of some conveyors or machinery with high vibration, the print heads may be better mounted from the floor or another surface.

Issues related to static electricity can affect print quality as continuous ink jet technology relies on the charges applied to the droplets by the system to produce the required character or pattern. Plastic top conveyors or machines involving printing onto continuous film/paper will develop static electricity and a CIJ printhead mounted slightly away can be impacted.

Consideration should be made in the mounting of the head and earthing the printhead to the conveyor or host machine to alleviate static concerns.



### 3. EFFECTIVE TRIGGERING OF PRINT SIGNAL

Effective triggering of the printhead by the photo cells is crucial to the smooth running of any inkjet system. Correct selection of a sensor for triggering the inkjet printer will ensure reliable operation and coding.

Simple applications such as cartons can be serviced using a standard photo cell. Other packaging such as food trays, clear bottles, or clear PET packs may require special sensors to ensure a signal is given reliably to the printer each time.



### 4. PLANNING FOR PREVENTATIVE MAINTENANCE

Just like your car, inkjet equipment needs regular servicing to operate efficiently over long periods of time.

Making and adhering to a preventative maintenance plan, based on a suitably trained internal resource or supplier technicians maximises system availability and lengthens the life of the inkjet system.



### 5. FIRST-FIX MAINTENANCE TRAINING

It is worth investing in 'First-fix' maintenance training. Having staff on-site who are trained in level one self-repair will help maximise system uptime and keep production running to schedule.

Again, comprehensive training should be available from the supplier of your continuous ink jet system.



# ABOUT INSIGNIA & DOMINO

We know how important your business is to you and how different it is from the next. This is why we work directly and collaboratively with you to understand your situation and needs, so we can create coding solutions tailored to add genuine value to your operations and help build your market competitiveness.

Since 1967, insignia have been providing identification solutions to Australian industry. Our family-owned values, our people, our products and our services are the reasons we've become the nation's leading manufacturer of labels and tags and distributor of top-tier thermal printing, marking and coding brands, including Domino, Datamax-O'Neill, Zebra, Bixolon, and Carl Valentin.

The Domino A-Series family of continuous ink jet printers are recognised as the benchmark that all others are measured against due to high reliability and ease of use. Designed and manufactured in Cambridge, England, the Domino A series is the preferred choice of many OEM's and multi-national companies due to its high performance and dependability.

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