Equipment Solutions Guide

Product Decoration

UV Flatbed Printers

ITNH, Inc

- UV DTF Printers
- Dye Sublimation Printers
- Garment DTF Printers
- Solvent and UV Decal Printers
- Plotter Cutter

Specializing in industrial inkjet digital printers for over 30 years, we've made it our mission to be *Product Decoration Experts*! Our equipment portfolio is expansive and includes the best-in-class equipment solutions for just about every product decoration application. In this guide, you'll learn about which printing technology best suits your products and how ITNH can help you choose and implement new equipment to make product decoration a success!





What is Product Decoration?

We use the term "Product Decoration" all the time. But, what does it really mean? Products come in all different sizes, shapes and are made from an endless number of different materials. The graphics being printed can range dramatically from simple to sophisticated, from short run to mass production as well as more graphical images versus more informational/technical images. That said, the term "product decoration" is a generic description and does not refer to one printer or one process. There are in fact many different printers, chemistries and processes to get the best results on each different product.

Our objective...

ITNH has been entrenched in industrial inkjet printing for over 30 years. As inkjet printing technology developed in that time, ITNH has made special efforts to focus on the printers best suited to decorate products amongst all the other inkjet printing applications. Our objective is to help our customers replace conventional analog printing technologies, like screen printing and pad printing, with digital inkjet printing technologies.

All of our product decoration solutions share key attributes including:

- On-demand printing workflow
 - iting workflow Hi-res, photo quality graphics
- Amazing Color

- Easy short run and customization/personalization applications

How we can help you....

Our process starts with a thorough discussion with you about your product type, your priorities and your overall goals. Completing this discovery process, we can move through our process of determining and proposing the most ideal solution.

We Test. We Make Samples. We Provide Demos (both in person and remote). We provide Data.

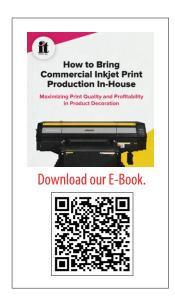
Our goal is here is to arm you with all the pertinent information you need to make your best decision. While it can be tempting to rush this process, we have learned that by being thorough here, it will lead to the best success for you.

We propose a full printing solution...

Our full solution includes the printer(s), ancillary products, software, training and implementation. We represent many different many manufacturers that all make a lot of equipment that you see in this guide. This portfolio of products allows us to propose the right package for your to start with an a path forward to grow your product decoration business.

Long Term Partnership...

ITNH is not looking for quick "equipment deals". We are out to engage in long term win/win partnerships with our customers. Your success is our success. We'll be doing everything we can to ensure you get off on the right foot and go quickly into production printing. Our service and support team will be ready and standing by to handle any issues you may encounter.



Printing "Hard Goods"

Small Format UV Flatbed Printers:

Perhaps one of the most popular product decoration tools, small format uv flatbed printers are designed to print primarily on "hard goods." This includes items made from metal, plastic, glass, acrylic, wood, stone and crystal. And, as the name would suggest, "small format" printers are generally used to print smaller products that can be ganged up in fixtures for easy and accurate printing. "Small Format" is a loose term and ITNH has models that vary fairly significantly in size and production capabilities. These printers excel at printing specialty graphics that include clear gloss and texture printing and can generally handle a varied amount of "unevenness" on the products print surface (like on a curved ball for example).



Mimaki Advantages:

-Many printer choices to best fit your needs -Many ink choices to best fit your needs -Same inks (and containers) used across many models -Mimaki excels at high print quality, precision and accuracy -Model/Ink Selection Makes Mimaki Ideal for Production Printing



Printing Hard Goods (and Packaging)

Large Format UV Flatbed Printers

We generally consider any flatbed printer with a print area of at least 4 feet by 8 feet to be "large format". These printers are normally designed to tackle rigid substrate signage. However, in the right circumstances, they can be very effective product decorators as well. They can also tackle special, short run and custom packaging too.



- Print speed 269 SqFt/Hr (25 SqM/Hr)



- 98.425" x 51.181"; up to 2.362" thick Print Area - Print speed 2,152 SqFt/Hr (25 SqM/Hr) - 16 Print Heads



- 4" Head Clearance
- CMYK plus two white channels

efi 16H/30H (Hybrid for packaging printing)



Maximum printable width 126"
Maximum media thickness 2"
Express mode maximum speed 2477 ft2/h

Why buy your printer from ITNH?

ITNH has carefully created this portfolio of printers to ensure that you get the best possible fit for your needs. Our selection allows our customers to get their printing operations started and grow quickly. Other key ITNH advantages include: • 20 years of experience selling UV Flatbed printers







- In-house application & software experts
- Experienced field technicians placed across the country
- Continual free webinars and other tutorial content for customers
- Color Management Services

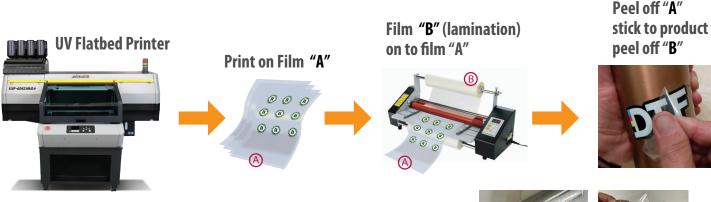


Scan this code to open the ITNH YouTube Page! Discover how EFI Pro Series UV printers are perfect for fast and high quality custom packaging.



"UV DTF" Printing

While both small and large UV flatbed printers do an excellent job at handling a massive variety of products, they can't handle everything. Some products are simply too large or have too complex a shape to properly be handled in the printer. That said, a "UV DTF" process has been developed that can help in some cases. The process workflow is as follow:



ITNH always recommends consulting our application professionals for the best advice and techniques when utilizing UV DTF.



Dye Sublimation

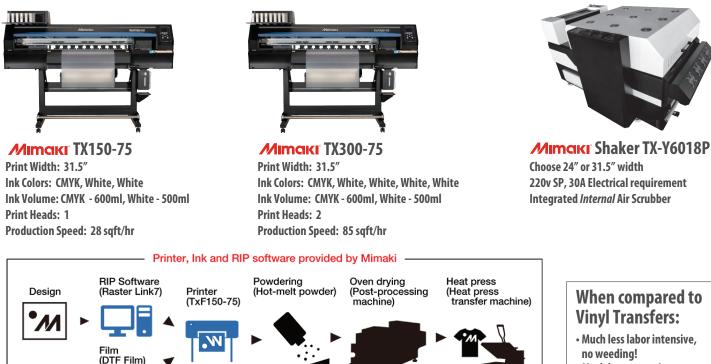
Dye sublimation is a very unique process of printing on "transfer paper" with disperse dyes (or "dye-sub inks") and then heat transferring the image to any polyester fabric. It is also possible to heat transfer the ink on to any "polyester resin coated" product, like a subway tile or mug, so long as they have been specially coated. These capabilities makes dye-sublimation highly attractive for both soft good poly fabrics as well as a large variety of hard goods too.



Unlike many other product decoration options, there is no white dye-sublimation ink available. That said, it has the requirement of printing to white, or very close to white, products. However, dye-sub does have a unique look and feel that differs from UV printing. It is known to be very bright and vibrant as well as super durable for washing on soft goods and scratch resistance on hard goods!

Apparel DTF Printing

Apparel DTF printing has quickly taken over as the number one way to use digital technology to print all things apparel. The DTF workflow has huge advantages focused on costs savings, quality, flexibility and production capability. ITNH has worked hard to create a DTF solution that utilizes the best printing technologies, ink and films available.



- Much less expensive
- compared to vinyl film.

Key Advantages of DTF when compared to DTG:

- Much less labor intensive
- No pretreating before printing
- Much better results on synthetics / sports apparel
- Print to many more substrates (see applications)

Ink

• Uses much less ink, especially white













Solvent & UV Printed Decals

Inkjet printed decals have, at this point, been a long popular means of product and packaging decoration. Solvent ink printing has been around and available longer than UV inks for this application and solvent has been highly trusted to make bright, durable, and long lasting decals. UV inks offer very similar features and offer a few additional benefits as well. Just like in UV flatbed printing, UV "roll" printer ink sets offer an opaque white ink and a clear gloss varnish ink. Having these inks allows printing on a much wider variety of specialty decal substrates like metalized films and the clear gloss allows for more and eye catching and interesting graphics!



Cutters

Cutting can be an integral part of product decoration, be it for the product itself, the workflow materials (vinyl, transfer paper, film, etc..) or perhaps for custom product packaging. To cover all our bases, ITNH has partnered with Summa cutters. Summa cutters are well built, robust and highly productive. The manufacture three major categories of cutters; Roll/Plotter cutters, Flatbed Cutters and Laser Fabric Cutters.







Service & Support

Born over 30 years ago as an inkjet service company, service is our backbone. Our team is dedicated to providing the highest quality equipment, software, consumables and customer care in the industry. Please reach out to us for any questions or concerns related to your equipment.

ITNH & YouTube

This code opens the ITNH YouTube Page! Check out videos on hardware and software support, file setup, application techniques, and more! Please like and subscribe to our channel to stay up to date on all videos to come!



Nationwide Sales & Support

