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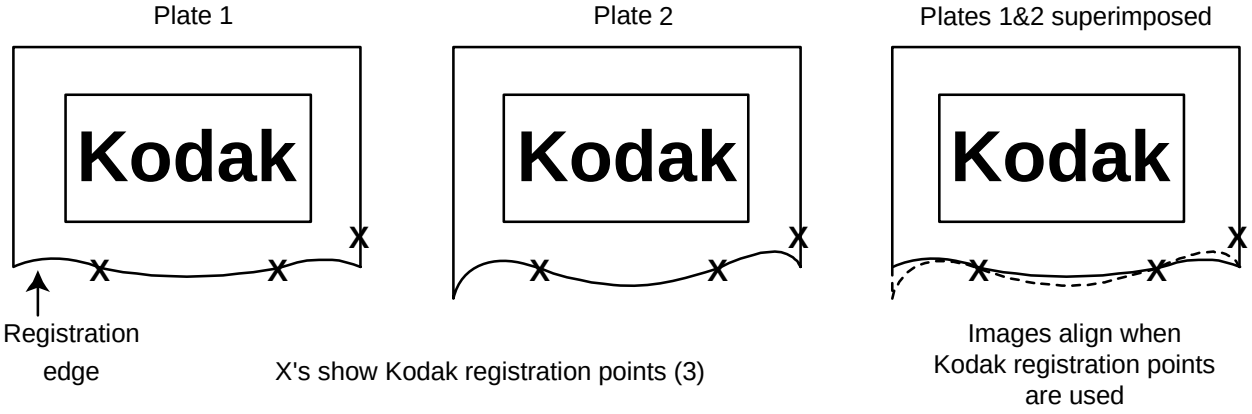
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White Paper

Plate Registration on Kodak Magnus XLF 80 Devices

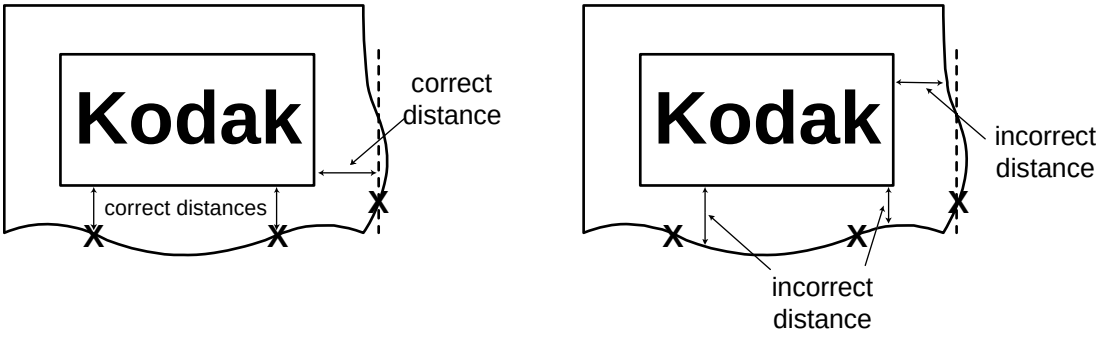
How Registration Works

When aligning two plates with different shaped registration edges, use the Kodak registration points to ensure that the images on plate 1 and plate 2 align.



Verifying Registration

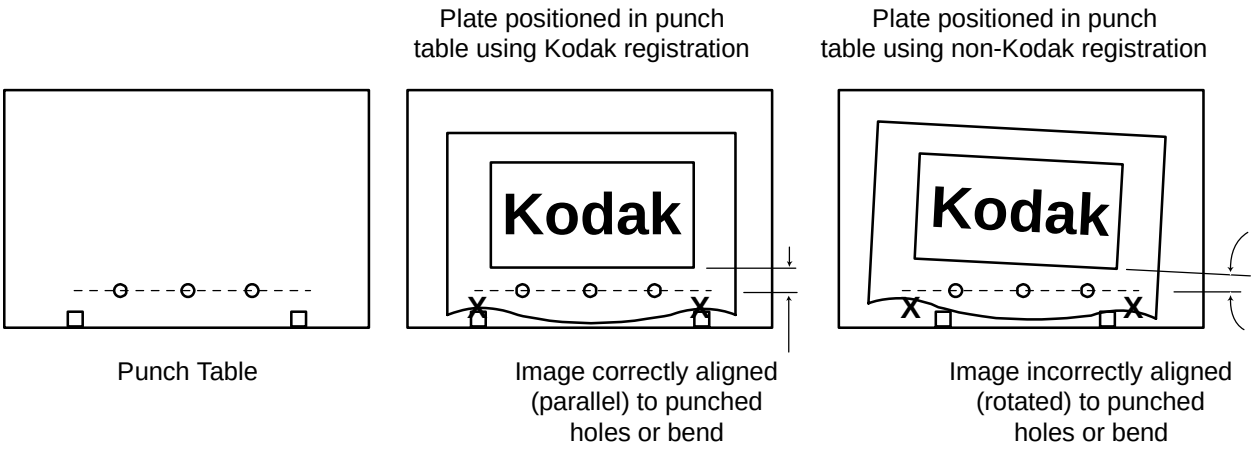
To verify registration accuracy, you must use the same registration points for measuring as those used for imaging. If different points are used, particularly on plates with wavy edges, then the results will be inaccurate.



Using non-Kodak Registration Points for Punching or Bending

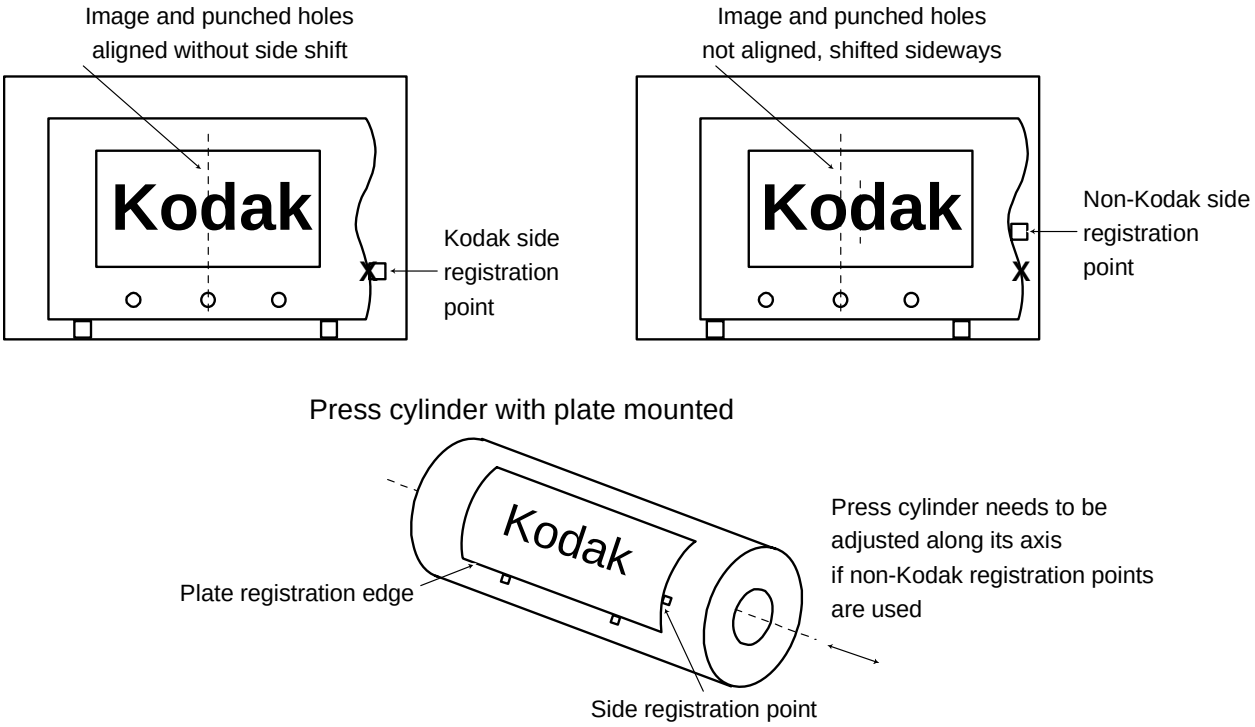
Registration Edge

Using non-Kodak registration points can result in the image being skewed on the plate as shown below.



Side Registration

Using non-Kodak side registration points can result in the image being shifted on press. This error is usually easily corrected on press.



Magnus XLF 80 Plate Registration

The Magnus® XLF 80 device is designed to handle single plates in leading edge mode. This paper explains some common plate registration terms.

Plate Registration Terms

What is the registration edge of a plate?

This is the along-press-cylinder plate dimension.

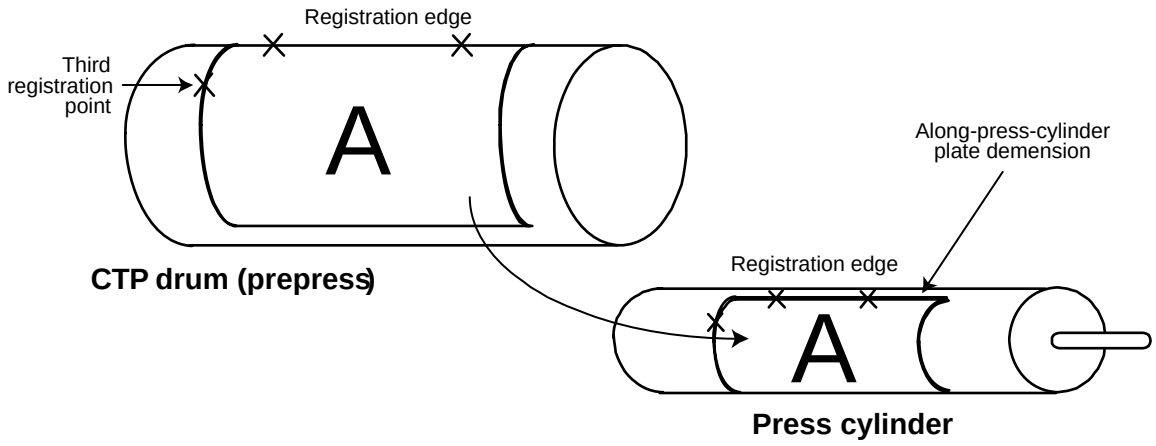
The registration edge is the edge that the image will be aligned to, normally using two points called 'registration points'. The Magnus XLF 80 uses a third registration point to align the side of the plate and image.

What is meant by the 4-pin registration system?

The Magnus XLF 80 detects correct registration of the printing plate by its alignment to registration pins on the imaging drum. The XLF 80 device is supplied with 4 pins on the drum (a 4-pin registration system).

What is a leading edge registered plate?

When the along-edge-cylinder plate dimension is mounted along the Magnus XLF 80 drum, this is called a leading edge registered plate.



Edge Detect Camera Registration

Instead of using the thermal head laser to find the third registration point on leading edge registered plates (see Figure 1), a CCD camera is used to find the plate edge. The CCD camera has the advantage that it can perform its edge detection while the drum is spinning—thus increasing plate throughput on the device.

Registering leading edge registered plates

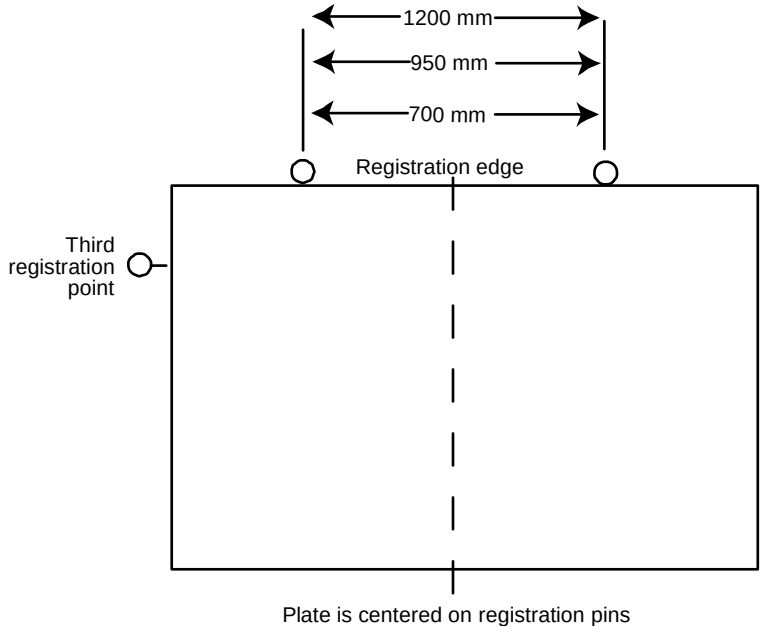


Figure 1: Leading edge registered plate

Table 1: Punch table setups used for Magnus XLF 80 plates

Registration Pin Spacing	Minimum plate size (along drum)	Maximum plate size (along drum)
700 mm (27.5 in.)	800 mm (31.5 in.)	1100 mm (43.3 in.)
950 mm (37.4 in.)	1101 mm (43.4 in.)	1350 mm (53.1 in.)
1200 mm (47.2 in.)	1351 mm (53.2 in.)	2260 mm (89 in.)

About Kodak Graphic Communications Group (GCG)

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