# Wide-format Impressions

### WIDE-FORMAT INDUSTRY OUTLOOK

Is Now the Right Time to Buy?

WIDE-FORMAT FINISHING:

The Changing Landscape of Cutting and Routing Technologies

#### **ALSO INSIDE:**

Wide-format Summit Series Agenda What's Hot in Media in 2020 and Beyond The Latest Trends in Wide-Format Software 2020 Wide-Format Inkjet Printer Chart 2020 Wide-Format Finishing Charts



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## Welcome

### TO THIS SPECIAL PUBLICATION FOR ATTENDEES OF THE 2020 WIDE-FORMAT SUMMIT SERIES.

Whether you are looking for your first wide-format inkjet device, or you're looking to expand your operation, the Wide-format Summit Series and *Wide-format Impressions* is the place to go for *the* most up-to-date information and business intelligence on successfully choosing, adopting, installing, and implementing this technology in your business.

This year, the Wide-format Summit Series — held Oct. 8 and 15 — will detail how current and future wide-format inkjet printing technology, software, and solutions impacts their business and investment decisions. This two-day summit series event offers strategic-level insights into what printing industry leaders should do to improve and optimize their business, especially since the COVID-19 global pandemic has made deep and lasting changes to the industry.

But where we go as an industry will depend on the economy. In the short term, fallout from the pandemic continues to impede recovery. Longer term, the roots of strong growth are in place.

According to PRINTING United Alliance Chief Economist, Andy Paparozzi, the economy will progress slowly during the rest of 2020 before taking off in 2021. The consensus of more than 60 economists surveyed by *The Wall Street Journal* expects GDP to grow 4.7% next year, the most rapid advance in 37 years, and more than double the 2.3% average annual gain during last decade. In comparison, GDP is expected to decline 5.9% this year, the steepest since the mid-1940s.

But as the economy accelerates, so will the printing industry. The upturn, however, will be reserved for companies best prepared to maximize productivity, minimize job turn times, serve current markets most effectively, open new markets, and satisfy the post-COVID preferences of their clients.

As a companion to the 2020 Wide-format Summit Series, this special publication provides attendees with a reference guide to current wide-format inkjet printer models, as well as finishing equipment specially produced to work in tandem with these presses. Additionally, it provides some much-needed insights into how print services providers can best position themselves now for the recovery — and growth — to come.

We hope this information will help serve as a valuable resource as you plan the next steps for your wide-format business, and determine where — and how — to expand and grow.

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distance

Wait here until the next circle is available. 1 customer per spot.

Thank you! #SocialDistancing

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## Agenda

OCTOBER 8, 20	20 – DAY ONE
11:00 a.m.	Welcome Steve Duccilli, Wide-format Impresions
11:05 a.m.	CASE STUDIES: Spectrum Print Plus, Riot Creative Imaging, and Group Imaging — Sponsored by Canon
11:20 a.m.	The Wide-Format Landscape in the New Normal Mark Hanley, I. T. Strategies Despite short-term disruptions across many of the markets for wide-format graphics, there are reasons to believe that brands and other buyers will rely on graphics like never before in the wake of the pan- demic. How will these changes affect your needs in technology moving forward, and how do you adjust your roadmap to navigate the capital investment decision?
11:55 a.m.	INTERVIEW: Terry Corman, Firehouse Image Center — Sponsored by Durst
12:15 p.m.	Who Buys Wide-Format (Key Trends in Buyer Industries) Nathan Safran, NAPCO Research Sign and display graphics are a critical communication tools across industries. This session, based off a NAPCO Research survey of buyers of wide-format printing, will identify trends, demands, and require- ments in key industries that purchase products produced on wide-format printing devices.
12:50 p.m.	CASE STUDY: Office Depot — Sponsored by Ricoh
1:05 p.m.	The Key Elements of a Successful Sales and Marketing Plan Tim Greene, IDC It's easy to get excited by "speeds and feeds" when evaluating potential equipment purchases, but the most important – and most often overlooked – factor of success is the plan. Consider how this invest- ment will impact your business plan. If it takes you into new markets and applications, map out exactly how you will sell and market your new capabilities.
1:40 p.m.	INTERVIEW: Alan Stratton, The Bernard Group — Sponsored by GMG
1:55 p.m.	Putting Smart Production Ideas into Action         Moderator: Steve Duccilli, Wide-format Impresions         Panelists: Hayes Holzhauer, bluemedia; Jason Ahart, Olympus Group         Competition is increasing, run sizes are shrinking, and orders continue to grow more complex. In short, inefficiency simply isn't tolerable any longer. Our panelists will discuss specific strategies they've used to streamline their manufacturing and improve their bottom lines.
2:30 p.m.	Closing Remarks Steve Duccilli, <i>Wide-format Impresions</i>

## Agenda

#### **OCTOBER 15, 2020 – DAY TWO**

11:00 a.m.	Welcome Steve Duccilli, <i>Wide-format Impresions</i>
11:05 a.m.	TECHNOLOGY: The Introduction of SEI Laser Wide-Format Technology — Sponsored by Matik
11:15 a.m.	The Successful Wide-Format Implementation Moderator: Eric Zimmerman, Keypoint Intelligence Panelists: Dave Brewer, Image Options; Elaine Scrima, GSP Once you have purchased a wide-format solution what are the other decisions that need to be made? What are the key challenges that need to be addressed to guarantee a smooth implementation process?
11:50 a.m.	INTERVIEW: Todd Davis, Super Sign Mart — Sponsored by swissQprint
12:05 p.m.	OAAA: Proving the ROI of Outdoor Advertising Stephen Freitas, Outdoor Advertising Association of America (OAAA) Signs, fleet markings, vehicle wraps it used to be difficult to establish the ROI to agencies and corpo- rate buyers. Learn about the latest tools and data you can use to build the case and win the business.
12:40 p.m.	INTERVIEW: Bob Green and Ryan Lombard, PCI Graphics — Sponsored by HP
1:00 p.m.	The Opportunity in Textile Printing Debbie McKeegan, Texintel As the Textile industry shifts toward a digital future, the digitization of the industry presents multiple opportunities to existing print suppliers and entrepreneurs alike. In this session we will focus on the technologies utilized for both synthetic and cellulose digital textile printing, how applications are evolving and how to leverage existing technology for convergence. We will look at the market opportunities and discuss where new horizons are located. We will talk about market trends, supply chain disruption — the value of reshoring and near shoring production and why these industry shifts offer new opportunities for existing practitioners. In this session we will also touch on sustainability and why its key to future business growth as the eco-agenda grows with critical importance.
1:35 p.m.	CASE STUDY: Impulse Graphic & Display — Sponsored by Fujifilm
1:50 p.m.	The Successful Pivot: Tackling New Marketing Opportunities Moderator: Denise M. Gustavson, <i>Wide-format Impressions</i> Panelists: Brian Hite, Image Options; Trevor Hansen Thomas Printworks The sign and graphics segment is well known for its product diversity, innovation, and ability to be nimble. That said, the COVID-19 pandemic has turned business completely upside-down. Denise M. Gusutavson talks with leading graphics business owners about what they've done to successfully pivot their company during these difficult times and how, in turn, they've also been able to help their communities.
2:25 p.m.	Closing Remarks Steve Duccilli, <i>Wide-format Impresions</i>

## Wide-Format Outlook

### PSPs NEED TO FIND A BALANCE BETWEEN WHAT WORKED BEFORE AND WHAT NEEDS TO HAPPEN TO SUCCEED IN THE NEXT NORMAL.

#### **BY DENISE M. GUSTAVSON**

ithout a doubt, the COVID-19 pandemic has impacted the world in ways no one could have ever anticipated. This virus affected the global economy, threatened the health and safety of every citizen in every country, and disrupted supply chains worldwide.

While many companies have crisis playbooks and business continuity plans that cover natural disasters, hazardous materials incidents, cybersecurity breaches, and even terrorism, it's probably safe to assume no one had a playbook for a global pandemic.

It's been months since we've all been tossed feet-first into the stormy seas of the pandemic. Print service providers (PSPs) have been forced to sink or swim (aka manufacture something or close up shop entirely) and many have pivoted to produce products they never have before. We've seen shops fabricating everything from PPE — face masks, gowns, and face shields — to social distancing signage — posters and floor graphics — as well as signage promoting current services (i.e. "We're Open for Take-Out," "Curbside Pickup," and more). Shops have learned to do things they've never done before. For this reason, there is often no playbook to teach nor experts to follow, so owners have needed to empower employees to try new things and learn along the way.

In many cases, digital printing and cutting technologies have shown their true benefits, allowing shops to turn on a dime to create new products quickly, providing just-in-time manufacturing capabilities to small and essential businesses desperate to get the word out about the health and safety guidelines all customers must follow.

While the crisis we're facing right now is overwhelming, there have been some glimmers of optimism.

According to a McKinsey & Company survey of U.S. financial decision-makers' sentiments during the COVID-19 pandemic, while most view the current economy as weak, those that expect worsening in the next three months are decreasing.

There's still a lot of uncertainty out there — especially because this situation is so fluid. There are still many questions. What does the economy look like

### "Printers who have been able to pivot quickly to make outdoor signage, advisory graphics, and wayfinding applications — or even PPE — have been seeing impressive results."

through 2020 and beyond? Will the industry rebound quickly or slowly? Are there areas and businesses that will rebound quicker than others? Where do we go from here? What does the next normal look like?

We reached out to industry experts — business owners, OEM partners, and industry analysts — to answer some of those questions.

#### **PIVOTS**

Without a doubt, companies that relied on human interaction — exhibit- or event-focused companies providing services for large gatherings of people, and even brick-and-mortar retail — have been hit the hardest. Additionally, companies that were already on shaky ground — or were financially extended with debt in the market verticals most affected that did not find alternative sources of revenue — have already begun closing.

But other areas — such as PSPs in the packaging space — have been more insulated, since consumer product goods (CPG) were in high demand during this time. Many PSPs have used their creativity and entrepreneurship to pivot their companies to add new products to their portfolio. While talking about pivoting might bring to mind the *Friends* episode when they had to haul a couch up a flight of stairs, the truth of it is that businesses have been forced to change — and in some cases completely reinvent their companies in order to stay in business.

For many PSPs, the year started off strong. "None of us saw the COVID-19 pandemic coming, and it hit us and most of our industry fast and very hard. As the pandemic spread, a large segment of our markets were shut down almost overnight," says Brian Adam, president, Olympus Group. He reported that his company saw a 50% drop in volume in April from a year ago. But his company, along with others in the industry, were able to pivot to producing PPE — face shields, face masks, gowns, sneeze guards — which allowed them to stay in business and do their part in delivering needed supplies to health care and essential workers.

"Printers who have been able to pivot quickly to make outdoor signage, advisory graphics, and wayfinding applications — or even PPE — have been seeing impressive results," says Mark Manning, senior portfolio manager, Ricoh USA, Inc. "In addition to making signage for self-checkout at the grocery store, updated hours to lessen crowding, and floor graphics for social distancing, print shops have





been experimenting with new ideas for the current moment, like professional-grade backdrops for video calls that can replace sometimes fake-looking or buggy virtual backgrounds."

#### **NEW SIGNAGE CATEGORIES**

While out-of-home advertising, retail, and event related graphics are suffering, there is a heightened demand for informational banners and signage. All of these signs and graphics related to the pandemic have opened up an entirely new signage category.

"As businesses reopen, they require a significant amount of signage to tell people where to stand,

how to line up for curbside pickup, and other more general warnings and procedures," says Andrew Oransky, president and CEO, Roland DGA. "Social distancing has also created some one-off opportunities, like the graduation yard signs. Some of our customers in the wrap market have seen strength, as their fleet customers have taken advantage of great deals on new vehicles to upgrade and need graphics for those vehicles."

"Communities will need signage again," says Deborah Hutcheson, director of marketing, Agfa. "Movie houses will need posters again. Local businesses will want to thank their customers with huge banners and wraps on buses that get rolling again. Plus, disposable items like restaurant menus will see an increased demand."

With the continued need for safe distancing, there will be an increased opportunity for media suppliers, says Randy Paar, marketing manager, Canon Solutions America. "This will enable PSPs with digital finishing equipment to manufacture clear acrylic or PETG shields, not just for health care workers, but for any place people need to conduct transactions. Manufacturers of graphic films will also see continued high demand for their products in the production of safe distancing floor graphics."

#### PREPARE FOR THE FUTURE

As businesses start to return to a new sort of normal, demand for signs and graphics will increase. All of us want life to return the way it was before COVID-19, but it won't be as easy as a simple flick of a switch.

What can you do now to help prepare for the next normal?



**Bear down, but be opportunistic.** If your business is slow, this is the time to clean and organize the shop, consider the layout of the shop from a workflow perspective, and connect with customers to see how your services can help them through this crisis, says Tim Greene, research director – large-format printing, IDC. "Drive some hard bargains with your suppliers to get better prices and payment terms. Look for people – either contractors or potentially new employees — that are suddenly available because of the crisis that can help you advance parts of your business like your e-commerce and web presence. Get them in and find out how they could help your business."

Decide where the threshold for survival is. Now is the time to cut debts and invest in a lower cost of print. PSPs need to accept that the crisis will become infrastructural, and decide where the new threshold for survival really is, says Mark Hanley, president, I. T. Strategies. "There is still room for profit even in our damaged environment because the wide-format graphics market is fundamentally local, relationshipbased, and will still play a strategic role in assisting the sale of goods in the consumer economy."

**Right size your business now.** It's better to ""right size' the business now, focusing on saving the whole by making the hard choices and adjusting expenses to fit a less optimistic view of the market," says Brian Hite, principal and cofounder, Image Options.

**Contingency planning is essential.** PSPs need to have a contingency plan in place that is flexible enough to adapt to whatever happens — through the end of 2020 and beyond. Make sure the plans are documented. "We have all learned a lot of lessons from this crisis. Figuring things out on the fly has kept us moving, but the best way to make sure those lessons stick is to write them down and share them with employees and other stakeholders," says Oransky.

Focus on the basics. It's important, right now, to make sure the basics — customer service and flexibility — are done and done well. "The better you serve your clients, the better the retention rate, and that will drive revenue," says Becky McConnell, segment marketing manager — wide-format inkjet, FUJIFILM North America Corporation, Graphic Systems Division.

Are your core services the right ones? PSPs need to think about their services. What are you selling to clients today? Are there low profit applications you could eliminate, but still serve your clients? And what else you can produce with the equipment and processes you already have that could open new lines of revenue for your business?

But through it all one thing is certain: as businesses step into the post-pandemic future, they need to find a balance between what worked before and what needs to happen to succeed in the next normal.

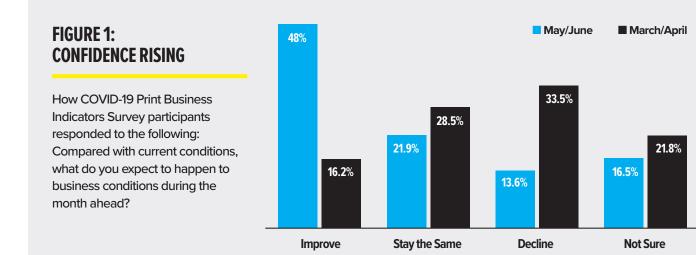
### Is Now the Right Time to Buy? THE ECONOMIC CONSIDERATIONS FOR INVESTING IN NEW EQUIPMENT IN 2020.

#### **BY ANDY PAPAROZZI**

he printing industry is moving toward recovery. In the past, that's all we needed to know because our recoveries were inclusive, the rising tides that lifted all boats. Now, with competition intensifying and opportunity expanding, but margin for error shrinking, we either prepare for recovery or get left behind. An essential step in making sure your shop isn't in the latter category: prudent, timely capital investment.

Every two months NAPCO Research and PRINTING United Alliance conduct the COVID-19 Print Business Indicators Survey to monitor the pandemic's effects on our industry. The more than 450 participants include commercial printers, graphic and sign producers, apparel decorators, functional printers, and package printers/converters. Annual sales range from less than \$1 million, to more than \$700 million.

We've been looking for movement off bottom, the first step toward recovery. We found it in our June survey. Among all participants, sales were trending higher for 27.7%, work-on-hand for 23.7%, and quote activity for 27.5%. Two months earlier, those numbers were 5.6%, 5.6%, and 4.4%, respectively. Additionally, 48% expected business to improve during the month ahead, up from just 16.2% in early spring (see Figure 1). These comments capture the consensus: "The worst seems to be over. Work is coming back as the world opens up," and "Business is definitely on the incline. We aren't fully where we want to be, but things are getting better by the day."



Where we go from here will depend on the economy. In the short term, fallout from the pandemic will continue to impede recovery. Many businesses will not reopen; losses from the lockdown have been too great. For many that do reopen, limits on operating capacity imposed by social distancing and rising costs — including the costs of keeping facilities clean and safe — will squeeze margins. There will be costly litigation unless Congress passes legislation protecting businesses from frivolous COVID-19 lawsuits. And there will be flare-ups of the virus because not everyone is going to follow even basic, commonsense health guidelines.

Longer term, the roots of strong growth are in place. The Fed and Washington have created record monetary and fiscal stimulus, with trillions more on the way. Consumers are gaining confidence: The University of Michigan Index of Consumer Sentiment rose to 78.1 in June, 20.5% less than a year earlier but up 8.8% since the April low. Consumer spending, which accounts for nearly 70% of GDP, is rising: Retail sales increased 12.3% through May and June, after declining 15.2% through March and April. Most important, Operation Warp Speed, a collaboration of U.S. federal agencies and nearly 20 biopharmaceutical companies, is fast-tracking development of a COVID-19 vaccine. A vaccine, of course, is a game changer.

The bottom line? The economy progresses slowly during the second half of 2020 before taking off in 2021. The consensus of more than 60 economists surveyed by *The Wall Street Journal* expects GDP to grow 4.7% next year, the most rapid advance in 37 years, and more than double the 2.3% average annual gain during the past decade. In comparison, GDP is expected to decline 5.9% this year, the steepest since the mid-1940s.

#### SMART INVESTMENTS WILL FUEL SUCCESS

As the economy accelerates, so will the printing industry. The lion's share of the upturn, however, will be reserved for companies best prepared to maximize productivity, minimize job turn times, serve current markets most effectively, open new markets, and satisfy the post-COVID preferences of their clients.

Those companies will not only invest, they will consistently get capital investment right. There are many tools for evaluating

investment options, including payback period, net present value, internal rate of return, hurdle rate, return on capital, and the total cost of equipment. Add the opportunity evaluation matrix to the tool kit as well.

As described in "A Framework For Evaluating Market Opportunity," by Neal Cabage, and "Market Dynamics," by Cabage and Sonia Zhang, the matrix evaluates investment options across six dimensions: customer, product, timing (state of the market), competition, finance, and team. It's necessary to analyze all six dimensions, according to Cabage and Zhang, because each "is but one piece to the puzzle, and to see the full picture you must put all of the pieces together. By taking the time to evaluate opportunities from all sides, you can gain a richer understanding of opportunities and challenges you may face, and potentially reduce your own blind spots."

Among the questions the matrix forces us to answer before committing to a capital investment:

- Is there a clearly defined, substantial customer base? Or are we relying on a "build it and they will come" approach?
- Does it address a pressing customer need? Or is it nice but not necessary? Cabage and Zhang emphasize "building something 'cool' with technology" must be secondary to "addressing the customer's fundamental unmet need or desire."
- Can the benefits be communicated clearly and concisely to customers and potential customers?
- How well does it fit with everything else we do?
- Are business conditions favorable or unfavorable? Are clients confident and expanding, or uncertain and sitting tight?
- Are we getting in early or trying to catch up to wellestablished competitors? Cabage and Zhang advocate being a "fast follower" rather than an early adaptor: "If you can see an area that someone else has recently validated, you can come in quickly enough to still be part of the early solution for customers, but your efforts are spent on developing a better solution rather than searching for a market."
- What are the up-front costs? What's the projected cash flow?
- Will the technology require new skills not just in operations but, for example, in sales? Do we have the necessary skills? If not, how will we acquire them?

#### **FIGURE 2: THE OPPORTUNITY EVALUATION MATRIX**

A tool to help identify the capital investments that best fit a company's resources, capabilities, and circumstances.

	Score fro	om 5 (highest) to a	l (lowest)
DYNAMIC	OPTION 1	OPTION 2	OPTION 3
Customer			
Clearly defined, established customer base			
Customers have a pressing need			
Sufficient demand			
Product			
Satisfies customers' pressing need			
Easy for customers to use			
Value proposition can be communicated clearly			
Timing			
General business conditions			
Time of entry			
Degree of commoditization			
Finance			
Up-front costs			
Projected cash flow			
Competition			
What the competition looks like			
Distinguishing ourselves			
Team			
Expertise required			
Integration			
TOTAL SCORE			

"By taking the time to evaluate opportunities from all sides, you can gain a richer understanding of opportunities and challenges you may face."

Investment options are scored from five (high) to one (low) on each dimension in a matrix like the one in Figure 2. Scores are summed, and options with low scores are eliminated no matter how well others are doing with them, or how much buzz they are creating.

We should also be wary of options with even one low score because, as Cabage and Zhang emphasize, very unfavorable conditions in one dimension can overwhelm favorable conditions in all the others. In this case, we either make the adjustments necessary to raise the score or pass on the option. The authors write: "Therein is one of the best parts about objectively grading an opportunity in this way early on — it can quickly surface challenges you might not have thought about."

The tendency coming out of deep recession is to delay capital investment until recovery is full on. But with economic recoveries, as with stock market rallies, the sooner we get in the better. Begin analyzing your investment options now. Include the opportunity evaluation matrix in your analysis to identify the options that best fit your company's capabilities, resources, and goals. It may well be the difference between investing and investing profitably — and so participating fully in the upturn ahead, or being left behind. ■

#### WIDE- & GRAND-FORMAT PRINTERS (24"+)

Wide-format or large-format printing generally refers to projects that require specialized printing equipment that will accommodate larger printing projects. As a rule of thumb, wide- and large-format printers include any computer-controlled printing machine that supports a maximum print between 24" and 100". Printers capabale of printing over 100" wide are considered super-wide or grand-format.

#### LEGEND

*Ink Technology:* A=Acid, CP=Ceramic Pigment, D=Disperse, DC=Discharge, DS=Dye-Sublimation, DT=Dry Toner, Eco=Eco Solvent, G=Gel, L=Latex, LT=Liquid Toner, OP=Oil Pigments, R=Reactive, S=Solvent, SUV=Solvent UV, TD=Textile Dyes, TP=Textile Pigment, UV=UV, UV LED=UV LED, WB=Water Based, W/R=Wax/Resin

*Colors:* B=Blue, C=Cyan, Cl=Clear, CO=Chroma Optimizer, Cr=Chromatic Red, Dgy=Dark Gray, Dk=Deep Black, Fp=Fluorescent Pink, Fy=Fluorescent Yellow, G=Green, Gy=Gray, Hdk=High Density Black, K= Black, Lb=Light Blue, Lc=Light Cyan, Lgy=Light Gray, Lk=Light Black, Llk=Light Black, Lm=Light Magenta, Ly=Light Yellow, M=Magenta, Mk=Matte Black, Ms=Metallic Silver, Mt=Metallic, N=Navy, Ny=Neon Yellow, O=Orange, Pc=Photo Cyan, Pgy=Photo Gray, Pk=Photo Black, Pm=Photo Magenta, Pr=Primer, R=Red, Si=Silver, T=Turquoise, V=Violet, VIm=Vivid Light Magenta, Vm=Vivid Magenta, Vr=Varnish, W=White, Y=Yellow

#### FLATBED PRINTERS (24"+)

Flatbed printers are printers characterized by a flat surface upon which a material is placed to be printed on. Flatbed printers are capable of printing on a wide variety of materials such as PVC, acrylic, glass, ceramic, metal, wood, foamboard, and leather. These printers are capable of printing on surfaces ranging in thickness from a sheet of paper up to several inches. Flatbed printers are great options for those who are looking to print directly on thicker or less traditional substrates.

Manufacturer	Model	Printer Type	Max Pri (inches)		Ink							Max Resolut (dpi)	tion	Speed @ Max Resolution (sqft/hr)
			Width	Length	lnk Technology	Colors	Spot	White	Metallic	Neon	Varnish	Width	Length	

#### 24" to 39"

GCC America Inc.	JF-240UV	F	24	20	11.8	UV LED	6	CMYK, CI, W, Pr		Х		Х	1,440	1,440	
LogoJET USA	LogoJET UVx90R Di- rect-to-Sub- strate Printer	F	24	36	6	UV	6	CMYK, CI, W		Х			720	2,400	30
Mimaki USA Inc.	UJF-6042	F	24	16.5	5.9	UV LED	8	CMYK, W, CI		Х		Х	1,800	1,800	
FUJIFILM North America Corporation	Inca OnsetM	F	27.8	39.4	0.4	UV	4	СМҮК							
Mimaki USA Inc.	UJF-7151 plus	F	28	20	6	UV LED	7	CMYK, W, CI		Х		Х	1,200	1,200	
Roland DGA Corporation	VersaUV LEF2-300	F	30	14.2	7.87	UV	6	CMYK, CI, W, Pr		Х		Х	1,440		16.16
Roland DGA Corporation	VersaUV LEF2-300D	F	30	14.2	7.87	UV	6	CMYK, CI, W, Pr		Х		Х	1,440		16.16
DMPS	DMP9575UV	F	37	29	5.9	UV	5	CMYK, W		х			1,200	1,200	64.6
CET Color	K2-250 Flatbed	F	39	60	4	UV LED	5	CMYK, Lc, Lm, W, V	Х	Х			1,200	1,200	106

Manufacturer	Model	Printer Type	Max Pr (inches	int Size )		lnk								Max Resolu (dpi)	tion	Speed @ Max Resolution (sqft/hr)
			Width	Length	Thickness	lnk Technology	Number of colors	Colors	Spot	White	Metallic	Neon	Varnish	Width	Length	()
40" to 59"																
CET Color	K2-500 Flatbed	F	48	98	4	UV LED	5	CMYK, Lc, Lm, W, V	Х	X				3,600	3,600	200
Direct Color Systems	UV-84DTS	F	48	96	4	UV LED								1,200		
Mutoh America Inc.	Performance- Jet 2508UF	F	48	96	4	UV LED	6	CMYK, Vr, W		Х			Х	600	1,200	
SID, distributed in North Ameri- ca by Paradigm Imaging Group	PIXis 2513 UV	F	48	96	3.1	UV	4, 7	CMYK, LC, Lm, W		Х				1,080	1, 440	105
Stratojet USA	SHARK FB 2512	F	48	96	4	UV LED		CMYK, G, Lc, Lk, Lm, O, R, V, Vr, W		Х			Х	1,200		240
Canon U.S.A. Inc.	Arizona 1240 GT	F	49	98.4	2	UV	4	СМҮК						1,440	1,440	362
Canon U.S.A. Inc.	Arizona 1260 GT	F	49	98.4	2	UV	6	CMYK, W, Vr/2W; CMYK, C, M/Lc Lm		X			Х	1,440	1,440	362
Canon U.S.A. Inc.	Arizona 1280 GT	F	49	98.4	2	UV	8	CMYK, Lc, Lm; CM + 2W/W, Vr		Х			Х	1,440	1,440	362
Canon U.S.A. Inc.	Arizona 2260 GT	F	49	98.4	2	UV	6	CMYK, W, Vr/2W; CMYK, C, M/Lc Lm		×			Х	1,440	1,440	620
Canon U.S.A. Inc.	Arizona 2280 GT	F	49	98.4	2	UV	8	CMYK, Lc, Lm; CM + 2W/W, Vr		Х			Х	1,440	1,440	620
CET Color	Q5-250	F	49	64	4	UV LED	7	CMYK, Lc, Lm, W, V	X	х			Х	1,200	1,200	106
Vanguard Digital Printing Systems	VSP2400	F	49	104	1.18	UV LED	4	СМҮК								18,897
Canon U.S.A. Inc.	Arizona 1340 GT	F	49.2	98.4	2	UV LED	4	СМҮК						1,440	1,440	548
Canon U.S.A. Inc.	Arizona 1360 GT	F	49.2	98.4	2	UV LED	6	CMYK, W, Vr/2W;		Х			Х	1,440	1,440	548
Canon U.S.A. Inc.	Arizona 1380 GT	F	49.2	98.4	2	UV LED	8	CMYK, Lc, Lm; + 2W/W, Vr		Х			Х	1,440	1,440	548
Canon U.S.A. Inc.	Arizona 2340 GTF	F	49.2	98.4	2	UV	8	СМҮК		Х			Х	1,440	1,440	119
Canon U.S.A. Inc.	Arizona 2340 XTF	F	49.2	98.4	2	UV	8	СМҮК		х			Х	1,440	1,440	119

Manufacturer	Model	Printer Type	Max Pri (inches			Ink								Max Resolu (dpi)	tion	Speed @ Max Resolution (sqft/hr)
			Width	Length	Thickness	Ink Technology	Number of colors	Colors	Spot	White	Metallic	Neon		Width	Length	
<b>40" to 59"</b> (c	ontinued)															
Canon U.S.A. Inc.	Arizona 2360 GTF	F	49.2	98.4	2	UV	8	CMYK + 2W/ Vr		Х			Х	1,440	1,440	75
Canon U.S.A. Inc.	Arizona 2360 XTF	F	49.2	98.4	2	UV	8	CMYK + 2W/ Vr		х			х	1,440	1,440	75
Canon U.S.A. Inc.	Arizona 2380 GTF	F	49.2	98.4	2	UV	8	CMYK + 2W/ Vr + CM		Х			Х	1,440	1,440	75
Canon U.S.A. Inc.	Arizona 2380 XTF	F	49.2	98.4	2	UV	8	CMYK + 2W/ Vr + CM		Х			Х	1,440	1,440	75
FUJIFILM North America Corporation	Acuity LED 44	F	49.2	98.4	2	UV LED	4	СМҮК								67
FUJIFILM North America Corporation	Acuity LED 46	F	49.2	98.4	2	UV LED	6	CMYK, CI, W		Х			Х			67
FUJIFILM North America Corporation	Acuity LED 48	F	49.2	98.4	2	UV LED	8	CMYK, Cl, Lc, Lm, W		Х			Х			67
Vanguard Digital Printing Systems	VKM600T-HS	F	50	99	4	UV LED	8	CMYK, Lc, Lm, Vr, W		Х			Х			274
Vanguard Digital Printing Systems	VR5D-E	F	50	99	4	UV LED	8	CMYK, Lc, Lm, Vr, W		Х			Х			180
HP Inc.	HP PageWide C500 Press	F	51.9	98.4		WB										246 linear ft/min
Teckwin Technologies Limited	TeckBlaze 1500	F	59		1.9	UV	12									
60" to 79"	1	1	I	1	I	I			1	I	1		1	I	I	
CET Color	K2-1000 Flatbed	F	62	122	4	UV LED	5	CMYK, Lc, Lm, W, V	Х	X				3,600	3,600	315
Vanguard Digital Printing Systems	VK300D-HS	F	62	125	4	UV LED	8	CMYK, Lc, Lm, Vr, W		Х			Х			400
Vanguard Digital Printing Systems	VK300D-HVT	F	62	125	4	UV LED	8	CMYK, Lc, Lm, Vr, W		Х			Х			400
Vanguard Digital Printing Systems	VK300D-SS	F	62	125	4	UV LED	8	CMYK, Lc, Lm, Vr, W		Х			Х			400
Flora/ American Printing Systems	PP1612UV-G	F	62.9	48	3.9	UV	6	CMYK, Lc, Lm, V, W		x				605	1,200	183
INX Internation- al Ink Co.	MD800 160	F	62.9		7.8	UV LED	8	CMYK, CMYK, Lc, Lm, V, W		Х				2,880	1,440	
HP Inc.	HP Scitex 11000 Indus- trial Press	F	63	126	1	UV	6	CMYK, Lc, Lm								

Manufacturer	Model	Printer Type	Max Pri (inches			lnk								Max Resolu (dpi)	tion	Speed @ Max Resolutior (sqft/hr)
			Width	Length	Thickness	lnk Technology	Number of colors	Colors	Spot	White	Metallic	Neon		Width	Length	
<b>60" to 79"</b> (c	continued)															
HP Inc.	HP Scitex 15500 Corrugated Press	F	63	126		UV	6	CMYK, Lc, Lm								
HP Inc.	HP Scitex 17000 Corrugated Press	F	63	126		UV	4	СМҮК								
SID, distributed in North Ameri- ca by Paradigm Imaging Group	PIXis 2030 UV	F	72	120	3.1	UV	4, 7	CMYK, LC, Lm, W		Х				1,080	1,440	105
Stratojet USA	Shark FB 1212	F	78	78	3	UV LED	5	CMYK, Vr, W		х			Х	1,200		150
Stratojet USA	Shark FB 2032	F	78	120	5	UV LED		CMYK, G, Lc, Lk, Lm, O, R, V, Vr, W		Х			X	1,200		128
Flora/ American Printing Systems	PP3220	F	78.7	125.9	3.9	UV	6	CMYK, Lc, Lm, V, W		Х				605	1,200	183
Flora/ American Printing Systems	Xtra3220UV	F	78.7	125.9	3.9	UV	6	CMYK, V, W		х				726	1,440	398
Gandy Digital Ltd.	Gladi8tor 3	F	78.7	120	2	UV LED	6	CMYK, CI, W		x				1,200		
INX Internation- al Ink Co.	MD800 160	F	78.74		7.8	UV LED	8	CMYK, CMYK, Lc, Lm, V, W		х				2,880	1,440	

#### 80" to 99"

CET Color	K2-1000+ Flatbed	F	81	120	4	UV LED	5	CMYK, Lc, Lm, W, V	Х	X			3,600	3,600	346
Mimaki USA Inc.	JFX500-2131	F	82.7	122	1.96	UV LED	6	CMYK, W, CI, Pr		X		Х	1,200	1,200	
Ricoh USA	RICOH Pro T7210	F	82.8	126	4.3	UV	7	CMYK, Cl, Pr, W		X		х	635	1,800	21.5
Dilli	Neo Sun	F	96			UV	5	CMYK, W		X			1,200	2,400	344
Gandy Digital Ltd.	Gladi8tor 2	F	96	48	2	UV LED	6	CMYK, CI, W		X			1,200		
Infiniti Digital/ Aeromatrix	Fina 2512UV	F	96	47	2	UV	7	CMYK, Lc, Lm, W		Х			2,400		150
Teckwin Technologies Limited	PQ300	F	96	48	3.94	UV	7, 8	CMYK, Vr, W		Х		Х	720	1,440	98
Teckwin Technologies Limited	TS 2513	F	96	48	3.94	UV	6	CMYK, W		X					183
Canon U.S.A. Inc.	Arizona 318 GL	F	98	49	1.89	UV	4, 5	CMYK; CMYK, W		X			1,440	1,440	68

Manufacturer	Model	Printer Type	Max Pri (inches			Ink								Max Resolu (dpi)	tion	Speed @ Max Resolution (sqft/hr)
			Width	Length	Thickness	lnk Technology	Number of colors	Colors	Spot	White	Metallic	Neon	Varnish	Width	Length	(546.00)
<b>80" to 99"</b> (d	continued)															
Canon U.S.A. Inc.	Arizona 365 GT	F	98	49	1.89	UV	5	CMYK, W		Х				1,440	1,440	71
CET Color	Q5-500	F	98	48	4	UV LED	7	CMYK, Lc, Lm, W, V	Х	Х			Х	1,200	1,200	200
CET Color	Q5-500 3 Row Flatbed	F	98	48	4	UV LED	7	CMYK, Lc, Lm, W, V	Х	Х			Х	1,440	1,200	30
Dilli	Neo Sirius FB	F	98			UV LED	5	CMYK, W		Х				600	2,400	
swissQprint	Impala 3	F	98	79	1.97	UV LED	9	CMYK, Lc, Lk, Lm, O, Vr, W, Pr	x	Х			Х	1,080		301
swissQprint	Impala 3S	F	98	79	1.97	UV LED	9	CMYK, Lc, Lk, Lm, O, Vr, W	Х	Х			Х	1,080		549
swissQprint	Oryx 3	F	98	79	1.97	UV LED	9	CMYK, Lc, Lk, Lm, O, Vr, W, Pr	х	Х			Х	1,080		97
Canon U.S.A. Inc.	Arizona 6160 HFV	F	98.4	126	2	UV	6	CMYK, Lc, Lm						1,440	1,440	1,668
Canon U.S.A. Inc.	Arizona 6170 HFV	F	98.4	126	2	UV	7	CMYK, Lc, Lm W		х				1,440	1,440	1,668
FUJIFILM North America Corporation	Acuity LED X44	F	98.4	121.3	2	UV LED	4	СМҮК								69
FUJIFILM North America Corporation	Acuity LED X46	F	98.4	121.3	2	UV LED	6	CMYK, CI, W		Х			Х			69
FUJIFILM North America Corporation	Acuity LED X48	F	98.4	121.3	2	UV LED		CMYK, Cl, Lc, Lm, W		Х			Х			69
Mimaki USA Inc.	JFX200-2513	F	98.4	51.1	1.96	UV LED	6	CMYK, Lc Lm, W, Cl, Pr		Х			Х	1,200	1,200	
Ricoh USA	RICOH Pro TF6250	F	98.4	51.2	4.3	UV	7	CMYK, Cl, Pr, W		X			Х	635	1,800	43.1
Roland DGA Corporation	IU-1000F	F	98.8	51.5	4.33	UV	6	CMYK, Cl, Pr, W		Х			Х	635	1,800	172

#### 100" to 119"

Agfa	Anapurna FB2540i LED	F	100	varies	1.77	UV LED	7	CMYK, Lc, Lm, W	Х		720	1,440	140
EFI	EFI Pro 24f	F	100	52		UV	4	CMYK, W	Х		1,200		

Manufacturer	Model	Printer Type	Max Pri (inches)			Ink								Max Resolu (dpi)	tion	Speed @ Max Resolution (sqft/hr)
			Width	Length	Thickness	lnk Technology	Number of colors	Colors	Spot	White	Metallic	Neon		Width	Length	
100" to 119"	(continued)															
Flora/ American Printing Systems	PP2512	F	100	48	3.9	UV	6	CMYK, Lc, Lm, V, W		X				605	1,200	183
Flora/ American Printing Systems	Xtra2512UV	F	100	48	3.9	UV	6	CMYK, V, W		х				726	1,440	398
Agfa	Jeti Mira MG2716 HS LED	F	106	63	0.125	UV LED	7	CMYK, Lc, Lm, W		х				920	1,200	140
Agfa	Jeti Mira MG2716 HS LED	F	106	63	0.125	UV LED	7	CMYK, Lc, Lm, Pr, W		Х				920	1,200	140
Agfa	Jeti Mira MG2716 HS LED	F	106	63	0.125	UV LED	7	CMYK, Lc, Lm, Vr, W		х			Х	920	1,200	140
Agfa	Jeti Mira MG2732 HS LED	F	106	126	0.125	UV LED	7	CMYK, Lc, Lm, W		х				920	1,200	140
Agfa	Jeti Mira MG2732 HS LED	F	106	126	0.125	UV LED	7	CMYK, Lc, Lm, Pr, W		х				920	1,200	140
Agfa	Jeti Mira MG2732 HS LED	F	106	126	0.125	UV LED	7	CMYK, Lc, Lm, Vr, W		Х			Х	920	1,200	140
Teckwin Technologies Limited	TS 3020	F	118	78.7	3.94	UV	6	CMYK, W		х						183
120"+																

Canon U.S.A. Inc.	Arizona 6160 XTS	F	120	98.4	2	UV	6	CMYK, Lc, Lm					1,440	1,440	1,668
Canon U.S.A. Inc.	Arizona 6170 XTS	F	120	98.4	2	UV	7	CMYK, Lc, Lm W		Х			1,440	1,440	1,668
CET Color	Q5-1000	F	120	63	4	UV LED	7	CMYK, Lc, Lm, W, V	х	Х		Х	1,200	1,200	315
CET Color	Q5-1000+	F	120	63	4	UV LED	7	CMYK, Lc, Lm, W, V	х	Х		Х	3,600	3,600	346
EFI	EFI Pro 30f	F	120	80	4	UV	4	CMYK, W		Х			1,200		
Canon U.S.A. Inc.	Arizona 1240 XT	F	121	98.4	2	UV	4	СМҮК					1,440	1,440	377
Canon U.S.A. Inc.	Arizona 1260 XT	F	121	98.4	2	UV	6	CMYK, W, Vr/2W; CMYK, C, M/Lc Lm					1,440	1,440	377
Canon U.S.A. Inc.	Arizona 1280 XT	F	121	98.4	2	UV	8	CMYK, Lc, Lm; CM + 2W/W, Vr		Х		Х	1,440	1,440	377

Manufacturer	Model	Printer Type	Max Pri (inches			Ink								Max Resolu (dpi)	tion	Speed @ Max Resolution (sqft/hr)
			Width	Length	Thickness	lnk Technology	Number of colors	Colors	Spot	White	Metallic	Neon	Varnish	Width	Length	
<b>120"</b> + (contir	nued)															
Canon U.S.A. Inc.	Arizona 2260 XT	F	121	98.4	2	UV	6	CMYK, W, Vr/2W; CMYK, C, M/Lc Lm		X			Х	1,440	1,440	691
Canon U.S.A.	Arizona 2280 XT	F	121	98.4	2	UV	8	CMYK, Lc, Lm; CM + 2W/W, Vr		X			Х	1,440	1,440	691
Canon U.S.A. Inc.	Arizona 1340 XT	F	121.3	98.4	2	UV LED	4	СМҮК						1,440	1,440	568
Canon U.S.A. Inc.	Arizona 1360 XT	F	121.3	98.4	2	UV LED	6	CMYK, W, Vr/2W;		X			Х	1,440	1,440	568
Canon U.S.A. Inc.	Arizona 1380 XT	F	121.3	98.4	2	UV LED	8	CMYK, Lc, Lm; CM + 2W/W, Vr		X			Х	1,440	1,440	568
swissQprint	Nyala 3	F	126	79	1.97	UV LED	9	CMYK, Lc, Lk, Lm, O, Vr, W, Pr	X	Х			Х	1,080		344
swissQprint	Nyala 3S	F	126	79	1.97	UV LED	9	CMYK, Lc, Lk, Lm, O, Vr, W	Х	Х			Х	1,080		613
FUJIFILM North America Corporation	Inca OnsetX1	F	126.8	63	1.8	UV	4, 5, 6 , 7, 8	CMYK, Lc, Lm, O, W	X	X				600	600	
FUJIFILM North America Corporation	Inca On- setX1-LT	F	126.8	63	1.8	UV	4, 5, 6	CMYK, Lc, Lm, W	Х	Х				600	600	
FUJIFILM North America Corporation	Inca OnsetX2 HS	F	126.8	63	1.8	UV	4, 5, 6 , 7, 8	CMYK, Lc, Lm, O, W	Х	X				600	600	
FUJIFILM North America Corporation	Inca OnsetX3 HS	F	126.8	63	1.8	UV	4, 5, 6 , 7, 8	CMYK, Lc, Lm, O, W	X	X				600	600	

#### HYBRID PRINTERS (24"+)

Hybrid printers are printers that allow users to print on both rigid and roll media. So in addition to printing on a wide variety of rigid materials such as pvc, acrylic, glass, ceramic, metal, wood, and foamboard, the machine can also support the use of flexible substrates stored in rolls. These printers are capable of printing on surfaces ranging in thickness from a sheet of paper up to several inches. In hybrid machines, the flatbed can be removed, and the rolls on each side attached giving it the ability to function as both types of machines.

Manufacturer	Model	Printer Type	Max Pri (inches)		Ink							Max Resolut (dpi)		Speed @ Max Resolution (sqft/hr)	
			Width	Length	lnk Technology	Colors	Spot	White	Metallic	Neon	Varnish	Width	Length		

#### 40" to 59"

	1					1							
Gandy Digital Ltd.	Pred8tor	Н	48	96	2	UV, UV LED	8	CMYK, Cl, Lc, Lm, W	Х			1,200	
FUJIFILM North America Corporation	Acuity EY	Н	49.2	98.4	1.89	UV	5	CMYK, W	Х				
FUJIFILM North America Corporation	Acuity Select 24	Н	49.2	98.4	2	UV	4	СМҮК					64
FUJIFILM North America Corporation	Acuity Select 26	н	49.2	98.4	2	UV	4, 5, 6	CMYK, V, W	Х				64
FUJIFILM North America Corporation	Acuity Select 26L	Н	49.2	98.4	2	UV	6	CMYK, Lc, Lm					64
FUJIFILM North America Corporation	Acuity Select 28	Н	49.2	98.4	2	UV	4, 5, 6, 7, 8	CMYK, Lc, Lm, Cl, W	Х		Х		64
FUJIFILM North America Corporation	Acuity Select HS 30	Н	49.2	98.4	2	UV	6, 8	CMYK, Cl, Lc, Lm, W	Х		Х		119

#### 60" to 79"

CET Color	K2-250h	Н	63		2	UV LED	5	CMYK, Lc, Lm, W, V	Х	X			1,200	1,200	106
CET Color	Q5-250h	Н	63		2	UV LED	7	CMYK, Lc, Lm, W, V	Х	х		Х	1,200	1,200	200
Dilli	Neo Earth HB1604-W2L	Н	63			UV	5	CMYK, W		х			600	1,200	205
Dilli	Neo Earth HB1606L	Н	63			UV	6	CMYK, Lc, Lm					600	1,200	16
Dilli	Neo Titan Plus	н	63			UV	5	CMYK, W		х			720	1,440	258
FUJIFILM North America Corporation	Acuity LED 1600 II	Н	63.7	7,872	0.04	UV LED	8	CMYK, Cl, Lc, Lm, W		х		Х	1,200	1,200	45
EFI	EFI H1625-RS	Н	64			UV	4	СМҮК					1,200		
EFI	EFI H1625-SD	Н	64			UV	4	CMYK, W		X			1,200		
EFI	EFI Pro 16h	Н	64			UV	4	CMYK, W		х			1,200		
HP Inc.	HP Latex R1000 Plus Printer	Н	64	120	2	L	7	CMYK, Lc, Lm, W		х			1,200	1,200	311

Manufacturer	Model	Printer Type	Max Pr (inches			Ink								Max Resolu (dpi)	tion	Speed @ Max Resolutio (sqft/hr)
			Width	Length	Thickness	lnk Technology	Number of colors	Colors	Spot	White	Metallic	Neon		Width	Length	(Sqrutin)
<b>60" to 79"</b> (c	ontinued)															
HP Inc.	HP Latex R1000 Printer	Н	64	120	2	L	7	CMYK, Lc, Lm, W		X				1,200	1,200	311
Mutoh America Inc.	ValueJet 1627MH	Н	64		0.62	UV LED	5	CMYK, W		Х				1,440		
Mutoh America Inc.	ValueJet 1638UH	Н	64		0.5	UV LED	6	CMYK, Vr, W		Х			Х	1,440		
Roland DGA Corporation	VersaUV LEJ-640	Н	64		0.51	UV	6	CMYK, CI, W		Х			Х	1,440	1,440	13
EFI	EFI VUTEk GS2000x Pro	Н	78		2	UV	8	CMYK, W		Х				1,000		
Gandy Digital Ltd.	Domin8tor	Н	78.7	120	2	UV, UV LED	8	CMYK, Cl, Lc, Lm, W		X				1,200		
80" to 99"																
EFI	EFI VUTEk GS2000LX Pro with UltraDrop Technology	Н	80		2	UV LED	8	CMYK, W		X				1,000		
EFI	EFI VUTEk H2000 Pro	Н	80		2	UV LED	6	CMYK, W		Х			Х	1,000		225
Teckwin Technologies Limited	TeckStorm TS300	Н	96	48	1.9	UV	8	CMYK, Lc, Lm, Vr, W		X			х	800	1,600	204
Agfa	Anapurna H2500i LED	Н	98		1.77	UV LED	7	CMYK, Lc, Lm, W		X				720	1,440	172
Dilli	Neo Sirius HB1650	Н	98			UV LED	5	CMYK, W		х				600	2,400	
Dilli	Neo Sun HB2504D- W2X	Н	98			UV	5	CMYK, W		X				600	2,400	355
Durst Image Technology US LLC	Delta WT 250	Н	98		2.75	WB	6	CMYK, Lc, Lm						1,000		2,150
Durst Image Technology US LLC	Rho 2500	Н	98		1.57	UV LED	4, 6	CMYK, Lc, Lm, W		X				1,000		3,440
HP Inc.	HP Latex R2000 Plus Printer	Н	98	120	2	L	7	CMYK, Lc, Lm, W		X				1,200	1,200	496
FUJIFILM North America Corporation	Acuity Select HS X30	Н	98.4	121.3	2	UV	6, 8	CMYK, Cl, Lc, Lm, W		X			Х			131
FUJIFILM North America Corporation	Acuity Select X24	Η	98.4	121.3	2	UV	4	СМҮК								66
FUJIFILM North America Corporation	Acuity Select X26	Н	98.4	121.3	2	UV	4, 5, 6	CMYK, CI, W		X			Х			66
FUJIFILM North America Corporation	Acuity Select X26L	Н	98.4	121.3	2	UV	6	CMYK, Lc, Lm								66

Manufacturer	Model	Printer Type	Max Pri (inches)			lnk								Max Resolut (dpi)	ion	Speed @ Max Resolution (sqft/hr)
			Width	Length	Thickness	lnk Technology	Number of colors	Colors	Spot	White	Metallic	Neon		Width	Length	
<b>80" to 99"</b> (c	continued)															
FUJIFILM North America Corporation	Acuity Select X28	Н	98.4	121.3	2	UV	4, 5, 6 , 7, 8	CMYK, Lc, Lm, Cl, W		X			Х			66
CET Color	Q5-500h	н	98		2	UV LED	7	CMYK, Lc, Lm, W, V	X	X			Х	1,200	1,200	106
Durst Image Technology US LLC	Rho 1312	Н	98		2.75	UV	8	CMYK, Lc, Lm		x				1,000		3,440

#### 100" to 119"

Agfa	Jeti Tauro H2500 LED	Н	100	Varies	0.08	UV LED	6	CMYK, Lc, Lm				1,200	725	667
Agfa	Jeti Tauro H2500 LED	н	100	Varies	0.08	UV LED	7	CMYK, Lc, Lm, W	X			1,200	725	667
Agfa	Jeti Tauro H2500 LED	Н	100	Varies	0.08	UV LED	7	CMYK, Lc, Lm, Pr, W	X			1,200	725	667
Stratojet USA	SHARK FBR 2512	Н	100	48	4	UV LED		CMYK, Vr, W	X		х	1,440		340
Teckwin Technologies Limited	TeckStorm TS600	Н	118.9	79.5	1.9	UV	8	CMYK, Lc, Lm, Vr, W	X		Х	800	1,600	183

#### 120"+

FUJIFILM North America Corporation	Acuity F66	Н	120	98.4	2	UV	6	CMYK, Lc, Lm	X				269
FUJIFILM North America Corporation	Acuity F67	Н	120	98.4	2	UV	7	CMYK, Lc, Lm, W	X				269
Flora/ American Printing Systems	Xtra3000H	Н	125.9		1.9	UV	6	CMYK, Lc, Lm, W	X		726	1,440	431
Gandy Digital Ltd.	Kre8tor	Н	125.9		4.7	UV	6	CMYK, Lc, Lm, W	X		1,200	1,200	484
Infiniti Digital/ Aeromatrix	Fina 320FB	Н	125.9		2	DS	4, 8	CMYK, Cl, Lc, Lm, W	X		1,440	1,440	192
Agfa	Anapurna H3200i LED	Н	126		1.77	UV LED	7	CMYK, Lc, Lm, W	X		720	1,440	182
EFI	EFI VUTEk 32h	н	126		2	UV LED	8		X				
EFI	EFI VUTEk GS3250x Pro	Н	126		2	UV	8	CMYK, W	X		1,000		
EFI	EFI VUTEk h3	н	126		2	UV LED	4, 8	CMYK, W	X		1,200		
EFI	EFI VUTEk h5	Н	126		2	UV LED	4, 8	CMYK, W	Х		1,200		
EFI	EFI VUTEk HS100 F4	Н	126		2	UV	4	CMYK, O, V, W	X				

Manufacturer	Model	Printer Type	Max Pri (inches			Ink								Max Resolu (dpi)	tion	Speed @ Max Resolution (sqft/hr)
			Width	Length	Thickness	lnk Technology	Number of colors	Colors	Spot	White	Metallic	Neon	Varnish	Width	Length	
<b>120"</b> + (contin	nued)															
EFI	EFI VUTEk HS100 Pro	Н	126		2	UV	8	CMYK, O, V, W		Х						
EFI	EFI VUTEk HS125 F4	н	126		2	UV	4	CMYK, W		х				1,000		
EFI	EFI VUTEk HS125 Pro	Н	126		2	UV	8	CMYK, W		Х				1,000		
EFI	EFI VUTEk LX3 Pro	Н	126		2	UV LED	8	CMYK, W		X				1,000		
FUJIFILM North America Corporation	Inca SpyderX	Н	126	197	2	UV	6	CMYK, Lc, Lm, W		х						
EFI	EFI VUTEk GS3250LX Pro with UltraDrop Technology	Н	126.5		2	UV LED	8	CMYK, W		Х				1,000		
Agfa	Jet Tauro H3300 LED	Н	130		0.08	UV LED	4	СМҮК						1,200	725	4,413
Agfa	Jet Tauro H3300 LED	Н	130		0.08	UV LED	5	CMYK, W		X				1,200	725	4,413
Agfa	Jet Tauro H3300 LED	Н	130		0.08	UV LED	5	CMYK, W, Pr		х				1,200	725	4,413
Agfa	Jet Tauro H3300 LED	Н	130		0.08	UV LED	6	CMYK, Lc, Lk						1,200	725	4,413
Agfa	Jet Tauro H3300 LED	Н	130		0.08	UV LED	7	CMYK, Lc, Lk, W		х				1,200	725	4,413
Agfa	Jet Tauro H3300 LED	Н	130		0.08	UV LED	7	CMYK, Lc, Lk, Pr, W		х				1,200	725	4,413
Durst Image Technology US LLC	P5 350	Н	138		2	UV LED	8	CMYK, Lc, Lm, O, V, G		х			Х	1,200		1,930

#### **ROLL-TO-ROLL PRINTERS (24"+)**

Roll-to-roll printers allow users to print on flexible media stored in rolls. The roll of material is loaded on one side and is carried through the printer, where it will be re-rolled onto another uptake roller. These types of printers are ideal for long runs of flexible material as the process can be streamlined, and production can move faster with less interruption.

Manufacturer	Model	Printer Type	Max Pri (inches)			Ink								Max Resolut (dpi)	tion	Speed @ Max Resolution (sqft/hr)
			Width	Length	Thickness	lnk Technology	Number of colors	Colors	Spot	White	Metallic	Neon	Varnish	Width	Length	()
24" to 39"																
Canon U.S.A. Inc.	image- PROGRAF PRO-2100	R	24	708	0.03	WB	11							2,400	1,200	
Canon U.S.A. Inc.	imagePRO- GRAF TA-20	R	24		0.03	WB	5	CMYK, Mk						2,400	1,200	
Canon U.S.A. Inc.	imagePRO- GRAF TA-20 MFP L24ei	R	24		0.03	WB	5	CMYK, Mk						2,400	1,200	
Canon U.S.A. Inc.	image- PROGRAF TM-200	R	24	708	0.03	WB	5	CMYK, Mk						2,400	1,200	
Canon U.S.A. Inc.	image- PROGRAF TM-200 MFP L24ei	R	24	708	0.03	WB	5	CMYK, Mk						2,400	1,200	
Epson Americas	SureColor P6000 Standard Edition	R	24		0.06	WB	9	C, Lc, Llk, Lk, Vlm, Vm, Y, and Mk or Pk						2,880	1,440	
Epson Americas	SureColor P7000 Commercial Edition	R	24		0.06	WB	10	C, Gr, Lc, V Lk, Mk, O, Pk, Vm, Y						2,880	1,440	
Epson Americas	SureColor P7000 Standard Edition	R	24		0.06	WB	10	C, Gr, Lc, Llk, Lk, Mk, O, Pk, Vm, Y						2,880	1,440	
Epson Americas	SureColor P7570	R	24		0.06	WB	12	C, Pk, Vm, Y, Lc, Vlm, Gy, Mk, Lgy, O, G, V						2,880	1,440	
Epson Americas	SureColor T2170	R	24		0.008	WB	4	СМҮК						2,400	1,200	
Epson Americas	SureColor T3170x	R	24		0.008	WB	4	СМҮК						2,400	1,200	
Epson Americas	SureColor T3270 Single Roll Edition	R	24		0.06	WB	5	CMY, Mk, Pk						2,880	1,440	
Epson Americas	SureColor T3475	R	24		0.008	WB	4	СМҮК						2,400	1,200	
HP Inc.	HP DesignJet T100	R	24		0.012	WB	4	СМҮК						1,200	1,200	
HP Inc.	HP DesignJet T120	R	24		0.012	WB	4	СМҮК						1,200	1,200	
HP Inc.	HP DesignJet T125	R	24		0.012	WB	4	СМҮК						1,200	1,200	

Manufacturer	Model	Printer Type	Max Pr (inches			Ink								Max Resolu (dpi)	tion	Speed @ Max Resolutior (sqft/hr)
			Width	Length	Thickness	lnk Technology	Number of colors	Colors	Spot	White	Metallic	Neon		Width	Length	(oqioin)
<b>24" to 39"</b> (c	continued)															
HP Inc.	HP DesignJet T130	R	24		0.012	WB	4	CMYK						1,200	1,200	
HP Inc.	HP DesignJet T525	R	24		0.012	WB	4	СМҮК						1,200	1,200	
HP Inc.	HP DesignJet T530	R	24			WB	4	СМҮК						1,200	1,200	
HP Inc.	HP DesignJet T830 24-in Multifunction	R	24		0.012	WB	4	СМҮК						2,400	1,200	
Mutoh America Inc.	ValueJet 628	R	24.8			Eco	6	CMYK, Lc, Lm						1,440		
Roland DGA Corporation	TrueVIS SG2- 300	R	30		0.03	Eco	4	CMYK						1,200		43
Roland DGA Corporation	VersaUV LEC2-300	R	30		0.03	UV	6	CMYK, CI, W		х			х	1,440		30.13
Mimaki USA Inc.	CJV150-75	R	31.4		0.04	DS	6	B, M, Y, K, Lb, Lm						1,440	1,440	
Mimaki USA Inc.	CJV150-75	R	32		0.04	Eco	10	CMYK, Lc, Lm, Lk, Or, W, Si		X	Х			1,440	1,440	
Canon U.S.A. Inc.	imagePRO- GRAF TA-30	R	36		0.03	WB	5	CMYK, Mk						2,400	1,200	
Canon U.S.A. Inc.	imagePRO- GRAF TA-30 MFP L36ei	R	36		0.03	WB	5	CMYK, Mk						2,400	1,200	
Canon U.S.A. Inc.	imagePRO- GRAF TA-30 without Stand	R	36		0.03	WB	5	CMYK, Mk						2,400	1,200	
Canon U.S.A. Inc.	image- PROGRAF TM-300	R	36	708	0.03	WB	5	CMYK, Mk						2,400	1,200	
Canon U.S.A. Inc.	image- PROGRAF TM-300 MFP L36ei	R	36	708	0.03	WB	5	CMYK, Mk						2,400	1,200	
Canon U.S.A. Inc.	image- PROGRAF TM-300 MFP T36	R	36	708	0.03	WB	5	CMYK, Mk						2,400	1,200	
Canon U.S.A. Inc.	image- PROGRAF TM-305	R	36	708	0.03	WB	5	CMYK, Mk						2,400	1,200	
Canon U.S.A. Inc.	image- PROGRAF TM-305 MFP T36	R	36	708	0.03	WB	5	CMYK, Mk						2,400	1,200	
Canon U.S.A. Inc.	image- PROGRAF TX-3000	R	36	708	0.03	WB	5	CMYK, Mk						2,400	1,200	
Canon U.S.A. Inc.	image- PROGRAF TX-3000 MFP T36	R	36	708	0.03	WB	5	CMYK, Mk						2,400	1,200	

Manufacturer	Model	Printer Type	Max Pri (inches			Ink								Max Resolu (dpi)	tion	Speed @ Max Resolution (sqft/hr)
			Width	Length	Thickness	Ink Technology	Number of colors	Colors	Spot	White	Metallic	Neon	Varnish	Width	Length	(equally)
<b>24" to 39"</b> (c	ontinued)															
Canon U.S.A. Inc.	PlotWave 3000	R	36	7,874		Т	1	K						600	1,200	4 D size prints per minute
Canon U.S.A. Inc.	PlotWave 3500	R	36	7,874		Т	1	К						600	1,200	6 D size prints per minute
Canon U.S.A. Inc.	PlotWave 5000	R	36	7,874		Т	1	К						600	1,200	8 D size prints per minute
Canon U.S.A. Inc.	Plotwave 5500	R	36	7,874		Т	1	К						600	1,200	10 D size prints per minute
Canon U.S.A. Inc.	Plotwave 7500	R	36	7,874		Т	1	К						600	1,200	10 D size prints per minute
Epson Americas	SureColor T5170 Wire- less Printer	R	36		0.008	WB	4	СМҮК						2,400	1,200	
Epson Americas	SureColor T5270D Dual Roll Edition	R	36		0.06	WB	5	CMY, Mk, Pk						2,880	1,440	
Epson Americas	SureColor T5470M	R	36		0.008	WB	4	СМҮК						2,400	1,200	
Epson Americas	SureColor T5475	R	36		0.008	WB	4	СМҮК						2,400	1,200	
HP Inc.	HP DesignJet T1600	R	36			WB	4	СМҮК						2,400	1,200	
HP Inc.	HP DesignJet T1600 PostScript	R	36			WB	4	СМҮК						2,400	1,200	
HP Inc.	HP DesignJet T1600dr PostScript	R	36			WB	4	СМҮК						2,400	1,200	
HP Inc.	HP DesignJet T2600 PostScript Multifunction	R	36			WB	4	СМҮК						2,400	1,200	
HP Inc.	HP DesignJet T2600dr PostScript Multifunction	R	36			WB	4	СМҮК						2,400	1,200	
HP Inc.	HP DesignJet T525	R	36			WB	4	СМҮК						1,200	1,200	
HP Inc.	HP DesignJet T530	R	36			WB	4	СМҮК						1,200	1,200	
HP Inc.	HP DesignJet T730	R	36		0.012	WB	4	СМҮК						2,400	1,200	
HP Inc.	HP DesignJet T830 Multi- function	R	36		0.012	WB	4	СМҮК						2,400	1,200	
KIP America	KIP 650	R	36			DT	4	СМҮК						600	2,400	6 D size PPM
KIP America	KIP 660	R	36			DT	4	СМҮК						600	2,400	6 D size PPM
KIP America	KIP 860	R	36			DT	4	СМҮК						600	2,400	8 D size PPM

Manufacturer	Model	Printer Type	Max Pr (inches			Ink								Max Resolu (dpi)	tion	Speed @ Max Resolution (sqft/hr)
			Width	Length	Thickness	lnk Technology	Number of colors	Colors	Spot	White	Metallic	Neon	Varnish	Width	Length	
<b>24" to 39"</b> (0	continued)															
KIP America	KIP 880	R	36			DT	4	СМҮК						600	2,400	8 D size PPM
KIP America	KIP 890	R	36			DT	4	СМҮК						600	2,400	8 D size PPM
KIP America	KIP 980	R	36			DT	4	СМҮК						600	2,400	16 D size PPM
KIP America	KIP 990	R	36			DT	4	СМҮК						600	2,400	16 D size PPM
KIP America	KIP 7171	R	36			DT	1	К						600	2,400	4 D size PPM
KIP America	KIP 7172	R	36			DT	1	К						600	2,400	4 D size PPM
KIP America	KIP 7572	R	36			DT	1	К						600	2,400	8 D size PPM
KIP America	KIP 7574	R	36			DT	1	К						600	2,400	8 D size PPM
KIP America	KIP 7582 MFP	R	36			DT	1	К						600	2,400	8 D size PPM
KIP America	KIP 7584 MFP	R	36			DT	1	К						600	2,400	8 D size PPM
KIP America	KIP 7974	R	36			DT	1	К						600	2,400	14 D size PPM
KIP America	KIP 7984 MFP	R	36			DT	1	К						600	2,400	14 D size PPM
KIP America	KIP 7984 MFP	R	36			DT	1	К						600	2,400	14 D size PPM
Ricoh USA	MP CW2201SP	R	36	590	0.43	G	4	СМҮК						1,200	1,200	2.1 PPM 4K, 3.8 PPM BW
Ricoh USA	MP W6700SP	R	36	590	0.43	DT	1	К						600	600	6.7 D size PPM
Ricoh USA	MP W7100	R	36	590	0.43	DT	1	К						600	600	10 D size PPM
Ricoh USA	MP W8140	R	36	1,180	0.43	DT	1	К						600	600	14 D size PPM

#### 40 to 59 inches

HP Inc.	HP Pagewide XL 3900 Mul- tifunction	R	40		WB	4	СМҮК			1,200	1,200	
HP Inc.	HP PageWide XL 4100 40-in Multi- function with PostScript/ PDF	R	40		WB	4	СМҮК			1,200	1,200	
HP Inc.	HP PageWide XL 4100 with Top Stacker	R	40		WB	4	СМҮК			1,200	1,200	
HP Inc.	HP PageWide XL 4100 with Top Stacker	R	40		WB	4	СМҮК			1,200	1,200	

Manufacturer	Model	Printer Type	Max Pri (inches)			Ink								Max Resolu (dpi)	tion	Speed @ Max Resolutio (sqft/hr)
			Width	Length	Thickness	lnk Technology	Number of colors	Colors	Spot	White	Metallic	Neon	Varnish	Width	Length	
<b>40" to 59"</b> (0	continued)															
HP Inc.	HP PageWide XL 4600 Multifunction with Top Stacker	R	40			WB	4	СМҮК						1,200	1,200	
HP Inc.	HP PageWide XL 4600 with Top Stacker	R	40			WB	4	СМҮК						1,200	1,200	
HP Inc.	HP PageWide XL 5100 Mul- tifunction with High-capacity Stacker and PostScript/ PDF	R	40			WB	4	СМҮК						1,200	1,200	
HP Inc.	HP PageWide XL 5100 Multifunction with Top Stacker and PostScript/ PDF	R	40			WB	4	СМҮК						1,200	1,200	
HP Inc.	HP PageWide XL 5100 with High-capacity Stacker and PostScript/ PDF	R	40			WB	4	СМҮК						1,200	1,200	
HP Inc.	HP PageWide XL 5100 with Top Stacker and PostScript/ PDF	R	40			WB	4	СМҮК						1,200	1,200	
HP Inc.	HP PageWide XL 6000 Mul- tifunction with High-capacity Stacker and PostScript/ PDF	R	40			WB	4	СМҮК						1,200	1,200	
HP Inc.	HP PageWide XL 6000 with High-capacity Stacker and PostScript/ PDF	R	40			WB	4	СМҮК						1,200	1,200	
HP Inc.	HP PageWide XL 8000	R	40			WB	4	СМҮК						1,200	1,200	
Canon U.S.A. Inc.	ColorWave 3600/3800	R	42	7,800	0.011	DT	4	СМҮК						600	600	3.5 D size prints per minute
HP Inc.	HP PageWide T400S	R	42			WB	4	СМҮК								
Mutoh America Inc.	RJ-900X	R	42.5			WB, TD, TP	4	СМҮК						2,880		
Mimaki USA Inc.	CJV150-107	R	42.9		0.04	DS	6	B, M, Y, K, Lb, Lm						1,440	1,440	
Mimaki USA Inc.	CJV150-107	R	43		0.04	Eco	10	CMYK, Lc, Lm, Lk, Or, W, Si		Х	Х			1,440	1,440	

Manufacturer	Model	Printer Type	Max Pr (inches			Ink							Max Resolu (dpi)	tion	Speed @ Max Resolution (sqft/hr)
			Width	Length	Thickness	lnk Technology	Number of colors	Colors	Spot	White	Metallic	Neon	Width	Length	(04.0)
<b>40" to 59"</b> (0	continued)														
Canon U.S.A. Inc.	image- PROGRAF PRO-4100	R	44	708	0.03	WB	11	CMY, B, Gy, Mk, Pc, Pgy, Pk, Pm, Pr, R					2,400	1,200	
Canon U.S.A. Inc.	image- PROGRAF PRO-4100S	R	44	708	0.03	WB	8	CMY, Gy, Mk, Pc, Pk, Pm,					2,400	1,200	
Canon U.S.A. Inc.	image- PROGRAF TX-4000	R	44	708	0.03	WB	5	CMYK, Mk					2,400	1,200	
Canon U.S.A. Inc.	image- PROGRAF TX-4000 MFP T36	R	44	708	0.03	WB	5	CMYK, Mk					2,400	1,200	
Epson Americas	SureColor F6370 Dye-Sub- limation Production Edition	R	44			DS	4	C, M, Y, Hdk					1,440	720	
Epson Americas	SureColor F6370 Dye-Sublima- tion Standard Edition	R	44			DS	4	C, M, Y, Hdk					1,440	720	
Epson Americas	SureColor P8000 Standard Edition	R	44		0.06	WB	9	C, Gr, Lc, Llk, Lk, Mk, O, Pk, V, Vlm, Vm, Y					2,880	1,440	
Epson Americas	SureColor P9000 Commercial Edition	R	44		0.06	WB	10	C, Gr, Lc, V Lk, Mk, O, Pk, Vm, Y					2,880	1,440	
Epson Americas	SureColor P9000 Standard Edition	R	44		0.06	WB	10	C, Gr, Lc, Llk, Lk, Mk, O, Pk, Vm, Y					2,880	1,440	
Epson Americas	SureColor P9570	R	44		0.06	WB	12	C, Pk, Vm, Y, Lc, Vlm, Gy, Mk, Lgy, O, G, V					2,400	1,200	
Epson Americas	SureColor P10000 Production Edition	R	44		0.06	WB	10	C, Dgy, Gy, Lc, Lgy, Mk, Pk, Vm, Vlm, Y,					2,400	1,200	
Epson Americas	SureColor P10000 Standard Edition	R	44		0.06	WB	10	C, Dgy, Gy, Lc, Lgy, Mk, Pk, Vm, Vlm, Y					2,400	1,200	
Epson Americas	SureColor T7270 Single Roll Edition	R	44		0.06	WB	5	CMY, Mk, Pk					2,880	1,440	

Manufacturer	Model	Printer Type	Max Pr (inches			Ink							Max Resolut (dpi)	tion	Speed @ Max Resolution (sqft/hr)
			Width	Length	Thickness	lnk Technology	Number of colors	Colors	Spot	White	Metallic	Neon	Width	Length	(
<b>40" to 59"</b> (c	ontinued)														
Epson Americas	SureColor T7270D Dual Roll Edition	R	44		0.06	WB	5	C,M,Y, Mk, Pk					2,400	1,440	
HP Inc.	HP DesignJet HD Pro Multi- function	R	44			WB	6	CMY, Cr, Mk, Pk					2,400	1,200	
HP Inc.	HP DesignJet T1700	R	44			WB	4	СМҮК					2,400	1,200	
HP Inc.	HP DesignJet T1700 PostScript	R	44			WB	4	СМҮК					2,400	1,200	
HP Inc.	HP DesignJet T1700dr	R	44			WB	4	СМҮК					2,400	1,200	
HP Inc.	HP DesignJet T1700dr PostScript	R	44			WB	4	СМҮК					2,400	1,200	
Vanguard Digital Printing Systems	VSP2400- RTR	R	49		0.033	UV LED	4	СМҮК							1,968
Mimaki USA Inc.	CJV150-130	R	53.5		0.04	DS	6	B, K, M, Y, Lb, Lm					1,440	1,440	
Mimaki USA Inc.	CJV300-130	R	53.5		0.04	DS	6	B, K, M, Y, Lb, Lm					1,440	1,440	
Mimaki USA Inc.	JV400LX-130	R	53.5		0.04	L	7	CMYK, G, O, W		х			1,200	1,200	
Mimaki USA Inc.	CJV300-130	R	53.6		0.04	Eco	6	CMYK, Lc, Lm, Lk, Or, W, Si		Х	Х		1,440	1,440	
Mimaki USA Inc.	JV150-130	R	53.6		0.04	DS, Eco	6	B, K, M, Y, Lb, Lm					1,440	1,440	
Mimaki USA Inc.	JV300-130	R	53.6		0.04	DS	6	B, K, M, Y, Lb, Lm					1,440	1,440	
Mimaki USA Inc.	TS30-1300	R	53.6		0.04	DS	6	B, K, M, Y, Lb, Lm					1,440	1,440	
Digifab Systems Inc.	StampaJet BP-54	R	54			D, DS, TP	4	СМҮК					1,440	1,440	
HP Inc.	HP Latex 315	R	54		0.02	L	6	CMYK, Lc, Lm					1,200	1,200	129
Mimaki USA Inc.	CJV150-130	R	54		0.04	Eco	10	CMYK, Lc, Lm, Lk, Or, W, Si		Х	Х		1,440	1,440	
Mimaki USA Inc.	JV300-130	R	54		0.04	Eco	9	CMYK, Lc, Lm, Lk, O, W		X			1,440	1,440	
Mimaki USA Inc.	JV400- 130SUV	R	54		0.04	SUV	4	СМҮК					1,200	1,200	
Mutoh America Inc.	ValueJet 1324X	R	54			Eco	4	СМҮК					1,440		

Manufacturer	Model	Printer Type	Max Pri (inches)			lnk								Max Resolut (dpi)	ion	Speed @ Max Resolutior (sqft/hr)
			Width	Length	Thickness	lnk Technology		Colors	Spot	White	Metallic	Neon	Varnish	Width	Length	
<b>40" to 59"</b> (c	ontinued)															
Mutoh America	Value let	R	54			Eco	4	СМУК						1440		

Muton America Inc.	1324X	K	54		ECO	4	CMYK			1,440	
Roland DGA Corporation	TrueVIS SG2- 540	R	54	0.03	Eco	4	СМҮК			1,200	54.9
Roland DGA Corporation	TrueVIS VG2- 540	R	54	0.03	Eco	8	CMYK, G, Lb, Lc, Lm, O, W	Х		1,200	98

#### 60" to 79"

Canon U.S.A. Inc.	imagePRO- GRAF PRO- 6000S	R	60	708	0.03	WB	8	CMY, Gy, Mk, Pc, Pk, Pm,				2,400	1,200	
Canon U.S.A. Inc.	image- PROGRAF PRO-6100	R	60	708	0.03	WB	11	CMY, B, Gy, Mk, Pc, Pgy, Pk, Pm, Pr, R				2,400	1,200	
Canon U.S.A. Inc.	image- PROGRAF PRO-6100S	R	60	708	0.03	WB	8	CMY, Gy, Mk, Pc, Pk, Pm,				2,400	1,200	
DGI	Poseidon	R	63			DS	4, 6	CMYK; CMYK, Fp, Fy; CMYK, Lc, Lm				600	1,200	431
Durst Image Technology US LLC	Rho 163 TS HS	R	63		1.57	UV	6	CMYK, B, R				400	600	550
Digifab Systems Inc.	StampaJet BP-64	R	63.3			A, D, DS, R, TP	8					540	1,080	66
Digifab Systems Inc.	StampaJet BP-150	R	63.3			A, D, DS, R, TP	8					540	1,080	158
Digifab Systems Inc.	StampaJet EN-64	R	63.3			A, D, DS, R, TP	8					1,440		150
Digifab Systems Inc.	StampaJet I-64	R	63.3			A, D, DS, R, TP	8					1,440	1,440	120
Digifab Systems Inc.	StampaJet IN-64	R	63.3			A, D, DS, R, TP	8					1,440	1,440	120
Digifab Systems Inc.	StampaJet XP-64	R	63.3			A, D, DS, R, TP	8					540	1,080	66
FUJIFILM North America Corporation	Acuity LED 1600R	R	63.3		0.04	UV LED	7	CMYK, Lc, Lm, W	;	X		1,200	1,200	45
Mimaki USA Inc.	CJV150	R	63.3		0.04	Eco		CMYK, Lc, Lm, Lk, O, W, Mt		x		1,440		
Mimaki USA Inc.	CJV150-160	R	63.3		0.04	DS	6	B, M, Y, K, Lb, Lm				1,440	1,440	
Mimaki USA Inc.	CJV300-160	R	63.3		0.04	DS	6	B, M, Y, K, Lb, Lm				1,440	1,440	

Manufacturer	Model	Printer Type	Max Pr (inches			Ink								Max Resolu (dpi)	tion	Speed @ Max Resolution (sqft/hr)
			Width	Length	Thickness	lnk Technology	Number of colors	Colors	Spot	White	Metallic	Neon	Varnish	Width	Length	(
<b>60" to 79"</b> (c	ontinued)															
Mimaki USA Inc.	JV300	R	63.3		0.04	Eco	9	CMYK, W, Lc, Lm, Lk, O		X				1,440	1,440	
Mimaki USA Inc.	JV400LX	R	63.3		0.04	L		CMYK, G, O, W		X				1,200		
Mimaki USA Inc.	JV400LX-160	R	63.3		0.04	L	7	CMYK, G, O, W		x				1,200	1,200	
Mimaki USA Inc.	JV150-160	R	63.4		0.04	DS	6	M, B, Y, K, Lb, Lm						1,440	1,440	
Mimaki USA Inc.	JV300-160	R	63.4		0.04	DS	6	M, B, Y, K, Lb, Lm						1,440	1,440	
Mimaki USA Inc.	CJV300	R	63.6		0.04	Eco	10	CMYK, Lc, Lk, Lm, M, O, W		Х				1,440		
Oki Data Amer- ica, distributed by Mimaki USA	ColorPainter M-64s	R	63.6			Eco		CMYK, Lc, Lm, Gy						900	900	
Oki Data Amer- ica, distributed by Mimaki USA	ColorPainter W-64s	R	63.6			Eco		CMYK, Lc, Lm						900	900	
Ricoh USA	RICOH Pro L5160	R	63.6	11,811	0.43	L	5	CMYK, W		х				1,200	1,200	44.1
Mimaki USA Inc.	JV5-160S	R	63.7		0.04	DS, S, Eco, WB	6	M, B, Y, K, Lb, Lm						1,440	1,440	
Canon U.S.A. Inc.	Colorado 1640	R	64	6,000	0.03	UV	4	СМҮК						1,800		215
Epson Americas	SureColor F7200	R	64			DS	4	C, M, Y, Hdk						1,440	720	
Epson Americas	SureColor F9470 Dye-Sublima- tion Inkjet	R	64			DS	4	C, M, Y, Hdk						1,440	720	
Epson Americas	SureColor F9470H Dye-sublima- tion Inkjet	R	64			DS	6	C, M, Y, HDK, Fy, Fp				Х		1,440	720	
Epson Americas	SureColor P20000 Production Edition	R	64		0.06	WB	10	C, Dgy, Gy, Lc, Lgy, Mk, Pk, Vlm, Vm, Y						2,400	1,200	
Epson Americas	SureColor P20000 Standard Edition	R	64		0.06	WB	10	C, Dgy, Gy, Lc, Lgy, Mk, Pk, Vlm, Vm, Y						2,400	1,200	
Epson Americas	SureColor S40600	R	64			S	4	CMYK						1,440	1,440	
Epson Americas	SureColor S40600 Print Cut Edition	R	64			S	4	СМҮК						1,440	1,440	
Epson Americas	SureColor S60600	R	64			S	4	СМҮК						1,440	1,440	

Manufacturer	Model	Printer Type	Max Pri (inches)			lnk								Max Resolu (dpi)	tion	Speed @ Max Resolutio (sqft/hr)
			Width	Length	Thickness	lnk Technology	Number of colors	Colors	Spot	White	Metallic	Neon	Varnish	Width	Length	
<b>60" to 79"</b> (c	ontinued)															
Epson Americas	SureColor S60600 Print Cut Edition	R	64			S	4	СМҮК						1,440	1,440	
Epson Americas	SureColor S60600L	R	64			S	4	СМҮК						1,440	1,440	
Epson Americas	SureColor S80600	R	64			S	9	CMYK, Lc, Lk, Lm, O, R, + W or Ms		Х	Х			1,440	1,440	
Epson Americas	SureColor S80600L	R	64			S	10	CMYK, Lc, Lk, Lm, O, R + W or Ms		Х	X			1,440	1,440	
HP Inc.	HP Latex 335	R	64		0.02	L	6	CMYK, Lc, Lm						1,200	1,200	140
HP Inc.	HP Latex 365	R	64		0.02	L	6	CMYK, Lc, Lm						1,200	1,200	183
HP Inc.	HP Latex 560	R	64		0.02	L	6	CMYK, Lc, Lm						1,200	1,200	248
HP Inc.	HP Latex 570	R	64		0.02	L	6	CMYK, Lc, Lm						1,200	1,200	248
HP Inc.	HP STITCH S300	R	64			DS	4	СМҮК						1,200	1,200	235
HP Inc.	HP STITCH S500	R	64			DS	4	СМҮК						1,200	1,200	365
Mimaki USA Inc.	CJV150-160	R	64		0.04	Eco	10	CMYK, Lc, Lm, Lk, Or, W, Si		х	Х			1,440	1,440	
Mimaki USA Inc.	CJV300-160	R	64		0.04	Eco	10	CMYK, Lc, Lm, Lk, Or, W, Si		Х	X			1,440	1,440	
Mimaki USA Inc.	JV150-160	R	64		0.04	Eco	8	CMYK, Lc, Lm, Lk, O						1,440	1,440	
Mimaki USA Inc.	JV300-160	R	64		0.04	Eco	9	CMYK, Lc, Lm, Lk, O, W						1,440	1,440	
Mimaki USA Inc.	JV400- 160SUV	R	64		0.04	SUV	4	CMYK						1,200	1,200	
Mimaki USA Inc.	UJV500-160	R	64			UV LED	5	CMYK, Lc, Lm, W		Х				1,200	1,200	
Mutoh America Inc.	ValueJet 1624WX	R	64			DS, WB	4	СМҮК						1,440		
Mutoh America Inc.	ValueJet 1638UR	R	64			UV LED	6	CMYK, Vr, W		x			Х	1,440		
Mutoh America Inc.	ValueJet 1638WX	R	64			DS, WB	4	СМҮК						1,440		
Mutoh America Inc.	XpertJet 1641SR	R	64		0.11	Eco	4	СМҮК						1,440		
Mutoh America Inc.	XpertJet 1682SR	R	64		0.11	Eco	7	CMYK, Lc, Lk, Lm						1,440		

Manufacturer	Model	Printer Type	Max Pri (inches)			lnk								Max Resolu (dpi)	tion	Speed @ Max Resolution (sqft/hr)
			Width	Length	Thickness	lnk Technology	Number of colors	Colors	Spot	White	Metallic	Neon	Varnish	Width	Length	
60 - 79 inche	es (continued)	)														
Mutoh America Inc.	XpertJet 1682WR	R	64		0.11	DS	4, 7	CMYK, Lc, Lk, Lm						1,440		
Roland DGA Corporation	SOLJET EJ-640	R	64		0.03	Eco	7, 8	CMYK, Lc, Lk, Lm						720	1,440	129
Roland DGA Corporation	SOLJET Pro 4 XR-640	R	64		0.03	Eco	9	CMYK, Lb, Lc, Lm, M, W		х	х			720	1,440	50
Roland DGA Corporation	Texart RT- 640	R	64		0.03	DS	4, 8	CMYK, Fp, Fy, Lc, Lm, O, V						1,440		43
Roland DGA Corporation	Texart RT- 640M	R	64		0.03	DS	4, 8	CMYK, Fp, Fy, Lc, Lm, O, V						1,440		43
Roland DGA Corporation	Texart XT- 640	R	64		0.03	DS	4, 8	CMYK, Fp, Fy, Lc, Lm, O, V						1,440		107
Roland DGA Corporation	TrueVIS SG2- 640	R	64		0.03	Eco	4	СМҮК						1,200		58.1
Roland DGA Corporation	TrueVIS VF2- 640	R	64		0.03	Eco	8	CMYK, G, Lb, Lc, Lm, O, W		Х				1,200		103.33
Roland DGA Corporation	TrueVIS VG2- 640	R	64		0.03	Eco	8	CMYK, G, Lb, Lc, Lm, O, W		Х				1,200		103
Roland DGA Corporation	VersaEX- PRESS RF-640	R	64		0.03	Eco	4	СМҮК						1,440	720	47
Roland DGA Corporation	VersaEX- PRESS RF-640 8C	R	64		0.03	Eco	8	CMYK, G, Lb, O, R						1,440	720	19.4
Stratojet USA	Hawk 72 EcoClean	R	64			WB	4	СМҮК						2,840		172
EFI	EFI Reggiani ONE 180	R	70											2,400		
EFI	EFI Reggiani PRO 180	R	70											2,400		
SID Signs, distributed in North America by Paradigm Imaging Group	SID ECOtech Taurus Series 180E	R	70			Eco	4	СМҮК						1,440		86
SID Signs, distributed in North America by Paradigm Imaging Group	SID ECOtech Taurus Series 180ES (Two Printheads)	R	70			Eco	4	СМҮК						2,880		150
Flora Digital	T100	R	70.8			TD	8	CMYK, B, Lk, O, R						605	1,200	538
Flora Digital	T180	R	70.8			TD	8	CMYK, B, Lk, O, R						605	1,200	700

Manufacturer	Model	Printer Type	Max Print Size (inches)			Ink		Max Resolu (dpi)	Speed @ Max Resolution (sqft/hr)						
			Width	Length	Thickness	Ink Technology	Number of colors	Colors	Spot	White	Metallic	Neon	Width	Length	(Sqruth)
<b>60" to 79"</b> (c	ontinued)														
Kornit Digital Ltd.	Presto	R	70.8			WB, TP	6	CMYK, G, R					1,000	800	1,345
EFI	EFI Reggiani VOGUE	R	71										2,400		
SID, distributed in North Ameri- ca by Paradigm Imaging Group	PIXis ES 71	R	71		0.06	Eco	4	СМҮК					1,440		193
d.gen Inc.	Aracne Hexa	R	72			TP	6						1,800		301
d.gen Inc.	Artrix H8	R	72			ТР	8						2,400		409
Mimaki USA Inc.	Tx500-1800B	R	72		0.04	DS, TD	6, 8	M, B, Y, K, Lb, Lm; CMYK, B, O, R, Lk					1,200	1,200	
Mimaki USA Inc.	Tx500- 1800DS	R	72		0.04	DS	6	M, B, Y, K, Lb, Lm					1,200	1,200	
SPGPrints	Javelin2	R	72.8		0.11	A, DS, R	6						1,200	1,200	115
EFI	EFI Reggiani FLEXY	R	73				8						600	1,200	1,023
d.gen Inc.	Arete Combo	R	74		0.3	WB	6	CMYK, Lc, Lm, O, T; CMYK, B, Lc, Lm, O					600		
d.gen Inc.	Teleios Hexa	R	74		0.5	TP	4, 8	CMYK, Lc, Lm, O, T; CMYK, B, Lc, Lm, O					600		
DGI	Apollon	R	74			DS	4, 6	CMYK; CMYK, Fp, Fy; CMYK, Lc, Lm					600	1,800	
DGI	FD-1904	R	74			WB, TP	8						600	1,200	570
DGI	FD-1908	R	74			WB, TP	8						600	1,800	700
DGI	Hercules	R	74			DS	4	СМҮК					720	1,800	366
DGI	HS FT III	R	74			DS	4, 6	CMYK; CMYK, Fp, Fy; CMYK, Lc, Lm					600	1,200	807
DGI	OJ-74	R	74			WB	4	СМҮК					720	1,200	
DGI	Poseidon	R	74			DS	4, 6	CMYK; CMYK, Fp, Fy; CMYK, Lc, Lm					600	1,200	484
DGI	VE-1904	R	74			Eco	4	СМҮК					720	1,440	97
DGI	VE-1908	R	74			Eco	4	СМҮК					720	1,440	172

Manufacturer	Model	Printer Type	Max Print Size (inches)			Ink			Max Resolu (dpi)	Speed @ Max Resolution (sqft/hr)						
			Width	Length	Thickness	lnk Technology	Number of colors	Colors	Spot	White	Metallic	Neon	Varnish	Width	Length	(3910111)
<b>60" to 79"</b> (c	ontinued)															
Digifab Systems Inc.	StampaJet IN-500	R	74			A, D, DS, R, TP	8									
Durst Image Technology US LLC	Alpha 190	R	74		0.12	TP	8	CMYK, B, G, O, R; CMYK, B, Gy, Lm, O, V; CMYK, B, Gy, O, R						500	600	3,970
Mimaki USA Inc.	TS500-1800	R	74		0.04	DS	6	B, M, Y, K, Lb, Lm						1,200	1,200	
PrinterEvolution	D1800 DS	R	74			DS, WB	4	СМҮК						600	900	1,395
PrinterEvolution	T1800 DS	R	74			DS, WB	4	СМҮК						600	900	
Stratojet USA	Piranha	R	74			DS	4	СМҮК						1,200		409
Digifab Systems Inc.	StampaJet K8-180	R	74.5			A, D, DS, R, TP	8							600	1,200	1,216
Digifab Systems Inc.	StampaJet R6-190	R	74.5			DS, TP	4	СМҮК						600	1,200	1,112
Gandy Digital Ltd.	NextJet Paper 190	R	74.8			DS	4	СМҮК						600	900	969
Mimaki USA Inc.	TS34-1800A	R	75		0.04	DS, WB	6	M, B, Y, K, Lb, Lm						1,440	1,440	
Mutoh America Inc.	ValueJet 1948WX	R	75			DS	4	СМҮК						1,440		
Mutoh America Inc.	ValueJet 1938WX	R	75.2			DS, WB	4	СМҮК						1,440		
Mimaki USA Inc.	TX300P- 1800	R	75.5		0.04	DS	6	B, M, Y, K, Lb, Lm						1,080	1,080	
EFI	EFI Reggiani BOLT	R	76			WB	8							600	4,800	
Mimaki USA Inc.	TS300P-1800	R	76.4		0.04	DS	6	B, M, Y, K, Lb, Lm	X					1,440	1,440	
Epson Americas	SureColor F10070	R	76.7			DS	4	C, M, Y, Hdk						1,200	600	
SPGPrints	PIKE	R	76.7		0.11	R	6, 9	CMY, B, Dk, Gr, O, R						1,200	1,200	
Flora Digital	LJ200T	R	78.7			DS	4	СМҮК						605	1,200	807
Flora Digital	TX2000DS	R	78.7			DS	4	СМҮК						605	1,200	807
Mimaki USA Inc.	UJV500-160	R	76.7		0.11	R	6, 9	CMY, B, Dk, Gr, O, R						1,200	1,200	
Flora Digital	LJ200T	R	78.7			DS	4	СМҮК						605	1,200	807
Flora Digital	TX2000DS	R	78.7			DS	4	СМҮК						605	1,200	807

Manufacturer	Model	Printer Type	Max Print Size (inches)			lnk			Max Resolu (dpi)	Speed @ Max Resolution (sqft/hr)						
			Width	Length	Thickness	lnk Technology	Number of colors	Colors	Spot	White	Metallic	Neon	Varnish	Width	Length	(Schorn)
80" to 99"																
Hollanders Printing Systems	ColorBooster DS	R	82.7			DS, TD, TP	6, 7, 8	СМҮК						720	720	
100" to 119"																
Infiniti Digital/ Aeromatrix	Fina 250PQ	R	100			S	4	CMYK						720	1,200	170
Infiniti Digital/ Aeromatrix	Fina 250Q	R	100			S	4	СМҮК						720	1,440	67
Hollanders Printing Systems	ColorBooster 250	R	100.4			DS, TD, TP	4, 6, 8	СМҮК						900	600	
PrinterEvolution	D2600 DS	R	102			DS, WB	4	CMYK						600	900	1,395
PrinterEvolution	Eos 100 DS	R	102			DS, WB	4	CMYK						1,200		720
PrinterEvolution	T2600 DS	R	102			DS, WB	4	CMYK						600	900	
Oki Data Amer- ica, distributed by Mimaki USA	ColorPainter H2-74s/H2- 104s	R	103.6			Eco		CMYK, Lc, Lm, Lk, Llk						900	900	
Oki Data Amer- ica, distributed by Mimaki USA	ColorPainter H3-104s	R	103.6			Eco		CMYK, Lc, Lm, G, Lg						900	900	
Mimaki USA Inc.	JV34-260	R	104		0.04	DS	6	M, B, Y, K, Lb, Lm						1,440	1,440	
Mimaki USA Inc.	JV34-260	R	104		0.04	Eco	6	CMYK, Lc, Lm						1,440	1,440	
Mutoh America Inc.	ValueJet 2638WX	R	104			DS, WB, Eco	8	СМҮК						1,440		
Mutoh America Inc.	ValueJet 2638X	R	104			Eco	7	CMYK, Lc, Lk, Lm						1,440		
HP Inc.	HP PageWide T1170	R	110			WB	6	CMYK, O, V								
HP Inc.	HP PageWide T1190	R	110			WB	6	CMYK, O, V								

#### 120" to 189"

		l		 l								
Infiniti Digital/ Aeromatrix	Fina 320SW	R	120		S	4	СМҮК			360	1,200	252
Infiniti Digital/ Aeromatrix	Economic Sky 330SW	R	125		S	4	СМҮК			1,200		86
Infiniti Digital/ Aeromatrix	Fina 330PQ	R	125		S	4	СМҮК			720	1,200	170
Infiniti Digital/ Aeromatrix	Fina 330TX	R	125		DS	4, 6	СМҮК			600	1,600	260
Flora Digital	LJ320SG	R	125.9		S	4	CMYK			720	800	646
Flora Digital	TX3200DS	R	125.9		DS	4	CMYK			605	1,200	700
Flora Digital	Xtra320G	R	125.9		S	4	CMYK			600	1,200	646
Flora Digital	Xtra320K	R	125.9		S	4	CMYK			720	1,440	646

Manufacturer	Model	Printer Type	Max Pri (inches			Ink								Max Resolu (dpi)	tion	Speed @ Max Resolution (sqft/hr)
			Width	Length	Thickness	lnk Technology	Number of colors	Colors	Spot	White	Metallic	Neon	Varnish	Width	Length	(eq.e)
120" to 189"	(continued)															
Flora/Ameri- can Printing Systems	Xtra3300L	R	125.9			UV	6	CMYK, Lc, Lm, W		Х				726	1,440	431
Gandy Digital Ltd.	Kre8tor	R	125.9		4.7	UV	6	CMYK, Lc, Lm, W		Х				1,200	1,200	700
Gandy Digital Ltd.	Termin8tor S	R	125.9			Eco, S	4	СМҮК						600	800	1,830
Hollanders Printing Systems	ColorBooster XL	R	125.9			DS, TD, TP	8, 12							2,880	2,880	
SPGPrints	Javelin2	R	125.9		0.11	A, DS, R	6							1,200	1,200	115
Teckwin Technologies Limited	TS 3200r	R	125.9		0.03	UV	6	CMYK, W		Х						215
Agfa	Anapurna RTR3200i LED	R	126		0.08	UV LED	6	CMYK, Lc, Lk, W		Х				720	1,440	161
Agfa	Anapurna RTR3200i LED (+ White)	R	126		0.08	UV LED	5	CMYK, W		Х				720	1,440	161
Canon U.S.A. Inc.	DGI FH-3204	R	126		0.0393	DS	4, 6	CMYK, Fy, Fp						600	1,200	538 (4PH/ 8Pass) 484 (2/3 PH/8 Pass)
CET Color	K2-3200	R	126		1.96	UV LED	4	СМҮК						1,200	1,200	400
d.gen Inc.	Papyrus Grande	R	126		0.3	DS	6	CMYK, Lc, Lm, O, T; CMYK, B, R						1,200		
d.gen Inc.	Papyrus GS	R	126		0.3	DS	6	CMYK, Dk, Fp, Fy, Lc, Lm, O, T; CMYK, B, R						1,200		
d.gen Inc.	Teleios Grande / GS	R	126		0.5	TP	4, 8	CMYK, Lc, Lm, O, T; CMYK, B, Lc, Lm, O						600		
d.gen Inc.	Teleios Grande / H12	R	126		0.5	WB	6	CMYK, Lc, Lm, O, T; CMYK, B, Lc, Lm, O						600		
d.gen Inc.	Teleios Grande / H6	R	126		0.5	WB	6	CMYK, Lc, Lm, O, T; CMYK, B, Lc, Lm, O						600		
DGI	FT-3204X	R	126			DS	4	СМҮК						720	1,080	538

Manufacturer	Model	Printer Type	Max Pri (inches			Ink								Max Resolu (dpi)	tion	Speed @ Max Resolutic (sqft/hr)
			Width	Length	Thickness	lnk Technology	Number of colors	Colors	Spot	White	Metallic	Neon	Varnish	Width	Length	
120" to 189"	(continued)															
DGI	VE-3204X	R	126			Eco	4	CMYK						720	1,080	538
Dilli	Neo Titan RTR3204D	R	126			UV	5	CMYK, W		X				720	1,440	377
Dilli	Neo Titan RTR3204D- W2	R	126			UV	5	CMYK, W		X				720	1,440	377
Dilli	Neo Titan RTR3204DX	R	126			UV	5	CMYK, W		X				720	1,440	732
Durst Image Technology US LLC	Rho 312R LED	R	126		0.8	UV LED	8	CMYK, Lc, Lk, Lm, O, V, G		Х				1,200		1,580
Durst Image Technology US LLC	Rho 312R Plus	R	126		0.8	UV	8	CMYK, Lc, Lk, Lm, O, V, G	X	Х				1,200		1,580
Durst Image Technology US LLC	Rhotex 325	R	126		0.08	DS	6	CMYK, Gy, Lc, Lm, O, V						800	600	2,360
EFI	EFI Pro 32r+	R	126			UV LED	4	CMYK, W		х			Х			
FUJIFILM North America Corporation	Acuity LED 3200R	R	126		0.039	UV LED	7	CMYK, Lc, Lm, W		Х				1,200	900	118
FUJIFILM North America Corporation	Acuity Ultra 3200 Series	R	126		0.08	UV	4, 6, 7	CMYK, Lc, Lm, W	X	Х				1,200	1,200	947
Hollanders Printing Systems	ColorBooster DS	R	126			DS, TD, TP	6, 7, 8	СМҮК						720	720	
HP Inc.	HP Latex 1500	R	126			L	6	CMYK, Lc, Lm						1,200	1,200	610
HP Inc.	HP Latex 3600	R	126			L	6	CMYK, Lc, Lm						1,200	1,200	830
HP Inc.	HP STITCH S1000	R	126			DS	4	СМҮК						1,200	600	1,400
Mimaki USA Inc.	UJV55-320	R	126			UV LED	7	CMYK, Lc, Lm, W		Х				1,200	1,200	
PrinterEvolution	D3200 DS	R	126			DS, WB	4	CMYK						600	900	1,395
PrinterEvolution	Eos 126 DS	R	126			DS, WB	4	CMYK						1,200		760
PrinterEvolution	Evo33-DS	R	126			DS, WB	4, 6	CMYK, O, V						1,200	1,200	
PrinterEvolution	Kayo 126	R	126			DS, WB	4	CMYK						1,200		560
PrinterEvolution	T3200 DS	R	126			DS, WB	4	СМҮК						600	900	
SID Signs, distributed in North America by Paradigm Imaging Group	Mercury 320	R	126		0.08	S, Eco	4, 6	CMYK, Lc, Lm						180	1,440	226
SID Signs, distributed in North America by Paradigm Imaging Group	Mercury GS 320	R	126		0.08	S, Eco	6	CMYK, Lc, Lm						720	1,440	247

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Manufacturer	Model	Printer Type	Max Pri (inches)			Ink								Max Resolut (dpi)	tion	Speed @ Max Resolution (sqft/hr)
			Width	Length	Thickness	lnk Technology	Number of colors	Colors	Spot	White	Metallic	Neon	Varnish	Width	Length	(eq:am)
120" to 189"	(continued)															
SID Signs, distributed in North America by Paradigm Imaging Group	PIXis ES 126	R	126		0.06	Eco	4	СМҮК						1,440		215
SID Signs, distributed in North America by Paradigm Imaging Group	SID ECOtech Taurus Series 320ES	R	126			Eco	4	СМҮК						2,880		194
SID Signs, distributed in North America by Paradigm Imaging Group	Titan 320	R	126		0.08	S, Eco	4, 6	CMYK, Lc, Lm						720		150
SID Signs, distributed in North America by Paradigm Imaging Group	Titan GS 320	R	126		0.08	S, Eco	4, 6	CMYK, Lc, Lm						1,440		333
SID Signs, distributed in North America by Paradigm Imaging Group	Triton S 320	R	126		0.25	Eco	4	СМҮК						2,880		236
Vanguard Digital Printing Systems	VKR3200-HS	R	126		1	UV LED	8	CMYK, Lc, Lm, Vr, W		Х			Х			400
Hollanders Printing Systems	ColorBooster 320	R	126.8			DS, TD, TP	4, 6, 8	СМҮК						900	600	
Hollanders Printing Systems	ColorBooster XL	R	128			DS, TD, TP	4, 6, 8	СМҮК						720	720	
Mimaki USA Inc.	JV5-320S	R	128		0.04	DS, S, Eco	6	M, B, Y, K, Lb, Lm						1,440	1,440	
Mimaki USA Inc.	JV5	R	129		0.04	Eco		CMYK, Lc, Lm						1,440	1,440	
Mimaki USA Inc.	JV5-320DS	R	129		0.04	DS, Eco	6	M, B, Y, K, Lb, Lm						1,440	1,440	
Mimaki USA Inc.	TS500P- 3200	R	129.5		0.007	DS	6	B, M, Y, K, Lb, Lm						1,080	1,080	
Gandy Digital Ltd.	NextJet Direct 330	R	129.9			DS	4	СМҮК						600	900	969
Gandy Digital Ltd.	NextJet Paper 330	R	129.9			DS	4	СМҮК						600	900	1,399
Teckwin Technologies Limited	TeckPro UV3200	R	129.9		0.03	UV	6	CMYK, Lc, LM						800		237
Agfa	Oberon RTR3300	R	130		0.08	UV LED	6	CMYK, Lc, Lm						900	600	1,582
Agfa	Oberon RTR3300	R	130		0.08	UV LED	5	CMYK, W		х				900	600	1,582
Digifab Systems Inc.	StampaJet R6-330	R	130			DS, TP	4	СМҮК						600	1,200	1,363

Manufacturer	Model	Printer Type	Max Pri (inches)			Ink								Max Resolu (dpi)	tion	Speed @ Max Resolutio (sqft/hr)
			Width	Length	Thickness	lnk Technology	Number of colors	Colors	Spot	White	Metallic	Neon	Varnish	Width	Length	
120" to 189"	(continued)															
Dilli	Neo Sun NS- RTR-3300	R	130			UV	5	CMYK, W		Х				1,200	2,400	344
Durst Image Technology US LLC	Alpha 330	R	130		0.12	ТР	8	CMYK, B, G, O, R; CMYK, B, Gy, Lm, O, V; CMYK, B, Gy, O, R						500	600	5,055
Stratojet USA	FALCON 3300 XL	R	131		0.01	UV		CMYK, G, Lc, Lk, Lm, O, R, V, Vr, W	Х	Х			Х	1,200		582
Canon U.S.A. Inc.	DGI FT- 3204X	R	132.6		0.03	DS	4	СМҮК						720	1,080	592
EFI	EFI Reggiani PRO 340	R	133											2,400		
swissQprint	Karibu	R	133		0.12	UV LED	9	CMYK, Lc, Lk, Lm, O, Vr, W	Х	Х			Х	1,080		345
EFI	EFI Reggiani COLORS	R	134				12							2,400		
EFI	EFI Reggiani POWER for Fabric	R	134				8	CMYK, B, O, R, V						600	1,200	3,175
EFI	EFI Matan 3	R	138			UV	4	СМҮК						600		
EFI	EFI VUTEk 3r+	R	138			UV LED	7	CMYK, W		Х				1,200		
EFI	EFI VUTEk D3r	R	138			UV LED	4	CMYK, W		Х			Х	1,200		

Dilli	Neo Titan RTR5004D- W2X	R	196			UV	5	CMYK, W		Х		720	1,440	732
Dilli	Neo Titan RTR5004DX	R	196			UV	4	СМҮК				720	1,440	732
Durst Image Technology US LLC	Rho 512R LED	R	196.8	0.8	.8	UV LED	8	CMYK, Lc, Lk, Lm, O, V, G		Х		1,200		1,785
Durst Image Technology US LLC	Rho 512R Plus	R	196.8	0.8	.8	UV	8	CMYK, Lc, Lk, Lm, O, V, G	Х	Х		1,200		1,785
Flora/ American Printing Systems	Xtra5000	R	196.8			S	6	CMYK, Lc, Lm, W		х		726	1,440	484
Teckwin Technologies Limited	TS 5000r	R	196.8	0.0	.03	UV	6	CMYK, W		х				269
Gandy Digital Ltd. 40 J. Wide-For	Fascin8tor	R	196.85			UV, UV LED	8	CMYK, Cl, Lc, Lm, W		x		1,200	1,200	

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Manufacturer	Model	Printer Type	Max Pri (inches)			Ink								Max Resolu (dpi)	tion	Speed @ Max Resolution (sqft/hr)
			Width	Length	Thickness	lnk Technology	Number of colors	Colors	Spot	White	Metallic	Neon	Varnish	Width	Length	
<b>190"</b> + (contin	ued)															
Gandy Digital Ltd.	Kre8tor	R	196.85		4.7	UV	6	CMYK, Lc, Lm, W		X				1,200	1,200	861
Teckwin Technologies Limited	TeckPro UV5000	R	196.9		0.03	UV	6	CMYK, Lc, LM						800		369
CET Color	K2-5000	R	197		1.96	UV LED	4, 5, 6	CMYK; CMYK, W; CMYK, Lc, Lm		Х				600	1,200	1,163
FUJIFILM North America Corporation	Acuity Ultra 5000 Series	R	197		0.08	UV	4, 6, 7	CMYK, Lc, Lm, W	Х	Х				1,200	1,200	1,119
Durst Image Technology US LLC	Rhotex 500	R	198		0.08	DS	6	CMYK, Gy, Lc, Lm, O, V						400	600	1,340
EFI	EFI Matan 5	R	198			UV	4	СМҮК						600		
EFI	EFI VUTEk 5r+	R	198			UV LED	7	CMYK, Lc, Lk, Lm, W		Х			Х	1,200		
EFI	EFI VUTEk D5r	R	198			UV LED	4	CMYK, W		Х			х	1,200		
PrinterEvolution	D5300 DS	R	208			DS, WB	4	СМҮК						1,200	600	1,720
Gandy Digital Ltd.	NextJet Direct 530	R	208.6			DS	4	СМҮК						600	900	1,184

# A Cut Above the Rest

THE CHANGING LANDSCAPE OF CUTTING AND ROUTING TECHNOLOGIES ARE SHAPING WIDE-FORMAT'S FUTURE.

**BY MAURA KELLER** 





• Cutting and routing technology has seen rapid progression in the past few years.

Gutting and routing equipment in the wide-format industry has gotten progressively faster and more automated. This reality, coupled with the ever-changing nature of this industry segment, can help owners and operators streamline their business systems and improve their bottom line.

Just ask Signarama franchisee, Ric Anderson, of Salt Lake City, Utah. The cutting and routing space within the wide-format industry has significantly progressed in recent years, which is impacting the way he does business.

"For our shop, we have been able to offer more dimensional signage which was just not possible several years ago," Anderson says. "The detailing that goes into each sign has become much easier and less time consuming with new 3D software. Textures can be easily added to a sign to give it a refined look compared to a flat sign. And we are able to create more interesting and unique signs for our customers to help their businesses stand out."

Indeed, as Tim Saul, senior marketing specialist, Canon Solutions America explains, change is constantly afoot within the cutting and routing segment as today's wide-format printers have made significant progress regarding quality, versatility, automation, and speed.

"From those advancements in printing technology, there is the opportunity for finishing equipment manufacturers to increase speed to market for finished graphics," Saul says. "The bottleneck for a print service provider moved from printing to digital finishing. Many of the manufacturers of cutting equipment have met the call for speed and application versatility."

#### **A CHANGING SPACE**

Historically speaking, many of the changes in digital cutting have revolved around the versatility to cut a wide range of substrates. As the ink sets and printers allow for greater use with a wide variety of substrates, so must the cutting equipment.

"The biggest changes in the world of finishing cutting systems is the increase in versatility and efficiency in print and finishing/cutting equipment," notes Gary Buck, VP, sales and marketing for Summa America. "Nowadays, it is important to meet about every cutting need you can imagine and develop versatile cutting machines, able to process a wide variety of materials, and thus address a wider range of industries."

"Many of the changes that have taken place over the course of the past few years are related to knife and router speeds, which have seen a significant increase," Saul says. As the variety of substrates has expanded, the tooling manufacturers have kept up with the demand for accurate, smooth cuts with the added benefit of increased cutter speed.

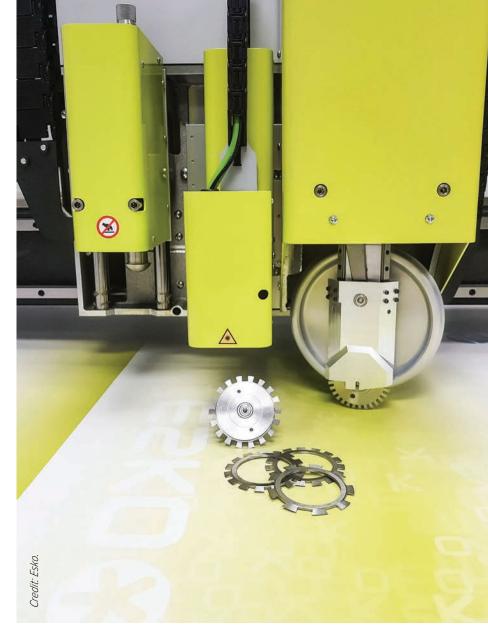
"Certain substrates can only be cut to an optimum level of speed. Tooling makes all the difference in how the cut is finished and presents as a final graphic to an end-user," Saul says. Indeed, the ability to effectively manage the digital print-and-cut workflow has been an important issue that has driven this segment of the industry.

But speed and versatility aren't the only factors driving the cutting and routing space of tomorrow. Lenny Marano, VP, product management and marketing for automation systems at Gerber Technology, points out that as the industry begins to step away from traditional signage, he's starting to see more of a push for connectivity and automation that will allow providers to quickly deliver customized products.

"Providers need to be able to offer both flexible and rigid materials, making it important to have access to the latest cutting and routing technology," Marano says. "In addition, with digital printers being able to produce vivid graphics for large display applications, up to 3.2m in width, the need for wide-format finishing is becoming mandatory."

Wide-format providers also need cutting and routing solutions that are compatible with the rest of the shop in order to efficiently offer a variety of services. "With versatile solutions, providers are able to quickly and easily change from one technology to another, providing a tremendous advantage," Marano says.

"Industry 4.0 is hot on the minds of OEMs and PSPs," says Heather Roden, strategic account manager, Graphics/Packaging at Zünd. "While Zünd Cut Center (ZCC) has long leveraged material databases for eliminating operator trial and error, we find more and more often custom data exchange taking place between PSP homegrown MIS workflow systems and ZCC."



• Versatility is a key trend in the cutting and routing space.

"The biggest changes in the world of finishing cutting systems is the increase in versatility and efficiency in print and finishing/ cutting equipment."

Roden goes on to note that one of the single biggest trends she sees for the space is around, "how the data exchange from all of the equipment on the shop floor will allow PSPs to operate with much more sophisticated cost-estimating models, which in turn will lead to much greater profitability."

# **4 CHALLENGES IN CUTTING AND ROUTING**

There are a few broad trends that will have a major impact on the cutting and routing space in the coming years, notes Gary Buck, VP, sales and marketing for Summa America. Those include:

- 1 SOFTWARE COMPATIBILITY and striving for perfect integration of the software with the hardware, with a focus on open systems that can interface with any machine in the workplace, via one computer or network.
- 2 MORE AUTOMATION and striving toward minimal intervention of the operator by developing features and add-ons to contribute to the equipment's automation strengths.
- **3 WASTE REDUCTION** and striving for optimal fabric and material consumption through features in the software (nesting) and smart fabric optimization add-ons in the hardware.
- 4 WORKFLOW INTEGRATION and combining strengths of both the printer and flatbed/laser cutter to work together perfectly.

The lower costs and faster production times associated with these cutting and routing advancements have given business owners like Anderson the ability to earn more revenue and profit opportunities with their signs.

"We have seen new suppliers of equipment enter the market and they have lowered the cost of owning equipment, making it possible for smaller shops to get into the industry," Anderson says. "The addition of 3D software has been a game changer for my team, opening the opportunity to automate many processes for small and mid-sized shops."

#### TRENDS TO WATCH

According to Chris Logan, director of product development at Esko, when considering the latest technology advancements in the sector, one of the key factors that will continue to be top of mind is versatility.

As Logan explains, historically, converters would have required an array of equipment across their shop floor to handle a range of different materials and applications — be it textile, paper-based, rigid, etc.

"But because of the advances driven by companies, many of these applications can now be handled with a single device," Logan says. "And due to end-market trends, there has also been a significant shift of focus toward quick changeovers between different materials and throughput, which has succeeded in ensuring finishing did not become the bottleneck." Saul points to workflow as the key to success for automating the print and cut production. As such, there have been increases in motor, routing, and cutting speeds, but there are also advancements in X/Y motion speed of the gantries.

"To meet the quest for quicker cutting production, the size of the working table has an impact on the productivity of the cutting system as well," Saul says. "Cutters that have on-loading and off-loading tables increase the productivity of the cutter, and minimize the downtime of conveying and reloading. There are systems that have increased the working table size, which can cut up to three 4x8-ft. boards in one convey."

And as suppliers continue to develop new substrates to meet the demands of brands and customers, integrated solutions have to ensure that the tooling technology keeps pace. As Logan explains, this can mean anything from the development of a totally new tool, to a very focused enhancement in knife blades or router bits.

"The challenge is to meet the multiple objectives of ensuring the highest quality of cut, for the lifetime of consumables, within reasonable budget constraints," Logan says. But that is easier said than done because the challenge of doing so is exacerbated by an influx of low-quality material on the market.

"While in some cases it may still be possible to print on lower quality boards, it is only when finishing a particular substrate that we really find out what it's made of and suffer the consequences in terms of the final output," Logan says.

The need will also spread to other areas of finishing. Roden notes that, "as cutting/routing processes become more automated and efficient, kitting is the area that turns into a bottleneck." She believes solutions that integrate a range of processes will help ease some of the challenges of the future.

The continued importance and awareness of environmental issues has also led to a significant increase in demand for more environmentally-friendly materials, particularly in the sign and display segment of the market. According to Logan, customers are looking to replace oil or plastic-based materials with more sustainable, eco-friendly offerings.



• Digital diecutting is making huge inroads in this space.

"While in some cases it may still be possible to print on lower quality boards, it is only when finishing a particular substrate that we really find out what it's made of and suffer the consequences in terms of the final output."

Digital transformation is also hugely important, and as a global provider of integrated software solutions the team at Esko has been heartened that automation has been another driving factor in this market.

"We have seen strong adoption from some of the industry's biggest names, and it's now making its way across the market in general, as it delivers maximized productivity, greater accuracy, and consistency of results, while also delivering the flexibility of fast job changeovers as run lengths continue to get shorter," Logan says.

#### WHAT THE FUTURE HOLDS

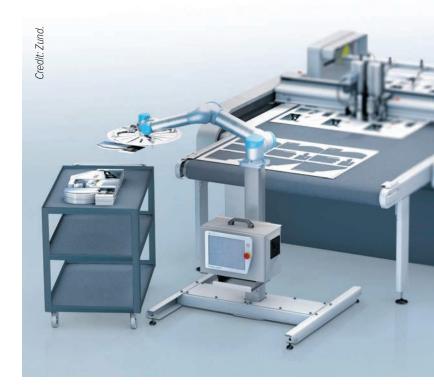
As technology in the cutting and routing space continues to advance, experts agree that manufacturers will continue to embrace enhancements to bring forth more productive units, while also researching new methods and tools for finishing.

"Many of the latest innovations are going to allow manufacturers to produce for longer and longer run sizes," Marano says. "The new technologies will help providers deliver the quality, speed, and versatility required to keep up the demands of longer-run, digitally printed applications."

And as cutting and routing technologies continue to get more advanced in terms of digital processing and data capabilities, end users will be able to cut more precisely and leverage higher power tools.

"We are starting to notice the incorporation of linear motors being used in some units," Saul says. Linear motors reduce friction, wear, and tear on parts, while increasing the speed of the traversing motion on the cutters.

According to Dylan Hoffman, engineer at Colex Finishing, the equipment on the market today is exceeding 4,000 and even 5,000 inches per minute (ipm) feed rates. This was something



Automation is popular for OEMs and end-users alike.

unheard of less than a decade ago.

"The manufacturers of the equipment are also working toward streamlining setup time by incorporating the use of a shared material library that can be accessed by a printed QR code, which will carry material, tooling, and the cut file data," Hoffman says. "The main competition on the flatbed cutting market all offer QR code functionality. What is currently holding back this technology from becoming mainstream are the RIP software companies."

As Hoffman explains, the majority of RIPs have yet to adopt this workflow, with Caldera being one of the first to take a chance. One by one the other RIP software companies will follow as the demand for streamlined productivity across equipment increases, he says.

One additional challenge faced by the wide-format industry is to be constantly aware of the development of new materials — which ultimately affects the routing and cutting processes. "There is also a growing argument for not only advancing deeper automation of the tables, but integrating this automation more closely across the entire shop floor," Logan says.

And as equipment continues to improve, Anderson and his team at Signarama in Salt Lake City are constantly watching for new software options.

"In routing we are able to produce beautiful threedimensional signage. To do so we have spent a great amount of time attending training courses and learning the functionality of various software programs," Anderson says. "This is allowing us to stay ahead of our competitors with creativity and production. I think the future will be wide open for those who stay at the front of technology. 3D printing, lasers, and new technology are the key for our future success."

# WIDE-FORMAT FINISHING: DIGITAL FLATBED CUTTERS (24"+)

Wide-format digital flatbed cutters are at least 24" wide, and can be used to cut a diverse range of substrates, including both flexible and rigid materials up to several inches thick, allowing all cutting activities to be consolidated to a single unit. Automation features also help improve speed and productivity, freeing operators to focus on other aspects of production.

## LEGEND

*Types of materials:* A=Aluminum, AC=Acrylic/Plexi, C=Canvas, CA=Carpet, CB=Cardboard, CC=Corrugated Cardboard, CM=Composites, D=DiBond, F=Fabric/Textile, FI=Film, FM=Foam Boards, G=Gaskets, GL=Glass, H=Honeycombs, K=Kevlar, L=Laminates, LE=Leather, M=Metal, P=Paper/Card Stock, PL=Plastics, PVC=PVC/Sintra, R=Rubber, S=Styrene, SFC=Solid-Fiber Cardboard, T=Textile, V=Vinyl, W=Wood/MDF

Company	Model	Work Area (incl	nes)	Gantry Clearance Height (inches)	Number of Vacuum Sections	Max Material Thickness (inches)	Types of Materials	Max Speed (ips)
		Width (inches)	Length (inches)					
24" to 39"								
Graphtec America	FCX2000-60VC	24	36			0.04	CB, FI, FM, P, R	15.7
Laguna Tools	iQ	24	36	6				
Laguna Tools	iQ Pro	24	36	6				
Graphtec America	FCX4000-50ES	25.98	19.21			0.08	CB, FI, FM, P, R	29.5
Graphtec America	FCX4000-60ES	38.4	25.9			0.08	CB, FI, FM, P, R	29.5

## 40" to 59"

					1	1		
Graphtec America	FCX2000-120VC	47.2	36			0.04	CB, FI, FM, P, R	15.7
Mimaki USA	CF2-0912	47.2	35.4			1	CC, FM, P, R, V	19.7
Omni CNC Technology	Omni1212	47.2	47.2	6			A, CM, M, PL, W	2.6
Omni CNC Technology	Omni1224	47.2	94.5	6			A, CM, M, PL, W	2.6
Aristo Graphic Systems	ARISTOMAT TL 1310C	48	40		up to 54	1.8		45
CLN of South Florida	CLN HS - 25	48	96	6				25
CLN of South Florida	S-20 Series	48	96	6				33
Graphtec America	Optima V250	48	96			0.75	CB, CC, FI, FM, PVC, R	33
Laguna Tools	SmartShop MT	48	96	12	6		A, AC, CA, CC, FM, G, LE, R	
Laguna Tools	Swift CNC Router	48	48	7.5				
Laguna Tools	Swift CNC Router	48	96	7.5				
Laguna Tools	Swift MT (Multi-Tool)	48	48	7	4, 6		A, AC, CA, CC, FM, LE, R, W	
Laguna Tools	Swift MT (Multi-Tool)	48	96	7	4, 6		A, AC, CA, CC, FM, LE, R, W	
Laguna Tools	Swift Vacuum	48	48	7.5	4, 6			
Laguna Tools	Swift Vacuum	48	96	7.5	4, 6			
Mimaki USA	CF22-1225	48	96			0.79		21.7
MultiCam	APEX1R CNC Router 103	48	96	7		3	FM, PL, W	
Aristo Graphic Systems	ARISTOMAT SL 1310C	49	37			1.4		55
Aristo Graphic Systems	ARISTOMAT SL 1317C	49	67			1.4		55
Aristo Graphic Systems	ARISTOMAT SL 1317PLC	49	67			1.4		55
Laguna Tools	SmartShop M2	49	49	10.5	2			350
Laguna Tools	SmartShop M2	49	97	10.5	4			350
MultiCam	3000 Series 3-101	50	50	6			FM, PL, W	

Company	Model	Work Area (inc	hes)	Gantry Clearance Height (inches)	Number of Vacuum Sections	Max Material Thickness (inches)	Types of Materials	Max Speed (ips)
		Width (inches)	Length (inches)					
40" to 59" (continued)								
MultiCam	APEX3R CNC Router 3-103-R	50	100	6			FM, PL, W	
Aristo Graphic Systems	ARISTOMAT SL 1310	51	37			1.4		55
Aristo Graphic Systems	ARISTOMAT SL 1317	51	67			1.4		55
Aristo Graphic Systems	ARISTOMAT SL 1617C	51	67			1.4		55
Aristo Graphic Systems	ARISTOMAT SL 1617PLC	51	67			1.4		55
Aristo Graphic Systems	ARISTOMAT SL 1625C	51	96			1.4		55
Aristo Graphic Systems	ARISTOMAT SL 1625PLC	51	96			1.4		55
Aristo Graphic Systems	ARISTOMAT TL 1310	51	40		up to 54	1.8		45
DGS - Digital Graphic Systems	X5-1310L	51	39.3	1.18	1	1		47.2
DGS - Digital Graphic Systems	X5-1316	51	63	1.18	1	1		47.2
DGS - Digital Graphic Systems	X5-1325	51	98	1.18	1	1		47.2
Eastman Machine	Hawk TL 1310	51	40		up to 54	1.8		45
Eastman Machine	Hawk TL 1317	51	67		up to 54	1.8		45
SID Signs	SID Katana 2513	51	98.4			1.18		47
SID Signs	SID Thor XR 2513 ECO	51	98.4	4.33		4.3	A, AC, PL, W	16.4
Summa	F1330	51	120	2	6	0.05	A, AC, CC, FM, G, H, P, PVC, R, T, V, W	39.4
Omni CNC Technology	CNC Digital Cutting Machine B Model	51.1	98.4	6			CA, CB, CC, F, FI, FM, G, L, LE, P, PL, R, V, W	29.5
Canon Solutions America	Zünd ProCut M-1600	52	63	2	1	2	A, AC, C, CA, CC, CM, D, F, FM, G, H, K, L, LE, PL, P, PVC, R, S, SFC, V, W	55
Canon Solutions America	Zünd ProCut M-2500	52	98	2	1	2	A, AC, C, CA, CC, CM, D, F, FM, G, H, K, L, LE, PL, P, PVC, R, S, SFC, V, W	55
Zund America	Zünd G3 M-1600	52	63	2.3	18	2	ALL	55
Zund America	Zünd G3 M-2500	52	98	2.3	18	2	ALL	55
Zund America	Zünd S3 M-1200	52	48	1.1	18	0.9	ALL	55
Zund America	Zünd S3 M-1600	52	64	1.1	18	0.9	ALL	55
Zund America	Zünd S3 M-800	52	32	1.1	18	0.9	ALL	55
Eastman Machine	Eagle S125 Static Table Cutting System	54	96, 144, 192, 240, 432					60
Assyst-Bullmer	PREMIUMCUT	55.1	47.2, 78.7, 98.4, 125.9	2.4		1.9	CC, CM, F, LE, P	78.7
Assyst-Bullmer	PREMIUMCUT Composite	55.1	47.2, 78.7, 98.4, 125.9			1.9	CC, CM, F, LE, P	78.7
Assyst-Bullmer	PREMIUMCUT Ultrasonic	55.1	47.2, 78.7, 98.4, 125.9			1.9	CC, CM, F, LE, P	78.7
Mimaki USA	CF2-1215	59	47.2			1	CC, FM, P, R, V	19.7
Omni CNC Technology	CNC Digital Cutting Machine B Model	59.1	118.1	6			CA, CB, CC, F, FI, FM, G, L, LE, P, PL, R, V, W	29.5

Company	Model	Work Area (inc	hes)	Gantry Clearance Height (inches)	Number of Vacuum Sections	Max Material Thickness (inches)	Types of Materials	Max Speed (ips)
		Width (inches)	Length (inches)					
60" to 79"								
Aristo Graphic Systems	ARISTOMAT TL 1317C	60	67		up to 54	1.8		45
Aristo Graphic Systems	ARISTOMAT TL 1617C	60	67		up to 54	1.8		45
Aristo Graphic Systems	ARISTOMAT TL 1617PLC	60	67		up to 54	1.8		45
Aristo Graphic Systems	ARISTOMAT TL 1625C	60	100		up to 54	1.8		45
Aristo Graphic Systems	ARISTOMAT TL 1625PLC	60	100		up to 54	1.8		45
AXYZ International	Infinite 4000	60	600	6				
AXYZ International	Trident 4000 Series	60	98, 120	6				
Canon Solutions America	Multicam Celero 3153	60	120	2	4	2	A, AC, C, CA, CC, CM, D, F, FM, H, L, LE, M, PL, P, PVC, R, S, SFC, V, W	30
Canon Solutions America	Multicam Celero 5153	60	120	2	4	2	A, AC, C, CA, CC, CM, D, F, FM, H, L, LE, M, PL, P, PVC, R, S, SFC, V, W	100
Canon Solutions America	Multicam Celero 7153	60	120	2	4	2	A, AC, C, CA, CC, CM, D, F, FM, H, L, LE, M, PL, P, PVC, R, S, SFC, V, W	130
CLN of South Florida	CLN HS - 25	60	120	6				25
CLN of South Florida	S-20 Series	60	120	6				33
Eastman Machine	Eagle S125 Static Table Cutting System	60	96, 144, 192, 240, 432					60
Laguna Tools	Swift CNC Router	60	120	7.5				
Laguna Tools	Swift MT (Multi-Tool)	60	120	7	4, 6		A, AC, CA, CC, FM, LE, R, W	
Laguna Tools	Swift Vacuum	60	120	7.5	4, 6			
MultiCam	3000 Series 3-208	60	241	6			FM, PL, W	
MultiCam	APEX1R CNC Router 204	60	120	7		3	FM, PL, W	
MultiCam	APEX3R CNC Router 3-204-R	60	120	6			FM, PL, W	
MultiCam	Celero 3153	60	120	2			AR, CC, F, FM, LE, PVC, S, V, W	28
MultiCam	Celero 7153	60	120	2			AR, CA, F, FM, H, LE, PVC, S, V, W	130
MultiCam	Celero 7153c Conveyor	60	120	2			AR, CA, F, FM, H, LE, PVC, S, V, W	130
MultiCam	3000 Series 3-202	60.5	60	6			FM, PL, W	
MultiCam	5000 Series 5-204	60.5	122	8			PL, W	
MultiCam	5000 Series 5-205	60.5	145	8			PL, W	
MultiCam	7000 Series 7-204	60.5	122	8			PL, W	
MultiCam	7000 Series 7-205	60.5	145	8			PL, W	
Laguna Tools	SmartShop M2	61	121	10.5	4			350
Assyst-Bullmer	PREMIUMCUT	62.9	47.2, 78.7, 98.4, 125.9	2.4		1.9	CC, CM, F, LE, P	78.7
Assyst-Bullmer	PREMIUMCUT Composite	62.9	47.2, 78.7, 98.4, 125.9			1.9	CC, CM, F, LE, P	78.7

Company	Model	Work Area (inc	hes)	Gantry Clearance Height (inches)	Number of Vacuum Sections	Max Material Thickness (inches)	Types of Materials	Max Speed (ips)
		Width (inches)	Length (inches)					
60" to 79" (continued)								
Assyst-Bullmer	PREMIUMCUT Ultrasonic	62.9	47.2, 78.7, 98.4, 125.9			1.9	CC, CM, F, LE, P	78.7
Assyst-Bullmer	TURBOCUT S 2501 CV	62.9	70.8, 98.4, 137.8			0.98		59
Aristo Graphic Systems	ARISTOMAT SL 1617	63	67			1.4		55
Aristo Graphic Systems	ARISTOMAT SL 1625	63	96			1.4		55
Aristo Graphic Systems	ARISTOMAT TL 1317	63	67		up to 54	1.8		45
Aristo Graphic Systems	ARISTOMAT TL 1617	63	67		up to 54	1.8		45
Aristo Graphic Systems	ARISTOMAT TL 1625	63	100		up to 54	1.8		45
DGS - Digital Graphic Systems	X5-1625	63	98	1.18	1	1		47.2
DGS - Digital Graphic Systems	X5-1630	63	120	1.18	2	1		47.2
DGS - Digital Graphic Systems	X7-1624	63	96	2.16	4	1.96		39.37
DGS - Digital Graphic Systems	X7-1630	63	118	2.16	4	1.96		39.37
Eastman Machine	Hawk TL 1617	63	67		up to 54	1.8		45
Eastman Machine	Hawk TL 1625	63	98		up to 54	1.8		45
Gerber Technology	Gerber MCT Cutter Digital Finishing Solution	63	126		6	2	CC, FM, P, T, V	78
Gerber Technology	Gerber MCT Cutter Digital Finishing Solution	63	189		6	2	CC, FM, P, T, V	78
Summa	F1612	63	47	2		0.05	A, AC, CC, FM, G, H, P, PVC, R, T, V, W	39.4
Canon Solutions America	Sharpcut SX1717	64	66	4	4	2.5	A, AC, C, CA, CC, CM, D, F, FM, G, H, L, LE, PL, P, PVC, R, S, SFC, V, W	46
Canon Solutions America	Sharpcut SX1732	64	126	4	6	2.5	A, AC, C, CA, CC, CM, D, F, FM, G, H, L, LE, PL, P, PVC, R, S, SFC, V, W	75
Canon Solutions America	SharpcutPro SXC1717	64	66	4	4	2.5	A, AC, C, CA, CC, CM, D, F, FM, G, H, L, LE, PL, P, PVC, R, S, SFC, V, W	46
Canon Solutions America	SharpcutPro SXC1732	64	126	4	6	2.5	A, AC, C, CA, CC, CM, D, F, FM, G, H, L, LE, PL, P, PVC, R, S, SFC, V, W	75
Colex Finishing Solutions	Sharpcut SX1717	64	66	4	4	2.5	A, AC, C, CA, CC, CM, D, F, FM, G, H, L, LE, PL, P, PVC, R, S, SFC, V, W	46
Colex Finishing Solutions	Sharpcut SX1732	64	126	4	6	2.5	A, AC, C, CA, CC, CM, D, F, FM, G, H, L, LE, PL, P, PVC, R, S, SFC, V, W	75
Colex Finishing Solutions	SharpcutPro SXC1717	64	66	4	4	2.5	A, AC, C, CA, CC, CM, D, F, FM, G, H, L, LE, PL, P, PVC, R, S, SFC, V, W	46

Company	Model	Work Area (inc	:hes)	Gantry Clearance Height (inches)	Number of Vacuum Sections	Max Material Thickness (inches)	Types of Materials	Max Speed (ips)
		Width (inches)	Length (inches)					
60" to 79" (continued)								
Colex Finishing Solutions	SharpcutPro SXC1732	64	126	4	6	2.5	A, AC, C, CA, CC, CM, D, F, FM, G, H, L, LE, PL, P, PVC, R, S, SFC, V, W	75
MultiCam	Celero 5153	64	120	2			AR, CA, F, FM, H, LE, PVC, S, V, W	73
MultiCam	Celero 5153C Conveyor	64	120	2			AR, CA, F, FM, H, LE, PVC, S, V, W	73
CET Color	CWT Apex 1713	66	51		15	1.96	A, AC, C, CC, CM, D, F, FM, G, H, L, LE, M, PL, PPVC, R, S, SFC, V, W	59
CWT Toolworks USA	Apex 1713	66	51		15	1.96	A, AC, C, CC, CM, D, F, FM, G, H, L, LE, M, PL, PPVC, R, S, SFC, V, W	59
Esko	Kongsberg C Edge 24	66	126	2.75	8		A, AC, CC, F, FM, P, PL, W	49
Esko	Kongsberg C24	66	126	2.75	8		A, AC, CC, F, FM, P, PL, W	66
Esko	Kongsberg X20	66	50	2	2		A, AC, CC, F, FM, P, PL, W	33
Esko	Kongsberg X22	66	86	2	2		A, AC, CC, F, FM, P, PL, W	33
Esko	Kongsberg X24	66	126	2	4		A, AC, CC, F, FM, P, PL, W	33
Laguna Tools	SmartShop Xcel	67	51			1.97		60
Canon Solutions America	Zünd ProCut L-2500	70	98	2	1	2	A, AC, C, CA, CC, CM, D, F, FM, G, H, K, L, LE, PL, P, PVC, R, S, SFC, V, W	55
Canon Solutions America	Zünd ProCut L-3200	70	125	2	1	2	A, AC, C, CA, CC, CM, D, F, FM, G, H, K, L, LE, PL, P, PVC, R, S, SFC, V, W	55
Zund America	Zünd D3 L-3200	70	126	2.3	24	2	ALL	55
Zund America	Zünd G3 L-2500	70	98	2.3	24	2	ALL	55
Zund America	Zünd G3 L-3200	70	126	2.3, 4.7	24	2,4	ALL	55
Zund America	Zünd S3 L-1200	70	48	1.1	24	0.9	ALL	55
Zund America	Zünd S3 L-1600	70	64	1.1	24	0.9	ALL	55
Assyst-Bullmer	PREMIUMCUT	70.8	47.2, 78.7, 98.4, 125.9	2.4		1.9	CC, CM, F, LE, P	78.7
Assyst-Bullmer	PREMIUMCUT Composite	70.8	47.2, 78.7, 98.4, 125.9			1.9	CC, CM, F, LE, P	78.7
Assyst-Bullmer	PREMIUMCUT Ultrasonic	70.8	47.2, 78.7, 98.4, 125.9			1.9	CC, CM, F, LE, P	78.7
Assyst-Bullmer	TURBOCUT S 2501 CV	70.8	70.8, 98.4, 137.8			0.98		59
Graphtec America	FCX2000-180VC	70.8	36			0.04	CB, FI, FM, P, R	15.7
Mimaki USA	CF2-1218	70.9	47.2			1	CC, FM, P, R, V	19.7

Company	Model	Work Area (inc	hes)	Gantry Clearance Height (inches)	Number of Vacuum Sections	Max Material Thickness (inches)	Types of Materials	Max Speed (ips)
		Width (inches)	Length (inches)					
60" to 79" (continued,	)							
Aristo Graphic Systems	ARISTOMAT TL 1917C	72	67		up to 54	1.8		45
Aristo Graphic Systems	ARISTOMAT TL 1925C	72	100		up to 54	1.8		45
AXYZ International	Infinite 5000	72	600	6				
AXYZ International	Trident 5000 Series	72	120	6				
CLN of South Florida	CLN HS - 25	72	144	6				25
CLN of South Florida	S-20 Series	72	144	6				33
Eastman Machine	Eagle S125 Static Table Cutting System	72	96, 144, 192, 240, 432					60
Summa	F1832	72	126	2	8	0.05	A, AC, CC, FM, G, H, P, PVC, R, T, V, W	39.4
Aristo Graphic Systems	ARISTOMAT TL 1917	75	67		up to 54	1.8		45
Aristo Graphic Systems	ARISTOMAT TL 1925	75	100		up to 54	1.8		45
Eastman Machine	Hawk TL 1917	75	67		up to 54	1.8		45
Eastman Machine	Hawk TL 1925	75	98		up to 54	1.8		45
Eastman Machine	Talon 75x Multi-Ply System	76.6	66		up to 54	3		60
Eastman Machine	C125 Conveyor System	78	192, 240, 432					60
Eastman Machine	Eagle S125 Static Table Cutting System	78	96, 144, 192, 240, 432					60
Eastman Machine	Talon 25x Multi-Ply System	78	66		up to 54	1.18		60
Assyst-Bullmer	TURBOCUT S 2501 CV	78.7	70.8, 98.4, 137.8			0.98		59
Omni CNC Technology	CNC Digital Cutting Machine B Model	78.7	118.1	6				29.5

Company	Model	Work Area (inches)		Gantry Clearance Height (inches)	Number of Vacuum Sections	Max Material Thickness (inches)	Types of Materials	Max Speed (ips)	
		Width (inches)	Length (inches)						
80" to 99"									
Aristo Graphic Systems	ARISTOMAT GL 2032	80	126		up to 264	2.16		91	
Aristo Graphic Systems	ARISTOMAT GL 2072	80	282		up to 264	2.16		67	
MultiCam	3000 Series 3-307	80	193	6			FM, PL, W		
MultiCam	3000 Series 3-308	80	241	6			FM, PL, W		
MultiCam	5000 Series 5-304	80	122	8			PL, W		
MultiCam	5000 Series 5-305	80	145	8			PL, W		
MultiCam	5000 Series 5-308	80	242	8			PL, W		
MultiCam	7000 Series 7-304	80	122	8			PL, W		
MultiCam	7000 Series 7-305	80	145	8			PL, W		
MultiCam	APEX1R CNC Router 304	83	121	7		3	FM, PL, W		
MultiCam	7000 Series 7-306	84	170	8			PL, W		
MultiCam	APEX3R CNC Router 3-304-R	84	120	6			FM, PL, W		

Company	Model	Work Area (inc	hes)	Gantry Clearance Height (inches)	Number of Vacuum Sections	Max Material Thickness (inches)	Types of Materials	Max Speec (ips)
		Width (inches)	Length (inches)					
80" to 99" (continued)								
AXYZ International	Infinite 6000	85	600	6				
AXYZ International	Trident 6000 Series	85	120	6				
Assyst-Bullmer	PREMIUMCUT	86.6	47.2, 78.7, 98.4, 125.9	2.4		1.9	CC, CM, F, LE, P	78.7
Assyst-Bullmer	PREMIUMCUT Composite	86.6	47.2, 78.7, 98.4, 125.9			1.9	CC, CM, F, LE, P	78.7
Assyst-Bullmer	PREMIUMCUT Ultrasonic	86.6	47.2, 78.7, 98.4, 125.9			1.9	CC, CM, F, LE, P	78.7
Gerber Technology	Gerber MCT Cutter Digital Finishing Solution	86.6	126			2	CC, FM, P, T, V	78
DGS - Digital Graphic Systems	X7-2230	87	118	2.16	4	1.96		39.37
Esko	Kongsberg C Edge 44	87	126	2.75	8		A, AC, CC, F, FM, P, PL, W	49
Esko	Kongsberg C44	87	126	2.75	8		A, AC, CC, F, FM, P, PL, W	66
Esko	Kongsberg X44	87	126	2	4		A, AC, CC, F, FM, P, PL, W	33
Esko	Kongsberg X46	87	189	2	4		A, AC, CC, F, FM, P, PL, W	33
Esko	Kongsberg X48	87	258	2	4		A, AC, CC, F, FM, P, PL, W	33
Canon Solutions America	Zünd ProCut XL-1600	89	63	2	1	2	A, AC, C, CA, CC, CM, D, F, FM, G, H, K, L, LE, PL, P, PVC, R, S, SFC, V, W	55
Canon Solutions America	Zünd ProCut XL-3200	89	125	2	1	2	A, AC, C, CA, CC, CM, D, F, FM, G, H, K, L, LE, PL, P, PVC, R, S, SFC, V, W	55
Zund America	Zünd D3 XL-3200	89	126	2.3	24	2	ALL	55
Zund America	Zünd G3 XL-1600	89	63	2.3	24	2	ALL	55
Zund America	Zünd G3 XL-3200	89	126	2.3, 4.7	24	2, 4	ALL	55
Zund America	Zünd S3 XL-1200	89	48	1.1	24	0.9	ALL	55
Zund America	Zünd L3 C-40	90	40	1.1	40	0.9	ALL	55
Assyst-Bullmer	TURBOCUT S 2501 CV	94.5	70.8, 98.4, 137.8			0.98		59
Aristo Graphic Systems	ARISTOMAT GL 2432	95	126		up to 264	2.16		91
Eastman Machine	C125 Conveyor System	96	192, 240, 432					60
Eastman Machine	Eagle S125 Static Table Cutting System	96	96, 144, 192, 240, 432					60
CET Color	CWT Apex 2513	98	51		15	1.96	A, AC, C, CC, CM, D, F, FM, G, H, L, LE, M, PL, PPVC, R, S, SFC, V, W	59
CET Color	CWT Apex 2517	98	66		15	1.96	A, AC, C, CC, CM, D, F, FM, G, H, L, LE, M, PL, PPVC, R, S, SFC, V, W	59

Company	Model			Gantry Clearance Height (inches)	Number of Vacuum Sections	Max Material Thickness (inches)	Types of Materials	Max Speed (ips)
		Width (inches)	Length (inches)					
80" to 99" (continued)								
CET Color	CWT Apex Plus 2516	98	63		9	1.96	A, AC, C, CC, CM, D, F, FM, G, H, L, LE, M, PL, PPVC, R, S, SFC, V, W	59
CET Color	CWT Apex Plus 2521	98	83		12	1.96	A, AC, C, CC, CM, D, F, FM, G, H, L, LE, M, PL, PPVC, R, S, SFC, V, W	59
CET Color	CWT Apex Plus 2532	98	126		18	1.96	A, AC, C, CC, CM, D, F, FM, G, H, L, LE, M, PL, PPVC, R, S, SFC, V, W	59
CWT Toolworks USA	Apex 2513	98	51		15	1.96	A, AC, C, CC, CM, D, F, FM, G, H, L, LE, M, PL, PPVC, R, S, SFC, V, W	59
CWT Toolworks USA	Apex 2517	98	66		15	1.96	A, AC, C, CC, CM, D, F, FM, G, H, L, LE, M, PL, PPVC, R, S, SFC, V, W	59
CWT Toolworks USA	Apex Plus 2516	98	63		9	1.96	A, AC, C, CC, CM, D, F, FM, G, H, L, LE, M, PL, PPVC, R, S, SFC, V, W	59
CWT Toolworks USA	Apex Plus 2521	98	83		12	1.96	A, AC, C, CC, CM, D, F, FM, G, H, L, LE, M, PL, PPVC, R, S, SFC, V, W	59
CWT Toolworks USA	Apex Plus 2532	98	126		18	1.96	A, AC, C, CC, CM, D, F, FM, G, H, L, LE, M, PL, PPVC, R, S, SFC, V, W	59

#### 100" to 119"

Aristo Graphic Systems	ARISTOMAT LFC 2332	101	135		up to 255	2.36		
Aristo Graphic Systems	ARISTOMAT LFC 2332C	101	135		up to 255	2.36		
Aristo Graphic Systems	ARISTOMAT LFC 2352	101	213		up to 255	2.36		
Aristo Graphic Systems	ARISTOMAT LFC 2352C	101	213		up to 255	2.36		
Aristo Graphic Systems	ARISTOMAT LFC 2372	101	291		up to 255	2.36		
Aristo Graphic Systems	ARISTOMAT LFC 2372C	101	291		up to 255	2.36		
DGS - Digital Graphic Systems	X7-2616	102	63	2.16	4	1.96		39.37
DGS - Digital Graphic Systems	X7-2630	102	118	2.16	4	1.96		39.37
Assyst-Bullmer	PREMIUMCUT	102.3	47.2, 78.7, 98.4, 125.9	2.4		1.9	CC, CM, F, LE, P	78.7
Assyst-Bullmer	PREMIUMCUT Composite	102.3	47.2, 78.7, 98.4, 125.9			1.9	CC, CM, F, LE, P	78.7
Assyst-Bullmer	PREMIUMCUT Ultrasonic	102.3	47.2, 78.7, 98.4, 125.9			1.9	CC, CM, F, LE, P	78.7
AXYZ International	Infinite 8000	103	600	6				

Company	Model	Work Area (incl	Work Area (inches)		Number of Vacuum Sections	Max Material Thickness (inches)	Types of Materials	Max Speed (ips)
		Width (inches)	Length (inches)					
100" to 119" (continued	d)							
Canon Solutions America	Zünd ProCut 2XL-1600	107	63	2	1	2	A, AC, C, CA, CC, CM, D, F, FM, G, H, K, L, LE, PL, P, PVC, R, S, SFC, V, W	55
Canon Solutions America	Zünd ProCut 2XL-3200	107	125	2	1	2	A, AC, C, CA, CC, CM, D, F, FM, G, H, K, L, LE, PL, P, PVC, R, S, SFC, V, W	55
Zund America	Zünd D3 2XL-3200	107	126	2.3	34	2	ALL	55
Zund America	Zünd G3 2XL-1600	107	63	2.3	34	2	ALL	55
Zund America	Zünd G3 2XL-3200	107	126	2.3	34	2	ALL	55
Eastman Machine	C125 Conveyor System	108	192, 240, 432					60
Eastman Machine	Eagle S125 Static Table Cutting System	108	96, 144, 192, 240, 432					60
Assyst-Bullmer	PREMIUMCUT	110.2	47.2, 78.7, 98.4, 125.9	2.4		1.9	CC, CM, F, LE, P	78.7
Assyst-Bullmer	PREMIUMCUT Composite	110.2	47.2, 78.7, 98.4, 125.9			1.9	CC, CM, F, LE, P	78.7
Assyst-Bullmer	PREMIUMCUT Ultrasonic	110.2	47.2, 78.7, 98.4, 125.9			1.9	CC, CM, F, LE, P	78.7
Eastman Machine	C125 Conveyor System	114	192, 240, 432					60
Eastman Machine	Eagle S125 Static Table Cutting System	114	96, 144, 192, 240, 432					60

## 120" to 139"

Arista Conschie Contana		125	120			240		67
Aristo Graphic Systems	ARISTOMAT GL 3232	125	126		up to 264	2.16		67
Aristo Graphic Systems	ARISTOMAT GL 3252	125	204		up to 264	2.16		67
Assyst-Bullmer	PREMIUMCUT	125.9	47.2, 78.7, 98.4, 125.9	2.4		1.9	CC, CM, F, LE, P	78.7
Assyst-Bullmer	PREMIUMCUT Composite	125.9	47.2, 78.7, 98.4, 125.9			1.9	CC, CM, F, LE, P	78.7
Assyst-Bullmer	PREMIUMCUT Ultrasonic	125.9	47.2, 78.7, 98.4, 125.9			1.9	CC, CM, F, LE, P	78.7
Canon Solutions America	Multicam Celero 7322	126	79	2	6	2	A, AC, C, CA, CC, CM, D, F, FM, H, L, LE, M, PL, P, PVC, R, S, SFC, V, W	130
Canon Solutions America	Sharpcut SX3216	126	62	4	6	2.5	A, AC, C, CA, CC, CM, D, F, FM, G, H, L, LE, PL, P, PVC, R, S, SFC, V, W	46
Canon Solutions America	Sharpcut SX3232	126	126	4	8, 16	2.5	A, AC, C, CA, CC, CM, D, F, FM, G, H, L, LE, PL, P, PVC, R, S, SFC, V, W	46
Canon Solutions America	SharpcutPro SXC3216	126	62	4	6	2.5	A, AC, C, CA, CC, CM, D, F, FM, G, H, L, LE, PL, P, PVC, R, S, SFC, V, W	46

Company	Model	Work Area (inc	hes)	Gantry Clearance Height (inches)	Number of Vacuum Sections	Max Material Thickness (inches)	Types of Materials	Max Speed (ips)
		Width (inches)	Length (inches)					
120" to 139" (continued)	)							
Canon Solutions America	SharpcutPro SXC3232	126	126	4	8, 16	2.5	A, AC, C, CA, CC, CM, D, F, FM, G, H, L, LE, PL, P, PVC, R, S, SFC, V, W	46
Canon Solutions America	Zünd ProCut 3XL-1600	126	63	2	1	2	A, AC, C, CA, CC, CM, D, F, FM, G, H, K, L, LE, PL, P, PVC, R, S, SFC, V, W	55
Canon Solutions America	Zünd ProCut 3XL-2500	126	98	2	1	2	A, AC, C, CA, CC, CM, D, F, FM, G, H, K, L, LE, PL, P, PVC, R, S, SFC, V, W	55
Canon Solutions America	Zünd ProCut 3XL-3200	126	128	2	1	2	A, AC, C, CA, CC, CM, D, F, FM, G, H, K, L, LE, PL, P, PVC, R, S, SFC, V, W	55
Colex Finishing Solutions	Sharpcut SX3216	126	62	4	6	2.5	A, AC, C, CA, CC, CM, D, F, FM, G, H, L, LE, PL, P, PVC, R, S, SFC, V, W	46
Colex Finishing Solutions	Sharpcut SX3232	126	126	4	8, 16	2.5	A, AC, C, CA, CC, CM, D, F, FM, G, H, L, LE, PL, P, PVC, R, S, SFC, V, W	46
Colex Finishing Solutions	SharpcutPro SXC3216	126	62	4	6	2.5	A, AC, C, CA, CC, CM, D, F, FM, G, H, L, LE, PL, P, PVC, R, S, SFC, V, W	46
Colex Finishing Solutions	SharpcutPro SXC3232	126	126	4	8, 16	2.5	A, AC, C, CA, CC, CM, D, F, FM, G, H, L, LE, PL, P, PVC, R, S, SFC, V, W	46
DGS - Digital Graphic Systems	X7-3216	126	63	2.16	4	1.96		31.5
DGS - Digital Graphic Systems	X7-3230	126	118	2.16	4	1.96		31.5
Eastman Machine	C125 Conveyor System	126	192, 240, 432					60
Eastman Machine	Eagle S125 Static Table Cutting System	126	96, 144, 192, 240, 432					60
Gerber Technology	Gerber MCT Cutter Digital Finishing Solution	126	63		12	2	CC, FM, P, T, V	78
Gerber Technology	Gerber MCT Cutter Digital Finishing Solution	126	126		12	2	CC, FM, P, T, V	78
Gerber Technology	Gerber MCT Cutter Digital Finishing Solution	126	189		12	2	CC, FM, P, T, V	78
Laguna Tools	SmartShop Xcel	126	83			1.97		60
Laguna Tools	SmartShop Xcel	126	94.5			1.97		60
MultiCam	Celero 7324	126	157	2			AR, CA, F, FM, H, LE, PVC, S, V, W	130
MultiCam	Celero 7324c Conveyor	126	157	2			AR, CA, F, FM, H, LE, PVC, S, V, W	130
Zund America	Zünd D3 3XL-3200	126	126	2.3	36	2	ALL	55
Zund America	Zünd G3 3XL-1600	126	63	2.3	36	2	ALL	55
Zund America	Zünd G3 3XL-2500	126	98	2.3	36	2	ALL	55
Zund America	Zünd G3 3XL-3200	126	126	2.3	36	2	ALL	55
Esko	Kongsberg C Edge 60	126.37	63	2.75	4		A, AC, CC, F, FM, P, PL, W	49

Company	Model	Work Area (inc	hes)	Gantry Clearance Height (inches)	Number of Vacuum Sections	Max Material Thickness (inches)	Types of Materials	Max Speed (ips)
		Width (inches)	Length (inches)					
120" to 139" (continu	ied)							
Esko	Kongsberg C Edge 64	126.37	126	2.75	8		A, AC, CC, F, FM, P, PL, W	49
Esko	Kongsberg C60	126.37	63	2.75	4		A, AC, CC, F, FM, P, PL, W	66
Esko	Kongsberg C64	126.37	126	2.75	8		A, AC, CC, F, FM, P, PL, W	66
Esko	Kongsberg C66	126.37	189	2.75	8		A, AC, CC, F, FM, P, PL, W	66
MultiCam	Celero 7322	127	78.74	2			AR, CA, F, FM, H, LE, PVC, S, V, W	130
MultiCam	Celero 7322c Conveyor	127	78.74	2			AR, CA, F, FM, H, LE, PVC, S, V, W	130
AXYZ International	Infinite 10000	128	600	6				
Zund America	Zünd L3 C-56	128	40	1.1	56	0.9	ALL	55
Summa	F3230	128.7	82.6	2	7	0.05	A, AC, CC, FM, G, H, P, PVC, R, T, V, W	39.4
Summa	F3232	128.7	130.7	2	14	0.05	A, AC, CC, FM, G, H, P, PVC, R, T, V, W	39.4
CET Color	CWT Apex Plus 3516	138	63		12	1.96	A, AC, C, CC, CM, D, F, FM, G, H, L, LE, M, PL, PPVC, R, S, SFC, V, W	59
CET Color	CWT Apex Plus 3521	138	83		16	1.96	A, AC, C, CC, CM, D, F, FM, G, H, L, LE, M, PL, PPVC, R, S, SFC, V, W	59
CET Color	CWT Apex Plus 3532	138	126		24	1.96	A, AC, C, CC, CM, D, F, FM, G, H, L, LE, M, PL, PPVC, R, S, SFC, V, W	59
CWT Toolworks USA	Apex Plus 3516	138	63		12	1.96	A, AC, C, CC, CM, D, F, FM, G, H, L, LE, M, PL, PPVC, R, S, SFC, V, W	59
CWT Toolworks USA	Apex Plus 3521	138	83		16	1.96	A, AC, C, CC, CM, D, F, FM, G, H, L, LE, M, PL, PPVC, R, S, SFC, V, W	59
CWT Toolworks USA	Apex Plus 3532	138	126		24	1.96	A, AC, C, CC, CM, D, F, FM, G, H, L, LE, M, PL, PPVC, R, S, SFC, V, W	59

#### 140" to 159"

Aristo Graphic Systems	ARISTOMAT LFC 3332	142	135	up to 255	2.36	
Aristo Graphic Systems	ARISTOMAT LFC 3332C	142	135	up to 255	2.36	
Aristo Graphic Systems	ARISTOMAT LFC 3352	142	213	up to 255	2.36	
Aristo Graphic Systems	ARISTOMAT LFC 3352C	142	213	up to 255	2.36	
Aristo Graphic Systems	ARISTOMAT LFC 3372	142	291	up to 255	2.36	
Aristo Graphic Systems	ARISTOMAT LFC 3372C	142	291	up to 255	2.36	
Eastman Machine	C125 Conveyor System	156	192, 240, 432			60

Company	Model			Gantry Clearance Height (inches)	Number of Vacuum Sections	Max Material Thickness (inches)	Types of Materials	Max Speed (ips)
		Width (inches)	Length (inches)					
140" to 159" (continued,	)							
Eastman Machine	Eagle S125 Static Table Cutting System	156	96, 144, 192, 240, 432					60
Canon Solutions America	Multicam Celero 7324	157	126	2	12	2	A, AC, C, CA, CC, CM, D, F, FM, H, L, LE, M, PL, P, PVC, R, S, SFC, V, W	130

## 160" to 179"

Aristo Graphic Systems	ARISTOMAT GL 4252	168	204	up to 264	2.16	67
Aristo Graphic Systems	ARISTOMAT GL 4332	168	126	up to 264	2.16	67

#### 180" to 199"

Assyst-Bullmer	PREMIUMCUT	196.8	47.2, 78.7, 98.4, 125.9	2.4	1.9	CC, CM, F, LE, P	78.7
Assyst-Bullmer	PREMIUMCUT Composite	196.8	47.2, 78.7, 98.4, 125.9		1.9	CC, CM, F, LE, P	78.7
Assyst-Bullmer	PREMIUMCUT Ultrasonic	196.8	47.2, 78.7, 98.4, 125.9		1.9	CC, CM, F, LE, P	78.7

#### 200"+

Aristo Graphic Systems	ARISTOMAT LFC 5232	210	126	up to 255	2.36		
Aristo Graphic Systems	ARISTOMAT LFC 5232C	210	126	up to 255	2.36		
Aristo Graphic Systems	ARISTOMAT LFC 5252	210	205	up to 255	2.36		
Aristo Graphic Systems	ARISTOMAT LFC 5252C	210	205	up to 255	2.36		
Aristo Graphic Systems	ARISTOMAT LFC 5272	210	291	up to 255	2.36		
Aristo Graphic Systems	ARISTOMAT LFC 5272C	210	291	up to 255	2.36		
CET Color	CWT Apex Plus 5516	217	63	21	1.96	A, AC, C, CC, CM, D, F, FM, G, H, L, LE, M, PL, PPVC, R, S, SFC, V, W	59
CET Color	CWT Apex Plus 5521	217	83	24	1.96	A, AC, C, CC, CM, D, F, FM, G, H, L, LE, M, PL, PPVC, R, S, SFC, V, W	59
CET Color	CWT Apex Plus 5532	217	126	24	1.96	A, AC, C, CC, CM, D, F, FM, G, H, L, LE, M, PL, PPVC, R, S, SFC, V, W	59
CWT Toolworks USA	Apex Plus 5516	217	63	21	1.96	A, AC, C, CC, CM, D, F, FM, G, H, L, LE, M, PL, PPVC, R, S, SFC, V, W	59
CWT Toolworks USA	Apex Plus 5521	217	83	24	1.96	A, AC, C, CC, CM, D, F, FM, G, H, L, LE, M, PL, PPVC, R, S, SFC, V, W	59
CWT Toolworks USA	Apex Plus 5532	217	126	24	1.96	A, AC, C, CC, CM, D, F, FM, G, H, L, LE, M, PL, PPVC, R, S, SFC, V, W	59

# WIDE-FORMAT FINISHING: VERTICAL XY CUTTERS

Vertical X/Y cutters are specifically designed for handling rigid materials. This type of cutter is perfect for shops looking for simple cuts that will be repeated many times, versus complex or variable cutting options.

## LEGEND

*Types of materials:* A=Aluminum, AC=Acrylic/Plexi, C=Canvas, CA=Carpet, CC=Corrugated Cardboard, CM=Composites, D=DiBond, F=Fabric/Textile, FM=Foam Boards, G=Gaskets, GL=Glass, H=Honeycombs, K=Kevlar, L=Laminates, LE=Leather, M=Metal, P=Paper/Card Stock, PL=Plastics, PVC=PVC/Sintra, R=Rubber, S=Styrene, SFC=Solid-Fiber Cardboard, V=Vinyl, W=Wood/MDF

Company	Model	Max Size	Listable (Sector)	This lung on the star	Types of Materials
		Width (inches)	Height (inches)	Thickness (inches)	
50" to 59"					
Safety Speed	C4 Panel Saw	50	96	1.75	
Safety Speed	H4 Panel Saw	50		1.75	
Saw Trax Manufacturing, Inc.	Sign Makers Cross Cut - Compact - #C52SM	52	78	1.75	A, AC, C, CA, CC, CM, D, F, FM, G, H K, L, LE, M, PL, P, PVC, S, SFC, V, W
Saw Trax Manufacturing, Inc.	Sign Makers Cross Cut - Full Size - #FS52SM	52	90	1.75	A, AC, C, CA, CC, CM, D, F, FM, G, H K, L, LE, M, PL, P, PVC, S, SFC, V, W
60" to 69"					
Safety Speed	SR5A ACM Panel Saw and Router Combo	62		1.75	
Safety Speed	SR5UA ACM Panel Saw and Router Combo	62		1.75	
Foster	Excalibur 3S	63	84	0.5	A, AC, FM, H, PVC, P, W
Foster	Excalibur 5000	63	84	0.25	A, AC, FM, H, PVC, P, W
Safety Speed	C5 Panel Saw	64	96	1.75	
Safety Speed	DFC-H5 Vertical Panel Saw & Dust Free Substrate Cutter	64		1.75	
Safety Speed	H5 Panel Saw	64		1.75	
Saw Trax Manufacturing, Inc.	Sign Makers Cross Cut - Compact - #C62SM	64	78	1.75	A, AC, C, CA, CC, CM, D, F, FM, G, H K, L, LE, M, PL, P, PVC, S, SFC, V, W
Saw Trax Manufacturing, Inc.	Sign Makers Cross Cut - Full Size - #FS64SM	64	90	1.75	A, AC, C, CA, CC, CM, D, F, FM, G, H K, L, LE, M, PL, P, PVC, S, SFC, V, W
Safety Speed	SSC 165A Substrate Cutter	65		0.75	
70" to 79"					
Safety Speed	H6 Panel Saw	74		1.75	
Saw Trax Manufacturing, Inc.	Sign Makers Cross Cut - Full Size - #FS76SM	76	102	1.75	A, AC, C, CA, CC, CM, D, F, FM, G, H K, L, LE, M, PL, P, PVC, S, SFC, V, W
80" to 89"					
Safety Speed	SSC 210A Substrate Cutter	82		0.75	
Foster	Excalibur 1000x	84	63	0.25	A, AC, FM, H, PVC, P, W
Foster	SteelTraK	84	98	0.5	A, AC, FM, H, PVC, P, W
Vivid Laminating Technologies	Trimfast TFMS-165	84	65		A, AC, CC, CM, FM, P, PVC, V
Vivid Laminating Technologies	Trimfast TFMS-210	84	83		A, AC, CC, CM, FM, P, PVC, V
Vivid Laminating Technologies	Trimfast TFMS-250	84	98		A, AC, CC, CM, FM, P, PVC, V
Saw Trax Manufacturing, Inc.	Sign Makers Cross Cut - Full Size - #FS88SM	88	114	1.75	A, AC, C, CA, CC, CM, D, F, FM, G, H K, L, LE, M, PL, P, PVC, S, SFC, V, W
90"+					
Safety Speed	SSC 250A Substrate Cutter	98		0.75	

100

126

1.75

A, AC, C, CA, CC, CM, D, F, FM, G, H, K, L, LE, M, PL, P, PVC, S, SFC, V, W

Sign Makers Cross Cut - Full Size - #FS100SM

Saw Trax Manufacturing, Inc.

# WIDE-FORMAT FINISHING: VINYL CUTTERS AND PLOTTERS (24"+)

Vinyl cutters use a computer-controlled blade to cut desired shapes and letters out of vinyl material, while the plotter portion allows the design to be drawn onto the material, rather than cutting out the shapes, which is useful for applications such as blueprint production or vehicle wraps. It can be used to create and cut patterns and pieces for projects such as vinyl lettering, billboards, bumper stickers, and more, depending on the size of the equipment and material.

### LEGEND

*Types of materials:* A=Aluminum, AC=Acrylic/Plexi, C=Canvas, CA=Carpet, CC=Corrugated Cardboard, CM=Composites, D=DiBond, F=Fabric/Textile, FL=Flock with Adhesive Backing, FM=Foam Boards, G=Gaskets, GC=G Flute Cardboard, GL=Glass, H=Honeycombs, K=Kevlar, L=Laminates, LE=Leather, M=Metal, P=Paper/Card Stock, PL=Plastics, PVC=PVC/Sintra, R=Rubber, RF=Reflective, S=Styrene, SB=Sand Blast, SFC=Solid-Fiber Cardboard, T=Textile, V=Vinyl, W=Wood/MDF

Company	Model	Manual / Automatic	Max Size		Max Speed (ips)	Cutting Force (gf)	Types of Materials
			Width (inches)	Thickness (inches)			
24" to 39"							
GCC America	AR-24		23.6	0.03	21.7	250	
GCC America	EX II-24/EX II-24LX		23.6	0.03	27.8	350	
GCC America	P4-60/P4-60LX		23.6	0.03	40.2	500	
Foster	Rotatrim Professional	М	24	0.08			C, CC, P, V
GCC America	J5-61 / J5-61LX		24	0.03	60	600	
GCC America	RX II-61		24	0.03	60	600	
Graphtec America	CE7000-60		24		36	450	FI, P, V
Roland DGA	CAMM-1 GS-24	А	24	0.04	19.69	30 - 350	HTV, PSV, SB, FL
Foster	Rotatrim DigiTech+	М	26	0.08			C, CC, P, V
Foster	Rotatrim PowerTech	М	26	0.08			A, C, P, LE, V, W
Foster	Rotatrim Technical	М	26	0.16			A, C, LE, P, V, W
Foster	Rotatrim Monorail	М	26.75	0.08			P, V
Ioline Corp	100 System	А	28		42		FL, P, V
Ioline Corp	SmarTrac	А	28		42	500	FL, P, V
SID Signs	SID 1000-60	А	28.3	0.04	23.6		V
SID Signs	SID 2000-60	А	28.3	0.04	23.6		V
Mimaki USA	CG-60SRIII	А	29.1	0.04	27.6	500	V
Summa	SummaCut S2 D75		29.2	0.03	56	400	T, V
Summa	SummaCut S2 T75		29.2	0.05	56	600	T, V
Foster	Rotatrim Professional	М	30	0.08			C, CC, P, V
Graphtec America	FC9000-75		30	0.04	58.5	600	
Summa	SummaCut S2 TC75		30	0.05	56	600	T, V
Mutoh America	VC2-600	А	30.3	0.03	60.2	5 - 600	V
Foster	Rotatrim Professional	М	36	0.08			C, CC, P, V
Foster	Rotatrim Monorail	М	37	0.08			P, V
Foster	Rotatrim DigiTech+	М	38	0.08			C, CC, P, V
Foster	Rotatrim PowerTech	М	38	0.08			A, C, P, LE, V, W
Foster	Rotatrim Technical	М	38	0.16			A, C, LE, P, V, W

#### 40" to 59"

Foster	Sabre Series 2 All Purpose Cutter	М	40	0.5		AC, F, FM, P, V
Foster	Ultimat Futura Mat Cutter	М	40	0.2		FM, P, V
Foster	Ultimat Gold Mat Cutter	М	40	0.375		FM, P, V

Company	Model	Manual / Automatic	Max Size		Max Speed (ips)	Cutting Force (gf)	Types of Materials
			Width (inches)	Thickness (inches)			
40" to 59" (continued)							
GCC America	J5-101/J5-101LX		40	0.03	60	600	
GCC America	RX II-101S		40	0.03	60	600	
Foster	Keencut Advanced Rotary Cutter (ARC)	М	42	2.75			A, F, P, V
Foster	Keencut Table-Edge Rotary Trimmer (TE)	М	42	2.5			A, F, P, V
Foster	Rotatrim Professional	М	42	0.08			C, CC, P, V
Graphtec America	FC9000-100		42	0.04	58.5	600	
Foster	Evolution-E3 Series-BenchTop	М	44	0.5			AC, F, FM, P, PVC, V
Foster	Evolution-E3 Series FreeHand	М	44	0.5			AC, F, FM, P, PVC, V
Foster	Evolution-E3 Series-SmartFold	М	44	0.5			AC, F, FM, P, PVC, V
Foster	Javelin Series 2	М	44	0.5			AC, F, FM, P, PL
Foster	Javelin Series 2 Big Bench Xtra	М	44	0.5			AC, F, FM, P, PL
Foster	Simplex Cutter Bars	М	44	0.5			F, FI, FM, P, PVC, V
Fotoba	Digitrim 44	А	44	0.02	11.8		
Summa	SummaCut D120		47	0.03	44	400	T, V
Summa	SummaCut S2 D120		47.2	0.03	56	400	T, V
Summa	SummaCut S2 T120		47.2	0.05	56	600	T, V
Foster	Ultimat Futura Mat Cutter	М	48	0.2			FM, P, V
Foster	Ultimat Gold Mat Cutter	М	48	0.375			FM, P, V
Foster	Rotatrim DigiTech+	М	49	0.08			C, CC, P, V
Foster	Rotatrim PowerTech	М	49	0.08			A, C, P, LE, V, W
Foster	Rotatrim Technical	М	49	0.16			A, C, LE, P, V, W
Mimaki USA	CG-100SRIII	А	49.2	0.04	27.6	500	V
Foster	Rotatrim Monorail	М	50	0.08			P, V
Graphtec America	CE7000-130		50		39	450	FI, P, V
Graphtec America	CE7000-130AKZ		50	0.025	39	450	FI, P, V
GCC America	P4-132/P4-132LX		51.18	0.03	40.2	500	
SID Signs	SID 2000-120	А	51.2	0.04	37.4		V
GCC America	EX II-52/ EX II-52LX		51.96	0.03	25	350	
GCC America	J5-132/ J5-132LX		52	0.03	60	600	
GCC America	RX II-132S		52	0.03	60	600	
Summa	SummaCut D140		53	0.03	44	400	T, V
Summa	SummaCut D140 X		53	0.03	44	400	T, V
Summa	SummaCut S2 D140		53.1	0.03	56	400	T, V
Summa	SummaCut S2 T140		53.1	0.05	56	600	T, V
Foster	Rotatrim Professional	М	54	0.08			C, CC, P, V
Graphtec America	FC9000-140		54	0.04	58.5	600	

Company	Model	Manual / Automatic	Max Size		Max Speed (ips)	Cutting Force (gf)	Types of Materials
			Width (inches)	Thickness (inches)			
60" to 79"							
Foster	Keencut Advanced Rotary Cutter (ARC)	М	60	2.75			A, F, P, V
Foster	Keencut Table-Edge Rotary Trimmer (TE)	М	60	2.5			A, F, P, V
Foster	Sabre Series 2 All Purpose Cutter	М	60	0.5			AC, F, FM, P, V
Roland DGA	CAMM-1 GR-540	А	60	0.04	1,485 mm/s	20 - 600	HTV, PSV, RF, SB, FL, GC
Foster	Rotatrim DigiTech+	М	61	0.08			C, CC, P, V
Foster	Rotatrim PowerTech	М	61	0.08			A, C, P, LE, V, W
Foster	Rotatrim Technical	М	61	0.16			A, C, LE, P, V, W
Mimaki USA	CG-130SRIII	А	61	0.04	27.6	500	V
Foster	Ultimat Futura Mat Cutter	М	62	0.2			FM, P, V
Foster	Ultimat Gold Mat Cutter	М	62	0.375			FM, P, V
Mimaki USA	CG-130FXII Plus	А	62	0.01	39.3	400	V
Summa	SummaCut D160		62	0.03	44	400	T, V
Mimaki USA	CG-130FXII	А	62.2	0.01	39.4	400	V
Summa	SummaCut S2 D160		62.2	0.03	56	400	T, V
Summa	SummaCut S2 T160		62.2	0.05	56	600	T, V
Summa	SummaCut S2 TC160		62.2	0.05	56	600	T, V
Mutoh America	VC2-1300	А	62.7	0.03	60.2	5 - 600	V
Fotoba	XLA 170	А	63	0.04	11.8		
GCC America	J5-160 / J5-160LX		63	0.03	60	600	
GCC America	J5-160-P		63	0.03	60	600	
SID Signs	SID SL XT 1600 B Trimmer	М	63	0.31			FM, P, V
Foster	Evolution-E3 Series-BenchTop	М	64	0.5			AC, F, FM, P, PVC, V
Foster	Evolution-E3 Series-FreeHand	М	64	0.5			AC, F, FM, P, PVC, V
Foster	Evolution-E3 Series-SmartFold	М	64	0.5			AC, F, FM, P, PVC, V
Foster	Javelin Integra	М	64	0.5			AC, F, FM, P, PL
Foster	Javelin Series 2	М	64	0.5			AC, F, FM, P, PL
Foster	Javelin Series 2 Big Bench Xtra	М	64	0.5			AC, F, FM, P, PL
Foster	Simplex Cutter Bars	М	64	0.5			F, FI, FM, P, PVC, V
Fotoba	Digitrim 64	А	64	0.02	11.8		
Fotoba	WR 64	А	64	0.02	11.8		
Graphtec America	FC9000-160		64	0.04	58.5	600	FI, P, R, V
CWT Worktools USA	Miura 160 Plus XY Cutter	А	65	0.04	78.6		C, FI, P, R. PVC, V
CWT Worktools USA	Miura II XY 160 Cutter	А	65	0.04	78.6		C, FI, P, PVC, V
CWT Worktools USA	Miura Plus Buffer XY Cutter	А	65	0.04	78.6		C, FI, P, R. PVC, V
CWT Worktools USA	Miura Plus HD XY Cutter	А	65	0.04	78.6		C, FI, P, PVC, V
CWT Worktools USA	Miura R XY Cutter	А	65	0.04	78.6		C, FI, P, PVC, V
CWT Worktools USA	Miura Wallpaper XY Cutter	А	65	0.04	78.6		C, FI, P, PVC, V
Royal Sovereign	Electric Trimmer RET-1652		65	0.03	6.6 fps		C, L, P, V
Colex Finishing	Fotoba Dreamcut XLD-170	А	67	0.04	720		C, F, PL, P, S, V
Fotoba	XLD 170	А	67	0.04	11.8		
Fotoba	XLD 170 HS	A	67	0.04	22.3		

Company	Model	Manual / Automatic			Max Speed (ips)	Cutting Force (gf)	Types of Materials
			Width (inches)	Thickness (inches)			
60" to 79" (continued)							
Fotoba	XLD 170 WP	А	67	0.04	11.8		
Fotoba	XLE 170	А	67	0.04	11.8		
Roland DGA	CAMM-1 GR-640	А	70	0.04	1,485 mm/s	20 - 600	HTV, PSV, SB, RF, FL, GC
GCC America	J5-183 / J5-183LX		72	0.03	60	600	
GCC America	RX II-183S		72	0.03	60	600	
Foster	Rotatrim DigiTech+	М	73	0.08			C, CC, P, V
Foster	Rotatrim PowerTech	М	73	0.08			A, C, P, LE, V, W
Foster	Rotatrim Technical	М	73	0.16			A, C, LE, P, V, W
Mimaki USA	CG-160FXII	А	74	0.01	39.4	400	V
Mimaki USA	CG-160FXII Plus	А	74	0.01	39.3	400	V
Mutoh America	VC2-1800	А	78.3	0.03	60.2	5 - 600	V
80" to 99"							

				1		
Foster	Keencut Advanced Rotary Cutter (ARC)	М	80	2.75		A, F, P, V
Foster	Keencut Table-Edge Rotary Trimmer (TE)	М	80	2.5		A, F, P, V
Foster	Sabre Series 2 All Purpose Cutter	Μ	80	0.5		AC, F, FM, P, V
Foster	Evolution-E3 Series-BenchTop	М	84	0.5		AC, F, FM, P, PVC, V
Foster	Evolution-E3 Series-FreeHand	М	84	0.5		AC, F, FM, P, PVC, V
Foster	Evolution-E3 Series-SmartFold	М	84	0.5		AC, F, FM, P, PVC, V
Foster	Javelin Integra	М	84	0.5		AC, F, FM, P, PL
Foster	Javelin Series 2	М	84	0.5		AC, F, FM, P, PL
Foster	Javelin Series 2 Big Bench Xtra	Μ	84	0.5		AC, F, FM, P, PL
Foster	Simplex Cutter Bars	М	84	0.5		F, FI, FM, P, PVC, V
Foster	Rotatrim PowerTech	М	85	0.08		A, C, P, LE, V, W
Foster	Rotatrim Technical	Μ	85	0.16		A, C, LE, P, V, W
Royal Sovereign	Electric Trimmer RET-2502		98	0.03	6.6 fps	C, L, P, V

## 100" to 119"

Foster	Keencut Advanced Rotary Cutter (ARC)	М	100	2.75	A, F, P, V
Foster	Keencut Table-Edge Rotary Trimmer (TE)	М	100	2.5	A, F, P, V
Foster	Rotatrim DigiTech+	М	100	0.08	C, CC, P, V
Foster	Rotatrim PowerTech	М	100	0.08	A, C, P, LE, V, W
Foster	Rotatrim Technical	М	100	0.16	A, C, LE, P, V, W
Foster	Sabre Series 2 All Purpose Cutter	М	100	0.5	AC, F, FM, P, V
Foster	Evolution-E3 Series-BenchTop	М	104	0.5	AC, F, FM, P, PVC, V
Foster	Evolution-E3 Series-FreeHand	М	104	0.5	AC, F, FM, P, PVC, V
Foster	Evolution-E3 Series-SmartFold	М	104	0.5	AC, F, FM, P, PVC, V
Foster	Javelin Integra	М	104	0.5	AC, F, FM, P, PL

Company	Model	Manual / Automatic	Max Size		Max Speed (ips)	Cutting Force (gf)	Types of Materials
			Width (inches)	Thickness (inches)			
100" to 119" (continued)		,	·				
Foster	Javelin Series 2	М	104	0.5			AC, F, FM, P, PL
Foster	Javelin Series 2 Big Bench Xtra	М	104	0.5			AC, F, FM, P, PL
Foster	Simplex Cutter Bars	М	104	0.5			F, FI, FM, P, PVC, V
CWT Worktools USA	Miura 265 Plus XY Cutter	А	105	0.04	78.6		C, FI, P, R. PVC, V
CWT Worktools USA	Miura II XY 265 Cutter	А	105	0.04	78.6		C, FI, P, PVC, V
120"+							
Foster	Keencut Advanced Rotary Cutter (ARC)	М	120	2.75			A, F, P, V
Foster	Keencut Table-Edge Rotary Trimmer (TE)	М	120	2.5			A, F, P, V
Foster	Sabre Series 2 All Purpose Cutter	М	120	0.5			AC, F, FM, P, V
Foster	Evolution-E3 Series-BenchTop	М	124	0.5			AC, F, FM, P, PVC, V
Foster	Evolution-E3 Series-FreeHand	М	124	0.5			AC, F, FM, P, PVC, V
Foster	Evolution-E3 Series-SmartFold	М	124	0.5			AC, F, FM, P, PVC, V
Foster	Javelin Integra	М	124	0.5			AC, F, FM, P, PL
Foster	Javelin Series 2	М	124	0.5			AC, F, FM, P, PL
Foster	Javelin Series 2 Big Bench Xtra	М	124	0.5			AC, F, FM, P, PL
Foster	Simplex Cutter Bars	М	124	0.5			F, FI, FM, P, PVC, V
Colex Finishing	Fotoba XLD320HS	А	126	0.04	720		C, F, PL, P, S, V
Fotoba	XLD 320 HS	А	126	0.04	22.3		

# WIDE-FORMAT FINISHING: LAMINATORS (24"+)

Lamination is used to preserve printed graphics, which is especially important for applications exposed to the elements, such as outdoor signage. Wide-format laminators come in a range of sizes, and can be used to laminate prints, mount them to rigid substrates, or apply transfer tape. Cold laminators use rollers to apply pressure-sensitive films to the media, while heat-assist laminators use a heating element to warm the top roller — accelerating the process of ink drying and outgassing — allowing solvent prints to be processed quicker, as well as set the adhesive. Thermal laminators are ideal if you require both sides of a printed substrate laminated and the edge sealed (encapsulated) against moisture. In this instance, both top and bottom rollers are heated to set the adhesive.

## LEGEND

*Type:* C=Cold, HA=Heat Assist, T=Thermal *Style:* F=Flatbed, L=Liquid, P=Pouch, R=Roll

Company	Model	Туре	Style	Size			Film Thickness Range (mil)	Speed Range (fpm)	Roller Diameter (inches)	Roller Heating	Max Temp. (°F)	Rewind/ Unwind	Output Slitting	Tension / Pressure	Foot Switch
		(Cold, Heat Assist, Thermal)	(Flatbed, Liquid, Pouch, Roll)	Max Film Width (Inches)	Max Film Length (Inches)	Max Thickness (Inches)				(Single/ Dual)		(Y/N/ Optional)	(Y/N/ Optional)	(Manual or Automatic	(Y/N/ Optional)
24" to 39"															
Daige Inc.	Solo	С	R	25		0.5								А	Y
LEDCO, a division of Graphic Laminating	Educator	С	R	25		0.125	1-5	25	1.25						
LEDCO, a division of Graphic Laminating	Heavy- Duty 25	С	R	25		0.5	1 - 10	25	1.5						
LEDCO, a division of Graphic Laminating	Premier 4	Т	R	25		0.125	1 - 10	7	1.25						
Xyron	Xyron Pro XM2500 Cold Laminator	С	F	25									Y		N
Drytac	Manual Laminator ML25	С	R	25.5		1			2.5				N	М	N
Coda Inc.	Coda- mount Laminator 26	C, HA	R	26		2		20		S, D	300	Y	N	М	
Coda Inc.	Cold- Mount Laminator 26-HS	С	R	26		2		20				0	Ν	М	
Coda Inc.	Cold- Mount Laminator 26-MS	С	R	26		2		20				0	Ν	А	
D&K Group	AutoKote Pro Automatic Lamination System	С, Т	R	26	30		18 pt	50			300				

Company	Model	Туре	Style	Size			Film Thickness Range (mil)	Speed Range (fpm)	Roller Diameter (inches)	Roller Heating	Max Temp. (°F)	Rewind/ Unwind	Output Slitting	Tension / Pressure	Foot Switch
		(Cold, Heat Assist, Thermal)	(Flatbed, Liquid, Pouch, Roll)	Max Film Width (Inches)	Max Film Length (Inches)	Max Thickness (Inches)				(Single/ Dual)		(Y/N/ Optional)	(Y/N/ Optional)	(Manual or Automatic	(Y/N/ Optional)
<b>24" to 39"</b> (	(continued)														
Vivid Laminating Technologies	Easymount Sign EMS- 650 S	С	R	26		1		16	3			Y	Ν	М	
Vivid Laminating Technologies	Linea DH-650	HA	R	26				4			140				
Vivid Laminating Technologies	Matrix Duo MD-650	HA	R	26			70 gsm				140				
Drytac	JetMount- er JM26	С	R	26.25		1		2.5 - 18	2.5			Y	Ν	М	Y
GBC	Catena 65	С	R	27		0.25	1.5 - 10	1-8.5				0			
GBC	Pinnacle 27	Т	R	27			up to 3	10							
GBC	Pinnacle 27EZ	Т	R	27			up to 3	10							
GBC	Ultima 55 Thermal Roll Laminator	Т	R	27				10							
GBC	Ultima 65 Thermal Roll Laminator	Т	R	27				10							
LEDCO, a division of Graphic Laminating	Professor	Т	R	27		0.1875	1 - 10	10	2.25						
Royal Sovereign	Alexis 27	Т	R	27			1.5 - 3	8.2				Y	Y		N
Royal Sovereign	RSL- 2702S	С, Т	R	27		0.24		8.2		D	302	Y	Ν	М	
USI Inc.	ARL 2700	Т	R	27		0.025	3	9.5				Y			Y
USI Inc.	ARL Pro 2700	Т	R	27		0.025	5	9.5				Y			Y
USI Inc.	CSL 2700	Т	R	27			3								
USI Inc.	ProMount Plus 2700	HA	R	27			10	8.9							
D&K Group	System 2760 Automatic Laminator	С, Т	R	30			18 pt	60			300				
D&K Group	System 2760 DN Lamination System	С, Т	R	30			18 pt	60			300				
Graphic Finishing Partners	230C	С	R	30		0.5	1 - 15	11.5	2.5		140	Y	N	М	Y

Company	Model	Туре	Style	Size			Film Thickness Range (mil)	Speed Range (fpm)	Roller Diameter (inches)	Roller Heating	Max Temp. (°F)	Rewind/ Unwind	Output Slitting	Tension / Pressure	Foot Switch
		(Cold, Heat Assist, Thermal)	(Flatbed, Liquid, Pouch, Roll)	Max Film Width (Inches)	Max Film Length (Inches)	Max Thickness (Inches)				(Single/ Dual)		(Y/N/ Optional)	(Y/N/ Optional)	(Manual or Automatic	(Y/N/ Optional)
<b>24" to 39"</b> (	(continued)														
LEDCO, a division of Graphic Laminating	Econocraft	С	R	30		0.5	1 - 10	30	3						
LEDCO, a division of Graphic Laminating	Thorough- bred High- Speed Laminator	Т	R	30		0.5	1 - 10	65	2.5						
D&K Group	System 3210 High Speed Laminator	С, Т	R	31	40		1-3	100			300				
Royal Sovereign	RSC- 820CLS	С	R	32		0.28		8.2				Y	Ν	Μ	
Coda Inc.	Coda- mount Laminator 34	C, HA	R	34		2		20		S, D	300	Y	N	М	
Coda Inc.	Cold- Mount Laminator 34-HS	С	R	34		2		20				0	N	М	
Coda Inc.	Cold- Mount Laminator 34-MS	С	R	34		2		20				0	Ν	А	
Drytac	JetMount- er JM34	С	R	34		1		2.5 - 18	2.5			Y	Ν	Μ	Y
Vivid Laminating Technologies	Easymount Sign EM- 880 S	С	R	35		1		10	3			Y	Ν	М	
Alliance Technology Corp	UV-36ESD Cyclone	HA	L	36		2	0.16 - 0.80	up to 50				N	Ν		N
Daige Inc.	Solo	С	R	38		0.5								А	Υ
LEDCO, a division of Graphic Laminating	Industrial Series	Т	R	38		0.5	1 - 10	35	3						

## 40" to 59"

GBC	Catena 105	С	R	40	0.1875		1.5 - 5							
USI Inc.	ARL 4000	Т	R	40	0.025	5	9.5				Y			Y
D&K Group	EXP 42+	С, Т	R	41	0.5		10	3	D	300		Y	М	
Advanced Greig Laminators	AGL 4400 Laminator	Т	R	42	1.75		15	4.25	D	320	Y	0	А	

Company	Model	Туре	Style	Size			Film Thickness Range (mil)	Speed Range (fpm)	Roller Diameter (inches)	Roller Heating	Max Temp. (°F)	Rewind/ Unwind	Output Slitting	Tension / Pressure	Foot Switch
		(Cold, Heat Assist, Thermal)	(Flatbed, Liquid, Pouch, Roll)	Max Film Width (Inches)	Max Film Length (Inches)	Max Thickness (Inches)				(Single/ Dual)		(Y/N/ Optional)	(Y/N/ Optional)	(Manual or Automatic	(Y/N/ Optional)
<b>40" to 59"</b> (	(continued)														
LEDCO, a division of Graphic Laminating	Digital 42	Т	R	42		0.5	1 - 10	30	3				0		
Xyron	Xyron XM4400 Cold Laminator	С	R	42			3.9								
Coda Inc.	Coda- mount Laminator 44	C, HA	R	44		2		20		S, D	300	Y	N	М	
Coda Inc.	Cold- Mount Laminator 44-HS	С	R	44		2		20				0	N	М	
Coda Inc.	Cold- Mount Laminator 44-MS	С	R	44		2		20				0	N	A	
GBC	Spire III 44T	С	R	44		2		20							
Graphic Finishing Partners	44TH	HA	R	44		0.25	1 - 15	5	3.5	S	302	Y	N	М	Y
LEDCO, a division of Graphic Laminating	Digital 44	Т	R	44		0.5	1 - 10	30	3.125				0		
LEDCO, a division of Graphic Laminating	Econocraft	С	R	44		0.5	1 - 10	30	3						
LEDCO, a division of Graphic Laminating	Signmaster	Т	R	44		0.5	1 - 10	25	3.125						
LEDCO, a division of Graphic Laminating	XL Pouch Mounter/ Laminators	С	Ρ	44		1.5	1 - 10	1	3.125						
Royal Sovereign	RSH-1151	С, Т	R	45		0.6		13.1		D	320	Y	Ν	М	
Kala Finishing Systems	STARTER 1080	С	R	46	330	2		1 - 11		S	105	0			
Vivid Laminating Technologies	Easy- mount EM-1200 DH	Т	R	47		1		13	4	D	266	Y	N	М	

Company	Model	Туре	Style	Size			Film Thickness Range (mil)	Speed Range (fpm)	Roller Diameter (inches)	Roller Heating	Max Temp. (°F)	Rewind/ Unwind	Output Slitting	Tension / Pressure	Foot Switch
		(Cold, Heat Assist, Thermal)	(Flatbed, Liquid, Pouch, Roll)	Max Film Width (Inches)	Max Film Length (Inches)	Max Thickness (Inches)				(Single/ Dual)		(Y/N/ Optional)	(Y/N/ Optional)	(Manual or Automatic	(Y/N/ Optional)
<b>40" to 59"</b> (	(continued)														
Vivid Laminating Technologies	Easy- mount EM-1200 SH	HA	R	47		1		20	4	S	140	Y	N	М	
Marabu North America	Buerkle LFC 1300 Roller Coater		L	51			4 - 3,000	6 - 32	9.4						
Alliance Technology Corp	UV-52ESD	HA	L	52		2	0.16 - 0.80	up to 50				N	Ν		Ν
Coda Inc.	Coda- mount Laminator 54	C, HA	R	54		2		20		S, D	300	Y	N	М	
Coda Inc.	Cold- Mount Laminator 54-HS	С	R	54		2		20				0	N	М	
Coda Inc.	Cold- Mount Laminator 54-MS	С	R	54		2		20				0	N	A	
SEAL	SEAL 54 EL including options	С	R	54		1		14						М	Y
SEAL	SEAL 54 EL-1	С	R	54		1		14						М	Y
Daige Inc.	Solo	С	R	55		0.5								А	Y
Graphic Finishing Partners	255C	С	R	55		1	1 - 15	13	4.5		140	Y	N	М	Y
Graphic Finishing Partners	355TH	HA	R	55		1	1 - 15	20	5	S	140	Y	N	Μ	Y
Royal Sovereign	RSC- 1401CLTW	С	R	55		0.6		16.4				Y	N	М	
Royal Sovereign	RSC- 5500H	C, HA	R	55		2		28		S	122	Y	N	М	
Royal Sovereign	Signmont 55H	HA	R	55				49.2			140	Y	N		Y
SEAL	SEAL 54 Base-1	HA	R	55		2		16.4			104			М	Y
Vivid Laminating Technologies	Easymount EM-1400 S	С	R	55		1		20	5			Y	N	М	
Vivid Laminating Technologies	Easymount EM-1400 SH		R	55		1		20	4	S	140	Y	N	М	
Kala Finishing Systems	STARTER 1400	С	R	58	330	2		1 - 11		S	105	0			

Company	Model	Туре	Style	Size			Film Thickness Range (mil)	Speed Range (fpm)	Roller Diameter (inches)	Roller Heating	Max Temp. (°F)	Rewind/ Unwind	Output Slitting	Tension / Pressure	Foot Switch
		(Cold, Heat Assist, Thermal)	(Flatbed, Liquid, Pouch, Roll)	Max Film Width (Inches)	Max Film Length (Inches)	Max Thickness (Inches)				(Single/ Dual)		(Y/N/ Optional)	(Y/N/ Optional)	(Manual or Automatic	(Y/N/ Optional)
60" - 79"															
Alliance Technology Corp	UV60- 2ESD	HA	L	60		3	0.3 - 0.8	30 - 110				0	Ν		Ν
Alliance Technology Corp	UV60M	HA	L	60		3	0.3 - 0.8	30 - 110				0	N		Ν
DGS - Digital Graphic Systems	Xpress LAM XL- 1500CM	C, HA	R	60		1		236			140				
DGS - Digital Graphic Systems	Xpress LAM XL- 1500CM	C, HA	R	60		1		236			140				
LEDCO, a division of Graphic Laminating	Digital 60	Т	R	60		0.5	1 - 10	20	3				0		
LEDCO, a division of Graphic Laminating	Econocraft	С	R	60		0.5	1 - 10	30	3						
LEDCO, a division of Graphic Laminating	Industrial Series	Т	R	60		0.5	1 - 10	35	3						
D&K Group	EXP 62+	С, Т	R	61		0.5		10	4.17	D	300		Y	М	
SEAL	SEAL 62 Base including options	HA	R	61		2		16.4			104			М	Y
SEAL	SEAL 62 Base-1	HA	R	61		2		16.4			104			М	Y
SEAL	SEAL 62 Pro D	С, Т	R	61		1.5		20			140		0	М	Y
SEAL	SEAL 62 Pro S	HA	R	61		1.5		20			140			М	Y
Advanced Greig Laminators	AGL 6400 Laminator	Т	R	62		2.38		20		D	320	Y	Y	A	
Advanced Greig Laminators	AGL 6450	Т	R	62		2.38		20	8.75	D	320	Y	Y	А	
Advanced Greig Laminators	AGL 64C Laminator	С	R	62		2.38		20				Y	0	Μ	
Advanced Greig Laminators	AGL 64i Laminator	Т	R	62		1.25		20		D	320	Y	Y	М	
Advanced Greig Laminators	AGL 64R Laminator	Т	R	62		2.38		20		S	320	Y	0	М	

Company	Model	Туре	Style	Size			Film Thickness Range (mil)	Speed Range (fpm)	Roller Diameter (inches)	Roller Heating	Max Temp. (°F)	Rewind/ Unwind	Output Slitting	Tension / Pressure	Foot Switch
		(Cold, Heat Assist, Thermal)	(Flatbed, Liquid, Pouch, Roll)	Max Film Width (Inches)	Max Film Length (Inches)	Max Thickness (Inches)				(Single/ Dual)		(Y/N/ Optional)	(Y/N/ Optional)	(Manual or Automatic	(Y/N/ Optional)
60" to 79"	(continued)														
Advanced Greig Laminators	AGL 64T Laminator	Т	R	62		2.38		20		S	320	Y	0	М	
Advanced Greig Lami- nators	AGL Compadre Laminator	Т	R	62				20	6	S	100	Y	Y		
Advanced Greig Laminators	AGL Encore DHR	Т	R	62		1.19		20	6	D	320	Y	0	М	
Advanced Greig Laminators	AGL Encore Maxim	Т	R	62		1.19		20	6	D	320	Y	0	М	
Advanced Greig Laminators	AGL Encore NH	С	R	62		1.19		20	6			Y	N	М	
Advanced Greig Laminators	AGL Encore SH	Т	R	62		1.19		20	6	S	320	Y	N	М	
Advanced Greig Laminators	AGL Patriot Laminator	С, Т	R	62		2.38		30	8	S	320	Y	Y	A	
Marabu North America	Buerkle LFC 1600 Roller Coater		L	62			4 - 3,000	6 - 32	9.4						
SID Signs, distributed by Paradigm Imaging	SID SL 1600-SA	С	R	62		0.9								A	
Mimaki USA	LA-160W	HA	R	62.2		1.38		24.6	4.72		140				Y
SID Signs, distributed by Paradigm Imaging	SID SL 1600-EW	HA	R	62.2				19.67			140			A	
Alliance Technology Corp	UV-63-RTR Roll-to-Roll	HA	L	63			0.3 and up	10-33				Y	N	А	N
Graphic Finishing Partners	263C	С	R	63		1	1 - 15	13	4.5		140	Y	N	М	Y
Graphic Finishing Partners	363TH	HA	R	63		1	1 - 15	20	5	S	140	Y	N	М	Y
Graphic Finishing Partners	563TH-4R MaxPro	HA	R	63		1	1 - 15	20	4.5	S	140	Y	N	М	Y
Graphic Finishing Partners	563TH- 4RS MaxPro	HA	R	63		1	1 - 15	20	4.5	S	140	Y	Y	М	Y

Company	Model	Туре	Style	Size			Film Thickness Range (mil)	Speed Range (fpm)	Roller Diameter (inches)	Roller Heating	Max Temp. (°F)	Rewind/ Unwind	Output Slitting	Tension / Pressure	Foot Switch
		(Cold, Heat Assist, Thermal)	(Flatbed, Liquid, Pouch, Roll)	Max Film Width (Inches)	Max Film Length (Inches)	Max Thickness (Inches)				(Single/ Dual)		(Y/N/ Optional)	(Y/N/ Optional)	(Manual or Automatic	(Y/N/ Optional)
<b>60" - 79"</b> (c	ontinued)														
Vivid Laminating Technologies	Easymount EM-1600 S	С	R	63		1		20	5			Y	N	М	
Vivid Laminating Technologies	Easymount EM-1600 SH	HA	R	63		1		20	5	S	140	Y	N	М	
Vivid Laminating Technologies	Easymount EM-1600 SHW	HA	R	63		1		20	5	D	266	Y	N	М	
Vivid Laminating Technologies	Easymount EM-A-1600 SH	HA	R	63		1		33	5	S	140	Y	N	Ρ	
Coda Inc.	Coda- mount Laminator 64	C, HA	R	64		2		20		S, D	300	Y	N	М	
Colex	LAMINA- TOR C364	HA	R	64	150 - 300	0.875	2.4 - 30	60	5	S	175	Y	Y	А	Y
Colex	LAMINA- TOR M564	HA	R	64	150 - 300	1.125	2.4 - 30	40	5	S	175	Y	N	М	Y
DGS - Digital Graphic Systems	Xpress LAM XL- 1600C	C, HA	R	64		1		236			140				
DGS - Digital Graphic Systems	Xpress LAM XL- 1600C	C, HA	R	64		1		236			140				
GBC	Spire III 64T	С	R	64		2		20							
Kala Finishing Systems	ARKANE 1650	С	R	64		2		1 - 21	4.7	S	285	Y			
Kala Finishing Systems	ARKANE 1650 D	Т	R	64		2		1 - 21	4.7	D	285	Y			
Kala Finishing Systems	ARKANE TS Traffic Sign	C, T	R	64		2		1 - 21	4.7	S	100	Y			
Kala Finishing Systems	ATLANTIC 1650	С, Т	R	64		2		1 - 21	4.7	D	285	Y			
Kala Finishing Systems	MISTRAL 1650	С	R	64		2		1 - 21	4.4	S	140	Y			
LEDCO, a division of Graphic Laminating	B64	Т	R	64		3	1 - 10	25	6						
LEDCO, a division of Graphic Laminating	Signmaster	Т	R	64		0.5	1 - 10	25	3.125						
Marabu North America	StarLam 1600R		L	64			2.16	1-4							

Company	Model	Туре	Style	Size			Film Thickness Range (mil)	Speed Range (fpm)	Roller Diameter (inches)	Roller Heating	Max Temp. (°F)	Rewind/ Unwind	Output Slitting	Tension / Pressure	Foot Switch
		(Cold, Heat Assist, Thermal)	(Flatbed, Liquid, Pouch, Roll)	Max Film Width (Inches)	Max Film Length (Inches)	Max Thickness (Inches)				(Single/ Dual)		(Y/N/ Optional)	(Y/N/ Optional)	(Manual or Automatic	(Y/N/ Optional)
60" to 79" (	continued)														
Paradigm Imaging	PIXis M-1700A1	HA	R	64		1.1		22			140				
Vivid Laminating Technologies	Easymount EM-1600 C	С	R	64		1		16	5			Y	N	М	
CWT Worktools	Express Heat- Assisted Top Roller Laminator	HA	R	65				33	5	S	140				Y
CWT Worktools	Galaxy Heat- Assisted Top Roller Laminator	HA	R	65				16	4.6	S	122				Y
D&K Group	EXP 65+	С, Т	R	65		2		21	4.25	D	280	Y	Y	М	
Daige Inc.	Solo	С	R	65		0.5								А	Y
Graphic Finishing Partners	865DH-3R	Т	R	65		1	1 - 15	13	5	D	266	Y	Y	М	Y
Kala Finishing Systems	AppliKator 2000	С	F	65	81	2						0			
Kala Finishing Systems	AppliKator 2600	С	F	65	102	2						0			
Kala Finishing Systems	AppliKator 3000	С	F	65	120	2						0			
Kala Finishing Systems	AppliKator 4400	С	F	65	174	2						0			
Kala Finishing Systems	AppliKator 6800	С	F	65	268	2						0			
Kala Finishing Systems	STARTER 1600	С	R	65	330	2		1 - 11		S	105	0			
Royal Sovereign	Fremont 65H	HA	R	65							122	Y	N		Y
Royal Sovereign	RSC- 6500H	C, HA	R	65		2		28		S	122	Y	Ν	М	
Royal Sovereign	RSH-1651	С, Т	R	65		0.6		13.1		D	320	Y	N	М	
Royal Sovereign	Signmont 65H	HA	R	65				49.2	5.125		140	Y	Ν		Y
SEAL	SEAL 65 EL including options	С	R	65		1		14						М	Y
SEAL	SEAL 65 EL-1	С	R	65		1		14						М	Y
SEAL	SEAL 65 Pro MD	С, Т	F	65		2		15			135				Y

Company	Model	Туре	Style	Size			Film Thickness Range (mil)	Speed Range (fpm)	Roller Diameter (inches)	Roller Heating	Max Temp. (°F)	Rewind/ Unwind	Output Slitting	Tension / Pressure	Foot Switch
		(Cold, Heat Assist, Thermal)	(Flatbed, Liquid, Pouch, Roll)	Max Film Width (Inches)	Max Film Length (Inches)	Max Thickness (Inches)				(Single/ Dual)		(Y/N/ Optional)	(Y/N/ Optional)	(Manual or Automatic	(Y/N/ Optional
60" to 79" (	(continued)														
Supply55	Guardian Laminator - Cold	С	R	65		0.57		23	3.25	S	122	Y		М	Y
Supply55	Guardian Laminator - Heat Assist	C, HA	R	65		0.57		23	3.25	S	122	Y		М	Y
Vivid Laminating Technologies	Easy- mount EM-1650 DH	Т	R	65		1		13	5	D	266	Y	Ν	М	
Advanced Greig Laminators	AGL 8000C Laminator	С	R	79		2.13		20	10			Y	Y	A	
Advanced Greig Laminators	AGL 8000R Laminator	Т	R	79		2.13		20	10	D	320	Y	Y	А	
Advanced Greig Laminators	AGL 8000S Laminator	Т	R	79		2.13		20	10	D	320	Y	Y	А	
Advanced Greig Laminators	AGL 8000T Laminator	Т	R	79		2.13		20	10	S	320	Y	Y	A	
<b>80"</b> +															
Alliance Technology Corp	UV80- 2ESD	HA	L	80		3	0.3 - 0.8	30 - 110				0	Ν		N
Alliance Technology Corp	UV80-RTR Roll-to-Roll	HA	L	80			0.3 and up	10 - 33				Y	N	А	N
Kala Finishing Systems	MISTRAL 2100	С	R	82		2		1 - 21	4.4	S	140	Y			
Marabu North America	Buerkle LFC 2100 Roller Coater		L	82			4 - 3,000	6 - 32	9.4						
Vivid Laminating Technologies	Easymount EM-2100 SH	HA	R	83		1		20	5	S	140	Y	N	М	

# *MEDIA BLITZ:* What's Hot for Print Service Providers in 2020 and Beyond

LEADING MEDIA MANUFACTURERS ARE HELPING PSPS NAVIGATE 2020'S NEW NORMAL.

#### **BY LAURIE WELLER**

he year 2020 will always be remembered as a wild ride in the wide-format printing industry, a time of incredible changes, challenges, and opportunities. To help PSPs deliver what brands need now — and in the future — top media providers have had to respond quickly to evolving customer needs.

"The pandemic has become a catalyst for growth," says Dennis Leblanc, territory sales manager-Eastern Canada for Drytac. "Demand for print media solutions is growing exponentially as the need for non-verbal communication becomes more and more necessary — and in some locations mandated across the globe."

Mactac has seen a huge spike in demand for its products as well, especially for media used for floor, wall, and window graphics, as well as adhesive tape used for shields and COVID-19 barrier applications.

"We are also seeing non-traditional commercial and roll label print providers engage in the market, trying to utilize some of their assets to bolster sales," says Ross Burnham, senior marketing manager, distribution products for Mactac.

The ways brands implement their graphics have been upended as well. "Retailers, restaurants, gyms, and other public places need to reimagine, revamp, and retool their spaces," notes Chuck Kunze, director, product management and marketing for 3A Composites USA. "The media used in signage, barriers, merchandizers, sanitation stations, and any other POS must be selected, printed, and fabricated with the following in mind: durability, cleaning and disinfecting, and configurability."

#### FLOOR GRAPHICS ARE IN

By far, notes Molly Waters, senior technical specialist, graphics solutions for Avery Dennison, the most impacted segment of the wide-format market has been floor graphics.

"This has been a big growth opportunity, as most stores and restaurants were not taking full advantage of floor graphics prior to the pandemic," she says. "Now they are used to remind shoppers to stay six feet apart, as well as designate some aisles as one way."

But not all areas of the wide-format industry are benefiting from the chaos. "Many PSPs that supply vehicle graphics have been affected by closures and a slowdown in their customers' businesses as they delay investments due to the economic uncertainty," says Adrian Cook, digital print marketing manager for 3M Commercial Solutions Division.

#### ALWAYS IN DEMAND: REMOVABLE, SUSTAINABLE, WELL PRICED

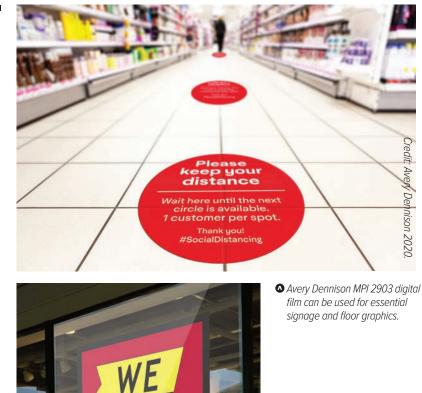
While the pandemic rolls on, many industry trends that were put in motion before the lockdowns began still have staying power.

"Print buyers continue to be driven by cost and project lead time," notes Burnham. "Challenges occur when trying to properly evaluate the total cost of the project that not only includes the finished print but also installation and, ultimately, removal. Key features of the materials being provided may add some upfront cost but can lower installation time and overall program costs."

Leblanc agrees. "In my opinion, the largest trend we are seeing from print buyers is in Easy-on, Easyoff graphic applications," he says. "In the past, we dealt with much longer application requirements from print buyers. However, in recent years — and with the advent of online shopping — this trend has very much changed to frequent changeover of graphics to continually change the experience for the consumer."

He adds that the retail cycle has gone from four seasons — spring, summer, fall, and winter — to eight to 10 seasons, including Easter, Mother's Day, Father's Day, and Back to School, with graphics changeovers for each.

Kunze continues to see demand increase for sustainable media — a trend that has been accelerating industrywide for years. "Sustainability and recyclability are significant drivers of innovation in rigid substrates for wide-format printers," he says. "Newly developed advanced manufacturing techniques, many of which are proprietary, enable rigid substrate manufacturers to produce extremely flat, stable, and lightweight structures that offer the advantages of traditional materials such as foam board, but with 100% sustainability."

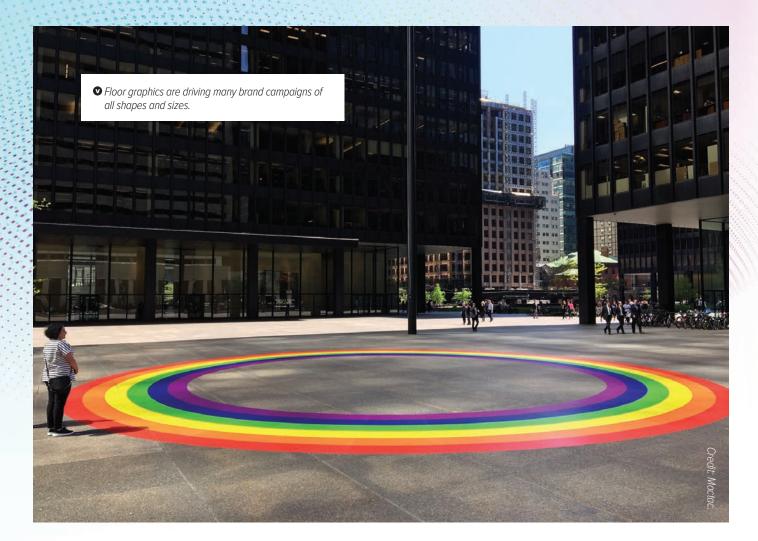


Graphics that are easy on/ easy off are a big trend right now.

Cost and lead time are some of the driving factors in media selection right now.



40% OFF



"Demand for print media solutions is growing exponentially as the need for non-verbal communication becomes more and more necessary — and in some locations mandated across the globe."

And price, as always, continues to be top of mind with PSPs. "Printers are looking for the best film at the best value based on their application needs," says Waters. "And they want a film that prints and performs consistently from roll to roll."

#### QUALITY, CONSISTENCY: THE HALLMARK OF A GREAT GRAPHIC

To ensure consistent imaging and performance, a variety of resources are available. "Avery Dennison has a literature piece called the Digital Media Selector Guide that lists out all of our films, and provides guidance on whether the media is compatible with a specific type of printer, such as solvent, latex, or UV, for example," says Waters. "We also test printer/ink/media combinations for compatibility and durability." Once a printer and ink has been tested and approved, she adds, it is in the company's ICS Performance Guarantee.

Tapping technical experts is also key to achieving the quality results today's discerning brands require. "A trained and experienced production manager is invaluable for evaluating

new materials and making them work in the shop's unique environment," notes Cook. "It's important to have relationships with technical service representatives from the printer manufacturers, media manufacturers, and distributors that provide tips and troubleshooting, as there are many variables that can affect media performance." He adds that 3M provides short roll media samples so PSPs can conduct a test print prior to starting a large job.

To aide in product selection, notes Burnham, Mactac offers a full online YouTube library of How-To videos for multiple products and applications. "With everything heading more online and digital, it's great to have available installation and product selection resources so the printer is not only choosing the right media, but also installing the media correctly," he says.

#### THE FUTURE IS GREEN — AND ALL ABOUT THE CONSUMER

Even though this year is unlike any other in the history of wide-format, media providers are already looking ahead, taking

inventory of their customers' business strategies and advancing their product lines accordingly. And for many PSPs, one of the most important considerations going forward remains sustainability.

"The demand for sustainable solutions has been increasing over time, but these types of products have usually been price prohibitive," notes Leblanc, adding that new, advanced materials are driving down the price tag of going green. "As time moves on, these options will become mandated by region, so make sure your media partners are addressing this segment of the market and providing the sustainable solutions your print buyers need."

Cook sees media manufacturers focused on boosting print quality while meeting the industry's constant push for lower overall production costs. "The media marketplace is very competitive," he says. "Going forward, expect to see media manufacturers introduce new products and features that are more efficient to run and reduce the total project cost. Print quality will continue to improve as materials are engineered for compatibility with an increasing number of printer and ink technologies as well."

Waters adds that installers will continue to play a significant role in media selection. "Installers have different needs, and an installer will continue to push for films that are easier and faster to install while maintaining the best overall quality in appearance and durability," she says. "Installers are well networked as well, sharing feedback on the performance of films. If your film is not performing as well as another brand, that knowledge will be shared quickly."

In the end, it's all about delivering on the quality expectations of brands — and the customers they serve.

"It's not just a sign anymore," says Leblanc. "Every surface in a retail space is an opportunity for non-verbal communications that improve the client experience. Messages to clients should be clean, clear — and on as many surfaces as possible. Wide-format is here to stay!" ■

Avery Dennison MPI 2105 digital film covers both vehicles and interior walls with dynamic color.



O Helping customers choose the right materials for each part of an installation is critical.



# The Latest Trends in RIP Software

# CHOOSING THE RIGHT RIP SHOULDN'T BE AN AFTERTHOUGHT WHEN INVESTING IN WIDE-FORMAT.

#### **BY KELLI RAMIREZ**

As businesses navigate the new normal, there is reason to be optimistic that the wide-format printing industry will continue to grow as the economy awakens from its torpor. As Andy Paparozzi, chief economist for PRINTING United Alliance, recently noted, "according to the consensus of economists surveyed by *The Wall Street Journal*, they expect the American economy to grow robustly in 2021 — by its fastest pace in nearly 40 years. That will give the printing industry a big boost, flipping the mind-set from cost reduction and survival to capital investment and growth."

Print service providers looking to expand their wide-format services tend to focus primarily on the printer hardware, which is largely tied to the application type. While printer manufacturers often recommend a particular RIP software based on the application and/or hardware, the RIP must be considered alongside the hardware selection, not as an afterthought.

This is especially true when adopting hardware technologies that may be outside of a print provider's comfort zone, and is essential for business growth such as adding a flatbed or a textile printer for the first time. They all "put ink on the substrate;" however, the process and results will be different than printing on something familiar, such as paper or vinyl. RIP software plays a key role in successful production. This article will look at trends in RIP software, focusing on automation, color management, and integration.

#### THE GROWING NEED FOR AUTOMATION

Automation in RIP software continues to remain a focus of vendors, which are regularly automating tasks within the RIP to help print service providers optimize their workflow. Tasks such as image scaling, rotation, bleed, grommets, sewing marks, tiles, and cut paths can be automated to save valuable file preparation and print production time across print-and-cut workflows.

"In wide-format printing time is money, so any additional features that save the print service provider time are going to be their greatest asset," says Michelle Johnson, director of marketing for SAi, makers of Flexi RIP software.

Jonathan Rogers, International marketing manager at Onyx Graphics, states, "being able to implement fast, effective automated print processes have helped print service providers be equipped to provide their customers with cost-effective and quality output that meets their needs in a timely manner."

As well, the current economy is accelerating the adoption of technologies that streamline the e-commerce aspect of wide-format printing. For example, many print service providers are making it easier for their customers to order products via new "shopping cart" features on their websites. According to Mary Ware, founder of Wasatch Computer Technology, "we also see an increase in subscriptions from small, boutique providers of specialty printing [such as] Etsy shops."

Automation also enables support for the application versatility happening in the market. The convergence of print has opened up new opportunities for all types of print providers to diversify their offerings to capture new market share. For example, while some commercial printers have already added wide-format flexible media printing services, many are now looking to expand into flatbed printing so they can offer rigid signage, displays, and packaging prototyping. Another example is established wide-format print service providers adding textile printers to supply flags, banners, custom wearables, and interior décor.

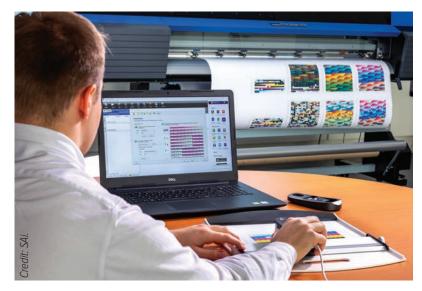
### COLOR MANAGEMENT IS STILL CRITICAL

With convergence comes the need for color management. Digital print service providers are creative: they'll look at a surface and figure out a way to get ink onto it. As new substrates and inks are introduced, color management becomes paramount to ensuring the results meet the client's expectations. If a printed

Integration with e-commerce platforms is another feature to watch for.



Credit: Onyx Graphics.



• Features that help save PSPs time and money should be at the top of the evaluation list.



Credit: Wasatch Computer Technology.

"In wide-format printing time is money, so any additional features that save the print service provider time are going to be their greatest asset."

product doesn't look like the provided artwork, it can become very costly to a print service provider, both in wasted ink and media for reprints, as well as the potential loss of repeat business.

"As commercial printers assess or adopt wide-format digital inkjet printing; or as wide-format digital inkjet printers start to assess or explore new print applications such as textile, from our experience, one consistent thread that joins them together is color management," says Rogers. "Without this, it is impossible to compare what is wanted with what can be produced, creating wrong color output."

Another trend from producers and clients is their desire for prints with more pop, according to Kerry Moloney, product marketing manager at EFI Fiery. "They don't just want the colorvolume turned up, however, as this just results in more ink usage, and prints that are off-balance colorimetrically," she says. "What they want to see is more saturation, gamut, and contrast, while still maintaining natural-looking skin tones and neutral grays."

Digital print operators also need ICC profiles for the varied substrates and ink combinations, and while printer hardware

vendors offer libraries of their own, the industry has seen an increase in third-party providers of ICC profiles and color management systems. "An increased understanding of ICC color is making reliable color reproduction more available for all print shops," says Ware. "In our particular markets, another trend is an increase in printing with fluorescent ink, and requests for ways to incorporate the new fluorescent inks into existing workflows."

### BRINGING IT ALL TOGETHER WITH SEAMLESS INTEGRATION

Along with automation comes the need for integration. Chris Des Biens, business unit manager at ErgoSoft, states that he has seen an increased demand for streamlined workflow and automated Web-to-print tools. "Integrating the RIP processes into the online order shop, and into the customer's ERP, along with a real-time module to track workflow through the process, is currently the holy grail of automation," notes Des Biens.

The beauty of software is that it is relatively agile. With the more open scripting languages and open software architecture, RIP software vendors should be able to integrate into other business systems, such as shipping, with few problems. "This increased use of scripting languages allows many departments to 'customize' their needs working with the RIP vendor to get the desired end product," says Ware.

Whenever software is being considered for a print workflow, integration with systems is essential. "As data shows us, automation is just one trend that print service providers are seeking out from their RIP vendors, even moreso over the past several months," says Rogers. "To achieve automation, systems need to connect, so as a first step, in our experience, PSPs should assess their business needs — both today and how they see their business expanding in the future — to help select the best software solution for their needs."

Another trend exacerbated somewhat by the new normal of the remote workforce is an increased emphasis on using



remote management applications and cloud-based services offered by the RIP software companies. "While display graphics producers still need to physically be present to operate their machines, a great deal of management, monitoring, and tracking can be done remotely, which is key in an age where more staff are limited to working from home," says Maloney.

One thing we know about digital print service providers is that they will continue to push boundaries for printing. As long as there are new substrates leading to more varied applications, RIP software will continue to be an integral component of wide-format printing. Taking the time to ensure the right RIP is paired with the right equipment is key to ensuring long-term success and profitability. ■