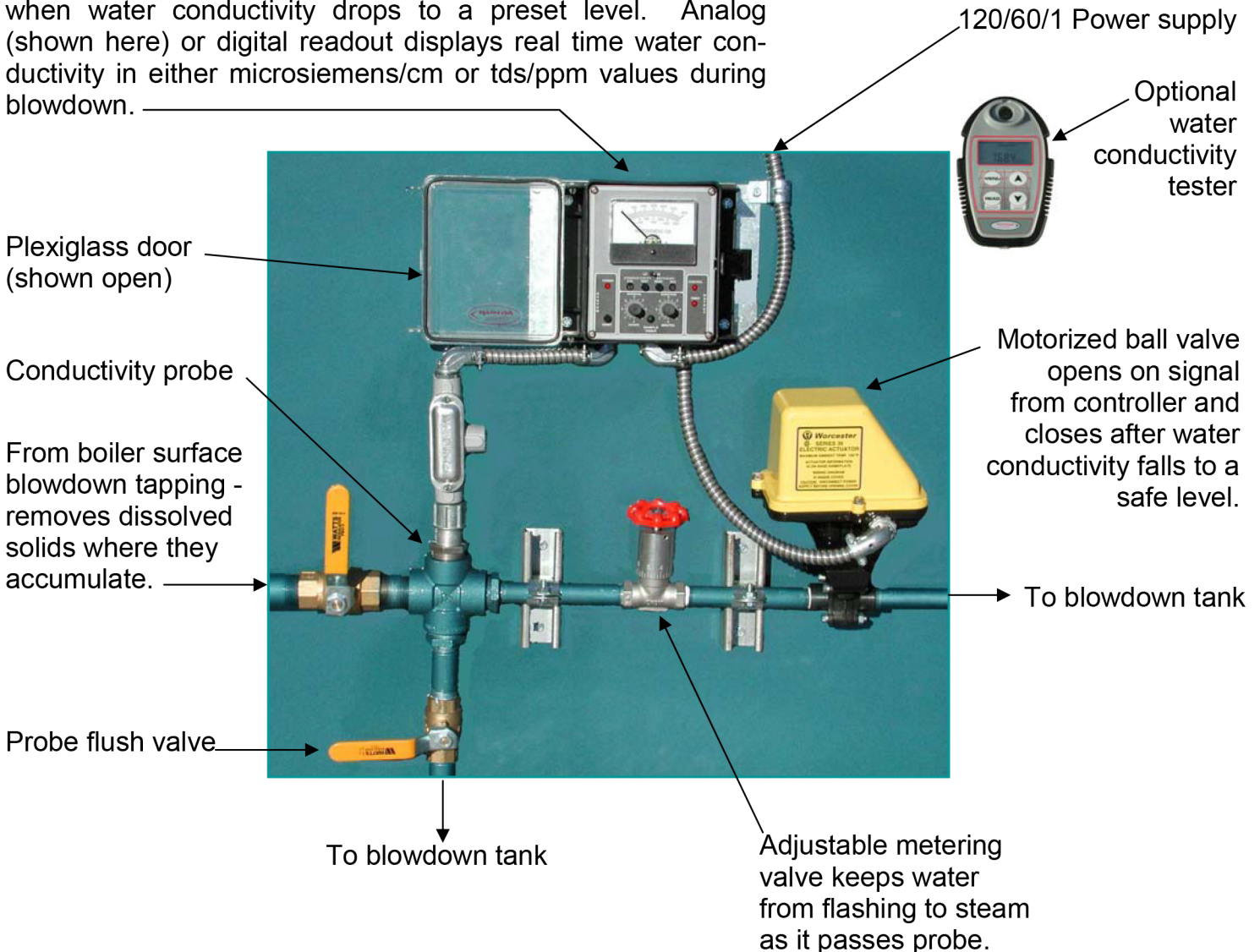




# SCALE CONTROL FOR STEAM BOILERS

## Automatic Timed Surface Blowdown

NEMA 4X Controller adjusts the frequency and duration of surface blowdown. Automatically terminates the blowdown when water conductivity drops to a preset level. Analog (shown here) or digital readout displays real time water conductivity in either microsiemens/cm or tds/ppm values during blowdown.



- Available factory installed or retrofit.
- Helps keep steam boilers scale-free and operating at peak efficiency.
- Minimal maintenance required.
- Can pay for itself in energy savings in six months.
- Perfect for installations where water treatment programs are limited.



# SCALE CONTROL FOR STEAM BOILERS

## Automatic Timed Surface Blowdown Controller

### Factory Setting\* and Piping Details

#### CONTROLLER FACE

Conductivity setpoint set at "lo" for 0-3000 microsiemens per centimeter or "hi" for 0 - 6000. To convert to TDS (total dissolved solids) in PPM (parts per million) divide by 1.5.

Blowdown conductivity should be 5 to 7 times the make-up water conductivity and no more than 10 times. Intervals between sampling blowdowns set for once every 4 hours.



\*Factory settings should be changed when job specific conditions warrant. Changes should be made by the chemical treatment specialist in charge of keeping the boiler scale free.

"ADJ" = calibration adjustment refer to "Series 2EZ Installation Maintenance Repair Manual" for calibration instructions.

Duration of sampling blowdown set at 3 minutes.

Interval range dip switches are factory set for #7 "ON" and # 1-6 and #8 "OFF" for 0-7.75 hour interval. For 8 to 31 hour interval, set dip switches # 6 & 7 "ON" and the rest "OFF".



View inside the controller.

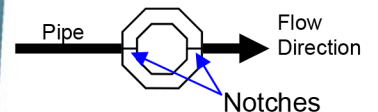
To surface blowdown connection in boiler head-plate. Leave isolation ball valve open except for servicing.

Steam column quick opening blowdown valve.

Use 300# fittings and schedule 80 pipe for blowdown piping.

Leave open (in case of probe leak)

The probe wrench flats have alignment notches that should be oriented as follows:



Boiler quick opening bottom blowdown valve.

Slow opening wye blowdown valve. Leave open except just prior to a bottom or steam column blowdown where the quick opening blowdown valves should be opened first and the wye valve last.

To Blowdown tank

Optional B31.1 Piping