

Winds of change

APS Germany has developed breakthrough technology which enables the use of high alcohol content, fast dry inks in thermal ink jet technology, reports **Anna Game-Lopata**.

As well as being a technological leader in the development of ground-breaking thermal ink jet printers, APS is a major international supplier of fluids (inks, additives and make-up) for all major brands of industrial ink jet printers.

The company is headquartered in Germany where its products are engineered and manufactured. Distribution takes place worldwide, to over 35 countries, including Australia through the local APS subsidiary.

Vice president Andrew Sharp says the company's mission is to open the restricted supply of consumables to major brands of ink jet printers, while simultaneously offering a maintenance-free alternative ink jet technology suited to the marking and coding of packaged products.

In terms of APS's most recent and exciting innovations, Sharp points to the Apsolute™ thermal ink jet printer, launched in Australia early in 2007 along with APS patented technology that extends the use of high alcohol content fast dry inks suited to coding non-porous primary packaging.

"While Thermal Ink Jet (TIJ) is a Hewlett Packard technology used daily in many workplaces for printing on porous materials, Apsolute™ significantly expands the number of applications through the use of high alcohol content, fast dry disposable ink cartridges for coding non-porous packaging materials," Sharp explains. "This unique breakthrough in ink jet technology is a mast head development from APS engineering, as it allows the enormous benefits of ink jet to be enjoyed without the drawbacks of current day continuous small character printers."

"The winds of change are here



By empowering a manufacturer with the ability to 'repair' problems with the simple exchange of a cartridge, the Apsolute™ eliminates time and expense.

already and blowing stronger," Sharp says. "The old days of high maintenance CIJ, service technicians, ink stained floors, handling of dangerous flammable liquids and exclusive supply agreements are being replaced with clean, maintenance free, enviro-friendly ink."

In the current environment, Sharp believes thermal ink jet offers the greatest potential to provide a single technology able to address the fundamental needs of primary, secondary and tertiary packaging.

"Thermal Ink Jet is the natural coding and marking technology of the future and will be dominant within the next decade," he asserts.

Of all the other ink jet technologies, Andrew Sharp says APS recognised the enormous benefits offered by thermal ink jet, such self maintenance through disposable cartridges, scalability and simplicity.

"With millions of systems being used daily in mailing and office environments, thermal ink jets are a well tried and tested solution," he says.

"But thermal ink jet only works with

water based and low alcohol content inks, meaning it is only suitable for porous materials. It's a secondary rather than a primary packaging solution."

APS therefore undertook a significant development project to engineer a proprietary driver pioneering high alcohol content, fast dry inks suited to coding non-porous primary packaging materials.

"The result was the launch in 2007 of the Apsolute™," Sharp enthuses.

A significant number of marking and coding packaging requirements are legislatively governed, forming a critical link in the production chain, and are installed in no-print-no-production locations.

Unlike current day continuous ink jet, laser and thermal transfer ribbon printers, the Apsolute™ thermal ink jet has no moving parts (no pumps, no motors, no filters, no tubes, no solenoid valves, and no membranes).

"This system is maintenance-free and allows the user to get on with the job without having to worry endlessly about the up-time of the marking and coding

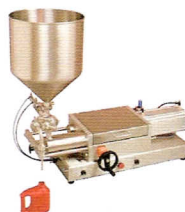
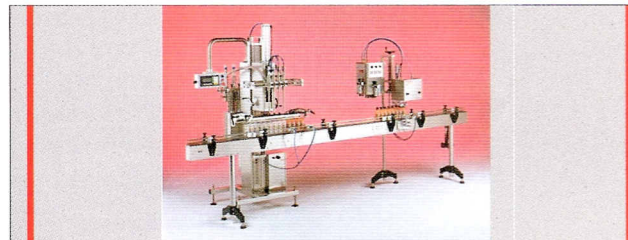
"The old days of high maintenance CIJ, service technicians, ink stained floors, handling of dangerous flammable liquids and exclusive supply agreements are gone."

equipment," Sharp says. "Any potential problems are resolved simply by replacing a print cartridge, a task that takes no more than five seconds."

"By empowering a manufacturer with the ability to 'repair' potential problems with the simple exchange of a cartridge, the Apsolute™ eliminates time, expense, lost production and the uncoded products normally associated with coder failure," he adds. "This increases efficiency, productivity and sustainability in all packaging situations."

At Interpack 2008, APS launched a further innovative technology, the Apsolute™ in-line shutter to increase the range of fast dry inks available for this product range. "The patented in-line shutter automatically caps the ink cartridge when not being used for printing," Andrew Sharp says.

APS has also launched an ink for Apsolute™ suitable for marking and coding on to BOPP film, which is traditionally a challenge for ink jet technology. "This new ink provides excellent adhesion with all the benefits of disposable cartridge technology," Sharp says.



Filling and Capping

Collier Packaging P/L
(02) 4324 0441
www.colpack.com.au