

July 13, 2018

RMGT to Exhibit at IGAS 2018 **Assist Your Potential with Technological Expertise and Constant Innovation**

RYOBI MHI Graphic Technology Ltd. (RMGT, president: Katsushi Hirokawa) will exhibit at IGAS 2018 (East Hall 6, No. 6-1) at Tokyo Big Sight for 6 days from July 26 (Thu.) to July 31 (Tue.). Under the theme “Assist your potential with technological expertise and constant innovation” RMGT’s exhibits will feature proposals for the printing industry’s future.

1. Assist Your Potential with Technological Expertise and Constant Innovation

Through seamless integration of staff, machinery and systems, RMGT’s smart factory of the future responds to accelerating market trends with an ideal production system that flexibly meets changing demand. The automated and laborsaving presses of tomorrow will enhance printing quality and shorten lead times, while utilizing IoT and cloud technologies for real-time visualization of press operating conditions and remote problem diagnosis to minimize downtime if a problem occurs. Within the print shop, advanced robot systems handle the transport of paper, printed sheets, etc. to the next process, as well as the repetitive work of loading and unloading.

RMGT’s automation and laborsaving technologies free operators from a wide range of time-consuming and labor-intensive tasks, enabling printing companies to capitalize on their expertise and maximize their potential. RMGT’s vision is of a world where machines and technologies are designed around people for a higher level of creativity and efficiency.

2. The Smart Factory of the Future – Robot-driven Automation

RMGT belongs to the RYOBI Group, which produces die cast products for the automotive industry and employs hundreds of industrial robots to perform casting, product inspection and other tasks.

Capitalizing on these strengths, RMGT has tied up with a number of global robot manufacturers to develop collaborative robots, automated guided vehicles (AGVs), and robot systems for handling and transporting paper, supplies, work in progress, finished products, and other materials within the print shop, providing cost-efficient solutions to the growing problem of manpower constraints.

(1) Work that robots can perform to assist humans

Production facilities in Japan and other countries face crucial labor shortages due to declining birthrates and an aging population. RMGT is proposing a smart factory that establishes a new relationship between humans and robots based on the concepts of “from robot-to-robot without human participation,” and “from robot-to-robot in collaboration with humans.” In addition to the demonstrations listed below, RMGT will present its vision of a factory of the future in which robots perform complex tasks that previously had to be performed by experienced human workers.



Demonstrations of Tasks Performed by Robots

- Transport of paper, printed sheets, and other heavy loads to the next process
- Repetitive, physically demanding loading and unloading work
- Transporting loads as assistants that follow behind humans

(2) S-CART Series AGV (concept exhibit)

In collaboration with Nidec-Shimpo Corporation, a pioneer in AGVs, the S-CART autonomously travels unaided to move paper and printed sheets to the next process. After mapping and teaching are performed in order to program the S-CART with a map of the area and teach it the route, it autonomously travels by using sensors to perceive the surrounding area. So unlike a conventional conveyor system, it can flexibly deal with changes in factory layout or production processes. And because it detects the presence of humans and objects as it travels, it can safely work alongside humans.

(3) FANUC CR-35iA Collaborative Robot (concept exhibit)

RMGT's IGAS exhibit will include a collaborative robot with cooperation of Fanuc Corporation, one of the world's top industrial robot manufacturers. The robot can work alongside human workers without a protective fence, performing such labor-intensive postpress processes as counting, stacking, and carrying. RMGT will present demonstrations of a "world in which robots can work safely in close proximity to humans," performing physically demanding repetitive work as well as physically stressful loading and unloading tasks.

3. The Smart Factory of the Future Concept – IoT and Cloud Technologies for Visualization and Higher Productivity

Visualization of production and machinery conditions is the first step toward improving productivity in the print shop. RMGT is proposing systems and services that employ IoT and cloud technologies for the smart factory of the future, including the RMGT press information cloud that enables press operating conditions and productivity indicators to be remotely monitored in real time, and the RMGT remote maintenance service for minimizing press downtime due to mechanical problems.

(1) RMGT Press Information Cloud (New)

The RMGT press information cloud enables visualization of the operating conditions of multiple presses in a print shop. The number of pages printed per minute, machine downtime, and other productivity indicators can be remotely monitored in real time, enabling prompt action to be taken for maximizing productivity.

(2) RMGT Remote Maintenance System (New)

Using IoT devices, the RMGT remote maintenance system enables problems with a printing company's presses to be remotely viewed at the RMGT service control center for promptly identifying a problem's location and cause and implementing corrective measures, minimizing downtime without a service call. In addition to helping printing companies meet delivery deadlines thanks by shortening press downtime, this also relieves operator anxiety when a problem occurs.

(3) New Versions of the PQS-D Series Printing Quality Control Systems (New)

Following on the very popular PQS-D (I) quality inspection function and PQS-D (C) color density tracking function, RMGT is introducing two new PQS products with new functions. The PQS-D (R) automatic registration adjustment function displays the 4-color registration status on the screen to enable the operator to automatically adjust the registration by a simple operation. The PQS-PDF (PDF comparison system) performs offline comparison of the printed sheets with PDF files or other plate data for even more reliable inspection.

4. Offset Presses

RMGT will present new automation and laborsaving technologies that improve printing quality and shorten lead times for all types of package printing and commercial printing. The IGAS exhibits will include a 1,020/1,050 mm format 6-color offset press with new functions, such as parallel processing for shortening make-ready time plus a retractable coating unit that enables make-ready tasks for coating to be performed simultaneously during printing; an A1-size 8-color convertible perfecter that further reduces make-ready time in addition to performing instant-drying perfecting; and an A3-size portrait format envelope printing system.

All of the presses are equipped with the LED-UV printing system that RMGT led the world in introducing in 2008. This system ushered in an “instant drying revolution” in the field of commercial printing, dramatically boosting productivity by eliminating the need to wait for ink to dry and powder-related printing problems. Now, at IGAS 2018, RMGT will provide demonstrations heralding the expansion of the “instant drying revolution” to the field of package printing.

- (1) Automation solutions for multi-variety small-lot package printing
1,050 mm format 6-color press (wide stock range press) RMGT 1050LX-6+CC+LED-UV+2LD
Parallel processing of make-ready tasks **【NEW】**
Printing Quality Control System PQS-D (I+C+R) **【NEW】**
Retractable coating unit that enables make-ready tasks for coating to be performed simultaneously during printing (with semi-automatic plate changer) **【NEW】**
Chemical embossed printing using LED-UV
New GUI (Graphical User Interface)
- (2) Solutions to shorten lead times for instant-drying perfecting in commercial printing
A1-size 8-color convertible perfecter RMGT 920PF-8+LED-UV
Parallel processing of make-ready tasks **【NEW】**
Printing Quality Control System PQS-D (I+C+R) **【NEW】**
Feeder air presets **【NEW】**
- (3) Solutions to shorten lead times for envelope printing
RMGT 340HA-4+LED-UV (for Japanese market only)

5. RMGT JP750 B2-Size Inkjet Digital Press

Ever since Fuji Film’s Jet Press 720 inkjet digital press was first introduced to the world at drupa 2008, and right up through the Jet Press 720S, RMGT has been manufacturing the paper transport system for the Jet Press series. Now, in collaboration with Fuji Film, RMGT has begun marketing the Jet Press using RMGT’s own sales network, and the OEM model RMGT JP750 will be exhibited and demonstrated at IGAS 2018.

In line with the JP750’s development concept of “a 3rd type of printing system that is neither a POD (digital press) nor an offset press,” demonstrations will feature the JP750 used in combination with the RMGT 920PF-8+LED-UV offset press. In addition to solutions that increase the productivity of existing offset presses, RMGT is proposing ideal production systems for entire print shops.

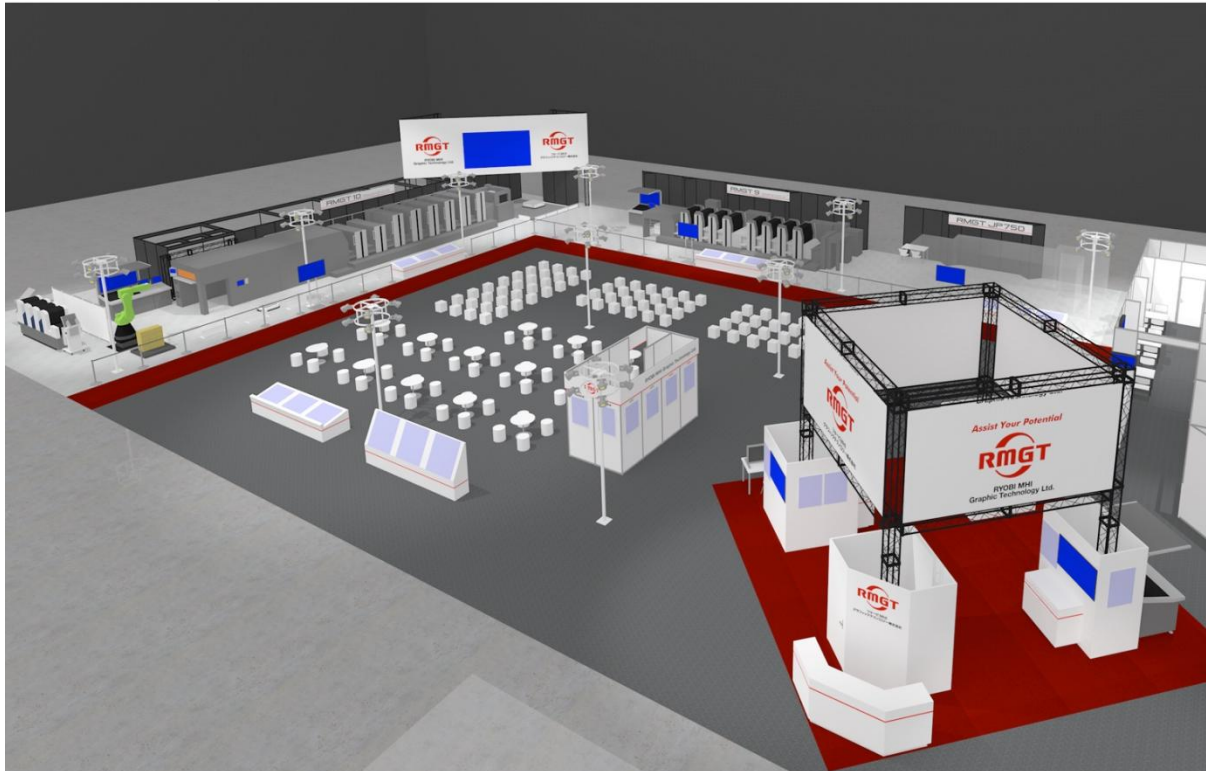
6. “IRODORI – Coloring the World Together Corner” (1) Collaborations with Ink and Plate Manufacturers

This corner will feature exhibits of RMGT’s collaborations with ink and plate manufacturers who are cooperating with our printing demonstrations. Visitors will have the opportunity to experience RMGT’s corporate message of “IRODORI – Coloring the World Together” and see the latest trends in printing materials through RMGT’s collaborations with various companies. With ink, plate, and press displays all grouped together in one location, staff from each company will be available to provide one-stop solutions for an array of printing issues.

7. “IRODORI – Coloring the World Together” Corner (2) Collaborative Exhibit Area

This corner will feature the SAT System, which uses waterless LED-UV offset printing to print on decorative in-mold film to offer the same level of functionality and wide-range applicability as screen printing. Through the cooperation of RMGT’s many collaborative partners, there will also be helpful printing industry-related exhibits and information covering more than just presses.

RMGT Booth’s Layout



Booth location: Tokyo Big Sight, East Hall 6, No. 6-1

* Exhibit content is subject to change without notice.