

June 16, 2020

Introducing the New RMGT 970

RYOBI MHI Graphic Technology Ltd. (RMGT, president: Katsushi Hirokawa) announces the new RMGT 970 A1-plus-size offset press.

1. Development background

With the offset press market seeing rising global demand for presses offering greater productivity and cost performance, there is a trend toward enhancing production capacity by enabling offset presses to handle a wide range of paper sizes.

In preparation for drupa 2020, the world's largest printing equipment exhibition, RMGT — now in its 7th year — has been combining the two founding companies' strengths of "energy-saving designs that incorporate new ideas" with "high-precision manufacturing technology and highly durable construction for long-term use."

The new RMGT 970 has many advanced features based on the 920/940 presses, known for their superior quality and productivity.

The new 970 model incorporates the latest technologies in addition to many features found on the flagship RMGT 10 series.

In the face of rising paper and printing supply costs, the RMGT 970 is perfectly positioned to meet the needs of the times by handling the most popular A1-plus paper sizes used around the world.

2. Key features

1) Greater versatility

With a maximum paper size of 650 x 965 mm, the RMGT 970 can handle the 640 x 900, 650 x 920, and 650 x 950 paper sizes popular in Europe and Australia; the 635 x 965 mm (25 x 38 inches) paper size popular in North America; and the 636 x 939 mm paper size popular in Japan and Korea. The maximum printing area of 640 x 930 mm (630 x 930 mm for perfecting) provides ample margin space for printing the color bar and PQS-D register adjustment marks. In addition to 8-up printing on A4-size sheets, the new 970 model can also handle a wide range of multi-up printing on non-standard sizes.

2) Exceptional cost performance increases profitability

Compared to B1-size (40-inch) format presses, the 970 model has significantly lower plate costs and markedly lower power consumption. The compact space-saving design results in a more comfortable work environment and enables efficient utilization of valuable printshop space. (Plate costs are reduced about 20%, power consumption by about 34%, and installation space by about 30%.*)

*Based on in-house research by RMGT



3) Instant-drying perfecting at up to 15,000 S.P.H.

Equipped with a double, double- and single-diameter cylinder perfecting device, convertible perfectors enable perfecting at up to 15,000 S.P.H. for higher productivity. Plus, installing LED-UV curing units at the perfecting and delivery sections makes instant-drying perfecting possible, eliminating the need to wait before proceeding to post-press processes and satisfying the demand for shorter lead times.

4) A varied lineup with heavy stock capability

The RMGT 970 model lineup includes straight printing presses and convertible perfectors ranging from 2 to 10 colors. Coating units can also be installed. Large-capacity feeder and delivery piles as well as the newly designed larger cylinder diameters enhance printing capability on heavy stock.

5) Smart Assist Printing increases press operating rates for continuous printing of short-run work

With the newly developed Smart Assist Printing functions*, you just touch the operation panel and the whole printing process — from ink presets, blanket cleaning, and plate changing to test printing, register alignment, density adjustment, and production printing — is performed fully automatically.

The result is a much higher press operating rate for continuous short-run printing requiring frequent job changeover.

*Currently under development.

6) PQS-D (I+C+R) printing quality control system (option)

A CCD camera installed on the press captures images of the printed sheets during printing for inline inspection of printing quality, eliminating the need to take out printed sheets for off-line checking. In addition to reducing paper waste and enhancing quality assurance, the PQS-D also facilitates automation of printing tasks.

7) Automatic plate changers equipped with a benderless plate clamp

Three systems are available for automatic plate changing: the SPC semiautomatic plate changer (standard equipment), the FPC fully automatic plate changer (optional), and the Smart-FPC fully automatic simultaneous plate changer (optional). All three plate-changing systems feature a benderless plate clamp that eliminates the need to bend the plates.

8) User-friendly feeder and delivery section touchscreen panels

Various feeder section operations, settings and checks can be performed via a touchscreen panel, including starting a print run, the counter settings, feeder air presetting (optional), and the timing checker. Delivery section settings such as adjustment of the back guide and side guide as well as adjustment of the delivery fun volume are also performed using a touchscreen panel, greatly simplifying delivery section tasks. Both operation panels are equipped with error description displays and other monitoring functions to assist the press operator.



3. Specifications

3. Specific	ations						
		970ST-2/ 970PF-2	970ST-4/ 970PF-4	970ST-5/ 970PF-5	970ST-6/ 970PF-6	970PF-8	970PF-10
Number of printing units		2 (2/0, 1/1)	4 (4/0, 2/2)	5 (5/0, 4/1) 5 (5/0, 3/2)	6 (6/0, 5/1) 6 (6/0, 4/2)	8 (8/0, 4/4)	10 (10/0, 5/5)
Max. sheet size		650 × 965 mm (25.59"× 37.99")					
Min. sheet size		970ST (straight press): 290 × 410 mm (11.42" × 16.14") 970PF (convertible perfector): [straight printing] 290 × 410 mm (11.42" × 16.14") [perfecting] 370 × 410 mm (14.57" ×16.14")					
Max. printing area		970ST (straight press): 640 × 930 mm (25.20" × 36.61") 970PF (convertible perfector): [straight printing] 640 × 930 mm (25.20" × 36.61"), [perfecting] 630 × 930 mm (24.80" × 36.61")					
Paper thickness*1		970ST (straight press): 0.04 - 0.6 mm (0.0016" - 0.024") 970PF (convertible perfector): 0.04 to 0.5 mm (0.0016"-0.020")*2					
Max. printing speed*3		970ST (straight press): 16,000 S.P.H. 970PF (convertible perfector): 15,000 S.P.H.* ²					
Plate size		700 × 945 mm (27.56" ×37.20") [positioning pin pitch: 780 mm (30.71")] Plate thickness (cylinder packing total): 0.48mm (0.019")					
Blanket size		800 × 955 mm (31.50" ×37.60")					
Feeder/delivery pile capacity		Feeder: 1,100 mm (43.31") Delivery: 1,100 mm (43.31") (includes pallet height for the feeder and delivery pile)					
Non printing area		$10 \pm 1 \text{ mm } (0.39'' \pm 0.039'')$					
Dimensions	Length*4	6,380 mm (12'11")/ 7,051 mm (12'12")	8,350 mm (27'5")/ 9,021 mm (29'7")	9,335 mm (30'8")/ 10,006mm (32'10")	10,320mm (33'4")/ 10,991mm (36'10")	12,960mm (42'6")	14,930 mm (49')
	Width	3,098 mm (10'2")				3,453 mm (11'4")	
	Height		2,011 mm (6′7″)				

^{*1} Printing paper thickness may vary according to paper stock. *2 For both straight printing and perfecting

4. Start of shipping: End of 2020

^{*3} The local conditions, ink and printing plate type, and the printing quality required will affect the maximum printing speed.

^{*4} The indicated length is for a standard delivery type press without a coating unit and does not include peripheral devices.

Please contact an RMGT dealer or representative for detailed information on dimensions and weight for other press types.





RMGT 970PF-8