Print job creation and management

CLARiSUITE® solutions

Ensuring the right code is on the right product
Videojet’s CLARiSUITE® solutions help ensure the right code is on the right product from line to line increasing productivity, reducing costs and protecting your brand.
Increase Availability and Quality by taking print job creation and management off the production floor

Videojet CLARiSUITE® solutions are engineered specifically to help packaging professionals implement sustainable improvements to Availability and Quality, two factors that directly influence line OEE (Overall Equipment Effectiveness). By enabling faster line set-up and changeovers and dramatically reducing the opportunities for coding errors, packaging operations can use CLARiSUITE to boost available production time, lower scrap and rework, and boost profits.

**Uptime advantage**
Use CLARiSUITE to set up the primary package, case, and pallet coding and labeling printers from a single location – dramatically reducing planned downtime during product changeovers. Increase available production time by using handheld scanners to select production jobs from work orders, which can trigger the automatic set-up of multiple printers in as little as 15 seconds. Optional WebServer edition provides real-time visibility of printers and job status anywhere in the plant, helping to identify and resolve issues faster.

**Built-in productivity**
Centrally stored and managed job data helps avoid delays in starting production runs as jobs are pre-validated and all information is at the operator’s fingertips. Built-in production statistics support efficiency and OEE reporting, helping your team with efforts to achieve sustainable process improvements.

**Simple usability**
Powerful software is only as useful as it is easy to use. CLARiSUITE solutions have intuitive displays and colorful graphics to simplify operation and minimize training. Drag and drop functionality simplifies common tasks like print job template design. Identifying potential issues with printers is quick and easy with clear, color-coded warning signals. Designed to complement your existing workflow, CLARiSUITE can be integrated with a range of leading manufacturing execution systems.

**Code Assurance**
Reduce costly rework and errors with CLARiSUITE software that minimizes and mistake-proofs operator inputs to the coding and marking process. By specifying error-proofing rules during set-up, operator inputs are limited to the choices specified, resulting in far fewer errors. Packaging operations can further enhance Code Assurance by validating downstream codes with optional bar code scanners or vision devices.
Print job management with CLARiSUITE

CLARiSUITE links on-product coding to a centralized print job database.

Printers in a CLARiSUITE network are managed from a central print job database – taking print job creation and management off the production floor. Job data is stored centrally and print jobs can be initiated by CLARiSUITE or external manufacturing systems.
The product or appropriate code can be selected at the CLARiSUITE-installed PC or Videojet printer. Or, a bar code can be scanned from a work order or from the product itself with a hand-scanner.

Information such as date/place of manufacture, best-before date, lot/batch number and a wide range of both production and consumer information is accurately applied to every product.

Throughout the packaging line, scanners check codes for accuracy. If a coding accuracy issue is detected, the alarm beacon can be activated and the line can be stopped or the product rejected automatically.

**1 Job Selection**

**2 Product Coding and Marking**

**3 Coding Accuracy Alerts**
Importance of code accuracy

A large global drinks producer stated that 84% of all critical quality assurance issues are due to operators incorrectly setting up jobs on the printer.

Up to 70% of coding errors are caused by operator error. The most common mistakes are incorrect data entry and incorrect job selection. Our survey found that these two mistakes accounted for 45% of all coding errors.

When you implement a solution, you take the first step towards:

- Removing human errors from the print job setup process
- Minimizing costs of scrap due to coding errors
- Reducing re-supply costs to replace recalled/withdrawn products
- Reducing potential for lost business from incorrect products being shipped
- Minimizing brand damage by narrowing the scope of any recalls
- Meeting the requirements of retail and regulatory guidelines for accuracy and product traceability
Who benefits from CLARiSUITE solutions?

CLARiSUITE extends the advantage of working with Videojet printers beyond the factory floor by supplying vital data and information to all areas of your business.

- **Finance**: Reduced scrap, rework and recalls
- **Management**: Increased efficiency, reduced costs and brand protection
- **Supervisors**: Reduced operator errors
- **Warehouse**: Correct carton/pallet labeling enabling adherence to goods receipting processes
- **IT**: Easy integration to standard IT environments
- **Quality**: Reduced coding and packaging errors
- **Maintenance**: Respond quicker to equipment or job failures
- **Compliance**: Control access for code creation and selection
- **Production**: Improved integration with other production equipment
- **Engineering**: Reduced risk of incorrect data entry, faster job set-up

IT

Operators

Maintenance

Compliance

Reduced operator errors

Correct carton/pallet labeling enabling adherence to goods receipting processes

Increased uptime and efficiency

Increased efficiency, reduced costs and brand protection

Easy integration to standard IT environments

Reduced coding and packaging errors

Respond quicker to equipment or job failures

Control access for code creation and selection

Improved integration with other production equipment
Case study

A large soft drinks and juices contract bottler was looking for a coding and marking solution to replace old inkjet printers that were requiring increasing levels of service and maintenance.

Their objective was more efficient equipment and increased productivity.

Videojet was asked for a solution that removed operator coding errors caused by manual data entry, as well as reduced printing job set-up times across all lines.

In the existing process, operators manually selected jobs at each individual printer, keyed in specific data/messages and then set the printer online. This was replicated across every machine on both primary and secondary packaging printers.

This process exposed many Code Assurance issues, such as; selecting the wrong job or entering incorrect job data. This incorrect data entry caused further downtime while the correct one was located and set-up – with resulting productivity losses.
To resolve this Videojet proposed new coding equipment alongside CLARiSUITE Alliance edition software. Today, the company no longer uses manual data entry from the production floor. Instead, all print job templates and job specific variable data are stored centrally in one server location.

This ensures the correct print job is always available for download at job set-up. In addition, CLARiSUITE’s standard functionality allows printer grouping so all print jobs and job data can be simultaneously downloaded to all printers. By grouping the primary and secondary packaging line printers, the company eliminated the risk of mismatching jobs while increasing job set-up efficiency.

Handheld bar code scanners also assisted operators with simple scanning of work orders, directly relating the correct job in the CLARiSOFT message database. CLARiSUITE takes care of the rest; all jobs and data are set-up correctly and efficiently right across the line.
Comprehensive logging facilities enable the review of production statistics, efficiency/OEE and an audit log of the job data that was printed. This information allows manufacturers to take positive steps to increase OEE by implementing sustainable improvements. In addition, the audit log allows producers to monitor the actual data downloaded to the printers within the CLARiSUITE network.

To help further increase Code Assurance and efficiency Videojet can help producers identify integration opportunities to existing manufacturing systems such as ERP, MRP and SCADA. Powerful integration tools available in CLARiSUITE enable producers to place existing product data within print jobs, or directly control print jobs and printers within a CLARiSUITE network using industry standard Open Process Control (OPC) functionality.

**CLARiSUITE integrates with:**

- Microsoft Dynamics
- IFS
- JDEdwards Enterprise Software
- Oracle
- SAP
- Siemens
- Wonderscribe
Three editions of CLARiSUITE are offered to fit your coding requirements and IT environment. Features contained within each edition allow for job initiation, bar code validation, printed code validation (vision) and data/event logging to support OEE.

<table>
<thead>
<tr>
<th>Print Job Management/ Data Source</th>
<th>Alliance</th>
<th>Alliance SW License</th>
<th>CWS (WebServer)</th>
</tr>
</thead>
</table>
|                                   | • CLARiSUITE™ database  
|                                   | • Single query external ODBC data source, e.g., MS Access, MS SQL, etc.  
|                                   | • CLARiSUITE™ database  
|                                   | • Single query external ODBC data source, e.g., MS Access, MS SQL, etc.  
|                                   | • CLARiSUITE™ database  
|                                   | • Single query external ODBC data source, e.g., MS Access, MS SQL, etc.  |

<table>
<thead>
<tr>
<th>Job Selection &amp; Start</th>
<th>Alliance</th>
<th>Alliance SW License</th>
<th>CWS (WebServer)</th>
</tr>
</thead>
</table>
|                       | • Via CLARiTY™ user interface  
|                       | • Via handheld bar code scanner connected to CLARiTY™ printer²  
|                       | • Initiated centrally from CLARiNET™  
|                       | • Network connected bar code scanner  
|                       | • OPC Server  
|                       | • TCP/IP ASCII Commands/ScanPoint Interface  
|                       | • Via CLARiTY™ user interface  
|                       | • Via handheld bar code scanner connected to CLARiTY™ printer²  
|                       | • Initiated centrally from CLARiNET™  
|                       | • Network connected bar code scanner  
|                       | • OPC Server  
|                       | • TCP/IP ASCII Commands/ScanPoint Interface  
|                       | • Via CLARiTY™ user interface  
|                       | • Via handheld bar code scanner connected to CLARiTY printer²  
|                       | • Initiated from web browser  
|                       | • Network connected bar code scanner  
|                       | • OPC Server  
|                       | • TCP/IP ASCII Commands/ScanPoint Interface  |

<table>
<thead>
<tr>
<th>Bar Code Validation</th>
<th>Alliance</th>
<th>Alliance SW License</th>
<th>CWS (WebServer)</th>
</tr>
</thead>
</table>
|                     | • Scanner connected to CLARiTY™ printer  
|                     | • Network connected bar code scanner  
|                     | • Scanner connected to CLARiTY™ printer  
|                     | • Network connected bar code scanner (Full)  
|                     | • Scanner connected to CLARiTY™ printer  
|                     | • Network connected bar code scanner (Limited)  |

<table>
<thead>
<tr>
<th>Code Validation (Vision)</th>
<th>Alliance</th>
<th>Alliance SW License</th>
<th>CWS (WebServer)</th>
</tr>
</thead>
</table>
|                          | • Via CLARiTY™ printer²  
|                          | • Network Connected Cognex Insight Camera  
|                          | • Via CLARiTY™ printer²  
|                          | • Network Connected Cognex Insight Camera  
|                          | • Via CLARiTY™ printer²  
|                          | • Network Connected Cognex Insight Camera  |

<table>
<thead>
<tr>
<th>Operational Mode</th>
<th>Alliance</th>
<th>Alliance SW License</th>
<th>CWS (WebServer)</th>
</tr>
</thead>
</table>
|                  | Windows® (7, 8, 10, Server 2008R2, Server 2012, Server 2016) application running on local server  
|                  | Windows® (7, 8, 10, Server 2008R2, Server 2012, Server 2016) application running on local / virtualized server  
|                  | Windows® (7, 10, Server 2008R2, Server 2016) Service running on local / virtualized server  |

<table>
<thead>
<tr>
<th>User Interface / HMI</th>
<th>Alliance</th>
<th>Alliance SW License</th>
<th>CWS (WebServer)</th>
</tr>
</thead>
</table>
|                     | • PC-based  
|                     | • PC-based, if virtualized access through remote desktop to virtualized machine  
|                     | • Web browser-based  |

<table>
<thead>
<tr>
<th>Licensing</th>
<th>Alliance</th>
<th>Alliance SW License</th>
<th>CWS (WebServer)</th>
</tr>
</thead>
</table>
|           | • Dongle  
|           | • Software  
|           | • Software  |

<table>
<thead>
<tr>
<th>Activity Logging</th>
<th>Alliance</th>
<th>Alliance SW License</th>
<th>CWS (WebServer)</th>
</tr>
</thead>
</table>
|                  | • Event/Production/Efficiency/OEE to text file  
|                  | • Event/Production/Efficiency/OEE to text file  
|                  | • Export to CSV file  |

<table>
<thead>
<tr>
<th>OPC Server</th>
<th>Alliance</th>
<th>Alliance SW License</th>
<th>CWS (WebServer)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable Data Entry</th>
<th>Alliance</th>
<th>Alliance SW License</th>
<th>CWS (WebServer)</th>
</tr>
</thead>
</table>
|                     | All fields  
|                     | All fields  
|                     | Text fields only  |

<table>
<thead>
<tr>
<th>Print Job Preview</th>
<th>Alliance</th>
<th>Alliance SW License</th>
<th>CWS (WebServer)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

**Compatible Printers:**

<table>
<thead>
<tr>
<th>Continuous Inkjet</th>
<th>Thermal Transfer Overprinters</th>
<th>Laser Marking³</th>
<th>Case Coding/Label Print &amp; Apply</th>
<th>Thermal Inkjet</th>
</tr>
</thead>
</table>
|                   | - 1000 Line¹  
|                   | - 1860/1880  
|                   | - 1580  
|                   | - 1280/1260  | - 6530  
|                   | - 6420  
|                   | - 6330  
|                   | - 6320  
|                   | - 6220  | - 2361  
|                   | - 2351  
|                   | - 2120  
|                   | - 9550  | - 8610  
|                   | - 8520  
|                   | - 8510  | - Wolke m610 advanced  |

**Label Printing**

- Sato Print Engines  
- Zebra Print Engines

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¹ 1210/1220 not supported  
² Hand Scanner connected directly to USB or RS232 port of CLARiTY printer  
³ Fixed mount vision device connected directly to RS232 port of CLARiTY printer. Contact your local Videojet representative to discuss vision capabilities.  
⁴ Configuration dependent; consult your local Videojet representative
Peace of mind comes as standard

Videojet Technologies is a world-leader in the product identification market, providing in-line printing, coding, and marking products, application specific fluids, and product LifeCycle Advantage™.

Our goal is to partner with our customers in the consumer packaged goods, pharmaceutical, and industrial goods industries to improve their productivity, to protect and grow their brands, and to stay ahead of industry trends and regulations. With our customer application experts and technology leadership in Continuous Inkjet (CIJ), Thermal Inkjet (TIJ), Laser Marking, Thermal Transfer Overprinting (TTO), case coding and labeling, and wide array printing, Videojet has more than 400,000 printers installed worldwide.

Our customers rely on Videojet products to print on over ten billion products daily. Customer sales, application, service and training support is provided by direct operations with over 4,000 team members in 26 countries worldwide. In addition, Videojet’s distribution network includes more than 400 distributors and OEMs, serving 135 countries.

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or visit www.videojet.com

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