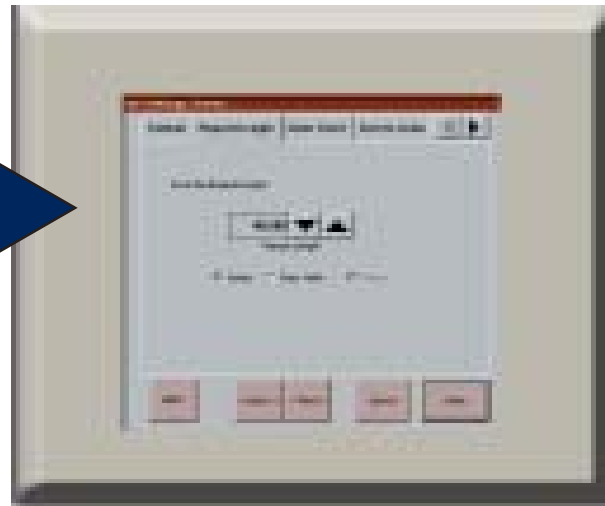




Select the control response strength and type.

Enter the repeat length in inches or gear teeth.



Designate units to be used.

MALCON



Automatic Registration Control System



Hurletron's Automatic Registration Controls improve color to color control, die to print alignment, web to web control, and other independent web functions.

Halcon® controls use two unique design features to improve registration control: **the point scanner** for mark detection and **the internal clock** for registration measurement.

Point scanners with embedded microprocessors pre-process the scanner signals before they deteriorate. This feature amplifies weak signals typical of light colors and eliminates the need for 100% clear-track printing of registration marks.

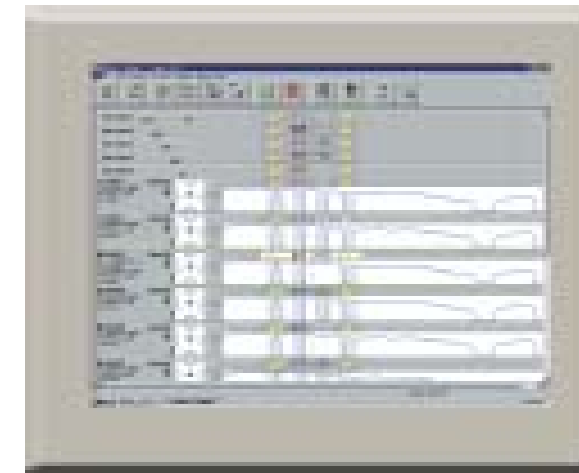
The fiber optic point scanner used to detect the registration marks self-adjusts for optimum signal-to-noise ratios to better adapt to changes in the environment and changes in contrast between ink and substrate. The point scanner also uses a wide focal range to compensate for imprecise mounting.



Hurletron's Halcon® Automatic Registration System is a Windows®-based automatic register control with a simple operator interface. Halcon® provides easy day-to-day operation centered around two main screens.

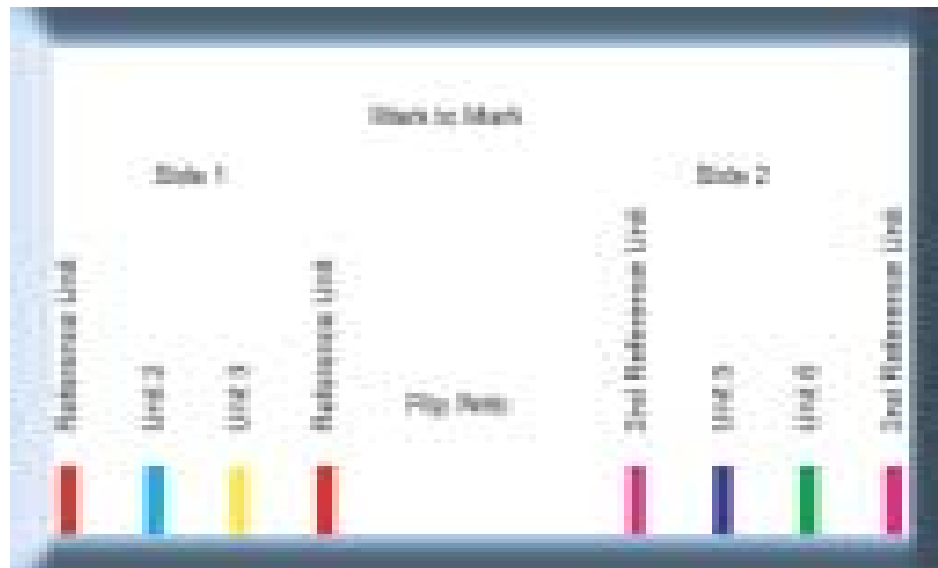


The Control Screen indicates the system status in real time, displays a visual representation of registration, and provides the operator with manual control.



The Edit Screen allows the user to modify the mark pattern, to display the scan path that shows the correlation between the mark pattern and input from the scanners, and to provide register information to the operator during the editing process.

Each Halcon® unit allows both automatic and manual register corrections for three print stations or one die/sheeter station. To achieve this functionality Halcon® measures registration every third station. It is primarily designed for small presses and printing operations where the web distance between units is minimal. Halcon® is a cost effective register control system.



The **internal clock** provides measurement accuracy to 0.0002" eliminating the need to rely on encoder pulses and their inherent mechanical measurement limitations. In many applications, the Halcon® uses encoder pulses only to identify the registration mark inspection zone and to indicate web speed.