

Product Portfolio

PRODUCT OF THE MONTH

MGI Meteor DP 60 Pro



The latest generation DP 60 Pro with ability to handle paper and plastic, is by far MGI's fastest and more productive machine, finds *Noel D'cunha*

DP 60 Pro: ability to print on variety of papers as well as on plastic has boosted its flexibility

The Meteor DP 60 Pro paper and plastic digital printer has fast become the flagship model for MGI's DP series. Designed for high-volume printing it can also carry out short- to medium-run and fast turnaround work on sizes up to 13x26in with an option of even 13x 40in with quality that's a close match to litho offset.

MGI Digital Technology is a French company that has been building digital printers since 1992; however, they were originally specialist manufacturer of devices for plastic card printing. The DP 30 Smart, introduced in 2005, was the first to be designed to handle commercial print-on-paper, including an offset-type paper feed. This was followed by DP 40 Pro launched in 2006.

The latest DP 60 Pro is the ninth generation – is faster than DP40 Pro and has enhanced features like Vibration Reduction System (VRS) and climate control, pneumatic loader, optional high-pile output stacker and variable-data printing. This four-colour printer is FOGRA certified and according to MGI, integrates "Spot On" Pantone swatches.

Aura Papers became the sole distributor for Meteor presses in 2007, starting with the DP 40 Pro, but are now concentrating on the DP 60 Pro. So far, Aura has installed seven DP 40s and one DP 60 Pro with another two DP 60 Pro to be delivered in the next month.

Aura's managing director V Natarajan says: "The previous models in this series were entry-level machines for printers that wanted to add a digital element to the operation. This latest generation is better, faster and more productive. It gives firms the opportunity to broaden their product range."

Feeding Mechanism

A successful attempt has been made to combine features of offset with digital by using a compact yet heavy duty offset feeder which can stack up to 3000 sheets of maximum size 13x26in. The paper is precisely aligned in the feed path initially to a side lay and then to a front edge alignment detector, before entering the print engine on the left side of the machine. "DP 60 Pro has an accuracy of 0.2mm sheet-to-sheet, including front-back accuracy for duplex work," says Natarajan.

An ultrasound double-sheet detector is also built-in. It also has an output stacker which can stack up to 6,000 sheets. Under the print engine are three paper feed trays, concealed behind the front door. All three trays can hold up to 500 sheets each. These trays can accept formats from small envelopes to 13x19in of paper.

Different substrates

It prints on a variety of papers like uncoated, coated gloss or matt, textured, labels, thermal transfer papers and even canvas. It can handle 3,900 A4 sheets, 1,600 13x19in sheets or 32,000 ISO CR80 PVC plastic cards per hour, in four-colour with variable data. The machine can print on paper and plastic thicknesses from 70-350gsm and 100-400-micron, respectively.

The most common printable materials include PVC (coated or uncoated), polyester, polycarbonate, lexan, PET, vinyl and synthetic papers such as teslin, melinex and artsyn. It can also print onto self-adhesive stickers and foil boards. Natarajan says: "There's no need for pre-sensitisation of the plastic and the press is also compatible with printing directly on RFID inlays."

Imaging technology

The DP 60 Pro's printing process uses the laser imaging technology instead of LED. It delivers a resolution of 2,400dpi, which can print 200lpi of conventional screen. Because of laser, finer details can be reproduced. It also comes with option of different line screening. "Under a magnifying glass, the halftone screen shows conventional rosette patterns," says Natarajan.

Fusing oil

The Meteor doesn't use fusing oil at all, which helps in giving the print a matt offset like finish, making it hard to distinguish between an offset print and DP 60 print; oil tends to give a semi-gloss finish. It also means Meteor-printed stationery is safe for use in office laser printers.

An important feature of DP 60 Pro is the unique fusing technology, which allows the user to increase or decrease the



fusing temperature according to the substrate. For example, a 100gsm paper will require very low temperature for fusing but a 400 microns PVC will require comparably high temperature. The adjustment of machine from paper to plastic and vice-versa takes just few seconds because of the sophisticated technology used in DP 60 Pro, says Natarajan.

Few other unique features includes, an infra red lamp on the feed board which helps in removing the moisture content of heavy gsm/textured papers and boards and at the same time helps in pre-treating the plastic substrate just before it enters the imaging unit.

Another big advantage of this machine is its ability to overprint envelopes in full-colour. Customised database-driven software enables the overprinting to include names, addresses and promotional messages.

SPECIFICATIONS

Max speed	3,900 4/0 A4pph
Max sheet size	330x1016mm, 330x660mm
Substrate weights	70-350gsm (paper) 100-400microns (plastic)
Resolution	2,400x2,400dpi
Front end	Efi Fiery server
Contact	Aura Papers Umesh Kagade +91 98608 35581 umesh@aurapapers.com

Control console

Most control functions are handled from the standard command workstation console. In addition to CW, an external EFI Fiery RIP server is also provided for faster processing and keeping the front-end available for setting up a new job. This helps in processing the variable data faster. This can be networked to practically anything and accepts PDF documents as well as other popular formats including TIFF, EPS, Photoshop, InDesign and QuarkXPress. It supports variable data printing and also accepts formats like PPML and VPS. It can also be integrated with softwares like Direct Smile and Bar Tender.

A substrate profile manager is also built into the press, which comes with pre-loaded profiles of different substrates, which defines the fusing temperature, gsm/microns, substrate format so the operator has to just select the name of a particular substrate from the list and the machine gets ready for printing that material within seconds. A new substrate can also be added as and when required by the operator himself.

DP 60 Pro uses high degree of colour management tools. It comes with a Gretag i1 spectrophotometer to calibrate the machine and set up ICC profiles for new paper stocks or to match the Meteor's output to another press (such as offset) or across mixed-stock jobs. MGI has recently collaborated with CGS to provide solutions for colour quality and fidelity.

"If a litho printer has a client that orders at the last minute, they can output the first 500 copies on the Meteor for same-day delivery, and then continue the rest of the run on an offset press," says Natarajan. "We've calculated that for run lengths of under 400 A3 sheets, the Meteor is cheaper than litho. Of course if the job contains variable data then digital print is the only way to do it, so cost-effective run lengths can be much longer."

MGI also provides a web cam and remote access software, using which the machine can be diagnosed remotely by MGI's engineers to provide faster solutions for any kind on

THE ALTERNATIVES

XEROX IGEN3

The 700 from Xerox would be the nearest rival in terms of speed and print resolution. But Aura claims it isn't only about speed in the high volume market. The firm points out that for those critical requirements such as sheet size and synthetic heavy weight media, the DP 60 competes with Xerox's iGen3. Available in two speeds - 90ppm and 110ppm - iGen3 offers host of features designed to keep productivity high, mixing stocks in a single run, for example. Inline finishing, including UV varnishing, is available as an option.

Max speed	6,600A4pph
Max sheet size	571x346mm
Substrate weights	60-350gsm
Max resolution	600 x4800 dpi
Front end	FreeFlow Server, Fiery, Spire
Contact	Pankaj Kalra +91- 96 54 99 61 51, Pankaj.Kalra@xerox.com

HP INDIGO PRESS 5500

In 2007 HP launched 5500 as the successor to 5000, the first product launched by the newly-branded firm following the acquisition of Indigo by Hewlett-Packard in 2002. The 5500 featured a new feeder system with a new four-tray feeder, and included the ability to have more drawers added. The machine can handle various types of substrates and was designed to produce high-quality images for the photo and fashion industry. There's provision for special and spot colours using IndiChrome and special effect inks.

Max speed	4,080 4/0 A4pph
Max sheet size	330x483mm
Substrate weights	60-400gsm
Max resolution	2,438x2,438dpi
Front end	HP SmartStream Rip (Harlequin)/option Creo Rip
Contact	Durai +91 9840356356, appadurai.a@hp.com

machine problem. This facility is in addition to the standard maintenance.

Click charges

Consumables for Meteor printers are sold outright instead of the usual digital press model of a click charge. They are sold in packs. The customers has the option of ordering for consumables that they actually need.

Natarajan says that this pricing model is more flexible than click charges. "I believe digital printing for short-run and variable data has come long way from the initial days when the supplier and customer approached it as office automation product."

Aura and MGI have approached the supplies for the digital machine just as offset. You pay for what you need and consume.

"We as supplier should not determine how much a customer should make or save in producing a print job. Well, our existing customer will not accept Rs 4 or Rs 4.5 per A3 as click charges for obvious reasons," he says. ■