

# Control unit

In order to fulfil the hygienic requirements for evaporative cooling towers, contamination of the process water by microorganisms has to be avoided. In addition, from an economical point of view the system should be operated in such a way that corrosion is kept at a minimum level. Therefore, the fresh water and process water are treated accordingly with appropriate chemicals. To ensure that the chemicals used achieve the desired effect and at the same time the consumption of chemicals is minimized, continuous monitoring of the circulating cooling water is essential. Furthermore, operators of evaporative cooling towers are obligated to provide evidence that the system is operated according to the regulations by e.g. documenting the applied cooling water treatment in an operations diary.

## CONTROLLER AEGIS II



The controller AEGIS II has been developed especially for the treatment of cooling water in evaporative cooling towers. It monitors, controls and documents all relevant parameters as requested by the regulations.

### Blow down

- Continuous monitoring of conductivity to control blow down
- Blocking blow down after biocide metering
- Forcing blow down before biocide metering

### Addition of biocide

- Time-controlled biocide metering
- Concentration-controlled biocide metering
- Measurement of ORP value as indirect disinfection parameter
- Measurement and if necessary, control of pH value

### Monitoring corrosion

- Corrosion measurement via coupon method
- Real-time corrosion measurement via LPR method
- Metering of corrosion inhibitor, hardness stabiliser, etc. proportionate to volume

### Documentation

- Continuous recording of all measured parameters
- Automatically generated daily or weekly reports (compliant with VDI 2047)
- Proof of biocide metering for operations diary

### Communication

- Web interface for configuration and remote maintenance
- Operating state indicated by 10 status LEDs

