



Matthews' Products & Services

High Resolution Thermal Ink Jet

Drop on Demand Valve Ink Jet

High Resolution Piezo Ink Jet

Continuous Ink Jet

Custom Solutions

Thermal Transfer

Contact Printing

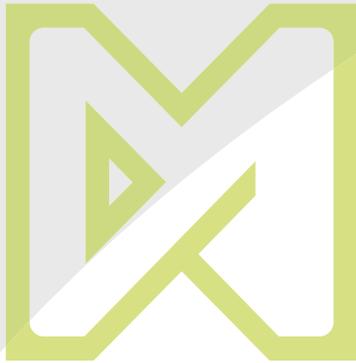
Laser Marking

Inks



**Matthews
Marking Systems™**

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800-775-7775



Matthews Marking Systems is a global innovator of printing systems and consumables for corporate branding, product identification, operational marking, and regulatory compliance.

Headquartered in Pittsburgh, Pennsylvania, Matthews Marking Systems has a worldwide sales, service, and distribution network. We pride ourselves on being the single source for all of your marking needs, offering products and services of unmatched quality.

With over 160 years of marking and coding experience, Matthews Marking Systems has established a global reputation as a supplier of innovative technologies and equipment in the marking and coding industry. Best known for our robust and reliable systems, combined with our complete line of consumables, Matthews provides our customers:

Branding
Marking and coding

Product identification
Traceability solutions

Our product portfolio includes:

Drop on Demand Valve Ink Jet
Thermal Transfer
Continuous Ink Jet

High Resolution Piezo Ink Jet
Contact Printing
Laser Marking

High Resolution Thermal Ink Jet
Custom Solutions
Inks

Service & Support

Matthews understands that customers demand high quality and that reliability and minimal downtime are essential to smooth business operations. All of our equipment undergoes rigorous testing and quality inspection processes to ensure reliable performance from the moment of installation, throughout the life of the product.

Skilled technical specialists offer product support after equipment installation. Matthews offers both telephone and on-site support to assure that your systems are running at peak performance. Our trained technicians provide training, support, and maintenance to maximize production uptime.

Industries Served

Automotive

Automotive part and assembly manufacturers require product identification codes that must withstand oil, gasoline, solvents, corrosion, abrasion, high heat, as well as painting and finishing. Matthews drop on demand valve ink jet and laser technologies are designed to meet requirements within this demanding industry, allowing us to provide you with the marking solution suitable for your needs. Whether your products are made of metal, rubber, plastic, glass, steel, foam, or fabric, we have the right solution for you.

Typical Marking:

Branding, logos, and graphics
Date and lot codes
Inspection (pass/fail codes)

Internal WIP codes
Linear and 2D barcodes
Machine readable codes

Orientation marking certification
Traceability
Serial numbers

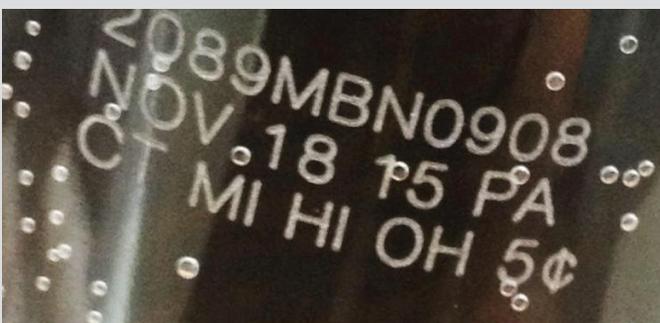
Beverage



The beverage industry demands reliable, high-speed marking and coding systems that must withstand the wash-down environment. Regardless of whether your beverages come in bottles or cans, glass, plastic or aluminum, Matthews has a solution for you. Our continuous ink jet printers, paired with fast-drying inks, are ideal for marking on glass bottles and labels. Matthews also offers a broad selection of laser coding systems for high speed marking, producing sharp quality codes while maximizing uptime.

Typical Marking:

Aluminum cans
Beverage pouches
Corrugated trays
Glass bottles
Refrigerator can packs
Shrink wrap
PET containers



Building Products



The building materials industry demands marking solutions that are durable and withstand the most challenging conditions. Matthews' superior integration capabilities are designed to enhance high speed, high efficiency industrial manufacturing lines. Our long life drop on demand valve ink jet print heads, vast portfolio of ink formulations, and experienced engineering design team make us the #1 marking and coding supplier to this industry.

Typical Marking:

Company logos
Compliance marking
Date codes
Grade stamping
Nail pattern marking
Product descriptions
Shift codes
Structural ratings



Consumer Packaged Goods



Matthews offers more ways to code your products than any other single supplier, from small character ink jet and laser coding for date, time, and lot info; to high resolution ink jet and thermal transfer for precise barcodes and graphics. From the primary package to the shipping carton, Matthews has the marking solution to fit your needs. With a wide selection of porous and non-porous inks available, and laser marking options, we have a solution for any application.

Typical Marking:

Aluminum cans and bottles
Aseptic packaging
Blister packs
Coated boxes/chipboard
Corrugated cases
Foils and films
Plastic/glass bottles and jars
Paper and plastic bulk bags



Electronics

Matthews provides marking and coding technologies that permanently identify printed circuit boards, components, and wire/cable products, making us a perfect fit for the electronics industry. Laser marking systems and thermal transfer technologies are utilized in the electronics industry, providing high resolution marks with graphic and 2D code capability.

Typical Marking:

Barcodes	Serial numbers
Batch and lot codes	Shift codes
Company logos	Text
Date and time	

Glass Products

Matthews provides a variety of marking technologies for glass material manufacturers, including small character ink jet, large character ink jet, contact printing, and laser. Our years of industry experience provides us knowledge of the challenges you face, and present you with proven solutions, eliminating your risk.

Typical Marking:

Batch codes	Date and time
Certifications	Graphics
Company logos	Product name

Metals



Matthews offers a wide range of marking technologies available for metal product manufacturers, including ink jet, laser, impact press, steel types and dies. Matthews manufactures a wide range of fast drying, UV stable, and specialty inks to meet your needs in a variety of environments.

Typical Marking:

Certifications	Part numbers
Company logos	Product information
Date and time	Product dimensions

Packaging

Packaging applications vary greatly, requiring a robust offering of marking and coding products to meet your needs. Are you marking in a dusty, dirty environment, in varying temperatures, or need to meet wash down requirements? Are you marking primary packaging, shipping cartons, or flexible packaging? Our software platform, MPERIA™, combined with our printing equipment, controls the entire production line, from primary to secondary, and even to tertiary packaging, reducing human entry error and increasing code reliability.

Matthews understands that consumer packaged goods companies often produce product variations within one plant, need to protect their brands, and require integration with filling and packaging equipment. We meet these needs and the most demanding production line requirements, while providing the highest value through reliability, production uptime, and return on investment.

Pharmaceuticals

Traceability is a requirement and priority for the medical and pharmaceutical community. Manufacturers need the ability to quickly and positively identify and isolate all suspect products in the supply chain.



Without legible barcodes and human readable production dates and lot numbers, product recalls are difficult to manage.

Matthews can help maintain compliance and traceability with its variety of marking and coding products. Whether you are marking on plastics, plastic films, foils, or Tyvek® we have the products to provide the high quality data and barcodes that you need.

Typical Marking:
 Expiration dates Lot and batch codes
 Linear and 2D barcodes Product information

Plastics

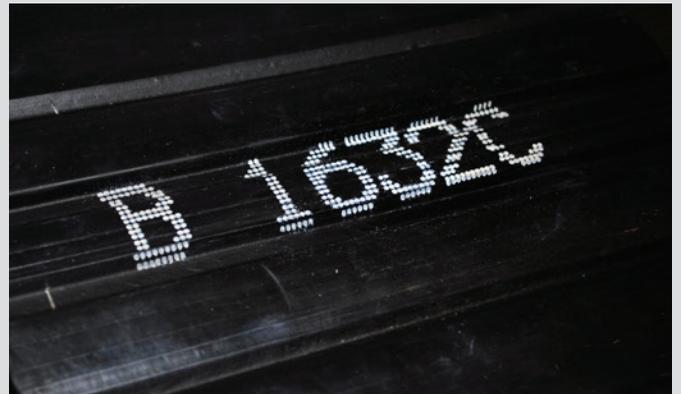


Matthews' ability to print drop on demand valve ink jet at higher production speeds while marking with specialized inks for non-porous plastics is a key reason why we are the leader in plastics marking. Our thermal ink jet technologies provide high resolution, easily read codes and our thermal transfer printing technology marks successfully onto rigid plastics. All of this makes Matthews the 'go to provider' for high quality plastic marking.

Typical Marking:
 Batch and lot codes Compliance coding
 Barcodes Date and time
 Certifications Product information



Rubber/Tire



Matthews offers a complete line of rubber marking solutions including offset, striping, and ink jet printers. Our drop on demand valve ink jet print heads have a life expectancy of more than 6 billion firings, assuring a quality mark print after print. Combined with our fast dry, HAPS free, curable, white pigmented ink, achieving a clear mark without transfer in the mold is simple.

Typical Marking:
 Cables Tire high point marking
 Extruded hose Tire striping
 Rubber hose Tire tread
 Rubber sheeting



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Matthews' Product Offering

Contact Printing

Contact printing technologies mark primarily using either rollers or reciprocating print heads. Contact printers can serve many functions; from high quality logos produced by offset printers to hot print branding that create crisp and highly permanent indented marks. Contact printers marks a variety of substrates including steel, plastics, rubber, metals and glass.



Thermal Transfer (TTO)

Matthews' thermal transfer printers mark both flexible packaging materials and rigid or semi-rigid parts and materials. Our printers allow for high-speed printing of variable text, serial numbers, linear and 2D barcodes, and graphics, making these printers ideal for crisp, legible marks of the highest quality.

In particular, thermal transfer printers can produce excellent quality barcodes with superior readability compared with other methods of printing.



Custom Solutions

Matthews provides custom marking and coding solutions to match your requirements. We specialize in custom software and user interfaces, custom mounting, and custom controls and integration:

- Material handling
- Traversing systems
- Logos and kickplates
- Turn-key automation
- Traceability
- Unique software requirements

Partner with Matthews and let us put our experience and technical know-how to work for you. We can design and develop specific solutions to help you increase productivity, reduce waste, and improve overall efficiency.

Inks

Our inks are specially developed for optimal performance, using only the finest of raw materials, including dyes, pigments, resins, and solvents. Tell us your marking requirements – adhesion, substrate, drying time, ink color or printing method and we'll recommend the best ink for your specific application.

We specialize in contact inks and inks for drop on demand valve ink jet, continuous ink jet, high resolution piezo ink jet and high resolution thermal ink jet technologies. We can formulate inks with various properties including adhesion, dry time, print quality, viscosity, and eco-friendly (low VOC, no HAPS).

Matthews' Product Offering

High Resolution Piezo Ink Jet

Matthews' high resolution piezoelectric ink jet print head creates crisp images with print heights up to 3.94" (100mm) from a single print head. Precision stitching of print heads allows for a large marking area, and our superior ink efficiency and re-circulating auto-prime function contributes to up to 35% less ink consumption than competing brands. Our high resolution print heads are ideal for printing on the side or top of a carton. Use high resolution ink jet when you need the highest quality print on your porous materials.

Drop on Demand Valve Ink Jet (DOD)

Matthews' DOD printers are suitable for many different large character applications, including packaging and industrial, as well as the harshest environments. Our DOD systems feature the longest life and most reliable print head in the industry. The exclusive micro-valve technology dramatically lowers ink consumption while maintaining impressive quality and speed.



High Resolution Thermal Ink Jet (TIJ)

Our high resolution thermal ink jet printer provides variable data printing with high print resolution (600 x 600 dpi) up to 200 f/min (60 m/min), nearly twice as fast as other thermal ink jet printers. If you need a lower resolution, our TIJ print head can print up to 1600 f/min (488 m/min). Its easy cartridge changeover reduces downtime and clean up. For applications using heavy ink volumes, our Bulk Ink System allows you to print twice as fast and your cartridge can last twice as long.



Laser

Matthews offers a complete line of CO2, diode, and fiber lasers designed to fit a number of industrial and packaging applications, and flexible enough to mark in static or continuous mode on a variety of materials. With the longest focal distance in the industry, our lasers can be mounted far away from the production line. Laser coding doesn't involve any inks or chemicals, making it a very clean, eco-friendly and cost-efficient method of permanently marking your product.



Continuous Ink Jet (CIJ)

CIJ is a form of small character, high-speed printing for applying variable information and is ideal for food, beverage, and pharmaceutical packaging applications. Print at speeds up to 1050 feet/minute (320 m/min), and character heights from .05" to .61" (1.25mm - 15.6mm.) Our print head is the cleanest, simplest, most durable design you can buy, ensuring fast and reliable printing on almost any material regardless of size, shape, or texture.



MPERIA™

Performance Controlled Marking and Coding from Matthews Marking Systems



A universal platform to manage multiple print technologies, combined with high speed, high resolution printing.

MPERIA™, Matthews' universal print platform, complete with our VIAjet™ print technologies, allows customers to control multiple print technologies across multiple production lines, integrate with order processing, populate data fields without human entry errors, and interface with new or existing databases – all from a single controller. Its intuitive, touch screen controller seamlessly integrates with your ERP or WMS system and the software is scalable, so it grows with your business. MPERIA™ allows you to pair and control VIAjet™ print technologies to meet a variety of applications. Some of our most successful applications include:

- OSB nail marking and APA-EWTA certification coding using VIAjet™ V-Series and VIAjet™ T-Series
- Printing lot numbers on primary packages
- Replacing labels with VIAjet™ L-Series and VIAjet™ T-Series

VIAjet™ T-Series

Matthews' VIAjet™ T-Series high resolution ink jet provides brand on demand printing of batch and date codes, variable text, graphics, and barcodes. Our superior ink efficiency and re-circulating auto-prime function provides up to 35% less ink consumption than competing brands. T-Series also allows you to stitch print heads together for large logos and branding, allowing you to replace preprinted cartons and labeling equipment and labels. Savings include reducing preprinted carton inventory and storage costs, and eliminating waste associated with obsolete cartons.



VIAjet™ L-Series

Matthews' VIAjet™ L-Series thermal ink jet printer offers high resolution printing up to 2" (51mm) per print head and a wide selection of fast dry inks for marking porous or non-porous materials at high speeds. Its removable cartridge makes replacing ink easy, all while reducing changeover and improving uptime. The VIAjet™ L-Series Bulk Ink Supply allows you to print twice as fast and double the cartridge life.



VIAjet™ V-Series

Matthews' VIAjet™ V-Series features Matthews' drop on demand (DOD) valve technology that marks substrates including metal, paper and pulp, wood, concrete, and plastic. Matthews' DOD print heads are the fastest in the industry, marking over 800 fpm (244 meters/min), with the longest life – over 6 billion firings per head.

The V-Series features large character print, ranging from 1/8" to 5" (3mm to 127mm), and an ability to stack print heads for large logos. These features, combined with its durable design, make V-Series ideal to meet the demands of extreme environments, such as building products and steel mills, as well as packaging applications.

