

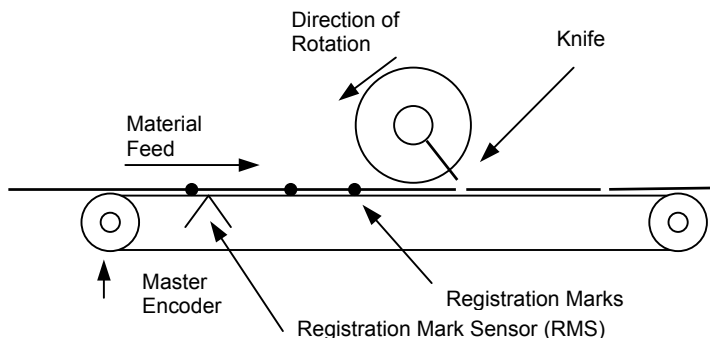


# QuickSilver Controls, Inc.

580 E. Arrow Hwy, #E, San Dimas, CA 91773  
888-660-3801 909-447-7417 fax: 909-447-7410  
www.QuickSilverControls.com

For immediate release

## Servo Controlled Rotary Knife Application



QuickSilver Controls' SilverDust servo controller/driver is now capable of doing rotary knife applications. Rotary knife systems are widely used to cut, seal or perforate material moving along a conveyor. A rotary knife system consists of a cylinder with a knife blade fastened along the longitudinal axis. As the cylinder rotates, it cuts the material passing underneath it. During the cut, the tangential knife velocity must match the linear speed of the material. During the rest of the revolution, the knife must either speed up or slow down to be ready for the next cut.

Most rotary knife applications are continuous operation with material continuously moving along the conveyor belt. The knife axis (slave) is geared electronically to the feed axis (master) so that the material cut lengths are independent of the material feed speed.

The app note discusses two types of rotary knife applications, Simple and Registration.

In the Simple application, the material length is fixed in the program or selected by an operator and the cuts are made continuously.

The Registration application adds a Registration Mark Sensor (RMS) that detects a registration mark on the material where the cut is to be made. The material length is variable and the RMS may be several material lengths from the knife.

See QCI-AN034 "Rotary Knife" for more details.

<http://www.quicksilvercontrols.com/support/ApplicationNotes.htm>