



GRAPHIC
MEASUREMENTS
INC.

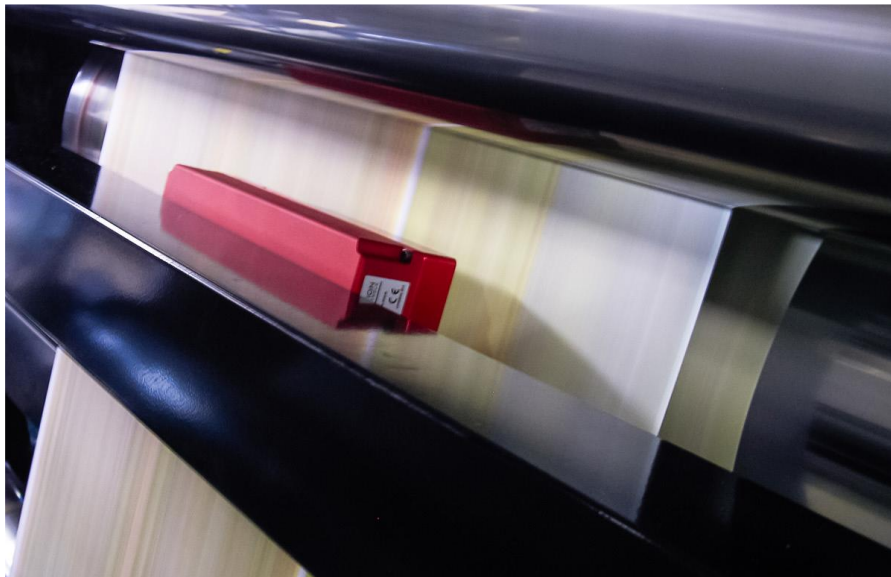
SnapReg Register Control +

Color-to-color register solution to improve speed and accuracy for litho presses

Searches, finds, and analyzes a specific printed register mark on a running web. The mark location for each separation compared to a reference mark is used to determine the required movement of the register motors.

Print-to-cut solution for web positional control

Searches, finds, and analyzes a specific printed register mark on a running web. The mark location is compared to a mechanical reference in the press, and this calculation is used to control web movements. Circumferential movements can utilize the main drive motor or a separate motor. Side lay movement can utilize a reelstand, webguide, or turnbar.



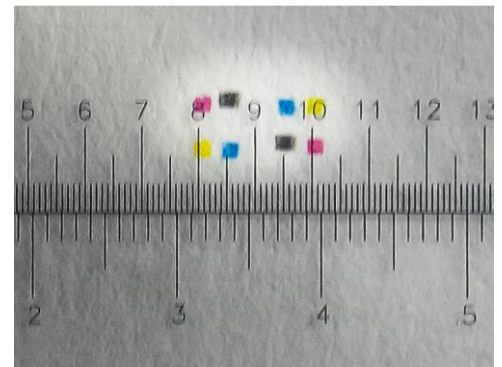


The SnapReg solution – an optional upgrade for any GMI Clarios or Mercury system – is a fully digital solution for registration on litho presses. Modern digital camera technology can outperform legacy register systems in both speed and accuracy. SnapReg is a compact and rugged system, allowing flexibility in placement when retrofitting an existing press. Ideal placement is close to the controlling motor that will execute the adjustments determined by the SnapReg. Upgrading closed-loop register to the latest capabilities doesn't have to involve a whole new press control system. Once installed, SnapReg will deliver shorter times to good register, low maintenance costs, and better register accuracy.

SnapReg can additionally be used for print-to-cut applications. Combined with the color register capability, SnapReg can cover many applications, such as circumferential and lateral color register control, ribbon control, webguide control, cut-off control, and fan-out control.

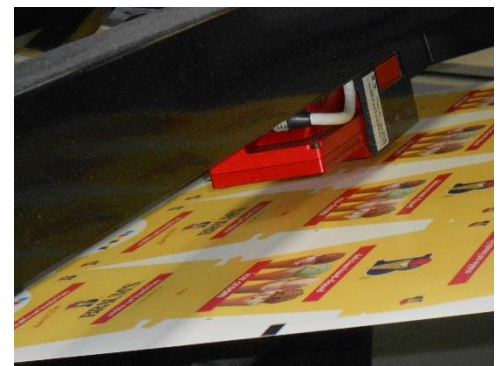
Micromarks save paper

The SnapReg system makes use of very small micromarks for register of up to 8 colors. The marks may be as small as 0.2mm (0.008") and are arranged in a pattern space of 4x8mm for 8 colors. This makes it possible to place the marks inside a Clarios colorbar, or they can be placed in a gutter or fold area.



Simple, cost-effective installation

Because the SnapReg is an add-on to an existing GMI Clarios or Mercury system, it can share the workstations and host computers already in place. This upgrade does not require new computers or additional screens. The compact cameras can usually be installed at the same place on the web where the legacy register system was located, avoiding web path changes.



Anti-Piling

For long runs, SnapReg supplies a "square dance" or anti-piling option. Synchronized, imperceptible cycling of all colors' positions helps to enhance blanket life and reduce piling. This process can be activated easily from the primary control screen.

