Videojet LifeCycle Advantage™
Enabled

Formulated for optimal performance and maximum uptime

Continuous Inkjet

Videojet 1860 inks and fluids


“Our chemically-advanced and proven inks are designed for today’s applications and production environments.
We’ll stick our reputation on it!”

Selection, quality & expertise

Over 40 years of ink and fluid technology, starting with those created for the first commercial inkjet printer, goes into every ink that Videojet formulates and delivers today. With specially formulated inks for the 1860 CIJ printer, Videojet can match the ideal ink for your application.

Performance without surprises

Achieve unparalleled uptime and improved productivity through our specially formulated inks that are optimized for the 1860 continuous inkjet printer. Precise fluid transfer measurement increases the stability of the ink and make-up mix, and provides reliable indication of remaining fluid levels, helping you to keep track of your fluid levels. In addition, the 1860's fluid system features a larger 1 litre Videojet Smart Cartridge™ with the embedded microchip, ensuring no mess, no waste and no mistakes.

Minimal touch design

Reduce operator error through advanced Code Assurance functionality, ensuring consistent high-quality codes throughout the lifetime of your product. The unique nozzle design delivers a cleaner start and print, with longer runs over wide ranges of changing production environments, giving you confidence in your code quality.

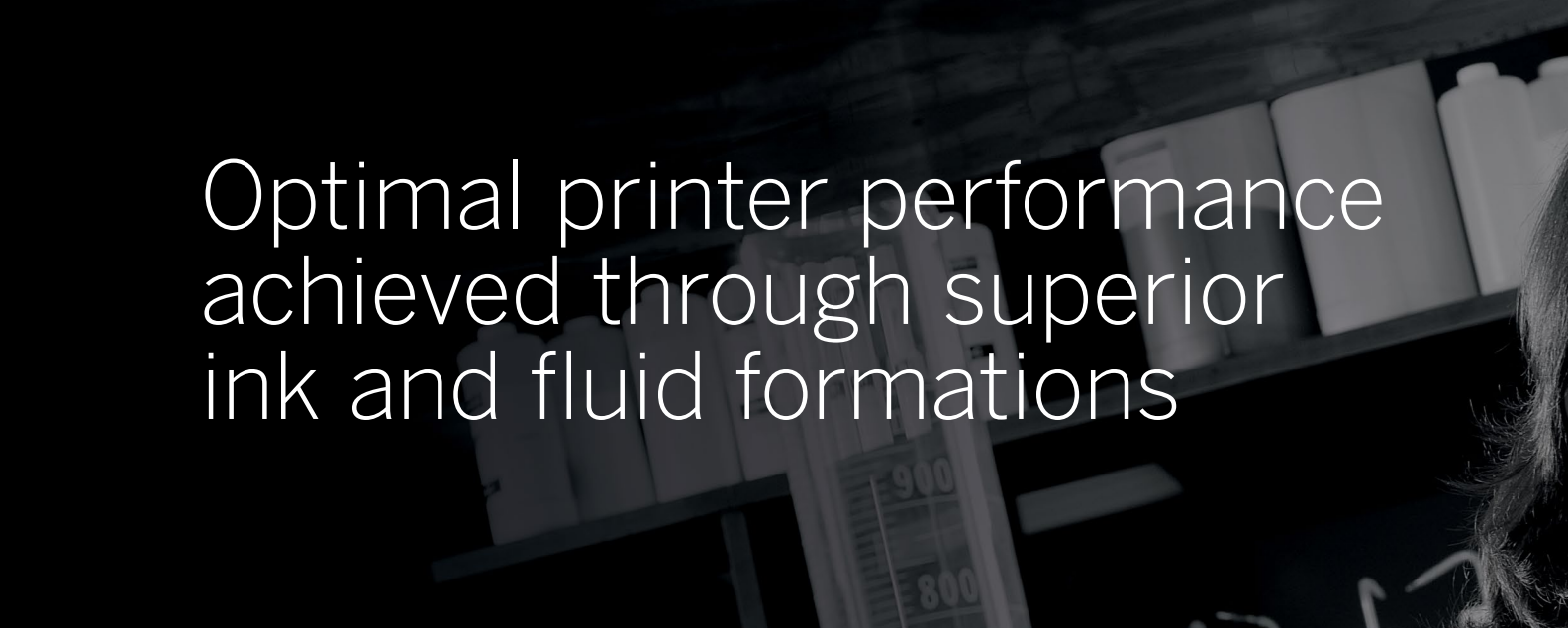
Natural fit in your line

Lower your cost of operation and achieve up to 20%* more efficient solvent usage through an innovative approach to condenser design and solvent recirculation. The innovative 45 degree printhead also delivers better line integration with more mounting options and closer proximity to the product.

Built-in evolution

You can make your printer more productive and profitable as your objectives change. Videojet continually develops new ink formulations to help you meet your changing production needs, helping to improve your operations today, tomorrow and in the future.

* Compared to existing 1000 Line models.



Optimal printer performance achieved through superior ink and fluid formations

Videojet ink development

Long-standing supplier relationships and experience in selecting the highest grades of specialized chemicals provide consistent, proven performance.

Chemical stability is constantly monitored and evaluated. In-house analytical laboratories employ sophisticated and analytical equipment to test 100% of ink batches that Videojet produces.

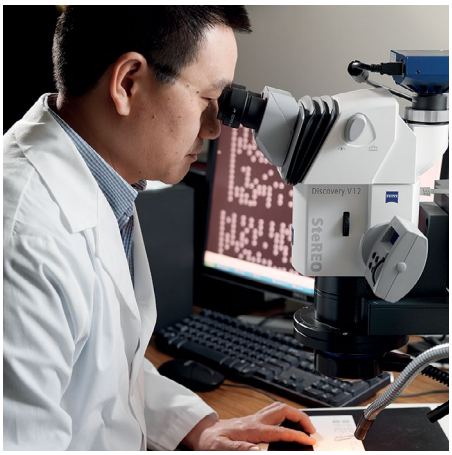
All inks and fluids pass rigorous development tests that prove their robustness prior to release. Tests include:

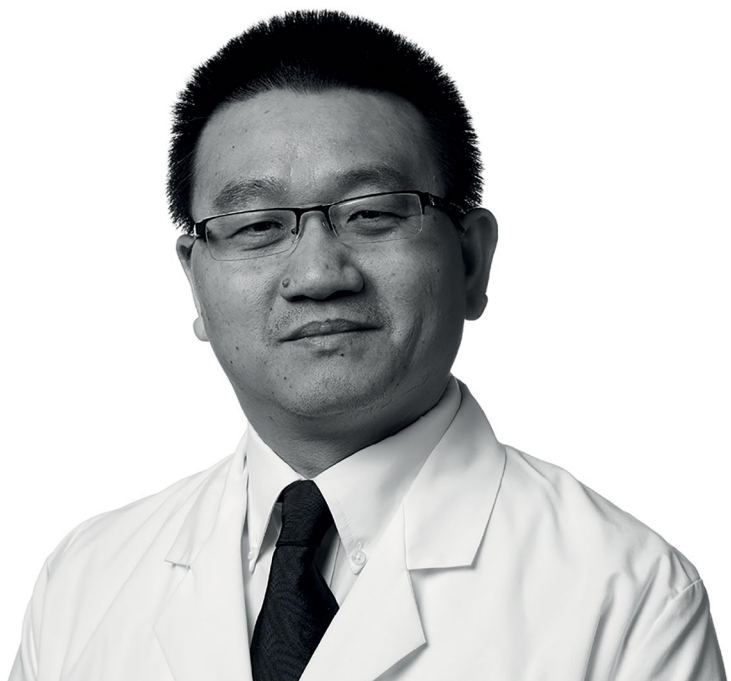
- Printer/ink qualification across a full-range of temperatures
- Accelerated aging
- Raw material and process variation control

"We ensure Inks and their raw materials meet purity and filtration standards to help minimize the risk of contamination that could impede critical printer operation"

Frank Xiao. Ph.D.

Staff Chemist





Industry-specific ink formulations:

- Aerospace & Automotive
- Baked Goods
- Beverage
- Candy & Confection
- Chemicals
- Dairy
- Fish & Seafood
- Frozen Prepared Meals
- Fruit & Vegetables
- Meat & Poultry
- Salty Snacks
- Pet Food & Animal Feed
- Personal Care & Cosmetics
- Pharmaceutical & Medical
- Tobacco

Partner with Videojet

Understanding what customers value, selecting the appropriate inks for applications, and determining how to integrate marking and coding into production processes can be challenging undertakings. Videojet has the experience and technology to assist through all aspects of industrial marking and coding.

With over 325,000 installed printers coding well over a billion products every day, Videojet delivers marking and coding solutions to a wide range of industries and applications.

Videojet's experts help customers utilize these solutions to grow market share, increase throughput, improve operational efficiency and meet regulatory requirements.

Inks for the Videojet 1860 Continuous Inkjet printer

Our 1860 inks have a variety of special properties including: the ability to penetrate a thin layer of condensation, to withstand the pasteurization process, and outstanding adhesion to steel, aluminum, glass, plastics, and wax coated substrates.

Videojet will help you choose the ideal 1860 ink to address your unique application requirements.

Fast dry

Ideal for rapidly moving production lines including those running web-based films and production lines that have tight material handling control, these Videojet inks dry and cure very quickly. They incorporate special fast-dry solvents and compatible resin technology necessary when there is little time between each code and when those codes come into contact with typical conveyor components and each other.

Ideal for: *high speed consumer packaged goods including food packages using films and stretch/shrink wraps; for decoration and branding.*

Retort & thermochromic Black to Blue/Dark Red to Light Red

These inks are designed to produce a color-changing quality assurance indicator to alert the manufacturer that food has passed through a critical retort process. Cooking sterilization temperatures between 115-130°C (239-266°F) for 20-45 minutes or longer to preserve flavor and texture. MEK-free ink formulas are available.

Ideal for: *soups, vegetables, sauces in aluminum and tin-free steel cans; chopped meat in polyester, nylon, aluminum, and polypropylene film laminated pouches; single serving plastic tubs and trays.*

Condensation-resistant/ caustic-removable

When applied immediately after the cold-filling process, these inks penetrate the condensation layer to adhere to beverage cans and bottles. Videojet condensation-resistant inks are durable during pasteurization and refrigeration/re-cooling. Videojet caustic-removable inks are soluble in common caustic wash solvents used in the recycling/refilling process. Certain inks can perform as a single-solution for bottlers producing a mix of returnable and non-returnable beverages.

Ideal for: *bottles, cans and bulk water containers.*

Solvent/chemical-resistant; heat cured

When subjected to temperatures around 175°C (350°F) for 30 minutes, codes printed with Videojet solvent/chemical-resistant inks become cured and resistant to offsetting/transfer and removal by steam, general abrasion, and many solvents.

Ideal for: *automotive and aerospace parts exposed to environmental solvents including, oil, lubricating fluids, antifreeze, and diesel fuel; electronic components and parts (extruded and molded connectors and housings subjected to cleaning solvents and defluxers); personal care products containing certain soaps and isopropyl alcohol.*

Visible / invisible fluorescing UV readable

Packages, bottles and certain products may require discrete fluorescing codes and brand information that are only visible under UV lighting. An unobtrusive solution for coding and tracking products though the supply chain, invisible fluorescing inks are also employed where the available package/label "real estate" is limited or is obscured by package graphics or secondary codes.

Videojet also offers a UV fluorescent ink that's been specially formulated for dual-purpose applications that require both machine readable fluorescent and human readable codes.

Ideal for: *automotive parts, aerosol cans, pharmaceuticals, retort processed food containers and cosmetic packaging.*

Cosmetic grade

This ink is a wetness-indicating / washable blue Ethanol ink that becomes invisible, and dissolves completely, when exposed to water or other water-based liquids. It is primarily used as a visual wetness indicator on absorbent diapers and incontinence products. It may also be used on trays or batch containers that require very easy removal using a simple water solution.

Ideal for: *personal care products, temporary in-plant batch or lot identification onto trays or batch containers*

Inks for the Videojet 1860 Continuous Inkjet printer

Oil penetrating

Metal automotive parts and extruded metal pipe sometimes contain lubricants that aid in their forming, bending or machining processes. Along with these lubricants, oils used as rust-preventatives can inhibit ink adhesion unless special ink chemistry is employed. Unique ink solvents and resins in Videojet oil penetrating inks help the inks to achieve excellent adherence through these protective layers.

Ideal for: *automotive parts, formed metal extrusions and stampings, and plastic components formed using mold release compounds.*

Flexible films/plastics

BOPP, HDPE, PE, PVC, PP, PET, acrylic, ABS, polystyrene and treated polyethylene film can all present challenges to an ink's adhesion due to their inherent "slick" surface properties and use of various plasticizers. The formulation of Videojet flexible films/plastics inks focuses on the toughest of these materials to provide optimal adhesion and code durability.

Ideal for: *food packaging bags and pouches, cups and tubs, shrink films, cosmetic and chemical bottles.*

Heat/steam cure

Extruded rubber products, such as hoses,belts and tires, undergo a unique two-step manufacturing process. After extrusion, they are cured (vulcanized) for approximately 30 minutes at 175°C (350°F) using pressurized steam heat. Many other inks fade or disappear during this process while Videojet heat/steam cure inks provide good color retention and adhesion throughout the curing process and beyond.

Ideal for: *automotive radiator hoses, transmission belts, tires, and extruded butyl rubber moldings.*

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iQMark™ coding

iQMark™ supplies are responsibly designed and manufactured to maximize contrast, adhesion and uptime while meeting safety, environmental and regulatory requirements. Videojet partner with manufacturers to help them meet their corporate responsibility goals by providing a comprehensive range of supplies. The iQMark™ line of inks, make-ups, cleaners and ribbons help Videojet communicate with manufacturers using common terminology to identify supplies that help meet their goals.

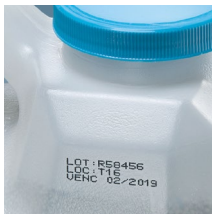
"The world is always changing and to formulate reliable inks, we've built a system to track the 40+ year history of all the raw materials we use"

John Garrett. B.S.
Sr. Chemist. Substrate analysis

Low-odor

Certain consumable goods and foods tend to acquire odors from their environment during manufacturing, packaging and coding processes. To address this, Videojet low-odor inks have been specially formulated with solvents and compatible resins/dyes that are virtually odor free. They are designed to reduce the need for air venting and offer the least impactful coding process possible.

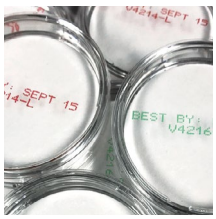
Ideal for: *bread and pastry packaging and other food packages that are coded in close proximity to the food filling process and tobacco products packaging.*



MEK-free

Even though MEK is not classified as a HAP (hazardous air pollutant) nor an ODC (ozone depleting chemical), local regulations and preferences can limit use of MEK-based inks. The MEK-free ink range matches to a wide variety of surfaces, coding processes and durability requirements. Some of these inks can also offer increased printer operating efficiency to further reduce solvent consumption.

Ideal for: *food containers, cans, pouches, bottles, etc., comprised of LDPE, HDPE, polypropylene, polystyrene, PVC, ABS, polycarbonate, stainless steel, tinplate, aluminum and glass.*



Colored inks

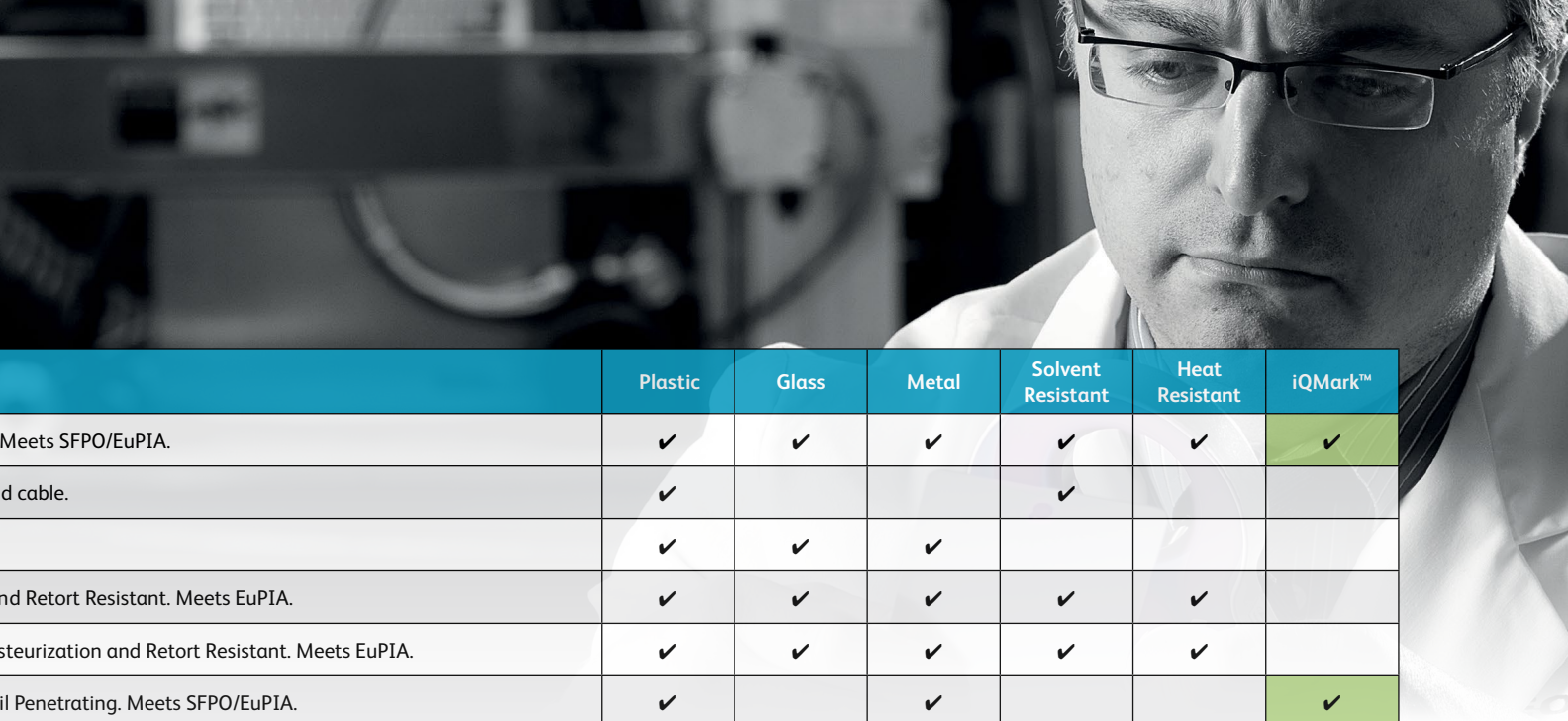
Varying the code color is useful to identify and segment products due to a variety of applications, including date sensitive inventory, stock rotation, differing quality grades, or differing regulatory standards. With fast dry times the colored inks offers excellent adhesion to plastic, metal and glass substrates.

Ideal for: *metal part marking, food packaging, flexible film and electronic components*

Videojet 1860 iQMark™ Ink Chart

1860 Inks	Ink Color	Solvent Type	Dry Time	Ink Shelf Life*	Application
V4201	Black	MEK	1-2 sec	18 months	General purpose. Flexible Food Packaging.
V4202	Dark Gray	MEK	1-2 sec	18 months	Excellent adhesion on extruded PVC wire an
V4204	Blue	MEK	1-2 sec.	12 months	General Purpose.
V4210	Black	MEK	1-2 sec	18 months	Condensation Penetrating. Pasteurization a
V4210A	Black	MEK	1-2 sec	18 months	Ethanol-Free. Condensation Penetrating. Pa
V4211	Black	MEK	1-2 sec	24 months	Flexible Food Packaging, especially BOPP. O
V4212	Black	MEK	2-4 sec	9 months	Returnable Glass Bottles, Removable, Conde
V4214	Red	MEK	1-2 sec	24 months	General Purpose. IPA, Automotive Fluids, Sc
V4215	Purple	Ethanol / MEK	2-4 sec	18 months	Excellent contrast and adhesion on metals.
V4216	Green	MEK	1-2 sec	12 months	General Purpose.
V4218	Black	MEK	1-2 sec	15 months	Oil and condensation penetrating. Oil resist
V4220	Black	MEK	1-2 sec	12 months	Returnable Glass Bottles, Removable, Conde
V4221	Black	Methanol	2 sec	15 months	Food Packaging, Aerospace. Caustic remova
V4222	Red	Methanol	2 sec	24 months	Low Odor. Food Packaging, Caustic removab
V4235	Black	MEK	1-2 sec	15 months	Electronic components. Isopropanol resista
V4236	Black	MEK	1-2 sec	18 months	Halogen-free. Electronic components. Micro
V4237	Black	MEK	1-2 sec	12 months	Retort resistant. Metal cans and foil/plastic
V4238	Black	MEK / Methanol	1-2 sec	12 months	Meets Mil Std 202G Method 215K after hea
V4251	Black	Methanol / Water	5-7 sec	12 months	Returnable plastic containers. Caustic remo
V4258	Pink/Fluorescent	MEK	2 sec	15 months	Visible and Fluoresces @590nm. Illuminate
V4259	Clear/Fluorescent	MEK	1-2 sec	18 months	Invisible and Fluoresces @433 nm. Illumina
V4260	Black	Ethanol	3-4 sec	24 months	General purpose. Low Odor. Meets EuPIA, Ja
V4262	Black	Ethanol/IPAc	1-3 sec	18 months	General purpose. Low Odor. Meets EuPIA, Ja
V4269	Black	Acetone / Ethanol	1-2 sec	12 months	General purpose. Retort Resistant. Flexible F
V4274	Black > Blue	Pentanone/Ethanol	2-3 sec	12 months	Retort, cooked food. Excellent color change.
V4275	Black > Blue	Pentanone/Ethanol	2-4 sec	12 months	Retort, cooked food. Excellent color change.
V4276	Dk Red > Lt Red	Pentanone/Ethanol	2-4 sec	12 months	Retort, cooked food. Excellent color change.
V4299	Cyan Blue	Ethanol	6-9 sec	24 months	Water Removable. Wetness Indicator on dia

* Store between 2 °C - 35 °C



	Plastic	Glass	Metal	Solvent Resistant	Heat Resistant	iQMark™
Meets SFPO/EuPIA.	✔	✔	✔	✔	✔	✔
d cable.	✔			✔		
	✔	✔	✔			
nd Retort Resistant. Meets EuPIA.	✔	✔	✔	✔	✔	
steurization and Retort Resistant. Meets EuPIA.	✔	✔	✔	✔	✔	
il Penetrating. Meets SFPO/EuPIA.	✔		✔			✔
ensation Penetrating, Pasteurization Resistant.	✔	✔	✔			
oap Resistant.	✔			✔		
Automotive/Aerospace parts marking. Automotive fluids resistant.			✔			
		✔	✔	✔		
ant. Flexible Poly films.	✔		✔	✔		
ensation Penetrating, Pasteurization Resistant. Meets SFPO/EuPIA.	✔	✔	✔	✔	✔	✔
ble. Replaces 16-8700/V421. Low Odor. No MEK.		✔	✔			✔
le.			✔	✔		✔
nt.				✔	✔	
clean™ resistant.	✔		✔	✔		
pouches. Oil penetrating. Meets EuPIA.	✔			✔	✔	
t cure (30min@150°C), Retort Resistant, IR readable.	✔	✔	✔	✔	✔	
vable. Low Odor. Low VOC.	✔					✔
@365nm.		✔				
tion @365nm.			✔			
pan PIA, Japan ISHL. No MEK.				✔		✔
pan PIA. No MEK.	✔		✔	✔	✔	✔
ood Packaging. Low VOC. Meets SFPO/EuPIA. No MEK.	✔			✔		✔
Meets EuPIA. No MEK.			✔	✔		✔
			✔			✔
Meets EuPIA. No MEK.					✔	✔
pers. Cosmetic grade.				✔		✔

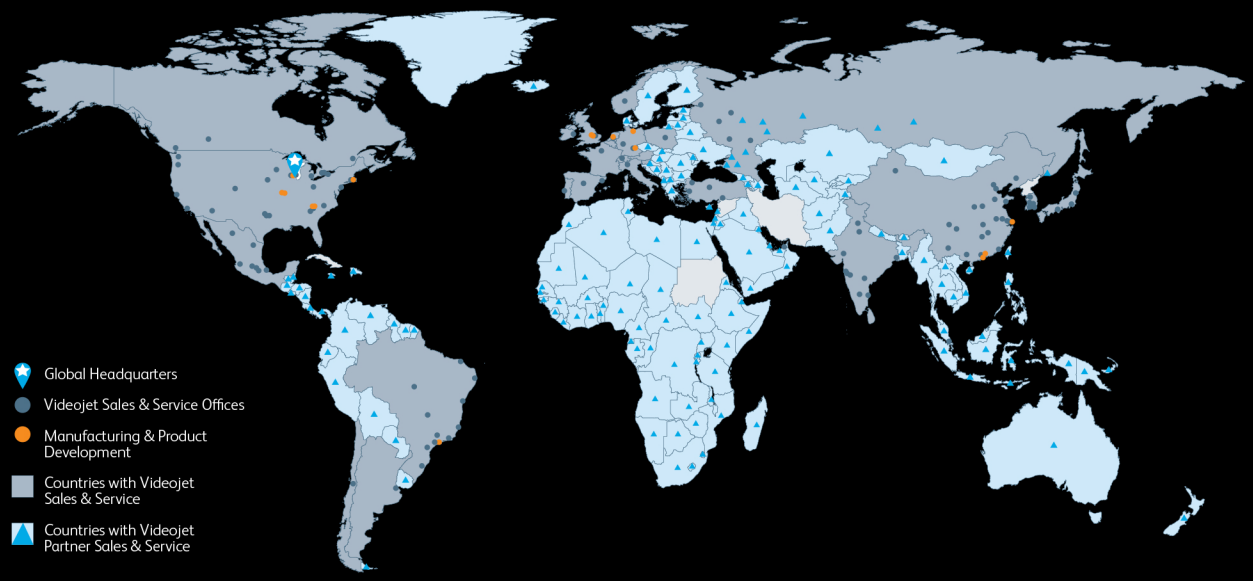
SFPO (Swiss Food Packaging Ordinance Exclusion List), EuPIA (European Printing Ink Association),
Japan PIA (Japan Printing Ink Association), Japan ISHL (Japan Industrial Safety Health Law Class 2 Organic Solvent List)

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 345,000 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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VIDEOJET