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About Us

InfoTrends/CAP Ventures is the leading worldwide market research and strategic consulting firm for the digital imaging and document solutions industries. We provide research, analysis, forecasts, and advice to help clients understand market trends, identify opportunities, and develop strategies to grow their businesses. Learn more about our company, visit www.capv.com.

Inkjet Coding: Overview and Outlook, 2004

- Market Segmentation
- Market Size and Forecast
- Market Trends

Introduction

Ink jet technology is at the heart of the industrial marking world, the most widely placed digital printing technology for primary and secondary coding applications. Approximately \$143 million in ink jet coders of all types were sold in North America in 2003. Augmented by fluids, parts, and service revenues, the total North American market reached \$385 million last year, and the total world market was likely about triple that figure.

How did ink jet coding come to be such a substantial market? The answer lies in a number of contributing factors. The first factor is the varied nature of the ink jet family, whose member technologies can collectively mark essentially any substrate, with coders of different price, resolution, and speed. Other contributors to the success of the ink jet coding market include the industry's intense focus on inventory management, security, and versioning; continuing refinements to packaging materials and configurations; and a growing use of more complex codes.

Despite these factors, the ink jet coding market has had an uneven experience as of late, and this market shows signs of change ahead. For instance:

- 2001 and 2002 marked a decline in North American placements, in tandem with the manufacturing recession, and especially for continuous ink jet (CIJ) systems.
- Laser coder placements have fared better, growing in 2002 and 2003, often at the expense of CIJ
- The equipment market gave clear signs of recovery in 2003, even in the most established ink jet product categories
- Thermal ink jet (TIJ) systems, based on HP technology, are now small but growing secondary and primary coding entrants
- Xaar and Spectra continue to increase their roles as piezoelectric head suppliers
- The mature equipment markets in North America continue to consolidate key industries and companies
- Independent suppliers of fluids continue to put pressure on fluids pricing from OEMs, with few protected from this influence



Continuous ink jet coding equipment photo courtesy of Domino Printing Sciences



Piezoelectric ink jet image on corrugated courtesy of Markem Corporation

In spite of ups and downs, the outlook for ink jet coders and related annuities is good. InfoTrends/CAP Ventures estimates that the total North American market for ink jet coding equipment and supplies had sales of \$385 million in 2003 and that the market will continue to grow as the economy expands.

To describe this important market and to predict its future, InfoTrends/CAP Ventures offers the report entitled *Ink Jet Coding: Overview and Outlook, 2004*. This research is InfoTrends/CAP Ventures' estimate and forecast for the ink jet coding market in North America between 2003 and 2008.

Report Objectives

This report is designed to help technology vendors and distributors to understand the ink jet coding market and to gain insights into its future. This study will help you:

- Segment the market by major ink jet technology type
- Estimate current and expected total installed bases
- Estimate current and expected total shipments
- Gauge the impact of the recent recession
- Compare the effects of recovery on different segments
- Understand the differing perceptions of other technologies
- Update your insight about thermal ink jet's role in the market
- Estimate share for your company vs. the market
- Estimate equipment markets by key geographic regions

While the focus of *Ink Jet Coding: Overview and Outlook, 2004* is the North American market, InfoTrends/CAP Ventures understands that ink jet coding markets outside this region are also of interest to clients. As a result, this study will make summary estimates for coding equipment placements and the installed base in other regions (Europe, Rest of World). These estimates will be segmented by major technology type.

Key Features of This Report

The key focus of *Ink Jet Coding: Overview and Outlook, 2004* is to explain the important segments of this market and to estimate and forecast the market's size through 2008. The study will thus divide the market into the main ink jet technologies used for primary and secondary coding:

- Primary Coders: (1) Continuous ink jet and (2) small character piezoelectric
- Secondary Coders: (1) Valvejet, (2) Piezoelectric, (3) Thermal ink jet (TIJ)

In fairness, placements and installed base for valvejet and thermal ink jet are in fact found in primary and secondary uses, although in each case one category or the other dominates. At the same time, for various reasons it is impossible to divide these technologies' markets into the primary and secondary categories with a useful level of precision. As a result, the report will estimate placements, installed base, and consumption for valvejet and thermal ink jet as if each technology were unified in its uses. The report will then comment qualitatively on the approximate shares of these valvejet and thermal ink jet coder placements and installed base attributable to primary and secondary applications. *Ink Jet Coding: Overview and Outlook, 2004* will make the following estimates and forecasts for ink jet coding markets in North America between 2003 and 2008:

- System placements
- Average selling prices
- Annual equipment revenues

- Year end installed base
- Average fluids expenditure per system, in dollars
- Average parts expenditure per system, in dollars
- Average service expenditure per system, in dollars
- Annual equipment revenues
- Annual fluids, parts, service revenues

For regions outside the North America, *Ink Jet Coding: Overview and Outlook, 2004* will make summary estimates of equipment shipments and installed base only, by major technology segment:

- System placements in Europe, Rest of World
- Year end installed base in Europe, Rest of World

Main Benefits of This Report

Ink Jet Coding: Overview and Outlook, 2004 will help managers involved in the coding equipment and supplies markets to understand the status and prospects of markets for all the major types of ink jet coders in North America.

This report provides a useful estimate of the market for 2003 and describes expected growth rates for equipment and annuities sales in North America through 2008.

The report also provides a less detailed estimate the role of ink jet coding in Europe and the rest of the world for the same period, giving approximate shipments and installed base, in units, by region. *Ink Jet Coding: Overview and Outlook, 2004* also describes key market trends such as:

- The growing role of laser coders as an alternate to CIJ devices
- The young but growing presence of TIJ coders in secondary and primary uses
- The growth of Spectra and Xaar heads among piezoelectric head options
- The growth of valvejet in certain primary coding uses
- The improving efficiency, and lower fluids use, of CIJ coders
- The relative role and prospect of key analog technologies, such as hot stamp

Ink Jet Coding: Overview and Outlook, 2004 ultimately provides managers with a way to gauge the role of their own companies in the coding world, and to know more about how that world will change in the years ahead.

Market Research

Methods supporting *Ink Jet Coding: Overview and Outlook, 2004* include primary and secondary research. InfoTrends/CAP Ventures will examine a range of market information on key applications, market segments, competitors, and product categories. InfoTrends/CAP Ventures will use a variety of sources that include:

Contacts with OEM managers	OEM exhibits at PackExpo, other shows
Contacts with ink suppliers	Periodicals such as <i>Packaging World</i>
Trade associations such as PMMI	Vendor Web sites, press releases
Vendor conference presentations	Contacts with equipment users
Vendor customer newsletters	Contacts with equipment distributors

By weighing insights gathered in these ways and from these sources, and by comparing them to past estimates and forecasts by InfoTrends/CAP Ventures, we will develop the forecast and describe important trends and factors affecting demand.

Report Deliverables

Clients will receive a hard copy report and presentation materials for internal use at their companies, as well as a spreadsheet detailing all market assumptions, estimates, and forecasts. The material will include:

- Executive summary that addresses key issues, findings, and overall recommendations
- Detailed written report based on at least 50 annotated PowerPoint slides, with text, charts, and graphs addressing the objectives of the study
- An electronic copy of all slides, for internal communication of the research results
- An electronic copy of all Excel worksheets for internal use

Report Schedule

InfoTrends/CAP Ventures will complete its research for *Ink Jet Coding: Overview and Outlook, 2004* in June 2004. We intend to publish the final report and supporting material in that month.

Report Fee, Early Subscriber Discount

For companies that subscribe to this report by May 15, 2004, a reduced fee of \$4,995 applies. For companies subscribing after that date, the report fee will be \$5,495.

This fee enables purchasers to use the report and its presentation materials internally at their companies. The fee does not give the purchaser the right to distribute the report or its presentation materials to subsidiary companies, partners, or customers. Nevertheless, clients may purchase additional copies of *Ink Jet Coding: Overview and Outlook, 2004* for distribution to other parties at a reduced rate.