

Case Study: RF1 Feeder Provides Flexibility to Supplements Packager

Contract manufacturer Cell Life UK produces and packages nutritional supplements, from vitamins and minerals to botanicals, for major brand owners and independent health companies world-wide. Products range from powders to tablets and capsules, which are packaged in pots, bottles, blister packs and cartons. All packs are printed with batch numbers and expiry dates; pots and bottles are coded using an antiquated CIJ (continuous inkjet) printer and cartons are coded by an inefficient hot foil printer.

A specialist in small batch supplement manufacturing, Cell Life UK has experienced considerable growth in recent years as more companies move to a 'just in time' approach to inventory. Orders are typically for 5000-7000 packs and to keep pace with this demand, Cell Life UK needed the capability to code 4000 packs per day, rather than the 1000 it was managing.

After reviewing systems from three different coding equipment suppliers, Cell Life UK purchased the RF1 friction feeder, owing to the flexibility it promised.

"We chose the RF1 system because it wasn't restricted to one size of carton and allowed us to print the code anywhere on the carton." said Tim Hutchinson, packaging engineer at Cell Life UK.



On the RF1 system, because the cartons are deposited onto a conveyor belt on a horizontal bed for printing, the code can be placed anywhere. This contrasts with rival systems on which the carton is fed down the front of the machine and gripped in a side belt - a configuration that limits code placement options. The RF1 system also offers users the flexibility to print cartons flaps-leading or body-leading, enabling printing along the length of the carton.

The RF1 takes flat cardboard sleeves or cartons from a hopper, feeds them through a printer so they can be coded, and stacks them ready for use. The versatile system can handle pack shapes and sizes ranging anywhere from 65x70mm to 350x350mm and can be easily adjusted to swap between sizes.

Also specified was a Markoprint® thermal inkjet printer to integrate with the RF1 feeding system, as this gives consistently crisp, smudge-free prints even on glossy surfaces, and is capable of coding all areas of the carton.

Overprinting systems which rely on contact technology and pressure, for example hot foil, tend to struggle with coding on end flaps and over internal seams where the thickness of the substrate is not uniform. As a non-contact technology, Markoprint® has no such limitations.

The offline coder has been in operation for more than a year, and Tim is finding the cartridge-based Markoprint® system very easy to maintain and use in comparison with the CIJ coder used to code pots.



Markoprint® X1JET Stitch



“Markoprint® is so easy to operate. With our CIJ system we have to fill it up with fluids and clean the nozzles, whereas with the Markoprint® printer, all we have to do is wipe it clean - we don’t even have to do any maintenance on it,” he says.

The difference stems from the fact that Markoprint® coders use a simple cartridge system which combines both a printhead and ink supply system. Replacing the print cartridge effectively replaces the entire print engine, and this can be done within a few seconds, minimizing downtime and eliminating the need for service contracts. Cartridge operation makes Markoprint® a very clean method of coding in comparison to CIJ printers.