# VersaCAMM VP Series Wide Format Inkjet Printer/Cutters

# **Frequently Asked Questions**

#### **Release & Price Information**

#### Q. When will the new VP-540 and VP-300 units be available?

A. The VP units are launching April 2 and will begin shipping April 16, 2007.

#### Q. How much will the VP units cost?

A. List price for the VP-540 VersaCAMM printer/cutter is \$20,995, and the VP-300 printer/cutter is \$14,995.

#### **General Information**

#### Q. What kind of printers are the VP units?

A. The VP printers are inkjet printers that use piezoelectric head technology and include an integrated cutter exclusive to Roland products. The Roland developed printer/cutter technology used in the VP units is engineered to produce print and cut graphics unattended.

#### Q. Are there any other costs associated with purchasing one of these machines?

A. Since the machine ships complete with Roland VersaWorks™, a custom-designed RIP software, and includes a 2-year warranty, nothing else is needed to get started other than design software. Users can use any design package that meets their needs including CorelDraw, Adobe Illustrator, Adobe Photoshop, SAI FlexiSign or Cadlink SignLab.

#### Q. What is the warranty availability and what does it cover?

A. The VP units come with a 2-year on-site warranty that covers parts and labor, making it the industry's best coverage. Additional coverage is available after the 2-year period.

#### Q. What is the cost of the extended warranty coverage?

A. Users can purchase extended warranty coverage for only \$1,299 for the VP-300 and \$1,699 for the VP-540 for a year of coverage.

#### Q. What is unique about the custom-designed RIP software that ships with these units?

A. The VersaWorks<sup>TM</sup> RIP software was designed and developed by Roland specifically to optimize performance of our printers and printer/cutters. This full-featured RIP is extremely easy-to-use and supports a variety of file formats.

The latest 2.2 version of the software includes several outstanding new productivity tools including Roland Color and Variable Data Printing. Roland Color allows users to quickly and easily color match vector graphics by offering predefined color palettes that are easily loaded into Corel or Illustrator. Graphics designed using these palettes are automatically color-matched in VersaWorks, offering 100% color accuracy every time without the use of any additional tools or software.

The Variable Data Printing option is a very easy-to-understand workflow to quickly customize and serialize jobs by marrying Excel data with Illustrator or Corel images right in VersaWorks. VersaWorks then allows for simple manipulation of this data (such as font changes or image rotation) before printing.

These features are quite unique and a real benefit to users, especially those without any previous color management experience.

#### Q. What ink type and colors do the VP units support?

A. The VP printers are 4-color (CMYK) inkjet printers that use mild solvent inks. Eco-SOL MAX inks typically do not require any additional ventilation, so they can be safely used in an office or smaller shop environment.

The 4 colors of ink are available in 220 or 440 ml cartridges, and the units have a built-in tray for larger cartridge protection.

#### Q. Can the new VP printer/cutters print on a variety of substrates?

A. These new units can print on a wide range of media. Because these printer/cutters use very well-formulated mild solvent inks, the primary media used will likely be uncoated banner and adhesive-back vinyl. However, the printer is not limited to these substrates.

Roland's complete line of Eco-SOL Media (ESM) provides a variety of substrates for the diverse applications that can be produced using the new VP units including paper and films.

In addition, the printer can produce stunning output using many of the other Roland media including select Roland Piezo Certified Media (PCM) and all SOLJET Certified Media (SCM).

Please refer to the media profiles in VersaWorks as well as an updated VersaCAMM price list for a complete list of over 20 different compatible Roland media.

#### Q. What is the cost-per-square-foot of the output?

A. Ink cost for the Eco-SOL MAX ink is as low as \$.16 per-square-foot. Since the target price point for a variety of substrates (paper, banner and calendered adhesive-back vinyl) is around \$.30 per-square-foot, the total cost of output is as low as \$.46 per-square-foot (or lower depending on media cost).

#### Q. How long will prints produced with Eco-SOL MAX ink last?

A. The general statement of "up to 3 years" durability is for outdoor graphics produced with adhesive-back vinyl. Variables that effect longevity include graphic placement and exposure as well as the type of material used.

Indoor print durability is many years depending on the substrate, and is often expected to be more than 50 years with a durable substrate such as artist canvas.

## Q. Do prints require any additional finishing?

A. The durability for laminated prints would be expected to exceed the 3 year mark. Graphics protected with high-quality pressure-sensitive overlaminate film would be expected to last at least 5 years (depending on exposure and geographic region). We definitely recommend overlamination for graphics in highly abusive environments such as floor or vehicle graphics.

#### Q. What type of maintenance do these machines require?

A. As with all Roland printer/cutters using Eco-SOL MAX inks, these new units are very low-maintenance and designed to be run continually as production machines. There is no daily maintenance required and very few user-replaceable parts.

#### Q. What are the user-changeable parts and how much do they cost?

A. The following parts are the only consumable spare parts that require replacement (depending on print volume and machine use).

Wipers \$10.00
Wiper scraper \$6.00
Pad wiper tray \$3.00
Cutter protection strip: \$15.00

#### **VP Specifications**

#### Q. How many heads do these units use?

A. The VP units have 4 piezo print heads consisting of one head per ink color.

#### Q. How many heaters do the VP units have?

A. The VP units have 2 integrated print heaters. The first is a print heater used for expansion of pores in the substrate and enabling the Eco-SOL MAX ink to adhere to uncoated vinyl materials. The second, a post heater, is used to help dry the print.

#### Q. How fast do the new VP units print?

A. The VP-540 has a maximum print speed of 166 square feet per hour, and the VP-300 has a maximum of 124 square feet per hour. Please refer to the chart below for all specifications regarding print speeds with resolution and number of passes.

Print Mode	Passes	Print Speed VP-540	Print Speed VP-300
High Speed Banner, 360x540	2 pass	166 sq ft/hr (15.5 m2/h)	124 sq ft/hr(11.6 m2/h)
High Speed, 360x720	4 pass	106 sq ft/hr (9.9 m2/h)	85 sq ft/hr (7.9 m2/h)
Standard, 720x720	8 pass	56 sq ft/hr (5.2 m2/h)	44 sq ft/hr (4.1 m2/h)
High Quality, 1080x1080	9 pass	32 sq ft/hr (3 m2/h)	28 sq ft/hr (2.6 m2/h)
High Quality, 720x1440	16 pass	27 sq ft/hr (2.5 m2/h)	21 sq ft/hr (2 m2/h)
Photo Quality, 720x1440	8 pass	30 sq ft/hr (2.8 m2/h)	25 sq ft/hr (2.3 m2/h)

#### Q. What is the print resolution of these new units?

A. Maximum print resolution is 1440 dpi (720dpi x 1440dpi). There are also 5 other print modes as referenced in the chart above. These modes offer vivid solid color printing for the best color output per resolution.

#### Q. What is the maximum media width that the VP units can accommodate as well as print?

A. The VP-540 can accommodate 54-inch wide media and can print up to 53 inches wide. The VP-300 accepts 30-inch wide media with 29 inches of printable width.

#### Q. What is the maximum media thickness that the VP units support?

A. The maximum media thickness that the VP-540 can accommodate is 39 mil (.039 inches or 1.0mm). To prevent potential head strikes when using thicker substrates, the VP-540 features two adjustable head height positions. The clearance between the print heads and the platen is 0.12 inches (3.2mm) in the high position and 0.08 inches (2.2mm) in the low position.

The head height in the VP-300 is fixed at 2.2mm, so it can accommodate materials up to 26 mil thick (.026 inches or xxmm). This is enough to easily accommodate heavy-weight banner and artist canvas substrates, which are generally in the 20 mil range.

#### Q. What is the maximum media roll weight the VP units support?

A. The VP-540 can now accommodate 66 pound rolls, allowing for use of heavier and longer rolls of media such as 50 yard rolls of adhesive-back vinyl or banner. The VP-300 still accommodates up to 44 pound rolls.

### Q. What are some of the other features that optimize the operation of these new printers?

A. These units have several excellent improvements that offer faster speeds with better media feed as well as optimizing performance with tighter specifications.

The new VP units have new media flanges and roll stoppers that provide more robust media feed support. Two different media clamps for print/cut or print only materials also help support better feed and accuracy. The VP units offer automatic ENVIRONMENTAL MATCH every time a new SET-UP is performed, and tighter adjustment values with tighter adjustment values in the PRINT & CUT Adjustment (now offers input in 0.05mm increments).

The grit roller system and belt drive systems have been improved, and there are additional pinch rollers. The VP-540 has a total of 7 pinch rollers with 5 detachable, and the VP-300 has a total of 4 with 2 detachable. There are also new adjustable media flanges that tighten in the media cores, new roll stoppers that hold the flanges in place on the roller bars in the back of the unit, two sets of media clamps, and an updated pinch roller system.

#### Q. Are take-up units available for these units?

A. A well-designed new take-up system with automatic sensing and a self-tensioning roller bar is offered in the TU2 take-up. We have the new TU2-54 or TU-30 priced at \$1,995 for these units that give consistent and stable tensioning for a variety of print only jobs including high-speed banner production.

#### Q. How do these units handle printing on different media types?

A. The new VP printer/cutters have improved media feed capabilities due to several improvements. There are new adjustable media flanges, new roll stoppers, two sets of media clamps, and an updated pinch roller system.

The VP-540V has a total of 7 pinch rollers. There are 2 fixed conical pinch rollers at both ends of the bed with 5 removable pinch rollers in between for printing a variety of media including banner materials. Depending on the type of media, you can add or remove one or all of these pinch rollers for more efficient media feeding, especially during printing and cutting. The VP-300 has a total of 4 pinch rollers with 2 removable.

#### Q. How do I connect the VP units to my computer?

A. The VP units have Ethernet connectivity. You can connect them directly to a PC with a crossover cable or to an existing network using a standard patch cable.

#### Q. What is the cutting pressure of the VP units?

A. The VP units have a range of cutting pressure from 30 grams to 300 grams of force. This allows for cutting a wide variety of substrates such as reflective vinyl and laminated graphics.

# Q. What is the blade offset range that VP units support?

A. This VP units support blades from the standard 45 degree blade with no offset to blades with as much as a 1.5 offset. Again, this allows for cutting a wide variety of substrates such as reflective vinyl and laminated graphics.

# **VP Comparisons**

#### Q. What is the advantage of Print & Cut?

A. The new VP units continue to offer the advantage of integrated printing and cutting in a single unit. This combined printing and contour cutting in a single device significantly improves production speed and ease of use.

The units can be used as a printer on substrates such as banner and paper, as a cutter only for colored vinyl or other cut only materials or as a combined printer and cutter. Combining the use as a printer and cutter means you can either print and then immediately cut graphics (which the software controls without manual intervention), or print graphics, remove them from the unit, laminate them, then put them back into the unit and cut them.

With our unique QUADRALIGN® registration system, you are assured that even when graphics are removed from the printer, the system adjusts for any stretch or skew. The system is simple, with printed registration marks that the printer reads with an optical eye then takes the position into consideration when cutting the graphics.

And since the RIP software supports all these applications, there is no need to purchase additional software and/or realign your output on a separate cutter.

#### Q. What are the differences between the VP-540 and the VP-300 printers?

A. Both printers support print and cut applications and 4-color CMYK printing, and offer some outstanding new features, but other than the obvious size difference, there are some minor specification differences including print speed and maximum media thickness.

#### Q. What is the difference between the new VP and the SP units?

A. The new VP units are as much as 54% faster than the SP units, mainly due to additional print heads. The VP units also offer better media feed for increased accuracy and output quality, including denser solid fills in higher speed modes. The media feed is now improved internally as well as externally with new media flanges, roll stoppers and new media take-up system.

The internal improvements include automated features like automatic ENVIRONMENTAL MATCH every time material is changed or the pinch rollers adjusted, increased alignment accuracy when performing BI-DIRETION adjustment before the PRINT & CUT adjustment, and tighter adjustment values with some of the other standard options such as the PRIINT & CUT adjustment.

The chart below shows the side-by-side print speed comparisons with percentage increases in speed. The comparative highlighted speeds show the improvement in quality that can be expected with the new VP units; the much higher speed mode is essentially comparable in quality.

Print Mode	VP-540 Print Speeds	SP-540 Print Speeds	Percentage Increase
Billboard, 360x540	166 sq ft/hr	NA	NA
High Speed (banner), 360x720	106 sq ft/hr	114 sq ft/hr	32%
High Speed (vinyl), 360x720	106 sq ft/hr	66 sq ft/hr	38%*
Standard, 720x720	56 sq ft/hr	32 sq ft/hr	43%
High Quality, 1080x1080	32 sq ft/hr	16 sq ft/hr	50%
High Quality, 720x1440	27 sq ft/hr	19 sq ft/hr	30%

<sup>\*</sup>The quality improvement allows for comparison of a higher speed mode to a much lower speed mode on LBV banner vinyl.

Print Mode	VP-300 Print Speeds	SP-300 Print Speeds	Percentage Increase
Billboard, 360x540	124 sq ft/hr	NA	NA
High Speed (banner), 360x720	85 sq ft/hr	63 sq ft/hr	50%
High Speed (vinyl), 360x720	85 sq ft/hr	56 sq ft/hr	34%*
Standard, 720x720	44 sq ft/hr	27 sq ft/hr	39%
High Quality, 1080x1080	28 sq ft/hr	13 sq ft/hr	54%
High Quality, 720x1440	21 sq ft/hr	16 sq ft/hr	24%

<sup>\*</sup>The quality improvement allows for comparison of a higher speed mode to a much lower speed mode on LBV banner vinyl.

# Q. Will we continue to offer the SP units?

A. We will be keeping the SP units in our line-up as the entry-level offerings. List price for the SP-540 printer/cutter will be \$16,995, and the SP-300 printer/cutter is \$10,995, which includes Roland VersaWorks™, a full-featured software RIP.

#### Q. What is the difference between the VP-540 and the XC-540 printers?

A. Both printers have print and cut capability and use the same ink type; however the SP-540V utilizes 4 ink cartridges (CMYK) while the XC-540 uses two sets of 6 ink cartridges making it a 6 color (CMYKLcLm) printer with tremendous ink capacity.

The included RIP software is the same for each unit, but the XC-540 is significantly faster than the VP unit. The VP-540 reaches a maximum speed of 166 square feet per hour, while the XC-540 can reach 441 square feet per hour.

Additionally, the XC-540 has an integrated take-up system and an optional heater/dryer system that makes it a top-of-the-line production machine.

#### Q. What is the major advantage of these printers in comparison with others in the market?

A. The new VP units offer excellent performance at a value price-point. The 2-year warranty and custom-designed RIP software are also huge benefits not offered by other manufacturers. And the use of mild solvent inks allows for a variety of applications without concern for additional ventilation or special handling.

These units are faster than other units in their same class when comparing print quality, and since they offer an integrated print and cut solution, no additional equipment is needed to produce a wide variety of graphics.

Since the size and weight of these units is smaller, and cleaning and maintenance are very low, these units offer an excellent solution for a variety of customers in different environments. Graphic artists, in-house marketing departments, and print-for-pay and copy shops are all ideal candidates for these units in addition to sign-makers and screenprinters.

The chart below outlines the major points of comparison with the closest competitive machines from Mutoh and Mimaki. These figures are meant for comparison only and are not intended to be used as a basis for a customer's total buying decision. On-going product support with a strong warranty as well as bundled custom-designed RIP software with a fully-profiled media line-up and the value of integrated printing and cutting should all be key factors in the decision-making process.

Model	Roland VP-540	Mimaki JV3-130	Mutoh ValueJet 1204	HP DJ 8000s
List Price	\$20,995	\$19,995	\$14,995	\$19,995
Printer Weight	240 lbs	363 lbs	204 lbs	478 lbs
Integrated Print/Cut	YES	NO	NO	NO
Warranty	2-Year	1-Year	1-Year	1-Year
Top Speed	166 sfph	222 sfph	154 sfph	165 sfph
Ink Configuration	1x4 cartridges, 220 or 440 ml	2x4 cartridges (or 1x6+2 special), 220 or 440 ml	1x4 cartridges, 220 ml only	1x6 cartridges, 500 ml
Resolution	1440x720 dpi	1440x1440 dpi	1440x720 dpi	720x720 dpi
Media Width	54" media, 53" printable	53.97" media, 53.58" printable	51" media, 48" printable	64" media, 63" printable
Roll Weight	66 pounds	55 pounds	42 pounds	53 pounds