

Application note



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Snacks Manufacturing complexities within snack food production



According to a Nielsen Global Snacking survey, more than three-quarters (76%) of global respondents eat snacks regularly and nearly half (45%) consume snacks as a meal replacement.¹

¹ "Snack Attack: What consumers are reaching for around the world", The Neilsen Company, September, 2014

The Challenges:

Evolving consumer tastes

Consumers want more snacking options and have increasingly indulgent tastes. Some regionally popular flavors such as salted, roasted, sour cream and onion, and sea salt are being rethought and re-imagined by consumers and snack companies alike. Flavors such as chipotle mango, asiago herb, smoked hickory, and chili lime, for example, are gaining popularity among snack flavors.

However, the product differentiation demanded by consumers does not stop at varying flavors. Nutritional requirements also add a dimension of differentiation within salty snacks: from gluten-free snacks for those with gluten allergies to snacks made with a low glycemic index for those suffering from diabetes.

Adding to the complexity issue are the varying sizes of packaging that have become widely used. Two examples of this are the larger packages sutiable for warehouse stores and single-serve packaging to fulfill the need for on-the-go convenience and smaller serving sizes.

Different flavors, nutritional requirements, and package sizes all add complexity for snack manufacturers that have a limited number of production lines. To stay competitive, producers must maneuver this complexity while also adapting to consumer preferences. Changeovers are a common occurrence when the manufacturer is attempting to satisfy the needs of changing consumer preferences. However, without strong processes and systems in place, line operators can spend disproportionate amounts of time to perform changeovers. Additionally, errors can occur that can lead to costly rework and waste.



Powerful solutions for managing code complexity



Videojet advantage:

Videojet offers solutions to help increase productivity and minimize coding errors with the growing complexity of snack production. Videojet CLARiSUITE® solutions are engineered to help manufacturers implement sustainable improvements in code management, improving availability and quality. By enabling faster line set-up and changeovers while limiting the opportunity for coding errors, manufacturers can increase available production time, lower scrap and rework, and ultimately boost profits.

Uptime advantage: Producers can use CLARiSUITE to set up the primary package, case, and pallet coding and labeling printers from a single location. This helps to reduce planned downtime during product changeovers and simplify the process. This streamlining of printer operation can increase available production time with the use of handheld scanners to select production jobs from work orders. This simple functionality can trigger the automatic set-up of multiple printers in as little as 15 seconds. The optional WebServer edition provides real-time visibility of printers and job status anywhere in the plant, helping users to identify and resolve issues faster.

Code Assurance: CLARiSUITE solutions are designed to help minimize and mistake-proof 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. Co-packing operations can further enhance code accuracy by validating codes downstream using bar code scanners or vision devices.

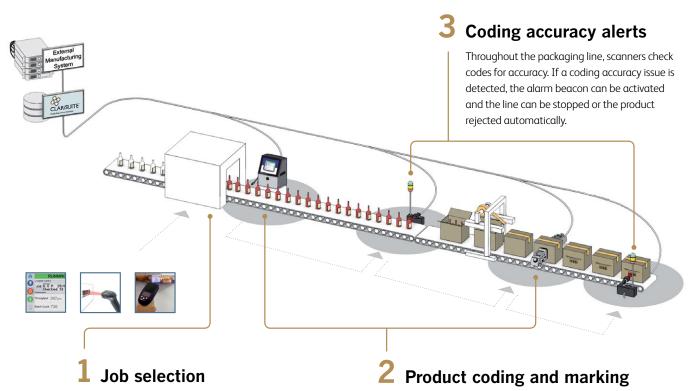
Built-in productivity: Centrally stored and managed job data can help avoid delays in starting production runs as jobs are pre-validated and all the information is at the operator's fingertips. Additionally, built-in production statistics support efficiency and OEE reporting, helping your team with efforts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

Simple usability: CLARiSUITE solutions offer intuitive displays and colorful graphics to simplify operation and minimize training. Drag and drop functionality simplifies common tasks like print job template design. And 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.









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.

CLARiSUITE® Options:

	Alliance	Alliance SW License	CWS (WebServer)
Print Job Management/ Data Source	 CLARiSOFT[®] database Single query external 	 CLARiSOFT[®] database Single query external 	 CLARiSOFT[®] database Single query external
	ODBC data source, e.g., MS Accesss, MS SQL, etc.	ODBC data source, e.g., MS Access, MS SQL, etc.	ODBC data source, e.g., MS Access, MS SQL, etc.
Job Selection & Start	 Via CLARiTY[®] user interface Via hand held bar code scanner 	 Via CLARiTY[®] user interface Via hand held bar code scanner 	 Via CLARiTY[®] user interface Via hand held bar code scanner
	connected to CLARiTY [®] printer ² • Initiated centrally from CLARiNET [®]	connected to CLARiTY [®] printer ² • Initiated centrally from CLARiNET [®]	connected to CLARiTY printer ² • Initiated from web browser
	 Network connected bar code scanner 	 Network connected bar code scanner 	 Network connected bar code scanner
Bar Code Validation	 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)
Code Validation (Vision)	• Via CLARiTY® printer ³	• Via CLARiTY® printer ³	• Via CLARiTY® printer ³
Operational Mode	• Windows® (7, 8, 10, Server 2008R2, Server 2012) application running on local server	• Windows® (7, 8, 10, Server 2008R2, Server 2012) application running on local / virtualized server	 Windows[®] (7, 10, Server 2008R2) Service running on local/virtualized server
User Interface / HMI	• PC-based	PC-based, if virtualized access through remote desktop to virtualized machine	Web browser-based
Licensing	• Dongle	• Software	• Software
Activity Logging	• Event/Production/ Efficiency/OEE to text file	• Event/Production/ Efficiency/OEE to text file	• Export to CSV file
OPC Server	Yes	Yes	Yes
Variable Data Entry	All fields	All fields	Text fields only
Print Job Preview	Yes	Yes	No



The Bottom Line

As customer and retailer demand rises for greater variety in snack types, flavors and packaging, snack producers must manage greater complexity in their production. Videojet provides robust and user-friendly coding solutions that help to speed line set-up and changeover while also limiting the opportunities for user error. When maximizing uptime and productivity are paramount, count on Videojet.

Ask your Videojet representative for more guidance, a production line audit, or sample testing on your substrate.

Call **800-843-3610** Email **info@videojet.com** or visit **www.videojet.com**

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