## Control and Regulation Systems

## Feedwater Tank

with deaerator dome



## **Control and Regulation Systems**

Individual control cabinet construction for ARI-Systems

In connection with the ARI-Systems installations, our customers also have the option of obtaining the control and regulation technology through ARI. For this purpose, the required control cabinets are adapted to the needs of our customers

We offer a wide range of options, from the simple standalone controller to the full-fledged PLC with operation and visualisations on a touch panel as well as communication via various bus systems.

- Individual design
- Touch panel or LCD display
- Signal transmission via various bus systems, e.g.
  Profibus, Profinet, BAC Net and many more.
- Engineering Sizing Design Commissioning our one-stop-shop philosophy!

Individual control cabinet construction – we handle it!

## **Feedwater Tank**

For heating and keeping feed water warm

Boiler feed water is preheated and kept at set temperature in the feed water tank before it enters into the steam boiler (open feed water tank approx.  $104^{\circ}\text{C}$  / 0.2 bar). In addition, inert gases such as oxygen and  $\text{CO}_2$  are expelled from returning condensate to protect the steam boiler from corrosion. In the counterflow principle, the returning condensate is introduced at the highest point of the deaerator dome. The steam flowing in the opposite direction binds the inert gases and ejects them. The feed water is kept at set temperature in the feed water tank directly via a steam lance or via steam injectors. The steam supply for discharging the inert gases is realised by a an additional steam connection at the lowest point of the dearator dome or on the top of the feedwater tank.

Centrifugal pumps feed the thermally processed feed water to the steam boiler/evaporator.

- Safe degassing (CO₂ and O₂)
- Removable (flanged) deaerator dome
- High operational safety
- Plug & Work
- Engineering Sizing Design Commissioning our one-stop-shop philosophy!

Feedwater processing – **we handle it!**