YASKAWA

Successful Solution

Registration Feed to Length   *July 23, 2008*

Issues / Problems / Challenges

- Existing supplier cannot meet throughput specs
- Need accurate positioning after registration
- Move adjustments on-the-fly
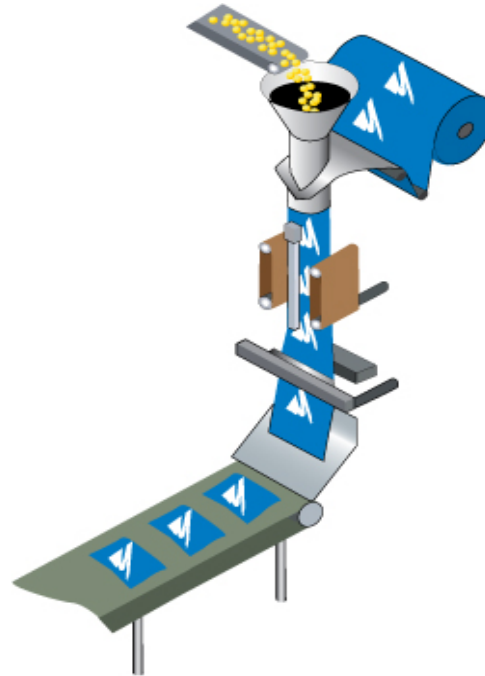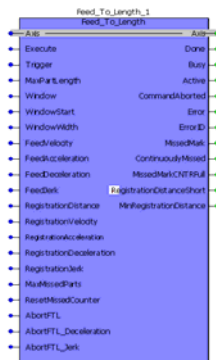- Ability to vary maximum part length

Solution

Controller:	MP2300Siec
Controller Software:	MotionWorks IEC
Solution Code:	Feed to Length Solution
Servo:	Sigma III (SGDS)

Performance Achieved:

Throughput:	120 per minute at 9.5" pitch
Accuracy:	+/- 0.01mm placement
Auxillary Functions:	I/O with PC, Photo eye

Customer Information

Industry:	Packaging
Application:	Feed to Length
	Vertical Form Fill Seal

Application Description:

This OEM makes a variety of equipment to serve the packaging industry. This application is a vertical form fill and seal machine used to make bags. Film for the bags is fed in by the servo film drive. A registration mark on the film is detected by a photo eye. The registration mark position on the film drive is latched by the high speed I/O of the film drive. Based on the position of the registration mark a calculation is made in the control program to adjust the move of the film drive such that the film is stopped at a certain distance from where the registration occurred. When the film drive has stopped, the cut axis is activated to seal the packet and cut the bag. After the cut is made, the film drive repeats its registration-based move.

Differentiating Solution Features	Resulting Solution Benefits
- Prewritten Solution Template	- Proven Core Code reduces commisioning time, reduces project risk, and improves performance
- High speed position registration latch	- Greater range of product sizes, higher throughput
- Mechatronics control capability	- Single control solution for motion and I/O saves money and cabinet space

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