Product Information Note

Honeywell



Honeywell's ProCoat System provides an integrated cross direction (CD) control solution for on-machine and off-machine blade and rod coating operations. It uses intelligent actuators to selectively change the CD coating application to level the coat weight profile. Each ProCoat System is a totally engineered solution, customized for all major coater types, either new or retrofit, such as Voith, Beloit, Metso/Valmet, IHI, MHI, Jagenberg and others.

The total ProCoat solution includes compact motorized, embedded CDWeb[™] actuators, protective canopy, customized mounting beam, spindle rods, couplings and backing bar.

ProCoat has been proven to provide optimal CD coat weight quality and process control. It will reduce coating use, start-up time and rejects and has been shown to extend coater blade life.



Superior performance and reliability of the ProCoat System combined with Honeywell engineering and manufacturing experience, applications expertise and full service support, guarantee consistent results and make Honeywell your best choice for coating optimization.

Features and Benefits

- Reduce CD coat weight variation
- Faster Recovery Times

- Reduce rejects, culls and off-spec production
- Improve coater, supercalender and converting runnability
- Minimize coating usage
- Accurate blade/rod position monitoring and backing bar protection
- Pre-assembled beam for fast drop-in installation
- Easy, quick maintenance

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

Models 9132 use the smaller CDW45L actuators for blade coating operations, and Models 9131 use the CDW60L actuators for large-diameter rod coating applications.

The ProCoat 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 SuperFlex[™] Backing Bar is protected from overstress. Variable speed drive facilitates large control moves, and manual backup is accomplished through a handwheel.

Embedded CDWeb technology provides local control of all actuator functions as well as network communications to the quality control system (QCS). Bend limit protection is implemented at the actuator, based on the position of neighboring actuators, actuator spacing and backing bar design. An electronic clutch limits motor torque to ensure consistent maximum force and backing bar protection. 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.

ProCoat's universal coupling and unique clamping assembly provide precise adjustment of the actuators and fast variable alignment across the coater head. The titanium SuperFlex backing bar is custom engineered to match actuator force and spacing for the tightest possible control.

The ProCoat system includes a splash-proof stainless steel canopy that protects the actuators and includes an integral wireway. The enclosure has hinged doors for easy access. An optional flexible fabric cover provides additional protection of the ProCoat beam during washdown, while allowing easy removal of coating buildup.



The customized mounting beam is specifically designed for each manufacturer's coater head to allow simple and rapid installation.

Each ProCoat 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)
- Steam header for blade cleaning

Custom Design Options

- Flexible fabric beam cover
- Coater blade guard

Specifications

Category	Specification – ProCoat Models 9132-10, 9132-11 with CDW45L Actuator
Actuator Housing Material	
Model 9132-10	316 stainless steel
Model 9132-11	Zytel®
Maximum Force Rating	4 kN (900 lbf)
Motor	24VDC
Stroke	13mm (.051 inch)
Setpoint Resolution	0.2 μm (0.0008 mil)
Feedback Resolution	0.2 μm (0.0008 mil)
Rate of Response	5-60 µm/sec (020-2.40 mil/sec)
Temperature	10°C - 65°C (14°F - 149°F)
Height	281 mm (11 inches)
CD Width	44.8 mm (1.76 inches)
Actuator Zone Spacing	45 mm minimum
Actuator Canopy	316 stainless steel
Mounting Beam	316 stainless steel
Spindle Rods and Couplings	316 stainless steel
Backing Bar	Titanium

Category	Specification – ProCoat Models 9131-10, 9131-11 with CDW60L Actuator
Actuator Housing Material	
Model 9131-10	316 stainless steel
Model 9131-11	Zytel®
Maximum Force Rating	14.5 kN (3,300 lbf)
Motor	24VDC
Stroke	13mm (.051 inch)
Setpoint Resolution	0.2 μm (0.0008 mil)
Feedback Resolution	0.2 μm (0.0008 mil)
Rate of Response	5-60 µm/sec (020-2.40 mil/sec)
Temperature	10°C - 65°C (14°F - 149°F)
Height	293 mm (11.54 inches)
CD Width	59 mm (2.32 inches)
Actuator Zone Spacing	60 mm minimum
Actuator Canopy	316 stainless steel
Mounting Beam	316 stainless steel
Spindle Rods and Couplings	316 stainless steel
Backing Bar	Titanium

Zytel® is a registered trademark of DuPont

More Information

For more information on ProCoat, visit <u>www.honeywell.com/ps</u> or contact your Honeywell account manager.

Automation & Control Solutions

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