



■ ISRAEL

With screen printing into new segments

MADNET PRINTING ■ The Haifa-based company has been an electronic products printer for decades. Their main products are printing masks, panels, covers, circuit boards, nameplates, rulers etc. made mainly by manual and/or sheet-fed screen printing machines.

In mid-2008, the decision was made to enhance the product range and switch from sheet-fed to web-fed production. This initiated the search for a suitable machine. After extensive searching, testing, surveying and reviewing references from press-owners they determined *Smooth Machinery* as their supplier for a web-fed screen printing machine. The decision for the *SPM-320SX* was due to the following reasons:

- **Printing.**
 - High printing speed of up to 6000 impressions/h; this allows it to handle comparable maximum production quantities. Web width is 320 mm (12.6"), print area is 400 x 300 mm (15.75" x 11.8").
 - CNC-controlled; independent servo drive printing station; pneumatic lifting and lowering of the print heads and screen stencil; auto adjustment of the squeegee angle during printing; orientation of print head parallel to web path to avoid problems such as ink jam damaging the stencil, ink leakage onto the substrate, limitations in ink thickness, registration tolerance etc.
 - Second web pass is a standard function; with precise re-pass regis-

tration it is possible to handle multi-colour printing with single-head machine.

- **Tunnel dryer.**
 - *Smooth* patent in Taiwan. Instead of using a traditional tunnel, the web passes in circles of 7 m length each (up to five circles).
 - Drying distance of 7-35 metres



(23-115 ft - special model up to 105 metres [345 ft]). With this relatively small space it is possible to dry the substrate at lower temperatures; the smooth drying at low speed reduces shrinkage problems.

- Smart design for heat blowers. The blowing route and the high tech inner materials keep the heating temperature »sealed« inside the oven to ensure the whole web dries at the same temperature. This is the key for 100% complete drying and ensures re-passes for multicolour printing with best registration and print quality.

- **High-speed flat-bed die-cutting machine.**
 - High cutting speed of up to 18,000 strokes/h with flat-bed die cutting allows it to handle the maximum production levels.

- One station can do kiss-cutting, through-cutting, perforations, hole punching, embossing, lamination, backside lamination, multiple laminations etc simply with a simple change of tools.
- Easier to handle various thicker web materials than with flexible dies. The die cost is comparably cheaper.
- **Slitter rewriter.**
 - German-made slitting blades, auto-locked without screws for easy set-up.
 - Slitting speed reducing function before job completion is able to save waste and extends the machine life.
 - In tandem with the main machine it allows for online or offline alternative functions.

With the *Smooth Machinery* equipment installed in May 2009, the company is able to start printing of thermal transfers, tattoos, labels, scratch-off products, tickets, lids, boxes, RFID etc in the near future.

→ www.smoothmac.com

■ WORLD

New website

DUPONT PACKAGING GRAPHICS ■

Following the introduction of the *Cyrel round* website, a new section within the portal has been launched dedicated to *Cyrel FAST*. The new section is aimed at helping to improve the knowledge and understanding of the benefits and possibilities of thermal platemaking.

→ www.cyrel.com



Left: Madnet Director Doron Vanano (right) and Smooth Machinery Sales Manager Jim Tien with the new equipment.

Right: Typical products of Madnet Printing. Photos: Smooth Machinery.

