

# ColorPRO Technology Overview for high-speed production printing applications



## Designed to achieve high-quality results on HP Inkjet Web Presses

HP Inkjet Web Presses bring a new level of features and performance to high-volume printing applications, breaking cost and performance barriers and offering a range of printing possibilities including book publishing, direct mail, transactional printing,<sup>1</sup> and newspapers.

Using HP Bonding Agent—a unique colorless liquid technology applied only at the precise locations where ink is to be printed—HP Inkjet Web Presses deliver outstanding image quality and durability on a wide range of low-cost, standard uncoated offset papers. For greater media choice and performance benefits at a competitive cost, customers also have the option of using uncoated papers treated with ColorPRO Technology, specifically designed and optimized for HP pigment inks and HP Inkjet Web Presses. Compared to standard uncoated offset papers, ColorPRO papers offer noticeably enhanced print quality at full press speed.

## The ColorPRO difference

Papers bearing the ColorPRO logo are manufactured to meet a strict set of quality specifications, with performance criteria such as:

- Black optical density
- Color gamut
- Line edge acuity
- Color-to-color bleed

Performance and quality of ColorPRO papers are verified by an independent testing agency.

ColorPRO papers deliver:

- Dense blacks, comparable to offset, for remarkable text and solid area fills
- Color gamut larger than SWOP inks on standard uncoated offset paper<sup>2</sup>
- Crisp text-over-color placement enabling limitless full-color options
- Sharp lines
- High-quality performance at full press speed

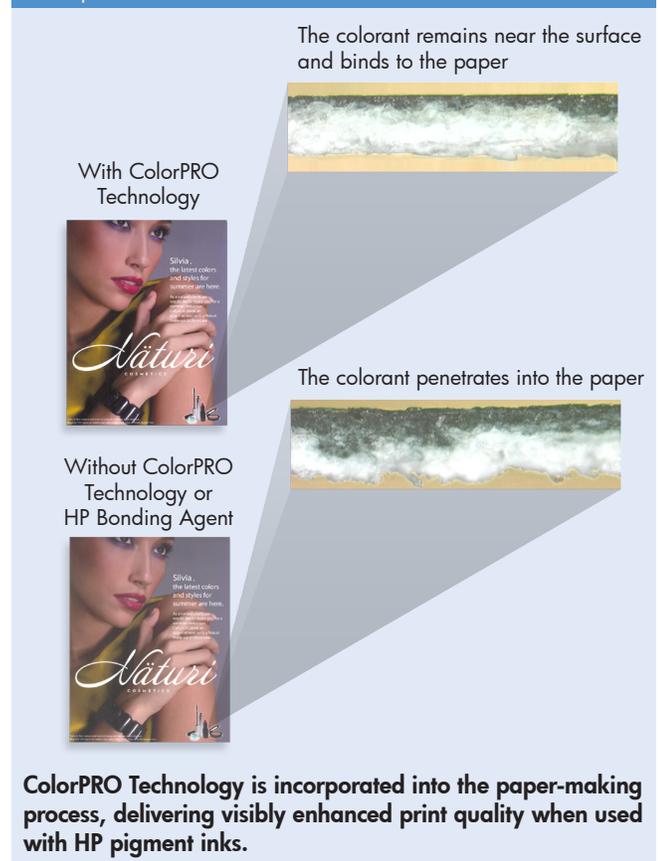
## ColorPRO Technology

ColorPRO papers compatible with the family of HP Inkjet Web Presses use additives that interact with HP pigment inks. These additives treat the paper to provide precise control over ink behavior at the paper surface (See Figure 1). As the ink penetrates the paper, the colorant is immobilized at the surface to provide higher black and color optical density, controlled dot gain, minimal feathering, and reduced color-to-color bleed. The results are dense blacks, vivid colors, and sharp edges for high definition of text and lines—especially text and lines against colored backgrounds.

This specific interaction between HP pigment inks and papers with ColorPRO Technology provides a unique combination of print quality characteristics and controlled ink absorption.



Figure 1: ColorPRO Technology for papers compatible with HP Inkjet Web Presses



<sup>1</sup> In some cases, solutions based on the HP Inkjet Web Press platform will be available through an HP authorized reseller or systems integrator.

<sup>2</sup> Comparison of color gamut volumes in the CIE Lab color space.

ColorPRO results are visible as professional quality delivered at full press speed. Examples shown in Figures 2 and 3 illustrate the ColorPRO difference for papers compatible with HP Inkjet Web Presses.

Designed to enhance print quality on lighter-weight papers, ColorPRO Technology can also enable economic benefits including lower overall costs of printing, transportation, and distribution.

### Providing media choice

In addition to supporting a wide range of uncoated offset media using HP Bonding Agent, HP Inkjet Web Presses take advantage of papers with ColorPRO Technology, specifically designed with HP pigment inks and the press, to maximize system performance. ColorPRO Technology will be available on a range of paper stocks produced using various pulping processes including mechanical, chemical, or a combination of both.

### The ColorPRO advantage for publishing and mailstream<sup>1</sup> applications

Prints produced on the HP Inkjet Web Press using ColorPRO papers deliver outstanding image quality and durability—including improved water and smear resistance—across a wide range of high-quality, high-productivity publishing and mailstream applications.

See the ColorPRO difference in the magnified portions of this print sample illustrating the print quality with ColorPRO Technology compared to the quality without ColorPRO Technology or HP Bonding Agent.



- More striking colors
- Finer detail

- Higher contrast black
- Sharper lines and text

Figure 2: ColorPRO Technology performance benefits

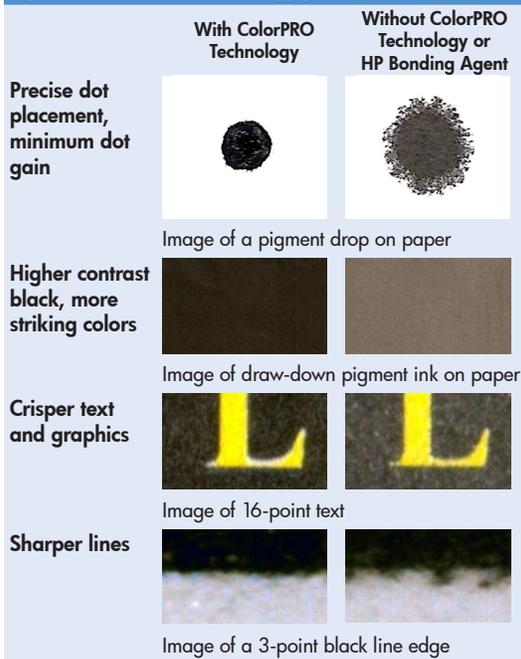
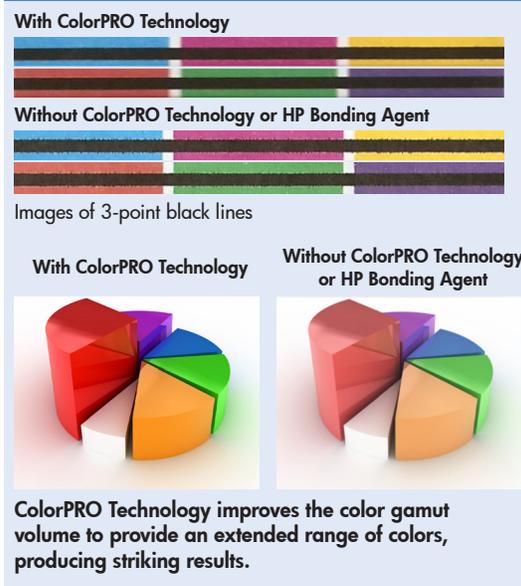


Figure 3: ColorPRO Technology color performance



Progressive, Profitable Printing



For more information on ColorPRO Technology, visit [www.colorprotechnology.com](http://www.colorprotechnology.com)

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