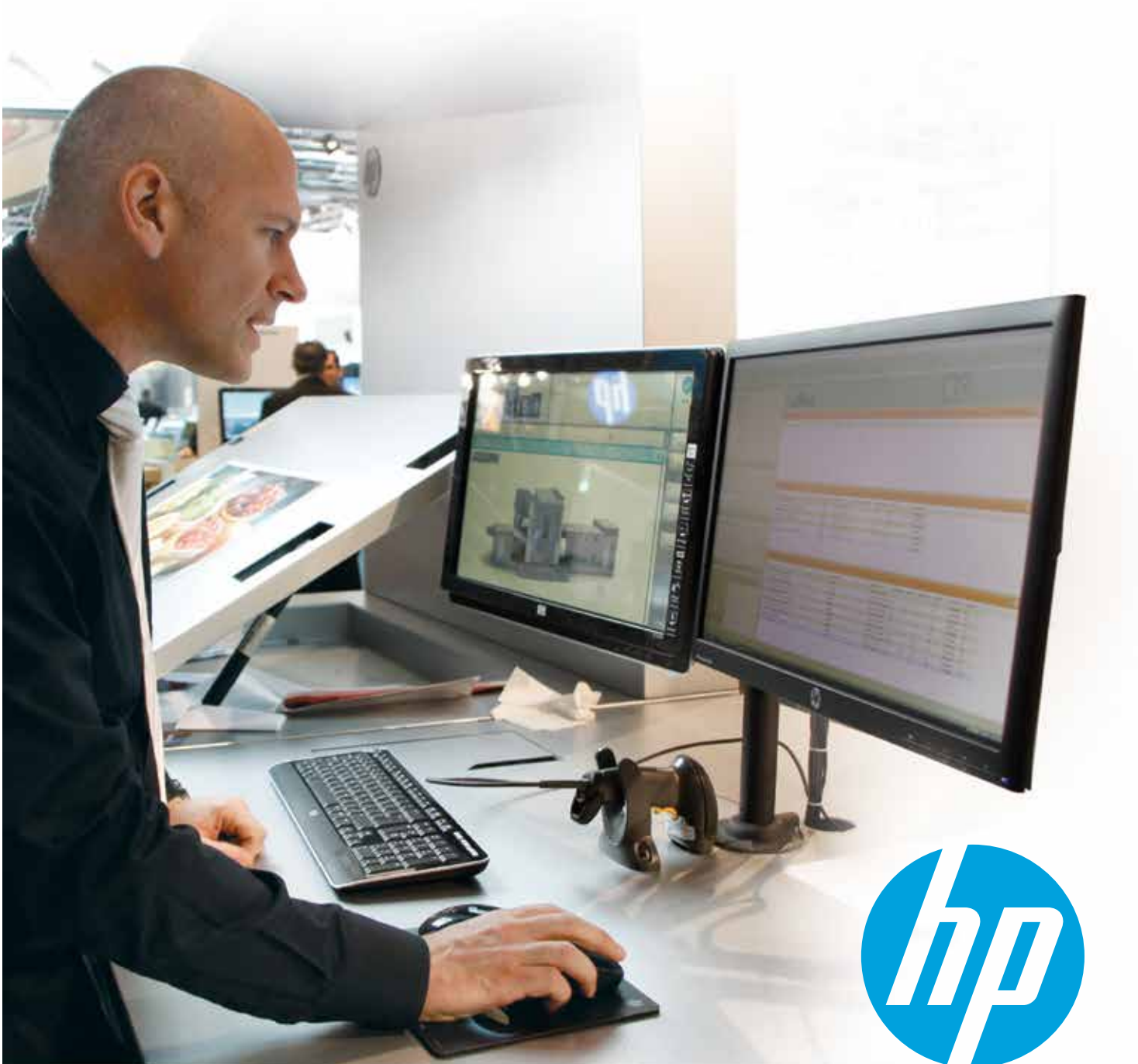


# HP SmartStream

Digital printing workflow and finishing solutions for HP Indigo commercial applications





# Gain a competitive edge

## Drive growth on your HP Indigo digital press business with HP SmartStream solutions

With HP Indigo digital presses you are already ahead of the game. HP Indigo delivers the high-value, on-demand jobs that are now the key drivers of growth and profitability in the industry. The digital content boom is fuelling this phenomenal growth, but this trend is also escalating the number of different jobs and their complexity. HP SmartStream workflow and finishing solutions can help you make the most of your Indigo business in these changing times, as well as take digital printing to the next level.

### HP SmartStream workflow solutions

HP SmartStream workflow solutions address the key growth challenges facing the printing industry today: maintaining operational efficiency to stay profitable and having differentiation to gain a competitive edge. This integrated set of tools from HP and partners improves production efficiency and enables the high-value applications that support the healthy and profitable growth of PSPs. Both scalable and modular, you can pick and choose the HP SmartStream components that serve your business needs as you grow.

### Boost the power of HP Indigo

HP SmartStream workflow management systems can control the deluge of short-run jobs and keep operations running on track. Value can be added to the printed item with data and image personalisation, special effects and other innovative offerings with HP SmartStream tools. HP SmartStream submission solutions make it easy to capture and process jobs from the web and other cross-media data. These are only a few of the profit-generating capabilities enabled by HP SmartStream solutions.

### Open standards

HP Indigo’s openness makes it possible to tailor a solution according to the specific needs of your business—helping you to achieve and maintain a leading edge in the market. Choose one or **more solutions from more than 80 different partner offerings** in addition to HP Indigo’s HP SmartStream components to create the system that works best for you. HP Indigo picks best-in-class partners, certifies their components and integrates these products with HP SmartStream.

A winning business strategy is more easily within reach of press owners that make the most of HP SmartStream. Learn more about these opportunities in the following pages.

## HP SmartStream solutions

<b>Creation and Submission</b>	HP SmartStream Designer, HP SmartStream Composer, HP SmartStream Director
<b>Production Management</b>	HP SmartStream Production Center, HP SmartStream Production Analyzer
<b>Print Servers</b>	HP SmartStream Onboard, HP SmartStream Production Pro, HP SmartStream Ultra
<b>Printing</b>	HP Indigo 10000 Digital Press, HP Indigo 7600 Digital Press, HP Indigo W7250 Digital Press, HP Indigo 5600 Digital Press
<b>Finishing and Fulfilment</b>	HP SmartStream Finishing Automation



# Creation and Submission

## HP SmartStream Designer technical specifications

### HP SmartStream Designer for Adobe InDesign

Intel® based Mac, with at least 2GB memory. Operating system: Mac OS version 10.6.8 or higher, Windows 8, Windows 7 or Windows XP SP3, with at least 2GB memory. Compatibility with Adobe InDesign CS4, CS5 and CS6.

### HP SmartStream Designer for QuarkXPress

Intel® based Mac, with at least 2GB memory. Operating system: Mac OS version 10.6.8 or higher, with at least 2GB memory. Compatibility with QuarkXPress versions 7, 8 and 9.

## HP SmartStream Composer technical specifications

### Hardware

HP ProLiant DL360p Gen8 Server, Dual 2.90 GHz 8 Core CPUs, 32GB RAM, 8 x 300GB HDD, or, HP ProLiant ML350p Gen8 Server, Dual 2.80 GHz 8 Core CPUs, 32GB RAM, 6 x 450GB HDD

### Software

Microsoft Windows 2008 Server R2. Includes Adobe InDesign CS6 Server.

## HP SmartStream Designer

HP SmartStream Designer enables the creation of sophisticated high-value jobs through a simple, affordable variable data tool optimised for HP Indigo presses, based on industry standard tools.

**Sophisticated personalisation.** Create unique and sophisticated high-value jobs. Leverage existing assets to create personalised versions, utilising the full design capabilities of Adobe InDesign and QuarkXPress.

- Rules-based variable data applications
- Support for unique text effects such as drop shadows, glow, and more
- Support for HP IndiChrome, spot colours and new special effects including textured effects, raised print, and sandwich printing
- Advanced image enhancement on all variable images
- Integration with third-party solutions including maps, barcodes, and personalised URLs to add incremental value to the application
- Support for PDF/VT and HP's JLYT for optimal variable data processing

**Connects to third-party solutions.** Personalised images: DirectSmile and Adobe Photoshop; Personalised URLs: MindFire; 1D and 2D Barcodes: TEC-IT Barcode Studio and ID Automation; Dynamic charts and graphs: Adobe Illustrator, Chartz, and Utility Warrior Chart Creator; Personalised maps: Locr maps; Photo Enhancement: Organic Imaging.

**Imposition for VDP.** Built-in imposition schemes provide optimal layout for variable data applications. The tool enables selection of specific records for printing and the printing order. In addition, new drag and drop imposition provides improved ease of use.

## HP SmartStream Composer

A customisable VDP composition tool for HP SmartStream Designer templates, HP SmartStream Composer enables PSPs to efficiently process jobs from capture to print, offering unparalleled cost savings through automatic creation and submission of VDP jobs.

HP SmartStream Composer is ideal for HP Indigo customers that produce medium to high volumes of personalised or customised print products with complex or simple graphical variable information, including direct mail, marketing collateral, and publications. The solution is also flexible and fits the growing business.

HP SmartStream Composer Lite is designed to support relatively simple VDP files with no complex graphics while maintaining high productivity.

**Automation of VDP composition process.** For HP SmartStream Designer customers, HP SmartStream Composer offers the next step of automation, performance and scalability. Optimised for Indigo workflow, HP SmartStream Composer has tight integration with HP Indigo presses and print servers. HP SmartStream composer output supports both the HP Indigo proprietary format (JLYT) and also standard PPML or PDF /VT.

**Highly customisable tool.** With simplified configuration and job queue windows, deployment takes only a few hours, offering same-day progress to full-blown production. Scripting support offers advanced users an extra layer of rules, assets control and data automation.

**Integrates into the Indigo SmartStream ecosystem.** Enabling customers to offer high-value applications, the solution integrates fully into the range of HP SmartStream products. JDF integration to HP print servers enables automated flows directly to the press. In addition, it can connect to the new HP SmartStream Production Center for automatic job submission.



# Creation and Submission

## HP SmartStream Director technical specifications

### Operating system

Microsoft Windows 2008 Standard server R2

### JDF version

Digital ICS version 1.3

### Hardware

Dual 2.80 GHz Octo Core CPUs 32GB RAM (16GB per CPU) DVD RW 6 x 450GB SAS 15K HDD Quad NICs P420i RAID with 1GB FBWC Dual Power Supplies (750W) Standard 20" monitor, keyboard, mouse

## HP SmartStream Director

Powered by Pageflex, HP SmartStream Director uniquely combines web-to-print functionality with back-end production automation, all well integrated into the HP SmartStream ecosystem. This facilitates efficient order capture for a wide variety of jobs with the highest level of automation all the way to the press.

**Grow business with online storefronts.** Build custom-branded online storefronts for multiple business accounts with an unmatched range of applications.

- Storefronts—create branded web stores, each with a customised buying experience to meet the requirements of a variety of users
- Global support—multi-currency, multi-lingual
- Mobile access—ability to access storefronts from mobile devices or tablets
- Wide range of supported applications—from static reprints through sophisticated variable data jobs, powered by HP SmartStream Designer

**Integrated workflow automation.** Automated submission of jobs directly to the press delivers unparalleled production efficiency and cost savings.

- Built-in pre-press tools—preflight, imposition, and variable data composition
- Dynamic routing—jobs sent to the correct press, including JDF/JMF integration to HP Indigo print servers and presses
- Comprehensive view—visibility of all jobs submitted via HP SmartStream Director
- Automated job ticketing that can be customised for end customer and printer
- Gang option—reduces production costs

**All inclusive.** Get everything you need to get started, including:

- World class HP ProLiant ML350 Server, with built-in redundancy
- All software components required, including HP SmartStream Designer server for VDP composition
- Six-month warranty for worry-free ramp up
- A unique six-step training and ramp-up process supports maximum business growth

**Optimised for HP Indigo customers.** Built exclusively for HP Indigo customers, including integration with HP SmartStream Designer and HP Indigo digital presses, the solution ensures seamless production, and end-to-end support from HP.

**Open environment.** Connect to other systems through open, standard interfaces. Generate reports, input to MIS, and more, using standard XML outputs from HP SmartStream Director. New APIs allow interconnectivity of other creation and web-to-print systems with HP SmartStream Director.



# Production Management

## HP SmartStream Production Center

HP SmartStream Production Center is a unique workflow system built to meet the challenges of receiving, producing, and delivering high volumes of short-run jobs, reducing turnaround time and increasing profitability. It supports the automatic submission of jobs by web-to-print, marketing automation or other job creation systems.

**Visibility.** All jobs, presses and finishing devices are visible to the system, and offer full insight into the real-time state of production through the use of configurable dashboards.

**Advanced automation.** When a print job arrives, HP SmartStream Production Center automatically plots out the entire production process, step by step, including finishing.

**Job flow control.** The priority for each job is set, and the job is then placed in the queue. The position of a job in the queue can easily be changed by a simple drag-and-drop operation.

**Production optimisation.** Job clustering or batching helps reduce waste and lowers costs, thus boosting productivity. It also allows priorities to be set according to changing deadlines and delivery dates. This makes it easier for owners and managers to allocate resources, such as operators and presses, with maximum efficiency.

**Integration.** HP SmartStream Production Center includes qualified integrations with leading web-to-print systems. Other software vendors, as well as customers, can leverage the open architecture and software developer kits (SDKs) for easy integration.

### HP SmartStream Production Center technical specifications

#### Browsers

IE9, Chrome 22, Firefox 16, Safari 5 Windows, Safari 6 MacOS7

#### Hardware

2x X5760 8-Core 2.80 GHz CPU, 32 GB RAM, P420i Controller with 1 GB FBWC, 8 x 300GB 10K 6G SAS 2.5" HDD, Embedded Quad Gb NIC, DVD R/RW

### HP SmartStream Production Analyzer technical specifications

#### Browsers

IE9, Chrome 22, Firefox 16, Safari 5 Windows, Safari 6 MacOS

#### Hardware

HP ProLiant DL360 G7 Server, 2x Hex-Core Intel Xeon Processor x5670 2.93 GHz, 12GB FBD PC3-10600R-9 6x 2GB, 2x HDD 146GB or 300GB SAS, 4x 1GB Network

## HP SmartStream Production Analyzer

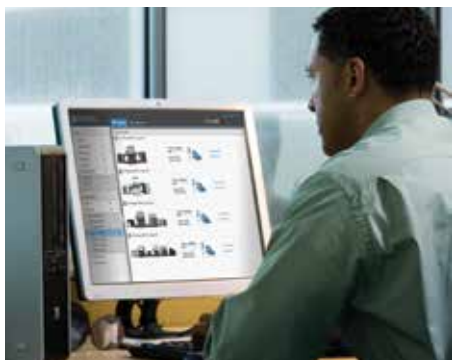
HP SmartStream Production Analyzer is a multi-press, multi-site monitoring tool for HP Indigo presses that enhances productivity in dynamic environments by providing real-time status and easily accessible data analysis. It empowers managers to continuously improve productivity and immediately respond to lapses in operations.

**Production dashboard.** Vital statistics on production efficiency across presses are displayed on screen on the production floor, enabling operators to monitor their production targets.

**Press status.** Print volume, printing speed, jams, errors, and press events are all tracked. The interactive user interface allows highly detailed drill downs to investigate tracked issues as well as press operator annotations. Access to data and analysis results are provided via software developer kits (SDKs) and CSV export. The tool can also be accessed remotely, via a web browser.

**Analysis tools.** Reports on presses and shifts are generated and production is measured against key performance indicators (KPI) benchmarks. A wide range of production data is measured and analysed, including:

- Print volume by impressions, sheets, and linear feet/meters
- Performance by press/shift/operator
- Consumables lifespan
- Main press issues
- Additional parameters, such as press operator annotations, event logs, year-over-year reports



# Print Servers

HP SmartStream Print Servers are scalable, high-performance solutions with modular architecture designed to meet current and future needs of business volume, production and complexity to maximise productivity from HP Indigo digital presses. The solutions include:

- **HP SmartStream Onboard Print Server**— A DFE solution to get started with digital printing, included with the press on HP Indigo press series 5000 and HP Indigo press series 3000.
- **HP SmartStream Production Pro Print Server**—scalable, modular and robust solution for mid- to high-production volume. Rack and tower configurations.
- **HP SmartStream Ultra Print Server**—a tailor-made, high-performance, high-volume server driving multiple presses for photo specialty or publishing applications.

## HP SmartStream Production Pro Print Server technical specifications

### Operating system

Microsoft Windows 2008 server R2, RIP version:  
Global Graphics Harlequin Multi-RIP 2.0r4 (32-bit)

### Client OS

Windows® XP, Vista, 2003, Windows 7; Mac OS  
10.5, 10.6 (64-bit), and 10.7

### Color and quality

ICC version 4.0, device link profiles, CMYK+3  
spots, CMYKOV + 1 spot, PANTONE emulations,  
PANTONE Goe™, PANTONE PLUS; Advanced half-  
toning, CMYKOVG, CMYKOG, CMYKVG

### Hardware

HP ProLiant DL360/DL380/ML350 G7 servers,  
Six Core 2.93/2.8 GHz, Intel® Xeon® X5660 CPU's;  
8-12 GB RAM DDR3 1333 Mhz, 8-16 146GB SAS  
10K rpm SFF HDD, vCORN 5. Some items depend  
on the specific product configuration.

### Input format

Postscript 1,2,3, PDF 1.7, PDF/VT (Including  
optimised PDF), PDF/x-1a: 2001, PDF/X-1a:2003,  
PDF /x-3:2002, PDF/X-3:2003, PDF / X-4, PPML-  
T, PPML 2.2, JLYT/SNAP, EPS, GIF, JPEG, TIFF 6,  
Microsoft XPS 1.0 including HD photo assets, DCS,  
DCS 2

## HP SmartStream Production Pro Print Server

HP SmartStream Production Pro optimises printing for any volume of any application from the simplest to the most sophisticated, including marketing collateral, direct and personalised mail, books and magazines, and photo products.

- High performance—Process thousands of jobs on a daily basis through advanced automation, scalable RIP farm, with the ability to split jobs across multiple RIPs and more.
- Openness—HP Indigo complimentary Software Development Kits (SDKs) enable bi-directional JDF and JMF connectivity to job submission and finishing systems.
- Single point of control—Multi-press connectivity and management from one location.

**Version 5.0.** The new capabilities and main features of HP SmartStream Production Pro 5.0 include:

- Full support for B2 format applications running at press speed
- Automatic finishing, planning, and setup supporting near line and inline finishing devices
- New simplified web-based user interface
- Central substrate and colour management
- New automatic ICC output profile creation per substrate type
- Complete job streaming—fast first page out

## HP SmartStream Ultra Print Server

HP SmartStream Ultra Print Server is a high-performance, tailor-made solution that automatically balances and tracks jobs across the workflow—making it easy to manage resources and keep production on schedule 24/7.

- Supports an unlimited number of presses with scalable RIP farm
- Sophisticated press load balancing tool
- Automatic finishing, planning, and setup supporting near line and inline finishing devices

# Finishing solutions

## Finishing devices with connectivity to HP SmartStream

### LRS

- PageReady

### Horizon

- SmartStacker (B2)
- BQ270 perfect binder
- BQ470 perfect binder
- HT-30 three side trimmer
- HT-70 three knife trimmer
- Stitchliner 5500 and 6000 saddle stitchers
- APC 6111 guillotine

### MBO

- Signature folder K800 (B2)

### Duplo

- DC-645

### Polar

- Polar Mohr 80 guillotine

### CP Bourg

- BME Booklet Maker

HP Indigo cooperates with leading finishing equipment manufacturers to provide a wide range of solutions that meet the diverse business, application and production needs of our customers. We support our customers' business growth by boosting productivity and profitability, via increased efficiency and cost savings, as well as high-value finishing effects that enhance HP Indigo prints. These solutions enable in-line and near-line integration of uniquely designed devices or existing products, supporting flexible, dynamic high-volume production of short and long runs.

The introduction of the B2-format HP Indigo 10000 Digital Press further increases productivity, efficiency and profitability. This format enables offset printers to leverage their existing finishing and binding equipment. B2 efficiency can be taken to an even higher level by using digital finishing.

Digital finishing enables the printer to fully capture the business and production advantages of digital printing. It supports the most efficient and reliable use of digitally pre-collated jobs and variable data. It is fully automated, closed-loop, and minimises waste. Such solutions can be integrated in-line or near-line using JDF connectivity.

## Automating the bindery with JDF connectivity

Finishing connectivity workflow is included in HP SmartStream Print Server Production Pro version 5.0. A Bindery Module, developed by HP SmartStream partner Ultimate Technographics, supports print server JDF workflow, sharing data with the devices, enabling automate setup and operation of finishing devices. The job finishing data is communicated to the JDF-enabled finishing devices. The devices set up and operate automatically and accurately, based on instructions provided by the print server finishing plan included in the Job Ticket template. This saves a significant amount of time in make-ready, reduces errors and eliminates waste. Less expertise is required to operate those devices as the decisions are made by expert systems, and the information is as accurate as possible (no manual measuring or coding), and the instructions provided are precise.



## HP SmartStream Solutions Partner Programme

HP Indigo partners with more than 80 industry-leading vendors in workflow and finishing as well as with emerging players that offer unique, innovative solutions. Partners cover the entire production span—from creation to fulfilment. Many partners are able to integrate their products with the HP SmartStream ecosystem, using open software developer kits (SDKs) that ensure tight, bi-directional and efficient integration.

HP Indigo tests and certifies integrations with its partners' solutions and ensures that customers can enjoy a reliable and efficient workflow. The combination of best-of-breed partners and full integration enables customers to create sophisticated, efficient and unique workflow solutions that fit their requirements. SDKs for integration into HP SmartStream workflows can be found at [spp.austin.hp.com/SPPMain/](http://spp.austin.hp.com/SPPMain/)

### Partners

A B Graphic International Ltd	Global Graphics	Photobook Technology
Adobe	GMC Software Technology	PhotoLynx Inc
Agfa Graphics	GMG GmbH & Co KG	Pitney-Bowes
Athentech Imaging	GMP	Pixami
Avanti	GP2 Technologies, Inc.	Pixfizz
AVT	Heidelberg	Polar Mohr
B2C Print LTD	Highcon System Ltd	PrintFlux
C&J	Horizon International Inc	Prisme Technologies
Cerm	Humaneyes	Quark
CGS ORIS	Hunkeler	Quote & Print
ColorLogic	KAMA	RedTie
CP Bourg	Karlville Development	Renz
Creo PODS	Kolbus	Rollem
Datatech Smartsoft	Kompac Technologies LLC	Saepio
Delta Industrial Services Inc	Label Traxx	Schmedt
DigiLabs	LasermaxRoll TecnaGroup	Scodix
DirectSmile	LumaPix	Smag Graphique
Duplo	MBO	Taopix
EMT	Mediaclip	Theurer
Enfocus	MindFireInc	Totani Corporation
Epic Products	Morgana	Ultimate Technographics
Esko	M-Photo	Unibind
Fujifilm	OLEC	XMPie
Gallus	On Demand Machinery	X-Rite Pantone
GBC	Pageflex	

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