adphos Tower Solutions are a family of high-performance, cost-effective products which enable the integration of digital monochrome, spot or process color inkjet printing with traditional offset web presses and finishing lines. adphos Tower Solutions can also be used in offline applications as laser printer replacement systems and can be configured for any inkjet technology.

adphos Tower Solutions are available in portable, simplex, and duplex configurations and can be configured for speeds in excess of 914 mpm (3000 fpm). With three standard web widths, a wide range of options, and field upgradeability, adphos Tower Solutions can be configured and reconfigured to meet your applications both now and well into the future.

The extreme accuracy of adphos Tower printhead positioning systems coupled with proper web handling and closed loop registration controls allows for imperceptible head to head and rail to rail printhead stitching for monochrome and process color applications that rivals the finest offset presses.

With an adphos Tower Solution, it is possible to start with a basic monochrome system, and as your business and requirements grow, upgrade with additional printheads, carriages, turn bars, camera systems, additional drying modules, web cleaners and tension controls. Upgrades can be performed on-site at your facility.

Based on the concept which uses standard building blocks for all models, the adphos Tower allows full modularity and upgradability.

Thus the range allows for a single rail, single-headed system without the need for drying newspapers, up to a full width fully process color duplex system running at speeds in excess of 600 mpm (2,000 fpm) and beyond.

As authorized integrators of various inkjet technologies, adphosNIR® systems can be mounted on a broad range of printheads, in different sizes, from different manufacturers, and in a myriad of configurations. Whatever the need a budget allows today, and with the capability of upgrading to more heads later if desired.

The adphos Tower can be designed with the web width of your choice - standard sizes are 508 mm (20"), 660 mm (26") and 1,016 mm (40") but others are available on request.

adphos only uses the highly efficient adphosNIR® drying technology to dry inks, thus drying at faster speed. The designer simply specifies the speed and paper stocks needed and adphos gives its recommendations. If lower drying capability is purchased initially, it can be upgraded later. Using adphos’s patented drying technology - the reflectors, the energy wavelength and the sophisticated airflow - offers the user extremely effective drying often leading to energy savings in excess of 30% over competitive systems.

The base modules are:

A printhead carriage with paper path and the number of rails needed to support the printheads to be purchased. A supporting frame with paper path. The adphos drying module(s) specified.

Options then allow for:

Web guides, tension control, web cleaners, extra dryers, camera system mounts and systems, pre & post-coat modules and dryer, various control solutions (Siemens/Rockwell/Mitsubishi), CE certification, etc.
CMYK Application

Web width: 965 mm  
Print width: 950 mm  
Web speed: 521 m/min  
Stocks: Different stocks mostly offset  
Configuration: Simple, automatic adjustment (pull out)  
PH: Kodak Prosper S20  
Rails: 4  
PH per rail: 2/1 (total 6)  
Drying: 2 x NIRWeb-III-40 modules

Single/Duplex Installation

Web width: 1,030 mm  
Print width: 1,000 mm  
Web speed: 300 m/min  
Stocks: Various standard stocks incl. glossy stocks  
Configuration: Duplex, manual adjustment (no pull out)  
PH: Kodak 6240, Kodak DH 91  
Rail: 3 + 2  
PH per rail: 2 (total 6 + 4)  
Drying: 2 x NIRWeb-III 40 modules per side

Lottery Ticket Application

Web width: 520 mm  
Print width: 500 mm  
Web speed: 300 m/min  
Stocks: Various papers including glossy stocks  
Configuration: Simple, automatic adjustment (pull out)  
PH: Kodak Prosper S10  
Rails: 4  
PH per rail: 1/2 (total 5)  
Drying: 2 x NIRWeb-III 26 modules