

SIEMENS



Modulating Water Level Control System

Combustion Controls



*World-class system,
support and
performance*

The Siemens Electronic Water Level Control System sets the standard for maintaining accurate water level in boiler steam drums, deaerating feed water tanks and condensate return tanks. The control system consists of a "SMART" differential pressure transmitter fitted with a 3-valve manifold, an application specific single loop PID controller and an electrically actuated ANSI 250 control valve assembly. The Siemens Electronic Water Level Control System provides precise water level control while ensuring efficient and reliable operation.

Key Features and Benefits

- 100% solid state system
- Ease of installation and commissioning
- Digital display of set-point and actual level
- Local adjustment of set point via key strokes
- Three levels of password protection
- Local/manual control options

Continuous Level Control, Universal Applications

Accurate feed water control is crucial for efficient, reliable boiler operation. Too low of a water level will expose boiler tubes to overheating, possibly damaging them. Too high of a water level can cause water carryover. The Siemens Electronic Water Level Control System maintains a consistent water level that minimizes these potential concerns.

The Siemens Electronic Water Level Control System offers the following advantages:

- More efficient boiler operation
- Minimal boiler water carryover
- Reduced thermal shock to boiler
- Reduced feed water pump wear

For boilers with rapidly fluctuating steam load changes, the system has the capability to include dual-element control, minimizing boiler drum swell and shrink effects.

Differential Pressure Transmitter

- Repeatable and accurate to 0.2" w.c. with a 100" span
- Rugged industrial-grade, explosion-proof construction
- Locally programmable using pushbuttons or externally via HART
- SMART transmitter can be spanned with empty vessel
- Manual output mode for troubleshooting
- Loop powered output signal simplifies wiring



Control Valve Assembly

- High temperature stainless steel trim
- ANSI Class 250 design
- Available in normally open or normally closed configurations
- Field replaceable packing cartridge, valve disc and stem
- High flow, low noise design
- Bolt-on actuator allows for ease of installation
- Self-calibrating electronics simplifies commissioning
- Manual operator allows for local override of actuator in the event of power failure
- Position switches available for pump operation if required
- Flexibility with direct, reverse, linear or equal percentage operation selected via dip switches



RWF Single Loop PID Controller

- Adjustable PID parameters for precise level control
- Built-in 24 VDC power supply for transmitter power
- Set-point/parameters are adjustable
- Bright display of set point and actual level
- Two configurable built-in relays
- Optional ModBus
- Password protection of programmed parameters



Global Siemens Headquarters

Siemens AG
Berliner Ring 23
76437 Rastatt
Germany

SCC, Inc.
1250 Lunt Avenue
Elk Grove Village, IL 60007
USA
Telephone: 1-224-366-8445

www.scccombustion.com

Printed in USA

© Siemens Industry, Inc. • (07/2013)

Solution
Partner

Combustion
Controls

SIEMENS