



Application note



Large Character Marking Systems **Upgrading to modern pulp and paper printing solutions**



Investing in a new printing system can not only help pulp and paper facilities to meet the changing code requirements of their customers, but also help increase operational efficiency.

Over the past 20 years, the industrial ink jet world has changed, seeing much new development in printing technology. In that time Videojet has become a leading supplier of all types of printing solutions, including large character marking systems (LCM).

The challenge:

As an increasing number of pulp and paper plants begin exporting outside their country of manufacture, the needs and demands of both the plant and the end customer are changing.

The result is a growing need for the use of bar codes as well as more product and production information being printed. Additionally, the ability to add customer information, and their specific requests, in a timely fashion by direct-to-bale printing is an attractive benefit that improves the responsiveness to the end customer.

Videojet advantage:

Videojet offers the widest range of LCM printing products and ink formulations allowing for a solution that more closely meets the application need. Through significant investment in a team of expert ink chemists, Videojet is able to offer inks designed specifically for the pulp and paper industry, as well as the expertise offered by the Videojet team.

Over the years, Marsh printers have been a popular choice for the pulp and paper industry, known for the product quality and reliability. As Marsh is now part of the Videojet family, we can continue to offer customers the same quality and reliability with the added peace of mind that comes from factory direct service and support.

Considerations for printer and ink selection



Is aging equipment holding you back?

Tolerating aging equipment is likely to cause both visible and hidden inefficiencies within an operating facility. Typical problems caused by old or outdated printing equipment include:

- Increased maintenance
- More parts and labor expense
- Increased downtime
- Less energy efficient systems
- More expensive fluids (or wasting more fluid through inefficient technology)
- More complicated systems to operate
- Unable to meet demands of current customer printing requirements

All of the above will, at some level, result in a loss of productive time, in turn affecting the bottom line profits.

By investing in upgraded equipment you will be investing in the latest technology that is designed to combat the above problems. Upgrading with Videojet provides the added benefit of over 40 years' experience in ink jet printing and deep application knowledge of the pulp and paper industry.

Before the Videojet team of experts can recommend a solution, you need to consider a few details:

What is the specific application need?

For example, does your customer want to print logos and bar codes or do you need to quickly and easily differentiate between product types? Knowing what is important to you and your customer will help you understand exactly which is the right printer for your job.

Do you need specially formulated ink for re-pulp process?

Videojet understands your business and therefore realizes that when pulp is made into a specific paper product, or recycled, it can often be used in applications where it may come in contact with food (direct or indirectly) or humans. As the ink will go back into the solution and become part of the paper, it is important that the ink does not degrade the end product in any way. That is why Videojet developed specially formulated inks that are approved for the 're-pulp' process and do not reduce the paper's ability to be used for any purpose.

Inks that are not capable of coming into contact with food or humans would require the segregation of pulp and paper; a costly and time consuming process that is simply not acceptable in today's modern production of pulp and paper products. If you require re-pulp inks, ensure you source a reputable supplier that genuinely understands the processes your business follows.

The Videojet range of LCM printers suit both porous and non-porous applications, and offer the choice of high resolution or dot matrix style printing in a large variety of inks.

Would colored ink benefit you?

Using colored ink in your LCM printers can add multiple benefits to your business. Ink jet color can be employed to increase visual functionality in paper bundles.



Primary Benefits of Videojet LCM color inks

Enhanced productivity employing visually distinctive colors

- Range of six visually differentiated, compatible color formulations
- Increase brand differentiation and code value

Increased code assurance and lasting code durability achieved through pigmented formulations*

- Increased UV light fastness and fade resistance over dye-based formulations
- Better water resistance over dye-based inks
- Maintains print quality over a broad range of substrates and varying substrate porosities such as those with recycled content and applications spanning different grades of kraft paperboard
- Produces crisp codes to optimize bar code readability

*Pigmented inks available in high resolution printers only.

Simple usability

Ink colors in this family are chemically compatible with each other, making for low risk during ink color changeover. *(Note: proper switchover procedure between colors is still required to achieve consistent color match.)*

The inks are excellent for linking corporate brand image with products and packaging coding and for identifying and differentiating outer wrappings of various weights and grades of paper stock.

Manufacturers can also use spot color as an efficient in-plant visual management tool for quality control or inventory management.

Large European paper and wood manufacturer put Videojet colored ink to the test

A large European paper and wood processing manufacturer had a requirement for different grades of their paper bales to be visually and clearly differentiated from each other. Due to the large variety in their paper stock, it was sometimes a challenge to quickly identify the correct bale and could potentially result in the wrong stock being selected.

The company was looking for a new printing solution that was able to address this issue as well support their goals of reducing downtime and maintenance intervals. In addition, the manufacturer wanted to add the company logo, preferably to match its corporate brand color.

Videojet was delighted to offer the 2300 series of large character printers as a suitable solution, using the range of nine colored inks available. The 2300 Series is capable of printing high resolution codes including bar codes and logos, making it the ideal option for printing the company logo onto the paper bales. The range of colored inks available also made it possible to match the brand color, which the company felt enhanced its product range.

In addition to meeting the practical needs of the application, the printing system demonstrated high performance with minimal maintenance of less than 5 cleanings in 18 weeks, and superb 100% uptime during the trial period. The manufacturer ultimately implemented the Videojet solution for high resolution large character printing, which delivered the required product differentiation, while providing flexibility for future changes and market requirements.



The bottom line

To keep pace with the changing needs of the pulp and paper packaging industry, your operation needs to be prepared to make educated decisions on coding solutions that can support your business critical needs.

Videojet stands ready to help with innovative printing solutions that promote operational efficiency as well as offering a range of colored inks to work with each customer's packaging design goals.

Let Videojet help you select the right combination of printer and ink to meet your production objectives and performance needs.

Call **800-843-3610**
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