From an idea to a labelled product

Why you should produce your own product labels and how DTM Print can help you to save money and time.

Manufacturers of almost any type of product often find themselves in need of short-run, full-colour customised product labels. Here are just a few applications across a broad range of industries:

- Specialty and gourmet foods and beverages
- Wineries, vineyards, specialty wine and spirits retailers
- Coffee roasting and specialty teas
- Cosmetics and personal care products
- Nutriceuticals and vitamins
- Organic and natural foods
- Plants and nursery products
- Water bottles
- Contract manufacturing and private labeling
- Print shops
- Medical supplies
- Automotive cleaning products
- Industrial and home cleaning products
- Pet foods
- Dairy products
- Candles, scents and gifts
- Corporate gifts

Reasons Why

There are many different reasons for the need of short-run labels: for use on prototype products, promotional campaigns, and perhaps most often, because the manufacturer has many different products that are all produced in smaller quantities.

Another reason is that you need to print variable data on your product label. Whether using inkjet or dry toner printers from DTM Print you have the possibility to print serial numbers, bar codes and other variable data fields.

Even more common is the need to print, in a single run, x number of one label followed by x number of another label for x number of different formats. While virtually impossible to accomplish on traditional analog equipment, this capability is fast and easy with the colour label printers DTM Print is offering.

Putting the most professional colour labels possible on your products will set them apart from others. This is especially important for smaller manufacturers who can actually increase their sales by making their products stand out through innovative packaging and labeling. It also allows manufacturers of all sizes to offer private label goods in smaller quantities.

Benefits with DTM Print

By choosing a label printer from DTM Print you have many advantages:

- **On Demand Printing**
  Print when you want and exactly the quantities you need – it doesn't matter if you print just one or thousands of labels at a time.

- **Speed**
  Print your labels fast and don't be bound to the print shop's delivery.

- **Flexibility**
  React quickly to market changes or other factors such as changed ingredients.

- **Cost-Efficiency**
  Save money because of a lower cost per label, which means a higher profit for you.

- **Personalisation**
  Offer your customers an added value and personalise your products.

- **All-in-One-Solutions**
  DTM Print doesn't only deliver the hardware. It also supports you e.g. with software for the label design. As a customer you can download the following from the DTM website:
  - NiceLabel Free 2019 DTM Edition (for Windows User)
  - BarTender UltraLite (for Windows User)
  - SwiftPublisher (for Mac User)

- **Performance**
  All printers offered by DTM Print are in no way inferior to printers in print shops. They all convince with an outstanding print quality.

Print Quality

The printed quality and appearance of the labels are extremely important. Providing a professional appearance on packages can easily make the difference between a product selling well or simply sitting on the retail shelf.

But finding a cost-effective and convenient way to produce high-quality, full-colour labels has not been easy. Until now, your choices have been limited to:

Flexographic ("flexo") printing

This is the most common method of printing "primary" product labels – those that go onto the product itself. However, flexo technology is generally affordable only in larger production runs – usually 10,000 or more identical labels at a time.

Creativity can be compromised on flexo since you are generally limited to several hundred PMS (Pantone Matching System) spot colours. If photos are required on labels, a visible dot pattern becomes apparent and is generally equivalent to only about 200 to 300 dpi.

Set-up costs for flexographic film, plates and "make-ready" (aligning four separate printing plates, mixing ink, etc.) are substantial, adding significantly to the cost when printing short-run jobs. Delivery usually takes about 3-4 weeks. Often, labels will need to be discarded when product information changes and the job needs to be reprinted.

Traditional offset printing

Like flexo printing, full-colour offset printing is generally appropriate only for longer runs. Offset printing is also limited to sheet-fed presses. Most end-users prefer rolls of labels because they can be used with automated applicators and are more compact to store on a warehouse shelf.

Digital offset printing

Offers many of the advantages of variable information and shorter runs, but presses are very expensive. Unless you can justify such a large equipment investment, these types of labels are usually sourced from an outside supplier. Delivery times are usually several days to a week. Print quality is better than flexo, but many digital offset presses require expensive lamination films to protect the inks from abrasion and handling. This is especially true of digital presses that use so-called liquid toner.

Colour thermal transfer printing

This method offers the advantages of printing variable information and short runs. The major disadvantage is that print resolution is very low – only 203 to 400 dpi. Machinery is also expensive. It does not produce a professional, offset-quality result, so thermal transfer is used mostly for industrial shipping and box labels.

Two other short- to medium-run label printing technologies are available: Colour inkjet and colour LED/laser label printing. Both provide high-resolution, durable labels that are ideal for primary label applications.

Label Printing with Inkjet

Inkjet technology has been in widespread use for many years in home, office and even professional photo and poster-printing applications. But because it had not been used extensively in the label industry, many people thought that it was not robust or waterproof enough to produce primary product labels. With today's state-of-the-art inkjet technology, just the opposite is actually true. If you combine inkjet technology with the right material, such as the DTM Poly White Gloss, the print is even water resistant.

With the colour label printers DTM Print is offering, you can produce full-colour product labels at up to 4800 dpi – about 240 times higher resolution than flexo – in up to 16.7 million colours.

Colour inkjet is typically better suited to short runs versus medium runs since ink capacities are lower and speeds are slower. However, print quality is not at all sacrificed. In fact, colour inkjet printing is among the best available of any competing technology.

Inkjet label printing has many advantages over other short-run label production solutions for three main reasons:

1. Lower Cost per Label = Higher Profits

Printing only the number of labels you need is always a better choice and will cost less. Why order thousands or even tens of thousands of labels from an outside vendor when you only need 500? You'll also save money by eliminating obsolete label inventory.

2. Time Savings

Since you print the labels when and where you need them, and only in the quantities you need, you'll save time and be able to get your product to market faster.

3. Extra Profits

Since labels can now be personalised, it is even feasible to charge more for your products. This is especially true when products such as wine, water bottles or corporate gifts are personalised.

DTM Print provides the following colour label printers from Primera Technology Inc., which utilise the latest inkjet technology.

1. LX500e/LX500ec Color Label Printer

- Designed for retail POS and other POI applications
- Small, compact size (264 mm W x 389 mm D x 180 mm H)
- Prints up to 101.6 mm (4") wide
- Borderless, photo-realistic printing
- Tri-colour ink cartridge (CMY)
- Easy switch from dye-based ink to pigment-based ink
- LX500ec with built-in guillotine cutter

2. LX600e Color Label Printer

- Designed for high-quality product labels
- Fast print speeds with up to 114 mm (4.5") per second
- Prints up to 127 mm (5") wide
- Borderless printing, photo-realistic printing
- Tri-colour ink cartridge (CMY)
- Easy switch from dye-based ink to pigment-based ink
- Built-in fully automatic pizza-wheel cutter

3. LX610e Pro Color Label Printer

- Automatic, built-in die-cutting: Cut custom labels of any shape or size
- Fast print speeds with up to 114 mm (4.5") per second
- Prints up to a wide of: Pre die-cut: 127 mm (5"),
                                              Die-cut: 104 mm (4.1")
- PTCreate™ Pro software is included (for contour cutting)
- Borderless printing, photo-realistic printing
- Tri-colour ink cartridge (CMY)
- Easy switch from dye-based ink to pigment-based ink
- Built-in fully automatic pizza-wheel cutter

4. LX910e Color Label Printer

- Fast print speeds with up to 114 mm (4.5") per second
- Prints up to 210 mm (8.25") wide
- Borderless printing, photo-realistic printing
- Tri-colour ink cartridge (CMY)
- Easy switch from dye-based ink to pigment-based ink
- Built-in fully automatic pizza-wheel cutter

5. LX2000e Color Label Printer

- Industrial-grade label printer for high UV- and water-resistance colour labels
- Fast print speeds with up to 152 mm (6") per second
- Prints up to 210 mm (8.25") wide
- Borderless printing
- Four large, seperate BS5609 Section 3 certified pigmented ink cartridges for Cyan, Magenta, Yellow and Black
- Ethernet, USB 2.0 or wireless connectivity
- Built-in fully automatic pizza-wheel cutter

Label Printing with Dry Toner

Laser Technology

Colour laser technology is often used in desktop applications on cut sheets of paper. Although well-suited for office use, it has generally not been a good choice for labels. There are a number of challenges: (1) general-purpose laser printers are not continuous-feed and can't handle rolls of paper, (2) substrates are quite limited – mostly just plain paper, and (3) lasers tend to require more maintenance when feeding materials with pressure-sensitive adhesives.

LED Technology

The printing process is similar to laser printers, fusing dry toner to the label material through a heat unit (fuser). LED technology delivers high resolution with more accurate, striking printed labels. The digital LED technology requires less space so the printer is compact, environmentally friendly and energy efficient, using significantly less raw materials in the manufacturing process and consuming less energy. LED print heads have no moving parts, making them robust and ultra-reliable.

Printing with a dry toner colour label printer has some advantages for medium-to-large-runs:

1. Fast print speeds
2. Lower cost of consumables
3. Highly durable prints
4. Toner can't dry out and is more high-yield in comparison to ink cartridges
5. Maintenance is very low

DTM Print provides three dry toner based label printers from different manufactures:

1. DTM CX86e

- Fast and compact printing solution for production, POS and POI applications
- World's smallest LED dry toner colour label printer
- Print resolution: 1200 x 1200 dpi
- Three-colour toner cartridge (CMY)
- Prints up to 86 mm (3.39") wide
- Built-in rotary cutter (cuttable media length 53 mm to 551 mm)
- USB 2.0, Ethernet, WLAN (optional) connectivity

2. Primera CX1200e

- Colour laser with four separate laser engines (CMYK)
- Photo-quality, full-colour labels
- Print resolution: 1200 dpi x 1200 dpi, 4800 Colour Quality (2400 x 600 dpi)
- Prints at speeds of up to 487.68 cm (19.2") per minute
- Prints up to 203 mm (7.99") wide
- Integrated touchscreen PC
- Includes software that matches your workflow

3. OKI Pro1050

- LED dry toner colour label printer
- Print with five colours (Cyan, Magenta, Yellow, Black and White)
- Fast print speeds with up to 152 mm (6") per second
- Prints up to 126 mm (4.961") wide
- Built-in rotary cutter (mind. cuttable media length 101.6 mm)
- DTM Print offer: Complete solution with an All-in-One-PC, approved for 24/7 nonstop operation

The ABC of Label Finishing

Labels printed on CX1200e and other similar digital presses must be "finished" afterwards by a secondary process. The finishing steps include die-cutting, optional laminating, slitting and rewinding to finished rolls. A variety of finishing options are available, most requiring the use of flexible or hard-tooled rotary or semi-rotary dies. However, dies are expensive and take time to get delivered. A different type of finishing system utilising digital die-cutting may be a better choice for companies who need maximum flexibility, low running costs and faster time-to-market. These systems use knife blades which pivot to produce labels cut into virtually any size and any shape. No dies are required.

Until now, the main disadvantage of digital die cutting systems has been their slow production speeds. Primera has changed that with the FX1200e Digital Label Finishing System. FX1200e has a patent-pending multiple knife blade system that can quadruple finishing speeds.

Other Uses for Short- to Medium-Run Digital Labels

Even though many users of the label printers DTM Print is offering are small to medium-sized companies, larger brand-name manufacturers also have the need to produce short runs of labels. They use them for market research, pilot runs, prototypes, private label goods and focus groups.

Marketing, advertising and promotional companies can produce labels for their collateral materials that indicate special offers, holiday greetings and other sales-driven and/or personalised messages.

Let Your Labels Shine

It's a fact: Shiny highlights on your labels gets them noticed. With the foil imprinting systems from DTM Print you can easily add brilliant, shiny elements to your pre-printed or blank product labels. Shiny metallic decoration and partial glossy clear elements on labels make your products stand out at retail, helping you sell more. It also adds a touch of elegance and luxury, enhancing the value of your products. You can print as few or as many at a time as you actually need.

1. DTM FX510e/FX510ec

- Small, compact size (226 mm W x 171 mm H x 285 mm D)
- Prints up to 105.7 mm (4.16") wide
- Borderless printing
- Including an external passive label unwinder for rolls with an outer diameter of up to 254 mm (10")
- FX510ec with built-on guillotine cutter

2. DTM FX810e/FX810ec

- Industrial-grade thermal foil printer for up to 220 mm (8.66") wide labels
- Robust metal housing with an intuitively to use colour touchscreen
- USB 2.0 and Ethernet 10/100 connectivity
- Including an external passive label unwinder for rolls with an outer diameter of up to 254 mm (10")
- FX810ec with built-on guillotine cutter

No More Self-Rewinding of Labels

Save time during the entire printing process by using a DTM Print unwinder and rewinder. A rewinder eliminates the need to rewind printed labels and makes it easy to rewind large quantities of labels.

We recommend to use an unwinder in the following cases:

- If you want to use label rolls that are either too heavy or have an outer diameter that is too large to load them into the printer
- If you want to keep track of how much of your roll is left to be printed

As with all our accessories a pre-test is highly recommended to find the right winder for your customers' needs.

DTM Print offers the following un- and rewinder:

1. DTM RW-7 and UW-7

- Light-weight dancer arm
- For use with virtually any desktop label printer
- Modular core adaptor fits 1", 1.5", 2" and 3" core sizes
- Label roll outer diameter: max. 203.2 mm (8")
- Label roll weight: max. 5 kg

2. DTM RW-9 and LW-9

- Industrial-grade, heavy duty winders
- Durable 2 mm steel housing
- For use with virtually any digital desktop printer
- High torque linear driven motor
- Analog speed control via dancer arm (soft start and stop)
- Reverse support for printers, which pull stock during maintenance cycles
- Label roll outer diameter: max. 330 mm (13")
- Label roll weight: max. 30 kg

Apply Labels Fast and Accurately

You have two options to applicate printed labels to your product: The first one is to do it by hand. The second one is to use a applicator, which applies labels straight without wrinkles or folds in exactly the location desired. This gives finished products a highly professional look and significantly increases the number of containers that can be labeled per hour versus manually applying labels.

DTM Print offers two different label applicators from Primera Technology Inc.:

1. Primera AP360e/AP362e

- Semi-automatic labelling solution for cylindrical containers as well as many tapered containers
- AP360e: Applies single labels at a time
- AP362e: Applies one or two different labels to a single container. A built-in LED counter and memory for up to nine front-to-back label offsets is also included.
- Speed: Up to 1200 containers per hour
- Container with a width up to 238 mm (9.4") can be loaded
- Media liner width: Up to 213 mm (8.375")

2. Primera AP550e

- Semi-automatic label applicator for flat-surfaced containers
- Speed: Up to 500 containers per hour
- Left or right justification of labels is not necessary; operator can adjust to the most convenient position
- High-precision, reliable micro-switch activation
- LED display with built-in up/down counter for labels applied
- Container with a height up to 203 mm (8") can be loaded
- Label width: Up to 101.6 mm (4")
- Label height: Up to 152.4 mm (6")

Genuine DTM Label Stock

To produce exceptional product labels for all kinds of applications you not only need advanced print technology as integrated in our colour label printers but you also need high-quality material.

To guarantee the best results we recommend Genuine DTM Label Stock either for dry toner based printers (such as DTM CX86e, OKI Pro1050 or Primera CX1200e), thermo transfer printers (such as DTM FX510e and DTM FX810e) or inkjet printers (such as Primera's LX-Series).

From pressure-sensitive papers to white and clear polyesters and more, DTM Print has it all!

A wide range of approved matte, semi-gloss and high-gloss materials are available, allowing you to precisely match your substrate requirements. DTM Print has many standard sizes available and any material is available as custom made size. There are different adhesives, too, like non-permanent or hot-melt. Please request prices from your local DTM Print partner or at sales@dtm-print.eu