IS THERE REALLY A DIFFERENCE BETWEEN ORIGINAAL AND THIRD-PARTY INK?

Ruth Zach outlines some reasons behind the development and manufacture of after-market products

Non-original equipment manufacturer (OEM) ink has many names: third-party, alternative, or generic. Whatever the name you choose, or how it is referred to in your country, it always refers to the same thing, and that is ink which competes with OEM ink and presents another option for print shop providers as an alternative to buying from the printer manufacturer.

Five to seven years ago, there were print shop providers that were not familiar with non-OEM inks and did not use them. Today there is no doubt that all are familiar or have been approached by a representative of an alternative ink provider. Common sense might dictate that OEM ink is optimal for the printer, since it is made for the exact engine and size to meet the printer’s requirements. However, experience shows that it is not necessarily so. Here are some views about printer manufacturers and their inks:

1) Printer manufacturers primarily focus on their own production. This means that with the development of new inks, the printer manufacturer may incorporate these new inks into their own products, which can lead to increased profitability and increased sales of their own brand products. Additionally, this can lead to increased competitiveness in the market, as other non-OEM ink manufacturers may not have the resources to develop and produce inks that are as high quality as those produced by the printer manufacturer. However, it is important to note that non-OEM ink manufacturers may also focus on developing inks that are compatible with the printer’s requirements, which can lead to increased sales of their own products. Therefore, it is important for print shop providers to carefully evaluate the inks being offered by non-OEM manufacturers to determine which ones are best suited for their specific printer and printing needs.

2) Printer manufacturers don’t have the expertise or the infrastructure to develop and sell inks. This means that they may choose to develop proprietary inks and sell them through their own sales channels, which can lead to increased profitability and increased sales of their own brand products. However, this can also lead to increased competitiveness in the market, as other non-OEM ink manufacturers may also focus on developing proprietary inks to increase their sales. Therefore, it is important for print shop providers to carefully evaluate the inks being offered by non-OEM manufacturers to determine which ones are best suited for their specific printer and printing needs.

3) In most cases, printer manufacturers commission ink development work at well-established ink manufacturers worldwide who sell them under OEM contracts as original inks.

The business model and nature of OEM ink manufacturers vary. Some ink manufacturers work strictly for OEMs and do not sell inks to other vendors, while other OEM ink manufacturers sell the exact same product to other customers under their own brand name or private label. This common practice across the board for UV-curable, solvent and dye sublimation inks. There are also cases in which the printer manufacturer enters a joint venture with the ink manufacturer. In this scenario, the ink manufacturer’s identity is known and the printer manufacturer endorses the ink manufacturer.

CAN YOU TELL THE DIFFERENCE? No matter whether the ink manufacturer is tied to the printer manufacturer via licensed OEM ink manufacturing agreements, or if they sell third-party ink for the printer, in both cases ink manufacturers invest similar resources in research and development of the ink. This investment includes testing, production and marketing costs involved in introducing new products. However, it is up to the end user to select a trusted third-party ink manufacturer that provides a full guarantee for any damage caused by the ink to the print head or to the printing materials and, as with any new product, to test the ink.

In the case of original inks, the end user normally purchases the ink from the same place he purchased his printer and is not always aware of the wheeling and dealing behind the ink. This brings us back to the original question – is there really a difference between original ink and third-party ink? In order to answer this fairly, we must break down the question:

The answer varies depending on ink type, printer and manufacturer. Third-party ink companies focus solely on ink. They invest in the research and development of many types of inks intended for various printers. The most common widespread digital inkjet inks are true solvent, solvent, which includes eco, mild and low solvent, UV-curable/UV-curable LED, water-based inks which include latex, and dye sublimation used in textile applications.

The best selling ink in the wide-format industry is for solvent-based printers. Eco solvent-based chemistry replaced the potentially hazardous true or half solvent ink. Made from environmentally acceptable solvents, the eco, mild and low solvent-based inks were born. This change in the ink was triggered by environmental considerations.

OPINIONS ABOUT THIRD-PARTY INK MANUFACTURERS True solvent-based inks are a cheap, easily developed formula which requires little research. In the case of this ink the quality of OEM and the third party inks are similar. The only guideline for the end-user should be the price because, in spite of each company’s promises, one would not likely find a difference between the various brands. However, eco and mild solvent-based variants are the main solvent inks used today. The stages of development and complexity result in significant differences in quality and the first of these chemistries that were introduced were OEM inks compatible with eco and mild solvent-based printers. Due to their revolution of composition and production processes low third party manufacturers followed with a competitive product because this product posed a challenge for third-party ink manufacturers in terms of high capital investment in research and production. Not many third-party ink manufacturers have enough backing to bring this to the market.

There are only a handful of companies that have the tenacity to undergo the development, production and intensive testing to offer OEM compatible inks. Included in these independent ink manufacturers, Bordeaux Digital believes it is among those that are leading the way. These independent ink specialist usually manufacture smaller batches compared with OEM’s with better quality assurance. They can also cater to specific customer needs such as with special packaging and, even, tailor-made inks for specific applications. OEM ink manufacturers cannot always offer this versatility. OEM inks can have quality issues such as a batch which required re- or even a ferrous case of a leading Japanese printer manufacturer that had to recall a complete line of UV-curable inks, leading customers to seek third-party alternatives.

NECESSITY FOR LONG-TERM RESEARCH The smaller unknown companies don’t usually invest in long-term research and development but sell lower quality inks that do not meet the requirements for eco and mild solvents. Purchasing ink cheaply or from an unknown source can shorten the life of the print head, cause clogging, or accelerate the depreciation of the printer. The competition in the industry forces printer and ink manufacturers to offer machines and consumables which are intended for specific applications. Already today OEMs offer eco and mild solvent-based printers such as for high-speed photographic quality printing achieving extreme colour gamut with eight colour stocks including orange and green. Some credible third-party ink manufacturers offer OEM quality fully plug-and-print products that match OEM in quality, colour and enable transparent conversion without prior or post preparation. The printer-to-ink specific standard is also effective for UV-curable and UV-curable LED printers for which non-OEM ink manufacturers have a ready solution, including compatible chips as a chip bypass solution for overcoming the printer barriers. Bordeaux Digital offers specific ink that incorporate a compatible chip or a chip bypass solution which defies the obstacles met by end-users during installation.

Independent ink manufacturers also initiate development of inks that are not associated with specific printers but offer added value to the market. Ink manufacturing companies have the infrastructure and suitable research and development to support these activities similar to other companies with the same capabilities. An example of such a product is the development of Bordeaux Digital’s latest inks for press print heads, although this should not be confused with HP’s product which is intended only for its own thermal inkjet print heads which are that company’s proprietary technology.

CONCLUSION This review should eliminate most of the hesitations involved with third party inks. There are several trusted wide-format ink manufacturers, including OEM and third-party that offer similar quality products. If you are considering moving to third-party ink, make sure you choose your ink vendor carefully in order to ensure a high quality product. As a rule of thumb try to avoid unfamiliar brands and choose as a preference brands that have been in the business for at least ten years. Don’t be intimidated when asking questions and demanding an ink trial kit prior to your decision since consumables are likely to be the most costly expense after the printers. Once you make the decision to switch, it is likely you will save between 40 and 70% on ink costs, depending on the printer, media and application.

Ruth Zach is Marketing Coordinator at Bordeaux Digital

Flow+ is a vital tool for managing all aspects of your wide-format business from quote to delivery.

Key Features
- Easy quotation system
- Creation of production processes
- Planning and production overview
- Live job-tracking and job-costing
- Real-time communication with the RIP
- Real-time stock management
- Advanced global database & analytics

Caldera has developed Flow+ to help its users automate every aspect of production, optimize daily-to-day processes and make strategic decisions based on totally accurate production data.

Clients who now use our ERP/MIS solution have gained productivity, profitability, visibility and serenity!