CHOOSING THE RIGHT CODER FOR PERSONAL CARE PRODUCTS

WHITE PAPER

INTRODUCTION

With an ever-growing array of product types and pack formats, cost, innovation and value for the money are among the key drivers and trends shaping packaging in the personal care market.

Within personal care packaging, cosmetics, hair care/color, and skincare are the largest product categories, accounting for 18.9%, 19%, and 22.6%, respectively.[1] Growth within the skincare market will mainly be driven by an increase in demand for facial care and anti-aging products.

The increased use of personal care products by men is also helping to drive growth in personal care packaging. Mintel expects that the US men's personal care market will reach $3.9 billion in 2014, representing growth of 15 % since 2008.[2]

While there is increased use of facial skincare among young men, toiletry products, such as anti-perspirants/deodorants (APDO), shower gel, and hair care products enjoy the highest market penetration, as male consumers use these products on a daily basis to maintain their personal hygiene. In fact, the men's APDO segment alone increased by 13 % during 2008-13 and is now worth $1.4 billion.[3]

The APDO segment will continue to grow steadily year to year into 2018. The continued growth is not surprising as some 95 % of men report that they use an APDO product, making it the most commonly used product among all male respondents.[4]

Clearly, there are a lot of new things happening in the personal care market, making it an attractive area for packaging companies looking to expand their business.

Sustainability at what price?

Environmental awareness campaigns have propelled sustainability initiatives to the forefront of consumer considerations in personal care purchasing.[5] At the same time consumer packaged goods manufacturers have responded by using more natural ingredients and recycled packaging.[6]

These same sustainability initiatives have provided suppliers the opportunity to cut costs and create product differentiation. Costs have been cut with the use of lighter weight or smaller packs and the constant push for reduced waste has provided suppliers a means to differentiate their products.[7] The overall impact will be an increase in the sale of higher volume, cheaper ranges and plastic is expected to be the big winner over the next decade.[8]

Substrate flexibility

Rigid plastics are the most commonly used material for packaging personal care products, accounting for over half of the total market value in 2012, with future growth expected to outstrip the market average. Glass is the second largest material category, followed by flexible packaging and board.[9]

Plastic bottles and jars account for the largest share of personal care packaging with 27.8 % of total market value in 2012 and they are set to continue to outperform all others. Cosmetics cases, pumps, and sprays are also forecast to grow ahead of the market average rate. Conversely, metal containers are expected to lose further market share.[10]

Effective coding and marking equipment must continue to be capable of delivering high-quality codes onto a variety of substrates.

FACTORS TO CONSIDER

Choosing the right coding solution is not easy. No two applications are exactly the same and the following are factors to consider when deciding which coding solution to choose:

- Code content – will a simple, one-line date and batch code be sufficient in the future? What are the requirements from your packaging designers and customers? Will increased code complexity such as additional lines, or printing in different orientations be supported by the printer you choose, or will you need to purchase another printer?

- Substrate – consider the range of materials you need to code onto (e.g. rigid or flexible plastic, metal,card, or cardboard). Ensure that you have each of these sample-coded by the printers you are considering. Is the code legible? Also consider the range of colors of the materials you want to code onto: could one coding solution be suitable for all?

- Line speed – will the coding solution keep up with your line speeds? Will the print be compromised if it cannot?

- Factory environment – if your coding environment is wet or dusty then ensure that your coding solution has the right IP rating to perform reliably.

- Available budget – not just the initial purchase price, but consider the overall cost of ownership and factor in reliability; by compromising on price you may pay more with unexpected breakdowns. Is leasing a better option, as a revenue rather than capital cost? During seasonal peaks in production, will rental give you flexibility to meet coding demands?

- Testing – will your coding and marking provider offer a free trial? You need to be sure the machine is capable of adapting to the demands you will put on it.

Key drivers behind coding purchases include code quality, reliability and cost of ownership. These and other factors are often interlinked.

Code quality

Flexible coding equipment gives the option to print onto differing substrates, allowing you to meet fast-changing requirements from customers who, in turn, may be responding to shifting consumer demand.

Add a printer's potential to be moved easily from one line coding onto one substrate, to another line coding on another, and the value of versatile equipment is soon obvious. Or, different types of pack may require the code to be printed at different angles – from the top, side or bottom – so a print head which can deliver from various angles can be a huge advantage.

Code accuracy is also a major consideration. As pack designers seek new ways to provide on-shelf impact, the amount of space available for functional information such as durability dates continues to be squeezed. Set against this may be legislative requirement for the code to be printed using characters of a certain size. This means printers have to be able to deliver the code accurately into what may be a small area.

Reliability

Reliability is a must: as other parts of the production line become faster, coding equipment has to be able to keep up, especially in coding environments where a machine could be exposed to liquid or powder.

You need to keep your line moving not just at high speed peak times, but also just as reliably when volume output may be lower.

Maximizing productivity means reducing unscheduled and scheduled maintenance time and costs. Printers have to be equipped with quicker trouble-shooting & servicing capabilities and 'self-service' options to allow basic maintenance to be carried out without the need to bring in an engineer.

Low Cost of Ownership

Flexibility is key here: a printer that can fulfill several coding functions by being moved between lines will pay for itself in months.

Today's lean manufacturing principles, sometimes led by quickly-changing consumer demands, require production to be more flexible and to handle smaller batch sizes and faster delivery. Therefore the printers must be more flexible – capable of dealing with faster product changeovers and easily moveable between production lines.

When selecting the appropriate marking and coding equipment, overall cost of ownership should be considered. Manufacturers should be sure to include not only the initial purchase price of the equipment but

the consumables and servicing costs over years as well as the hidden cost of downtime caused by unreliable printers or delays in code entry during changeovers.

From a purchasing perspective, attractive leasing options may be available, where the higher overall cost is offset by the attraction of not having to get capital expenditure approval. Servicing and consumables can be added in to make the overall cost predictable from the start.

Examine what arrangement works best for you – buying, leasing or renting all have advantages in different production and business environments.

Ease of Use

Feedback from Linx research across a range of markets suggested that users prefer a simple, cost-effective solution rather than complex, feature-heavy machines. A printer with an intuitive interface will save time during product changeovers when new codes are entered: prompted coding fields can simplify this process even further and remote control features will also allow code control from a central location, further reducing the risk of coding errors.

The costs of errors can be substantial, particularly if these are not detected until after product has left the factory.

THE DIFFERENT CODING TECHNOLOGIES

There is a range of coding technologies available, each with their own particular strengths in different applications.

Continuous Ink Jet

Continuous Ink Jet (CIJ) holds an important place in the market as it can print on almost any substrate. A wide range of inks is available to use with CIJ printers. Choices include inks of different colors to ensure legibility on any color substrate. Many more inks are available, each optimized for specific applications.

From plastic and glass to paper, metal, and cardboard, CIJ can print from one to multiple lines of text and simple graphics at speeds of over 2600 characters per second. Further versatility is given by the compact print head that can be situated above, beside or beneath a production line – even traversing from side to side across the line if necessary. With lighter models increasingly being produced, the CIJ printer is more capable of being quickly moved from line to line and is quicker to install and set up than laser coders.

Laser

Laser coding has no ink involved in the coding process and therefore no drying time and no risk of smudging. This can be an issue on some materials where the coded product is in contact with other products or handling systems soon after coding. Laser coders are suitable for a wide range of substrates at any line speed. They are particularly attractive due to low down-time, high-speed capability and the fact there is no use of consumables.

Steered beam laser systems are highly versatile as they provide clear, consistent and perfectly formed characters in a variety of fonts and message formats, and enable the use of high quality graphics and logos over relatively large print areas. They are particularly suitable where high quality codes are required (e.g. to blend in with the style of the preprinted packaging).

Since their introduction into coding and marking, the advances in technology and efficiency means that the initial purchase price has significantly reduced. Add to this the low cost of ownership due to no consumables and relatively low maintenance, laser coders are a popular choice for personal care applications.

Developments in design have also recently given rise to a new generation of lower cost compact laser coders, which offer an affordable alternative to other technologies while still maximizing functionality.

Large Character Marking

Case coders are particularly well-suited for printing variable information onto secondary packaging such as cardboard boxes. These outer cases usually require text and graphics which are easy to see.

Case coders can print to a high-resolution quality capable of printing alphanumerics and barcodes, and are versatile enough for use on a variety of surfaces and materials. Easy to set-up and adjust, their reliability and predictable cost of ownership endear them to production lines in a range of industries. They are also a cost effective alternative to pre-printed boxes or labels.

Thermal Inkjet Printers

TIJ printers also offer a flexible coding solution for both outer cases and primary packaging. Although offering a smaller print area than case coders, these high resolution coders can print alphanumerics and barcodes while offering superb print quality for premium packaging, and are a cost effective solution for slower production lines or where production is not 24/7.

BRAND PROTECTION

Personal care and pharmaceutical products rank fifth in the most counterfeited products in the US, according to figures from Customs and Border Protection (CBP).[11]

In 2013, CBP agents seized nearly $80 million worth of counterfeit pharmaceuticals and personal care products. This was 4 percent lower than the nearly $83 million of such shipments seized in 2012, and down 44 percent from $142 million in 2011. This reduction was largely due to increased international efforts to crack down on the sale of fake prescription drugs. Despite the reduction in value of seized goods, pharmaceutical and personal care items rose up the list of most counterfeited products.[12]

The ability to protect a product and consumers, and to demonstrate product authenticity, can help build trust and reassurance. Many manufacturers are also looking for effective and unobtrusive ways to track products throughout the production and packaging processes.

The coding and marking industry is able to offer some solutions.

Serial numbering of packs can help identify that a product is genuine, through the use of codes that can be linked back to a central warehouse for authentication. Hiding the identification or serial number in an encoded format such as a Data Matrix code makes it more difficult for these codes to be reproduced.

Combining this with supply chain management, whereby individual products are scanned as they migrate from manufacturer to end user, can provide added security and highlight where counterfeits may be originating.

CONCLUSION

Make sure you have explored all the options in order to select the coder that meets your exact requirements.

And remember line speed, code content, the coding environment, and true cost of ownership are all important factors to consider before making your choice.

A reputable supplier with experience in supplying coding solutions to the personal care industry should be your first point of contact.

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