

AutoSlice



Honeywell’s AutoSlice™ system provides superior cross direction (CD) basis weight control through headbox slice lip automation. The narrowly spaced, intelligent actuators with their fast response and precise movement provide the tightest CD control.

Each AutoSlice system is custom engineered to suit customer requirements considering total paper machine control strategies. An entire headbox optimization system can be designed, including Honeywell actuators, mounting assemblies, spindle rods, clamping assemblies and SuperFlex™ slice lip.

High force AutoSlice actuator systems with a force output of up to 88 kN (20,000 lbf) for nozzle blade and suction former applications can also be custom engineered.

coupled with Honeywell’s unparalleled reputation for providing increased profitability, make AutoSlice the best choice for slice lip control.

Features and Benefits

- Reduce CD basis weight variation
- Faster recovery time
- Optimized tuning for all grade groups
- Fully sealed stainless steel actuator for reliable operation in the harshest headbox environment
- Compact design for narrow zone spacing
- Electronic force limiting and software bend limits ensure precise, worry-free movement
- LVDT provides true output position feedback for highest resolution and superior stability
- Expert installation and startup services

AutoSlice systems are offered in two configurations, using either the CDW60L or CDW45L actuator. Actuators are available with either stainless steel or Zytel® housings.

AutoSlice Models 9141 use the CDW60L actuator with increased force output that can be used with other manufacturers’ slice lips, or coupled with Honeywell’s SuperFlex slice lip and clamping assemblies. Models 9142 are a complete slice lip control system for use on conventional headbox applications, including CDW45L actuators, spindle rods, SuperFlex clamping assemblies and SuperFlex slice lip.



With Honeywell controls, the AutoSlice system improves CD basis weight profiles leading to improvements in moisture, caliper and coating profiles, as well as calendering, winding, converting and runnability.

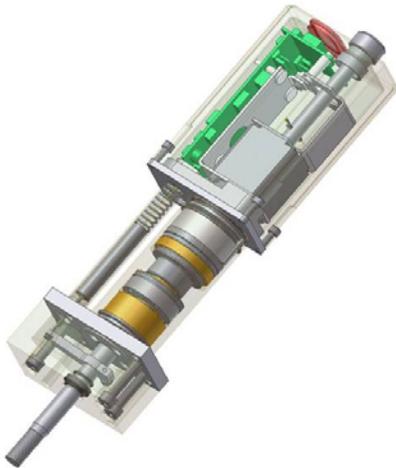
Honeywell has been a leader in headbox automation and control for over 25 years, with over 450 AutoSlice systems worldwide, in all applications. Features like the intelligent actuators, SuperFlex slice lip and clamping assemblies, expert installation services and advanced CD control software,

The AutoSlice actuator uses a DC stepper motor with steel harmonic gear designed for high torque, fast response and precise movement. Configurable electronic torque limiting

constrains the output force and ensures that the slice lip is protected from overstress.

Bend limit protection is implemented at the actuator, based on the position of neighboring actuators, actuator spacing and slice lip design. An electronic clutch limits motor torque to ensure consistent maximum force and slice lip protection. Variable speed drive facilitates large control moves, and manual backup is accomplished through a hand wheel with built-in slip mechanism to protect from accidental over-stressing.

Output position is measured with an LVDT that provides a signal that is virtually noise free. The LVDT is positively connected to the actuator output shaft for true position feedback.



Electronics are incorporated into a standard CDW drive module that is a field replaceable plug-in unit for easy on-site, on-machine service. Programming is retained in non-volatile, flash memory to facilitate future upgrades in-place.

Each AutoSlice system includes a CDWeb™ which provides the interface between the supervisory control system (QCS) and the actuators. The easy-to-use CDWeb Explorer software is used for actuator configuration, tuning, advanced diagnostics and troubleshooting.

Standard Options

- Actuator digital display (not available with Zytel® actuators)
- Actuator mounting adapters
- Cable support tray

Additional Options for Model 9141-10 and 9141-11

- Spindle rods
- SuperFlex clamping assemblies
- SuperFlex slice lip or profiling bar , T316SS or titanium

Custom Design Options

- C-channel actuator mounting beam
- Custom actuator protection for harsh environment

Specifications

Category	Specification – AutoSlice, Models 9141-10, 9141-11 with CDW60L Actuator
Actuator Housing Material Model 9141-10 Model 9141-11	T316 stainless steel Zytel®
Maximum Force Rating Motor Stroke Setpoint Resolution Feedback Resolution Rate of Response Temperature Height CD Width	14.5 kN (3,300 lbf) 24VDC 13mm (.051 inch) 0.2 µm (0.0008 mil) 0.2 µm (0.0008 mil) 5-60 µm/sec (0..20-2.40 mil/sec) 10°C - 65°C (14°F - 149°F) 293 mm (11.54 inches) 59 mm (2.32 inches)
Actuator Zone Spacing	60 mm minimum

Category	Specification – AutoSlice, Models 9142-10, 9142-11, 9142-20, 9142-21 with CDW45L Actuator
Actuator Housing Material Model 9142-10, 9142-20 Model 9142-11, 9142-21	T316 stainless steel Zytel®
Maximum Force Rating Motor Stroke Setpoint Resolution Feedback Resolution Rate of Response Temperature Height CD Width	4 kN (900 lbf) 24VDC 13mm (.051 inch) 0.2 µm (0.0008 mil) 0.2 µm (0.0008 mil) 5-60 µm/sec (0..20-2.40 mil/sec) 10°C - 65°C (14°F - 149°F) 281 mm (11 inches) 44.8 mm (1.76 inches)
Actuator Zone Spacing	45 mm minimum
Spindle Rods	316 stainless steel
Slice Lip Material Model 9142-10, 9142-11 Model 9142-20, 9142-21	316 stainless steel Titanium

More Information

For more information on AutoSlice, visit www.honeywell.com/ps or contact your Honeywell account manager.

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