

## **MEGA Jprint 40 series**

Akiyama International introduced the world's first non-convertible perfecting press, popularly known as the Jprint in 1994. Since then, Jprint has earned a high recognition in the market with over 400 presses currently in operation around the world. Over the years the Jprint has continued to evolve, constantly improving to reflect customer needs and feedback. Now, we are proud to announce another round of major enhancements to this revolutionary printing press. Featuring a full range of new and improved functions, the MEGA Jprint with double coater will be exhibited at DRUPA 2008. The MEGA Jprint's key features and specifications are explained below.

### **Achieving a maximum printing speed of 15,000 sph**

High speed printing capability has become a must in the modern marketplace. The new version of our popular JP440 model now achieves 15,000 sph, while our JP540 now runs 14,000 sph. The rigidity of each respective mechanism has been improved as well, allowing these units to withstand higher revolutions and thereby ensuring stable printing at higher speeds.

### **Feeder and delivery mechanisms provide stable feeding delivery**

Akiyama developed a new sucker head for the control of feeding paper. The sucker head currently used in our straight press, EXTREME—which boasts an operating speed of 16,000 sph, has been improved. This along with the greater rigidity mentioned above, enables stable sheet-feeding at the highest Jprint operating speeds.

The feeder table employs an air suction tape that creates a vacuum to pick up and align the paper at high speed and transfer it to the swing.

The swing gripper base which is now made of a new improved material also incorporates a number of improvements, notably a better layout and increased durability. In addition, a newly developed mechanism has been installed to prevent sheet over runs.

The delivery section has two additional transfer cylinders to significantly suppress paper movement. Another addition is a paper-guiding endless tape that operates at the same peripheral speed as the rod. It transfers the printed sheet from the final transfer cylinder to the delivery belt in a parallel motion, so that the worry of rubbing

and scratching the product is eliminated.

The control mechanism of paper-release cams has also been changed to one that is based on special algorithms for the selection of paper thickness, so that the cams' movements more closely follow the printing speed. Accordingly, various types of papers can be supported. There is virtually no need to adjust the speed of the delivery fan or the slowdown-suction wheel for each job.

Additionally, the gripper shaft uses Akiyama's original double-cam mechanism to ensure that the sheets are transferred smoothly at high speeds and fan-out is prevented.

The slowdown suction wheel structure is new, as well. It can now be installed and/or removed together with auxiliary suction piece, and the lateral movement has been made easier too. The new slowdown suction wheel clearly helps make the MEGA Jprint a machine that the operator will find to be very user-friendly.

### **Ensuring high quality**

The MEGA Jprint takes the Jprint's high printing quality to an even higher level. For example, the cylinder machining method was revised to improve registration accuracy, while the oscillating amount of form rollers has been changed in order to eliminate ghosting. Furthermore, the ink air-blow device has been modified to prevent the excessive emulsification of ink. These functional improvements further ensure the high printing quality for which the Jprint brand is renowned.

### **New operation stand (ACC)**

The ACC (Akiyama Color Control) operation stand is seamlessly joined with the main press. Along with its improved design, the operation stand has been updated to incorporate a number of new functions.

First, the new ACC operation stand supports higher control speeds of the ink-key motors within the press, so that the values entered at the stand are enacted by the ink keys in half the time. The benefit is that printing jobs can go full-scale more quickly and press time can be used more effectively. Also, the new operation stand employs a touch panel. This is significant news for the operator, who can now easily perform various operations simply by touching the screen.

The enhanced troubleshooting and maintenance reminder functions contribute to the efficient operation of the press. Because the customer will perform regular preventive maintenance based on alerts from the ACC, sudden stops and other problems in the press can be prevented.

#### **Greater automation for savings in energy and labor**

Large amounts of electricity are required for high-speed printing, but the MEGA Jprint minimizes those power requirements by using an inker clutch as an optional component in each printing unit. The inking drive of a printing unit not currently being used for printing can be separated from the main power line through a simple operation on the touch panel. Roller wear is also prevented because they are not used when the corresponding printing units are idle.

Customers can also choose to install the optional FAPC (Full Auto Plate Changer) When the FAPC is installed, plate changeover becomes a more convenient operation. Simply set the new plate on the plate guide, and all required operations—from ejecting the previous plate to setting the new plate will be performed automatically. Akiyama's original cylinder configuration remains intact, meaning that the top and bottom plates maintain the same phase. As a result, it takes only about four minutes to change all plates.

#### **Introduction of double sided coating (DC)**

The MEGA Jprint offers an inline double coater that is commonly used on conventional straight presses. Mega Jprint's original inline coater achieves revolutionary single-pass inline coating and significantly reduces the risk of rubbing or scratching. It shortens the time to the next process while dramatically lowering the use of spray powder.

## Main Specifications

# MEGA **J**print 40 *Series*

Models		JP2P240	JP4P440	JP5P540	JP6P640
Colors		2/2	4/4	5/5	6/6
Max. printing speed	sph	15,000	15,000	14,000	13,000
Max. paper size	mm	720 × 1,030			
Min. paper size	mm	360 × 540			
Paper thickness	mm	0.04 ~ 0.2 / (0.06 ~ 0.3 OP)			
Max. image area	mm	710 × 1,020			
Plate size	mm	800 × 1,030			
Blanket size	mm	975 × 1,035			
Feeder pile capacity	mm	1,300			
Delivery pile capacity	mm	1,200			
Overall length	mm	7,641	10,287	11,610	12,933
Overall width	mm	2,920			
Overall height	mm	2,750			
Machine weight	kg	24,900	42,900	51,900	60,900
Power requirements	kW	58	87	90	94

Machine design and features are subject to change without notice for the purpose of incorporating the latest technology and continuously enhancing system performance.

The stated range of printing speeds represents mechanically feasible capabilities.

Actual speeds may vary, depending on the printing application.