

**KOMORI CORPORATION**

11-1, Azumabashi 3-chome, Sumida-ku, Tokyo 130-8666, Japan Tel: +81-3-5608-7817-19 Fax: +81-3-3624-6955

<http://www.komori.com>



JQA - QMA10134  
JQA - EM1949  
Tsukuba Plant

# NEW SYSTEM G38

# Introduction

High Productivity and Quality with H-UV

The Ultimate Double-sided 38" Offset Printing Press

Komori relentlessly drives the evolution of print technology. Now in the pursuit of print perfection comes the ultimate printing press for production and management efficiency.

A web offset press with its inherent high productivity, the 38" System G38 Double-sided Offset Printing Press features the H-UV curing system — the revolutionary Komori system that enables high quality printing on sheetfed presses. A maximum printing speed of 30,000 sph yet a total length of just 20 meters. Reel-to-sheet printing means this press is ideal for short to medium runs. The same size as an eight-color sheetfed perfecter with utterly overpowering productivity.

All made possible by Komori's independently developed H-UV curing system along with new functions and a range of automatic devices and systems. Komori's latest outstanding technologies are unstintingly deployed throughout the press for very short makeready, lightning quick print start-up as well as shorter job changeovers and automatic color control during the run. New ink cleaning and mist recovery systems as well as the means to visualize operating information and outstanding ease of operation, the press embodies maximum consideration for people and the environment.

Solving a host of printing issues with its superb printing quality, high productivity, short turnaround, excellent cost performance and blue-chip environmental credentials, the System G38 will be a critical asset for greater management efficiency.



## Contents

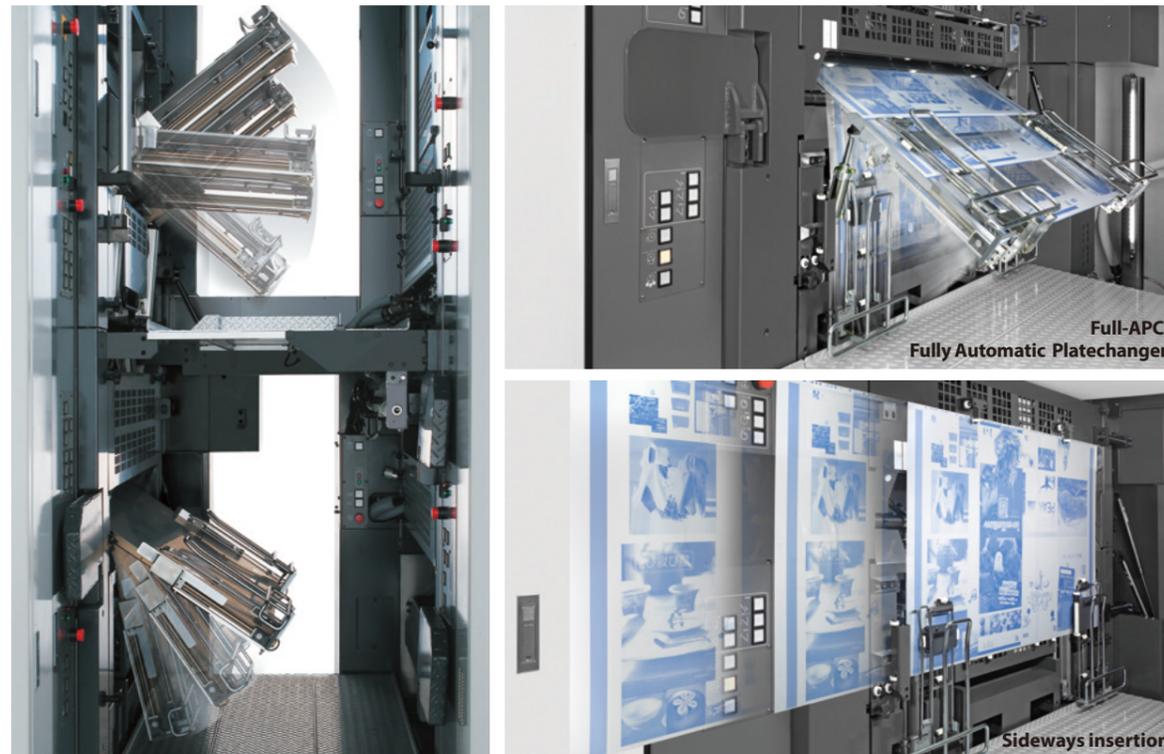
- 4 Short Makeready**  
Short Makeready, High Print Quality and Unmatched Productivity
- 5 H-UV**  
H-UV: Key to Production Efficiency and Greater Profitability
- 6 Color and Register Control**  
Automatic Color and Register Control for Stable Quality
- 7 Specifications**  
Specifications

Photo: SYSTEM G38  
(H-UV-equipped 38" Offset Printing Press)

## Short Makeready, High Print Quality and Unmatched Productivity

The development concept of the System G38 is the combination of sheetfed print quality technologies and web offset productivity. A web press that can be handled like a sheetfed. Initial development aimed at solving the problems of web offset presses, such as paper waviness. Made a reality as a true state-of-the-art press ideal for next-generation market needs through the development of numerous new functions, devices and systems that automate printing processes. Ultimate short makeready performance with the AI-Link integrated control system, Full-APC fully automatic platechanger and the H-UV instant curing system. Job changeover is completed with automation of all processes from the end of one job to the start of the next by just inputting to the Smart Sequence job reservation function. Printing of the next job is also started automatically.

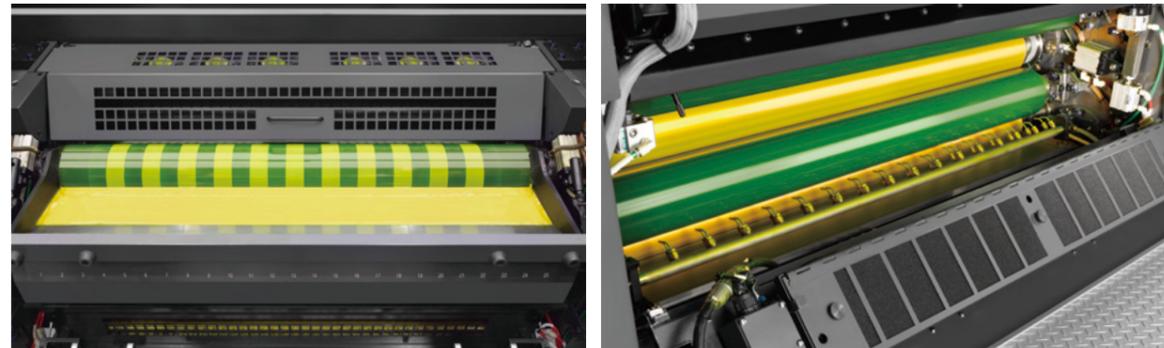
The fully automatic seamless flow for printing preparation not only reduces the operator's workload but also realizes high print quality and staggering productivity.



### Full-APC Fully Automatic Platechanger

Plate changing for all eight colors is completed in about two minutes. Job changeover time is reduced to around five minutes. Higher plate mounting precision due to improved plate holding pad and lateral guide. Easier plate setting due to sideways insertion method for lower cylinder plates.

## Automated Systems for Print Quality and the Environment



### Ink Mist Extractor Fans

Ink mist from inside the inker is recovered by a dedicated fan and filter. Maintains the environment of machine and the surrounding area and reduces the workload for air conditioning and peripheral maintenance.

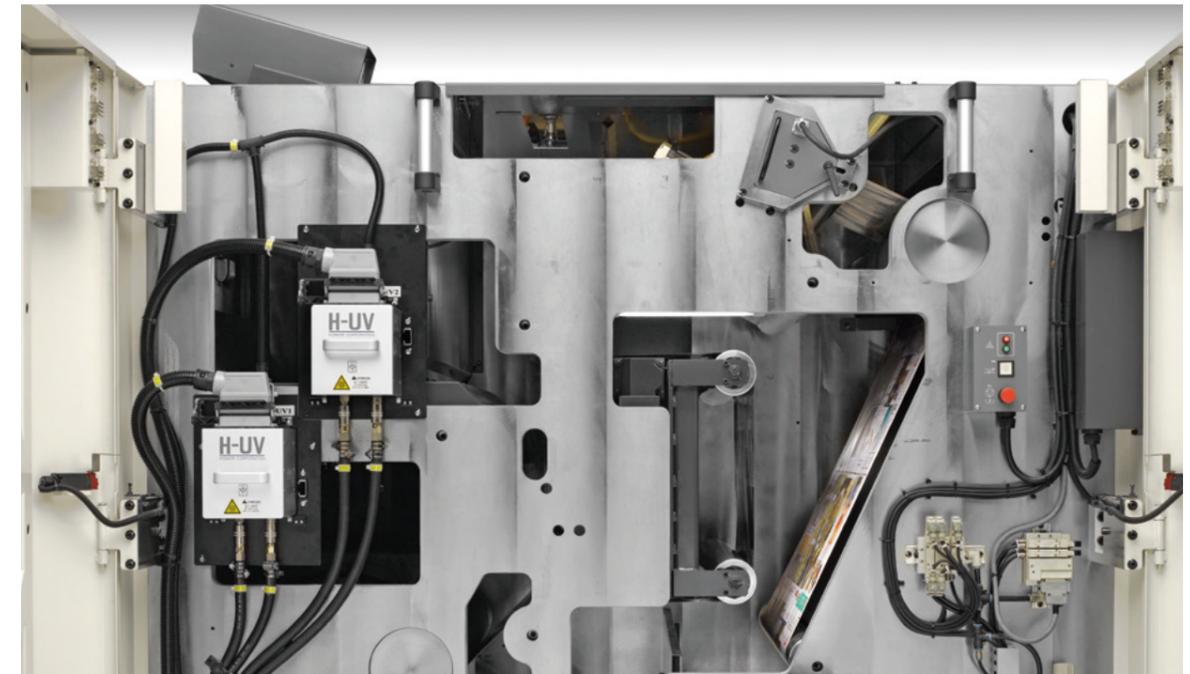
### Automatic Ink Cleaning System

After plate changing, the inker is washed by water and cleaning fluid automatically sprayed from two nozzles. In addition to ink recovery, this is a very effective countermeasure for paper dust on the ink rollers.

## H-UV: Key to Production Efficiency and Greater Profitability

The System G38 is configured with the in-line H-UV curing system as standard equipment.

H-UV realizes printing with high-speed instant curing by the combination of Komori's original H-UV lamp and K-Supply ink. The H-UV unit houses two H-UV lamps that cure the front and back sides instantly. The system combines high quality and reliability and offers economical, ecologically responsible performance. H-UV curing is the solution to a wide range of printing issues. It ensures improved print quality because it is powderless and solves the problem of paper expansion and contraction because a hot-air dryer is not used. In addition, it meets short turnaround needs and lowers the operator's workload and the environmental impact because total lead time is reduced. The synergy of H-UV and a variety of new functions and devices contributes to further improvement of production efficiency and profitability. The time to impression-on is held to a minimum by means of the stable paper control due to H-UV. Paper waste is significantly reduced because the time to reach maximum printing speed is reduced.



H-UV lamps housed in pullout drawers, making lamp replacement easy.

### H-UV for Print Quality and Profitability Improvement

**Improved print quality because powder and hot-air dryer are not used.**

- Powder unnecessary, so no problems occur due to powder falling.
- Solution to printed sheet surface roughness, so postpress surface treatment is smooth.
- No dry-down means certain print quality and improved working efficiency.
- No problems when overprinting with a POD.
- Increased orders for work that prohibits powder adhesion.
- Solution to paper waviness, shrinkage and expansion.

**Shortens total lead time and meets short turnaround needs.**

- Printing lead time is dramatically shorter than for conventional printing.
- Postpress processes such as cutting, die cutting and folding can be done immediately after printing.
- Meets short turnaround needs because time from receiving the job to delivery of finished work is shorter.

**Mindful of people and the environment**

- Reduces the operator's workload and improves working efficiency.
- CO<sub>2</sub> emissions are cut to ¼ of conventional UV curing.
- Short wavelength light from the UV lamp is cut, so curing is ozone-less.

**Reduced initial and life-cycle costs**

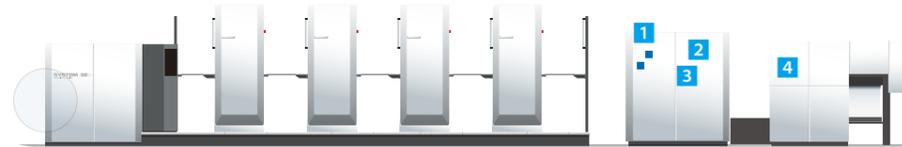
- Initial cost reduced due to no air cabinet requirement and space saving design.
- Life-cycle cost significantly reduced due to lower power consumption and materials usage.
- Higher profitability because of reduced initial and life-cycle costs.

## Automatic Color and Register Control for Stable Quality

The System G38 is equipped with the latest technologies and systems that simultaneously complete adjustment of register and standard densities to enable printing of webs of paper. Plate register is set by the in-line automatic plate adjustment system, and cutoff control and the web guide are automatically controlled by the high precision presets of KHS-AI. At print start-up, quick start-up by H-UV is performed until standard densities are reached, making possible considerable paper waste reduction. Moreover, standard densities are automatically maintained throughout the run by the in-line color control system. In addition, AI-Link, which provides integrated control of the press and various automatic systems and devices, enables further paper waste reduction and very short makeready. Also, stable operation and improved productivity and working efficiency result from the tight coordination of KHS-AI, H-UV and the various automatic systems and devices, thereby contributing to significantly increased profitability.



1 Density monitoring camera    2 Register monitoring camera    3 Web guide    4 Cutoff monitoring camera



**PQA-W SG**  
**Print Quality Assessment System (Web) – SG Model**  
 Automatically maintains standard densities by scanning the color bar on the printed sheet with a camera and sending feedback of measured densities to ink fountain keys.

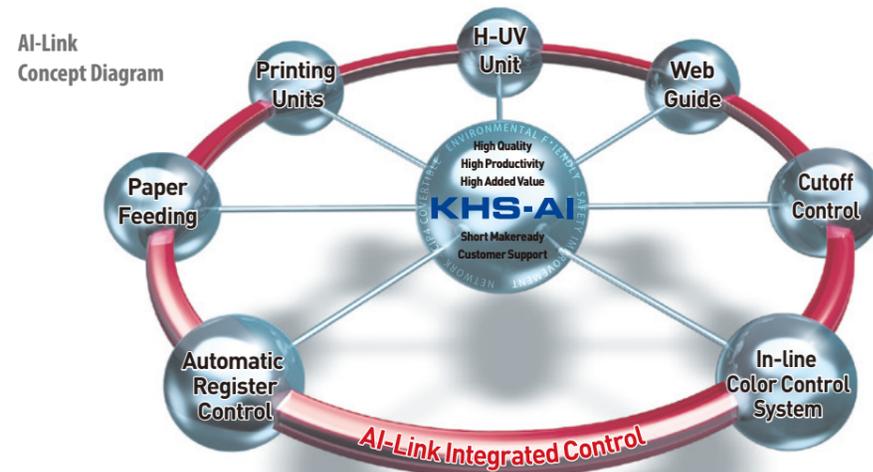
**KID (Komori Info-Service Display)**  
 Visualization of a variety of information, including press operating conditions and printing information. Realtime display on a large monitor allows the operator to check the state of the machine.



### AI-Link (Integrated Control System)

- Automatic control of fine adjustment at print start-up in addition to the preset self-learning function of conventional KHS-AI.
- Controls the press from the infeed unit to delivery and also provides integrated control of peripherals.

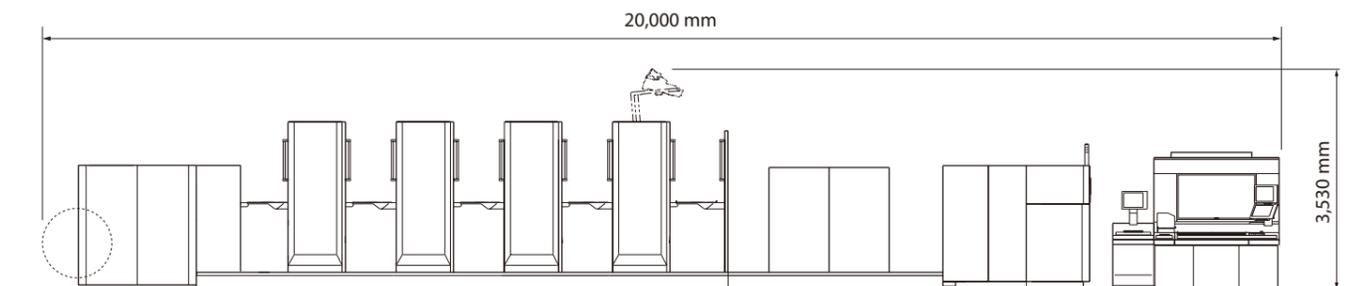
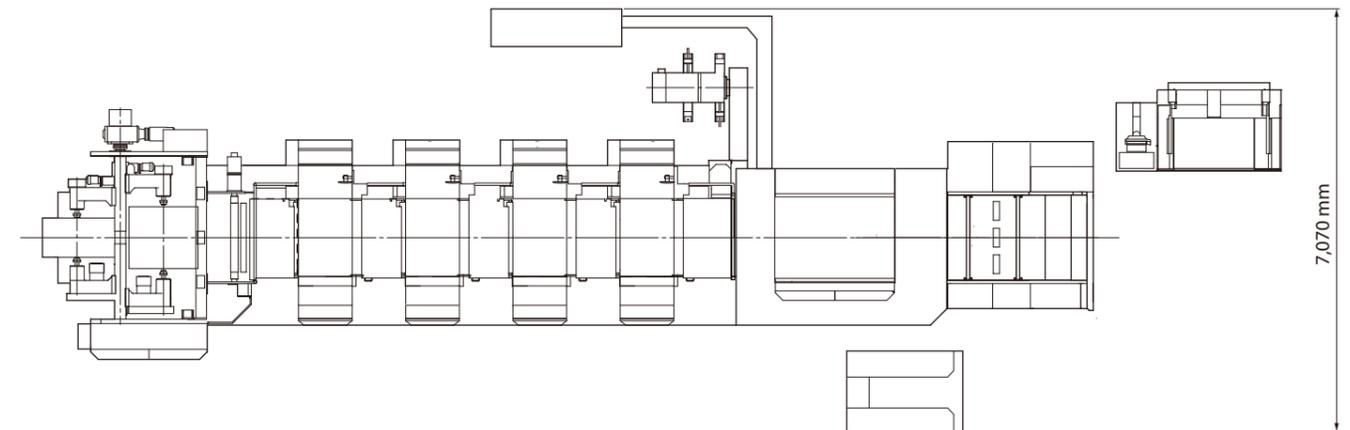
**Extraordinary waste paper reduction and short makeready by means of integrated control.**



## Specifications

Main specifications		
Maximum printing speed		30,000 sph (500 spm)
Paper size	Cutoff	625 mm
	Web width	625 mm – 985 mm
Maximum roll diameter		Φ1,100 mm / Φ1,270mm (option)
Non-printing gap		8 mm (theoretical - 1 color)
Paper stock range		40 – 130 g/m <sup>2</sup>

### Outline



Note:  
 Copyright © 2016 Komori Corporation all rights reserved. All specifications stated herein are current as of March, 2016. Maximum printing speed may differ from specification herein. Komori reserves the right to change specifications on machines without notice and without obligation to modify equipment previously manufactured. Because of changes in design, specification, or optional attachments and accessories, the machine actually delivered may differ in appearance and performance from that shown in this brochure. The trademarks and logos of Komori Corporation or others used on this brochure are the property of Komori Corporation or their respective owners. Nothing contained in this brochure grants by implication, waiver, estoppel or otherwise, any right to use any trademark displayed on the brochure without the written permission of Komori Corporation or the respective owner.