

## Press Release

Release No: A07  
Date: September 2009  
Release Date: Immediate

### Laser Marking Coated Paper

Laser marking coated paper or cardstock-based packaging is perfect for food, cereal, film, pharmaceutical, and health care products because the 10.6- $\mu\text{m}$  carbon dioxide wavelength fully ablates the inked coating down to the paper surface leaving a crisp, clean, high-contrast mark.

For products where lot numbers or expiration dates are mandated, laser marking during the actual packaging process eliminates the need to manage an inventory of pre-printed materials. Further savings are realized because laser marking does not require the consumables and maintenance overhead associated with other marking or labelling processes such as inkjet and thermal printers where make-up ink and transfer tape are reoccurring costs. Because the WinMark Pro laser marking software is easily configured to generate sequential numbers and date codes, the process of marking serial numbers, expiration dates, lot numbers, and batch codes is done without operator invention.



*A 125 mm focusing lens was used with a spot size of 180 microns (0.007") to mark coated paper products using 10 watts of power in a cycle time of 0.15 seconds per mark.*

The photograph shows an example of a serialised laser mark on inked paper. The mark file was created with a single nine-character text string where the first four digits were set to increment serially from 0001 through 1000 while the remaining text was fixed. To do this, a text string was created using WinMark Pro's built-in *Simple* stroke font at a *Text Height* of 4.75 mm (0.1875"). *Auto Text Type* was set to *Serial Number Text* and the *Serial Number Mask* property was configured so that only the first four digits are serialized. At a power level of 10 watts and a mark velocity of 40 inches per second (IPS), cycle times of 150 microseconds (0.15 s) were achieved per mark. Based on the distance between marks on consecutive packages, over 370 packages could be marked per minute in this application. Much higher line speeds are possible by simply increasing laser power and mark speed.

For pre-publication queries contact: Jeryl Adcock ([jeryla@laserlines.co.uk](mailto:jeryla@laserlines.co.uk))  
For sales/technical queries contact: Gary Broadhead ([garyb@laserlines.co.uk](mailto:garyb@laserlines.co.uk))



**Laser Lines Ltd**  
Beaumont Close | Banbury | Oxon | OX16 1TH | UK

T: +44 (0) 1295 672500 | E: +44 (0) 1295 672550  
E: [info@laserlines.co.uk](mailto:info@laserlines.co.uk) | W: [www.laserlines.co.uk](http://www.laserlines.co.uk)

Directors: R A Wilkin (Managing) | G D Broadhead | S P Knight | M J Turner | S Hall  
Registered No. 4021637 England. Registered Office: Beaumont Close | Banbury | Oxon | OX16 1TH. VAT Registration No. GB 915 7430 25