



Progressive, Profitable Printing

How the

# HP T300 Color Inkjet Web Press

can help to reduce the **environmental**  
impact of commercial printing & publishing

The HP T300 Color Inkjet Web Press combines the advantages of digital on-demand printing, water-based HP pigment inks and Bonding Agent – reducing waste and enabling an improved printing environment

Transform your production environment with breakthrough digital performance

The HP T300 Color Inkjet Web Press offers a compelling opportunity to reduce the impact on the environment of printing books, direct mail, transaction material<sup>1</sup>, newspapers, and other kinds of high-volume commercial printing. Based on the latest generation of HP's proven, scalable Thermal Inkjet Technology, this revolutionary press enables significant cost reductions due to low cost-per-page and reduced inventory and spoilage. At the same time, it delivers an unparalleled combination of print width, color quality and productivity that enables a range of printing possibilities.

Minimize waste with digital on-demand printing

Offset printing inherently generates high levels of waste during set-up and changeover processes. Digital on-demand printing with the HP T300 Color Inkjet Web Press virtually eliminates these inefficiencies, lowering the impact of printing on the environment in terms of raw materials, energy usage and emissions. Printers can produce materials as needed, benefit from more efficient printing processes and economically viable short-run jobs, increase profitability by reducing waste in their own operations, and work with customers to reduce their carbon footprint.



*"Based upon our initial analysis, we believe that we could cut the amount of paper used to print our books by around 15-20% a year by leveraging the efficiency and flexibility of digital on-demand printing."*

Marianne Fairclough, Vice President,  
Corporate Paper Operations, Pearson

## An improved printing environment

The HP T300 Color Inkjet Web Press and its ink supplies are designed with the environment in mind. Leveraging years of experience in the development and testing of ink formulations, HP developed the water-based HP pigment ink technology and specially engineered Bonding Agent used with the HP T300 Color Inkjet Web Press to produce high-quality and durable images on a wide range of uncoated media.

These water-based HP pigment inks and Bonding Agent are non-flammable and non-combustible<sup>2</sup>, emit very low levels of Volatile Organic Compounds<sup>3</sup>, and contain no detected Hazardous Air Pollutants<sup>4</sup>. In addition, inkjet printing provides a direct method for depositing colorant on the surface of the paper, without the need for electrostatic charging steps, and therefore avoids creation of ozone and potential ozone management issues<sup>5</sup>.

All of this can help create an improved environment for printing operation employees, reduce the environmental impact of printing and solve storage, handling and waste disposal challenges more often associated with traditional offset printing.

## Commitment to recycling

HP works with the recycling industry to ensure a smooth transition as digital prints comprise more of the recycled paper stream. As part of extensive research into recyclability and deinkability<sup>6</sup>, HP confirmed that its additives developed to increase the durability and enhance the print quality of inkjet prints also enhance deinkability. These additives can be introduced as an additional clear ink (Bonding Agent) or as a paper pretreatment.

In addition, HP pigment ink and Bonding Agent drums for the HP T300 Color Inkjet Web Press are material recyclable.



## Reducing the carbon footprint of paper

Use of ColorPRO papers with the HP T300 Color Inkjet Web Press enables high-quality printing results on thinner grades of papers than those that have typically been used in high-volume inkjet printing<sup>7</sup>. Printing on thinner paper grades can translate into lower costs to commercial printers and publishers, lower transportation and distribution costs and a reduced carbon footprint per square foot or square metre of paper.

## HP's commitment to environmental leadership

The HP T300 Color Inkjet Web Press is part of the HP commitment to environmentally responsible printing. Used in the context of a proper strategy for sustainability, this advanced press can help commercial printers and publishers to reduce the impact of printing on the environment while improving their profitability.

- 1) In some cases, solutions based on the HP T300 Color Inkjet Web Press platform will be available through an HP authorized reseller or systems integrator.
- 2) HP water-based pigment inks and the Bonding Agent for the HP T300 Color Inkjet Web Press are not classified as flammable or combustible liquids under the USDOT or international transportation regulations, and are non-flammable according to EU Council Directives 67/548/EEC of 27 June 1967 and 91/689/EEC of 12 December. These materials have been tested per U.S. Environmental Protection Agency Method 1020 and the flash point is greater than 110 degrees Celsius.
- 3) Dryer and print zone exhaust systems, along with very low levels of VOC emissions enable an improved print shop work environment. Customers should consult state and local requirements and regulations.
- 4) The inks were tested for Hazardous Air Pollutants per U.S. Environmental Protection Agency Method 311 (testing conducted in 2008) and none were detected. HAPs are air pollutants which are not covered by ambient air quality standards but which, as defined in the Clean Air Act, may present a threat of adverse human health effects or adverse environmental effects.
- 5) No ozone products expected based on ink composition and printing technology.
- 6) The process of separating ink (or toner) from printed media. Effective de-inking ensures that a paper recycling process produces quality fiber in high yields.
- 7) Based on internal HP testing of papers in the 75-90 g/m<sup>2</sup> range.