The K600i embellishment printer

Digital embellishment technology

Revolutionary digital cold foiling, varnish
and white printing setting new efficiency
standards for label embellishment

Domino. Do more.

K600i - digital embellishment

For some time, driven by reducing lead times and ever more SKU's, digital printing has helped to solve the requirement to print shorter run lengths cost effectively. However, after printing, you are then faced with the bottle-neck in finishing, again requiring printing plates and screens with set-up downtime and material waste.

The K600i digital embellishment printer, including the digital printing of opaque white, spot varnish and digital adhesive applied cold foil, brings finishing into the digital age.

A diverse range of applications

Designed for sheet or web – printing onto labels, tags, tickets, forms, security products and direct mail.

Digital foiling, a unique solution for product embellishment and brand protection

Digital Spot Varnish, creates a wide range of tactile effects and textures, and can provide a cost effective alternative to traditional screen printing.

Our widely recognised white printing solution provides a highly opaque white, and offers a cost effective alternative to screen printing.

The Product Range

Each printer includes a compact print bar with mounting bracket and integrated Domino **i-Tech CleanCap** maintenance station.

K600i Variable Data Printer*

High quality digital variable data printing at speeds up to 200m/min (650ft/min).

K600i Digital Cold Foiling

Innovative digital solution enabling conventional metallic foils to be digitally applied to labels, packaging and security products.

K600i Varnish

Spot and tactile varnish capability without the need for printing plates or screens.

K600i White

The renowned cost-effective alternative to screen printing, ideal for a wide range of labels and packaging applications.

Alternative workflow options exist including the industry standard ESKO DFE.

*See separate **K6**00i Variable Data Printer brochure for details.

Modular

Print widths range from a single print module, covering 108mm (4.25'') up to seven dual print modules with a print width of 782mm (30.81''). Print head alignment and image stitching is achieved through the Domino **i-Tech StitchLink** micro-motor controller technology. It is easy and accurate for rapid set up of high quality images.

Dual bar print modules facilitate higher laydown of varnish and white images providing an efficient digital alternative for many traditional screen applications.

K600i White is limited to a maximum of 445mm (17.54'') print width.

Print Modules	Print width	
	(mm)	(inches)
× 1	108	4.25
× 2 or 4	220	8.69
× 3 or 6	333	13.11
× 4 or 8	445	17.54
× 5 or 10	558	21.96
× 6 or 12	670	26.39
× 7 or 14	782	30.81

Operating Speed

Digital foiling with single print bar will operate at up to 75m/min (246ft/min). Digital varnish and white with dual bar configuration will operate from 12.5m/min (41ft/min) to 50m/min (164ft/min) depending on the ink laydown required.
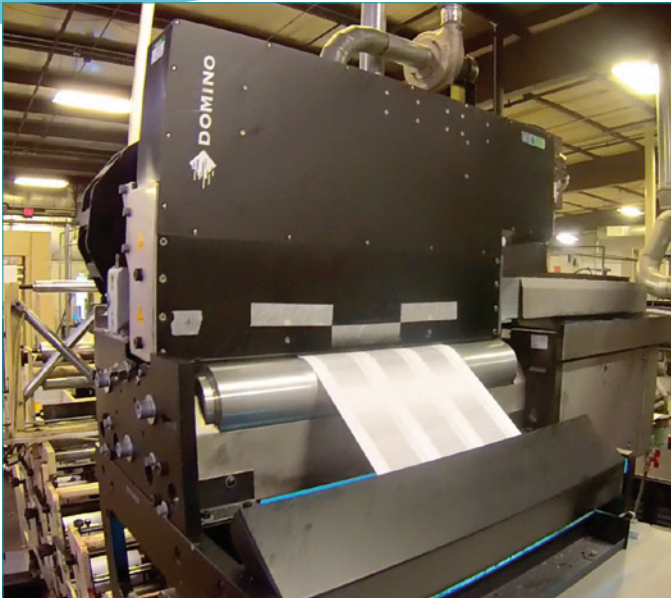
Greener credentials

Domino's commitment and investment in sound environmental practices means we frequently exceed the increasingly demanding governmental, industry and company standards and regulations. We are committed to minimising the consumption of natural resources and energy and the creation of waste. Our products are RoHS and WEEE compliant so that they are recyclable.

K600i

The **K6**00i is supplied with UV curable, LED curable and aqueous inks representing an efficient use of our natural resources. Although UV curable inks are chemicals and need to be used correctly, they offer significant environmental benefits compared to solvent alternatives. Solvent inks include up to 95% volatile solvents that evaporate into the environment and require regular print head cleaning. **K6**00i UV curable inks contain 1% volatile solvents.

Digital embellishment line

In conjunction with a number of leading label finishing partners Domino can supply a complete digital embellishment solution.

Easy to Integrate

The compact design can also facilitate mounting on an existing press or finishing line, we just need some space and good material control to convert you to digital. Equipment options include a roller section and web extension, enabling simple integration into your existing machine.

Domino. Do more.

K600i Varnish

Options for printing a simple spot varnish at high operational speeds as well as tactile embellishments for added value applications,

Available in standard print widths from 108mm (4.25'') to 782mm (30'') from a dual bar configuration.

The same K600i dual bar system can be interchanged between printing varnish and cold foil applications..

Why use digital varnish and white printing?

✓ Can integrate into your existing production lines

✓ High-quality screen-like finish

✓ Total cost of ownership – no screens and rapid job set up

✓ Added value including variable data printing capability

✓ No high-cost of purchasing flexible screens

✓ Efficient short run production

✓ Operates at up to 50m/min (164ft/min)

✓ Responds quickly to customer requirements with reduced lead times

✓ Utilise varnish printer also for cold foil applications.

K600i White

As seen on the award-winning Domino N610i since 2012 we have made our infamous digital white print capability available now as a separate K600i White module, designed for integrating into your existing conventional printing process.

The K600i White is configured with up to a 445mm (17.54'') print width and prints up to 50m/min (164ft/min).

Domino *intelligent Technology* or **i-Tech** components combine to create a system with superior performance, altogether more flexible and reliable.
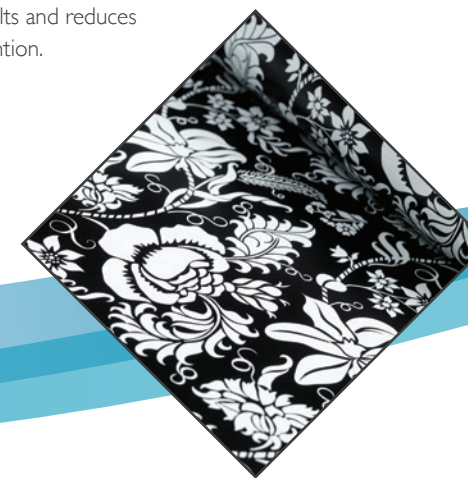
Domino **i-Tech** *UltraMix™* ink tank continuously circulates the white ink ensuring the pigment does not settle, but stays in suspension at all times, providing consistent results and enhanced reliability.

The Domino heavily pigmented **i-Tech** *Trapless™* print bar has a unique design removing all potential ink traps where pigment can conglomerate. This helps to avoid the risk of early life nozzle failure that would impact print quality and reliability.

The unique Domino **i-Tech** *ActiFlow* ink circulation system ensures that the ink is always moving around the print head, even when it has stopped. This degasses the ink, preventing air bubbles forming that can impact nozzle performance. *ActiFlow* maintains consistant and reliable print results and reduces operator intervention.
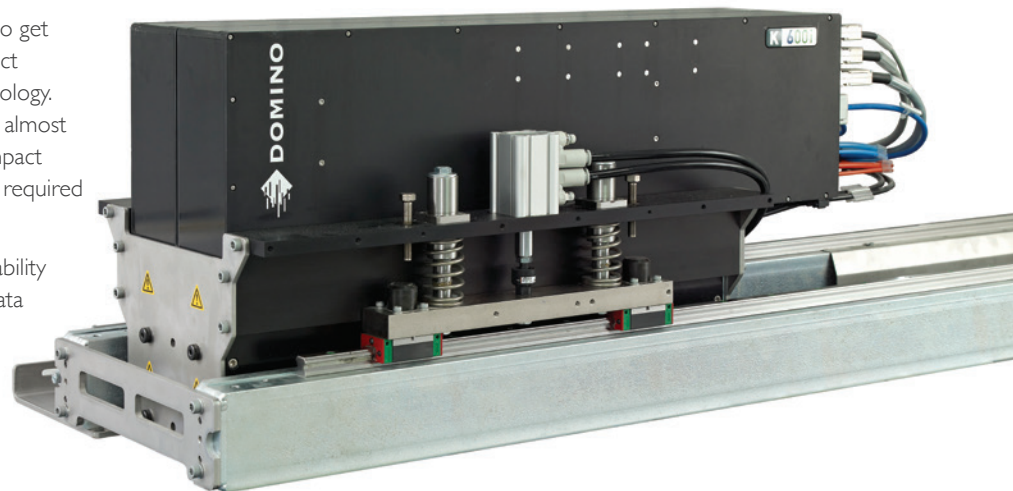
Domino K600i White **i-Tech** *UltraMix™* Ink Tank

White and Varnish screen-like printing replacement with a difference

There are no screens to be produced in order to get that opaque bold two dimensional textured effect typically only possible with screen printing technology. K600i is non-contact and clean to operate, with almost no maintenance, efficiently providing this high impact printing, in any quantities, with no waste or time required to change from printing one job to another.

With shorter lead times, efficient short run capability and the capacity to print added value variable data printing, the K600i provides a real competitive advantage and added value capability.

Domino. Do more.

K600i Digital Cold Foiling

This innovative second generation digital solution from Domino enables conventional metallic foils to be digitally applied to labels, packaging and security products.

At speeds of up to 75m/min (246ft/min) the Domino **K6**00i cold foiling system delivers real productivity. Combine this with virtually no make ready, no special tools, plates or dies, along with low maintenance and you have a highly efficient system to help you increase sales and profitability.

The same **K6**00i dual bar can be interchanged between printing varnish and cold foil applications.

Packaging Embellishment

Especially for short run work, digital cold foiling is a highly efficient method to apply decorative foils to pharmaceutical, personal care, cosmetics, food and beverage labels and packaging.

Brand Protection and Authentication

Digital cold foiling is used to enhance brand protection, provide traceability and represents an enhanced anticounterfeiting measure. By combining the 'printing' of variable content including features such as variable text, security marks and graphics onto customer specific customised holographic foils, it provides increased complexity and a heightened level of security that is difficult to replicate.
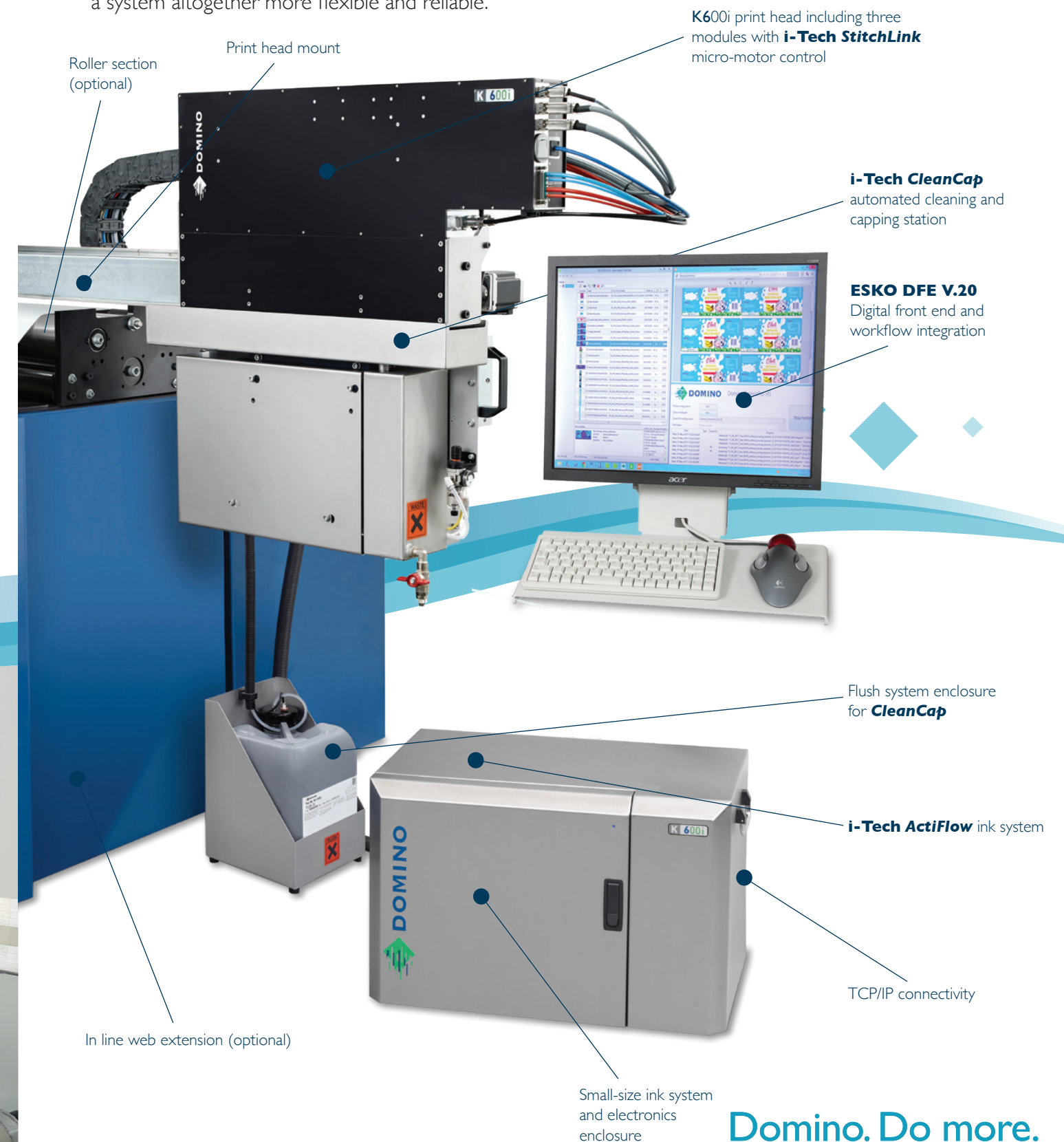
Why use digital foiling?

✓ **Versatile** - no requirement to produce flexo plates or expensive tooling

✓ **Lead time** - can print job as soon as image is loaded

✓ **Impact** - brighter and more reflective than printed foils

✓ **Quality** - produces large solid areas as well as images with fine detail

✓ **High Security** - combined with customised holograms provides unique security solutions

✓ **Durable** - highly resistant to handling and abrasion

✓ **Extensive range** - different shades, holographs and finishes

A quick tour around the K600i

intelligent Technology

i-Tech components combine to create a system altogether more flexible and reliable.

Roller section (optional)

Print head mount

K600i print head including three modules with **i-Tech** *StitchLink* micro-motor control

i-Tech *CleanCap* automated cleaning and capping station

ESKO DFE V.20 Digital front end and workflow integration

Flush system enclosure for *CleanCap*

i-Tech *ActiFlow* ink system

TCP/IP connectivity

In line web extension (optional)

Small-size ink system and electronics enclosure

Domino. Do more.

![DOMINO]

Technical Specification:

Small enclosure - 10 litre ink supply box for up to 3 print nozzles or 333mm/13'' wide print systems

Operational Capability

Maximum line speed Digital Foil	75m/min (246ft/min)
Maximum line speed Digital White	50m/min (164ft/min)
Maximum line speed Digital Varnish	50m/min (164ft/min)
Print resolution	300dpi – 600dpi – 1200dpi options
Nominal drop sizes	6,7,11,14pl (14pl drop only at reduced speeds)
Image width range Digital White	108mm (4.25'') to 445mm (17.54'')
Nominal media to print head distance	1.0mm (0.04'')
Media	Coated and uncoated paper, foil and plastic

Ink System

Ink Supply	1 - 10 litres (ink dependent)
Ink Type	UV Curable/LED Curable/Aqueous/Foil Adhesive/White Heavily Pigmented.

Digital Front End

Options include:

ESKO DFE	PDF files
Editor RIP	IPDS, AFP data streams and PDF files

Key Dimensions

Conduit length - main enclosure to print head 4m (13') for1x1 module, 5m (16') for 1x2 or 1x3 module, otherwise 4.25m (14')
Conduit length - main enclosure to flush bottle 4m (13')

1x3 head print bar	1330w x 354.4d x 705.4h mm (height dimension excludes conduit)
Small-size 10L ink supply box	640w x 441d x 425h mm (dimensions exclude conduit radius*)
Mid-size 10L ink supply box	800w x 400d x 1810h mm (dimensions exclude conduit radius*)
Flush holder	234w x 234d x 360h mm (dimensions exclude air regulator and conduit radius*)
	*Width is configurable, please see below

Mid-size ink supply box for all print systems above 3 print modules

Services

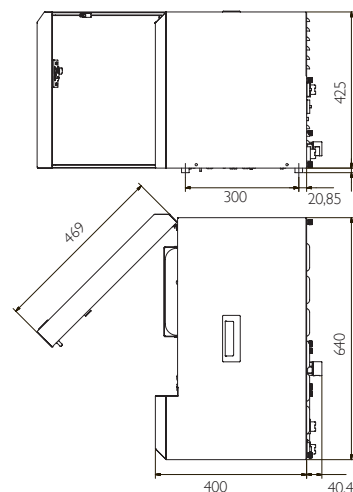|		
Electrical	**K6**00i	110-240v AC50-60Hz 10A (auto ranging)
	UV System	Operation dependent, normally 380-420v three phase drop
Compressed Air		6-8 bar clean dry supply

Environment

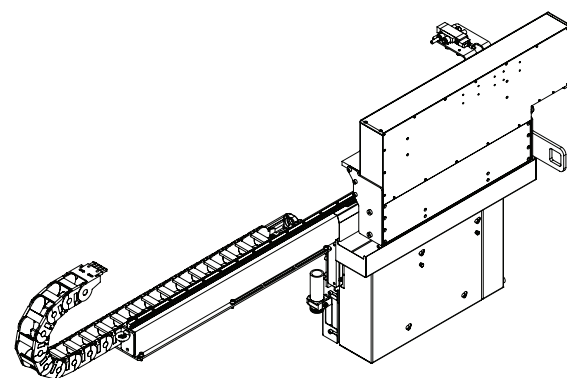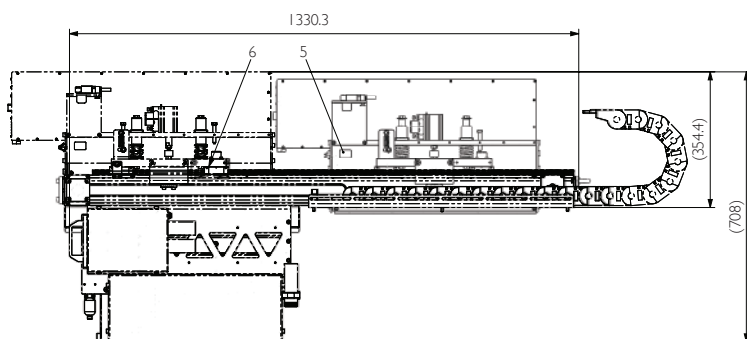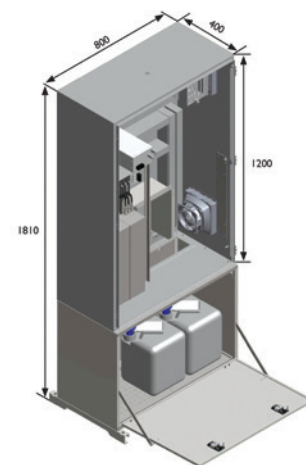|	
Optimum temperature range	20-30°C (68-86°F)
Optimum humidity range	40-60%

Ancillary Equipment

Print head guarding, UV dryer, LED UV pinning, Web cleaner, Web guide, Anti-static bars, Mail base, Web extension, Reel to reel system, Arched roller section, Corona treatment.

Print width to	Head Mount lengths
108mm (4.25'') Single	1339mm*, 1800mm, 2215mm
333mm (13'') Single	1339mm*, 1800mm, 2215mm
333mm (13'') Dual	1400mm*,1800mm, 2215mm
558mm (22'')	1800mm*, 2215mm, 2600mm
782mm (30'')	2400mm*, 2800mm, 3400mm

*Standard length; bespoke length head mounts upon special request

[You Tube]

http://bit.ly/2eLcpZM

[FSC] MIX Paper from responsible sources FSC® C103228

www.domino-printing.com