



GUIDE TO HYBRID PRINTING FOR NARROW WEB LABEL PRODUCTION

YOUR FLEXO PRESS + A DIGITAL RETROFIT



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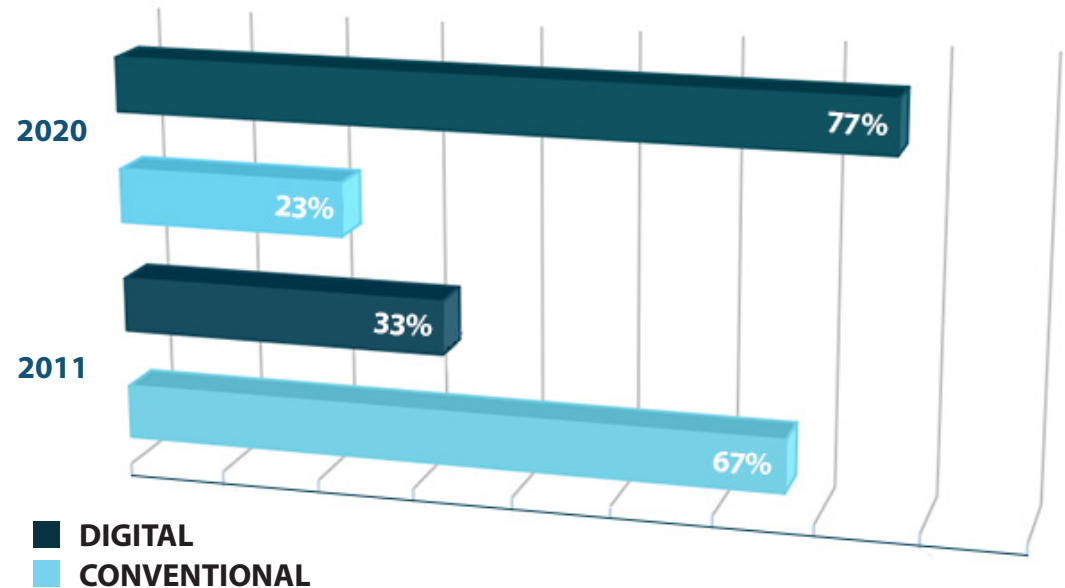
DIGITAL DEMAND CREATING NEW OPPORTUNITY

Digital print complements narrow-web flexo label production, enhancing traditional printing methods with variable data and efficient high-mix, low-volume production.

By the end of 2020, three out of every four new presses purchased will be a digital solution, while only one of every press sold will be a conventional system.

To continue meeting customers' needs with a high level of satisfaction, label printers must integrate digital technology into their operations.

TOTAL PRESS SALES IN THE NORTH AMERICAN MARKETPLACE
2011 vs. 2020 (Projected)



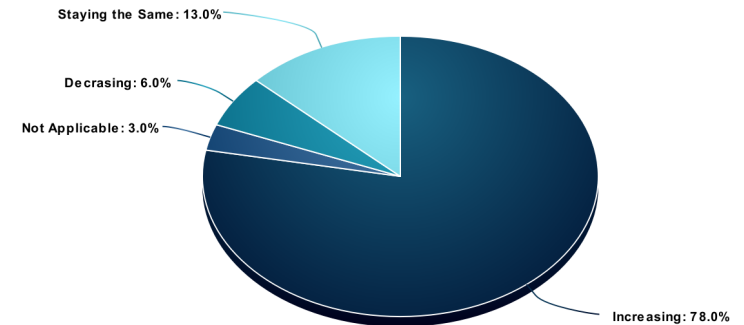
Source: LPC, Inc.

WHY HYBRID?

Driving Forces

- SKU Proliferation – Companies are continuing to see growth through product variation as consumers purchase tailored products that meet their tastes and lifestyle choices. This drives down the average run length creating high-mix, low-volume production, which is more cost-effectively produced with hybrid printing.
- Product Competition On Shelf & Online – Brands are looking for more ways to stand out against their competition not just on the store shelf but also online. Using customization, personalization and regionalization through variable data, brands can create a competitive edge during the purchasing process.

LABEL BUYERS' PROJECTIONS: SKU Proliferation

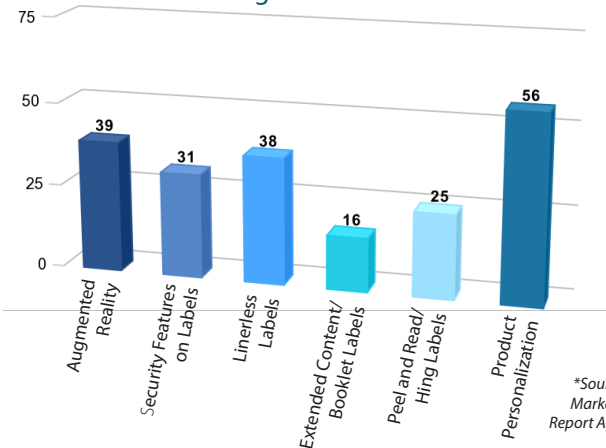


2020 PROJECTIONS

78% of companies predict SKU proliferation will continue to rise*

PACKAGING BUYERS' VIEW:

Technologies not currently used however seriously considering for the near future



*Source: TLM/Market Watch Report April 2020

- New Business Opportunities – Companies are indicating a continuation of high interest in adding personalization into their label production*. This feature is quickly and affordably accomplished with the digital print technology used in hybrid printing.
- Shorter Lead Times – The average label lead time for an existing job is one to three weeks, while new jobs average three weeks or more.* Hybrid printing allows labels to be completed quicker by minimizing setup and changeover times. This helps label converter better serve customers in need of rush orders and faster turnaround times.

HOW HYBRID WORKS

- 1 Print variable data and graphics with digital
- 2 Print static images and text with flexo
- 3 Finish the label as desired with lamination, varnishing, die cutting and more



Printing high-mix, low-volume labels with a hybrid solution, using both flexo and digital print, eliminates the need to purchase and set up plates for the dynamic parts of the label. Likewise, the static label elements are more cost-effectively produced with traditional flexo printing than completely digital production. This flexibility creates greater profitability on each job produced with the hybrid press.

PRINT MORE FOR GREATER PROFITABILITY

Hybrid printing allows label converters to optimize their press' run time by reducing downtime. The math for greater profitability potential is simple:



**LESS
SETUP
TIME**



**LESS
CHANGEOVER
TIME**



**GREATER THROUGHPUT
POTENTIAL
(more jobs per day)**

SETUP & CHANGE OVER TIME - FLEXO

FLEXO:

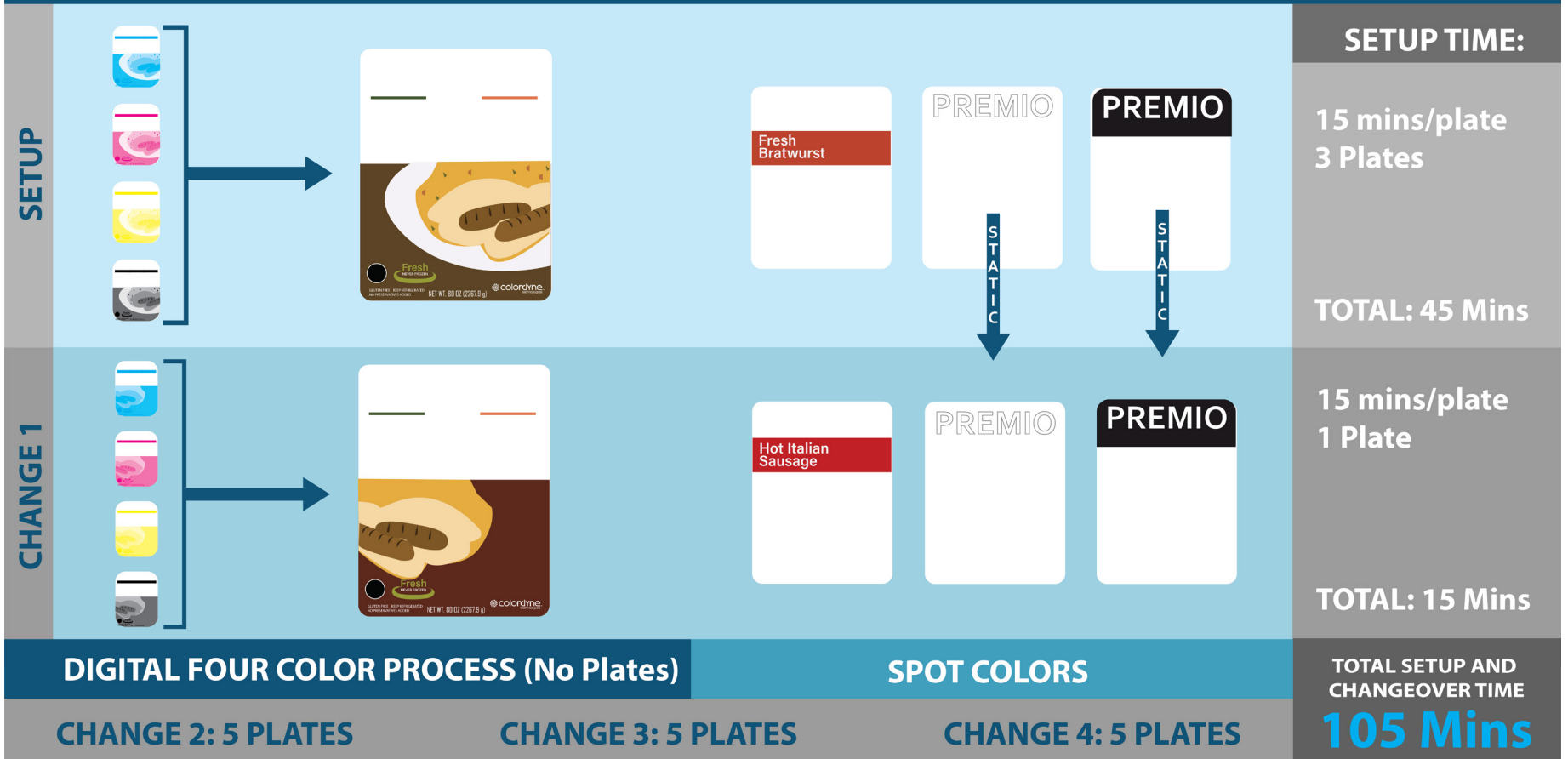
5 Version Job; 5000 Labels Each

SETUP					SETUP TIME: 15 mins/plate 7 Plates TOTAL: 105 Mins
	CHANGE 1				
FOUR COLOR PROCESS			SPOT COLORS		TOTAL SETUP AND CHANGE OVER TIME 405 Mins
CHANGE 2: 5 PLATES		CHANGE 3: 5 PLATES	CHANGE 4: 5 PLATES		

SETUP & CHANGE OVER TIME - HYBRID

HYBRID:

5 Version Job; 5000 Labels Each



FLEXO VS. HYBRID TIME SAVINGS SUMMARY

FLEXO SETUP TIME:		
15 mins/plate 7 Plates	15 mins/plate 5 Plates	TOTAL SETUP & CHANGEOVER TIME
TOTAL: 105 Mins	TOTAL: 75 Mins	405 Mins
HYBRID SETUP TIME:		
15 mins/plate 3 Plates	15 mins/plate 1 Plate	TOTAL SETUP & CHANGEOVER TIME
TOTAL: 45 Mins	TOTAL: 15 Mins	105 Mins

DEFINE RETROFIT

An alternative to purchasing a standalone hybrid printing press is to integrate digital inkjet production onto an existing flexo press. Simply put, a retrofit is a digital print engine that is mounted on top of a third-party piece of analog printing equipment. This solution allows label converters to leverage current assets in their pressroom while minimizing new or duplicated expenses.



Retrofit
|
\'re-trō-.fit\

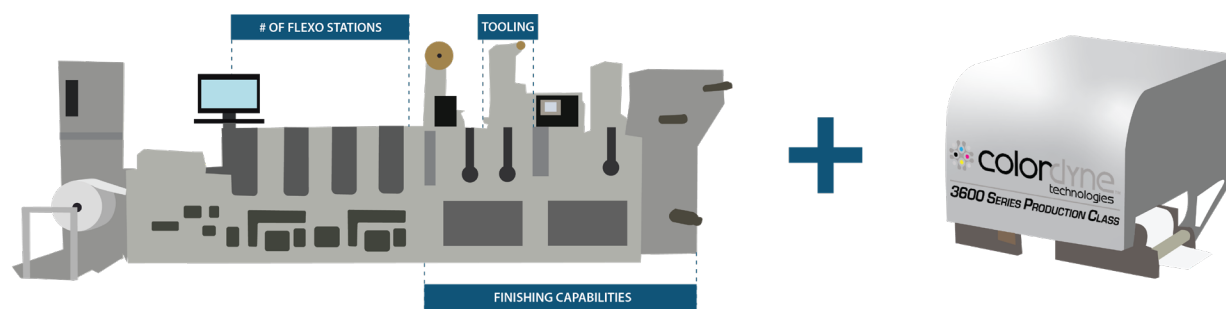
Noun

An act of adding a component or accessory to something that did not have it when manufactured.

HYBRID PRODUCTION WITH A RETROFIT

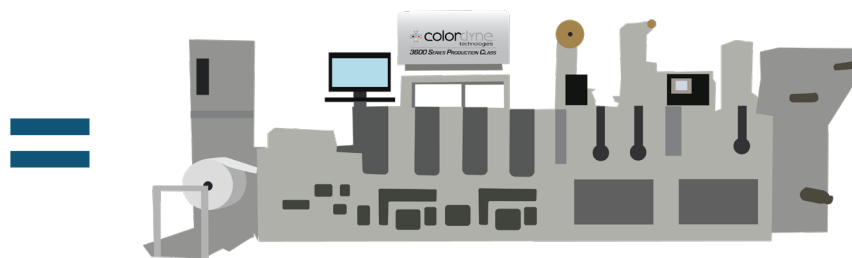
To achieve hybrid label production, a flexo press can have a digital inkjet print engine incorporated to offer the combination of flexo printing, digital printing, embellishment and finishing all on the same piece of equipment.

This powerful hybrid combination enables greater production flexibility and cost-efficiency. Label converters can use the most cost-effective asset for each part of the job being produced. Plus, print providers do not need to find additional space on the pressroom floor or hire a new operator to run a separate piece of equipment.



LEVERAGE EXISTING KNOWLEDGEBASE AND FUNCTIONALITY

VALUE OF DIGITAL







HYBRID PRODUCTION PLATFORM

CHOOSING THE RIGHT TECHNOLOGY



Why inkjet? Digital inkjet is cost-effective, high-quality and compatible with a wide range of markets and applications. Inkjet technologies are available in multiple formats, including aqueous dye, aqueous pigment and UV LED. So, no matter the job, there is an inkjet solution that can get it done affordably, quickly and with high-quality output.

	3600 SERIES AP-RETROFIT	3600 SERIES AQ-RETROFIT	3600 SERIES UV-RETROFIT
			
INKJET	Aqueous Pigment	Aqueous Dye	UV, UV LED
PRINTHEAD TECHNOLOGY	Memjet DuraLink	Memjet VersaPass	Kyocera
COLORS	CMYK, Spot Color, OGV	CMYK, Spot Color	CMYK, White
PRINT WIDTHS	8.5" (215.9mm) 17" (432 mm)	8.5" (215.9mm) 17" (432 mm)	8.5" (215.9mm) 12.75" (324mm)
MAX RESOLUTION	1600 x 1585 dpi	1600 x 1375 dpi	600 x 600 dpi
MAX PRINT SPEED	668 ft/min 204 m/min	500 ft/min 152 m/min	240 ft/min 73 m/min
MEDIA COMPATIBILITY	<ul style="list-style-type: none"> - Bond - Uncoated Offset - Inkjet Treated - Inkjet Coated - Can coat select media in-line 	Aqueous Inkjet Compatible	<ul style="list-style-type: none"> - Paper - Coated Papers - PP - PET - Aluminum

G2 I.D. SOURCE HYBRID CASE STUDY

G2 I.D. Source is a high-tech packaging solutions provider based in Jacksonville, Florida. The company offers a range of services including wide format, car wrap, window graphic and full-color label printing. Its label production primarily focuses on the pharmaceutical, industrial and food service industries, including a strong presence in the seafood space. This fresh food market demands rapid labels and packaging turnaround times, which G2 I.D. Source's digital and hybrid print capabilities can deliver.

G2 I.D. Source uses hybrid label printing to increase daily throughput and profitability. The label converter operates a Colordyne 3600 Series AQ – Retrofit, powered by Memjet's VersaPass printhead technology, mounted onto a flexo press creating a hybrid workflow. With this technology, the company can offer faster turnarounds, affordable short runs and greater production flexibility.



G2 I.D. SOURCE HYBRID CASE STUDY

Hybrid Printing Overview

Hybrid printing combines digital printing with traditional flexography. G2 I.D. Source uses low-cost flexo to produce static portions of a label while printing variable text and high-resolution images using the digital inkjet retrofit. This creative combination allows the company to deliver the best possible label needed, at the lowest cost and in less time.

Terry Cochran, Vice President of G2 I.D. Source explains how hybrid printing tremendously changed their business:

“It allows us to do so much more in less time. We are able to choose which combination between flexo and digital print provides the highest quality at the best price point for each specific job.” Hybrid printing allows G2 I.D. Source to satisfy customer needs including affordable versioning high-quality prototyping and shorter lead times.

G2 I.D. SOURCE HYBRID CASE STUDY

The Benefits of a Colordyne Retrofit

The digital capabilities provided by Colordyne's retrofit increases G2 I.D. Source's daily throughput and its ROI by reducing labor, setup and changeover times. David Frederick, the president of G2 I.D. Source explained that hybrid printing maximizes the press' production time during the day because they can turn a 7-color flexo job into a 3-color hybrid job. Frederick said: "We're also reducing a tremendous amount of labor and our throughput can double or triple. If I can triple my throughput on a press a day, the ROI is really going to pop out."

Taylor Buckthorpe, Sales Director at Colordyne Technologies, said G2 I.D. knows that digital and hybrid printing are the future of label production. "Now is the time to add digital capabilities, and companies can see a faster ROI with hybrid production that increases daily productivity and throughput," said Buckthorpe.



KEY TO SUCCESS

With the changing print landscape, incorporating hybrid printing into your converting operation can be the key to future success. Adding a digital retrofit provides both digital printing capabilities and hybrid printing capabilities from the same piece of equipment. This allows you to be profitable while also meeting the changing needs of your customers.

There's no one size fits all digital print technology. For converters looking to add hybrid printing to their business, we offer three unique inkjet options to fit the needs of your business and applications.



LET'S CONNECT

Contact us to learn more about hybrid printing, retrofitting and what technology is right for your business.



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ABOUT COLORDYNE TECHNOLOGIES

Colordyne Technologies is a leading manufacturer of efficient, high resolution digital print solutions. Colordyne is committed to providing on-demand label and tag color inkjet printers for a wide range of applications and industries at breakthrough speeds and cost-effectiveness. Colordyne's wide range of digital color platforms – from benchtop industrial color printers to complete, in-line finishing production presses – demonstrates Colordyne's specialization in scalability of the industry's most versatile products. Visit www.colordynetech.com for additional information.

THANK
YOU!

