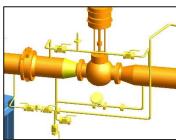
# Plantware

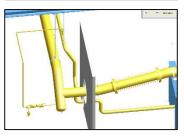
# EN1348( Piping acc. to

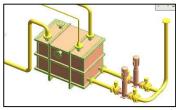
Design of Steam and Condensate Piping installation according to PED and EN13480. Design of Steam Pipes with

- Pipe Flexibility Calculations
- Detailed Component Design Tees, Olets, Tube/Shell etc.
- Pipe Design 3D routing and Detail design with Manufacturing Pipe Isometrics
- Steel Support Design with Manufacturing Drawings
- Pipe Support Fix (Lateral & Axial), Suspended, Spring or Constant Load
- Compensator design
- Start-up arrangements
- Drain and Water Droplets removing Arrangements.
- Control Valve Arrangement
- Safety Shut-off and Depressurizing Valve Arrangement (Emergency Shut-off).
- Instrumentation
- Control Specification (FDs)
- Condensate Collection –
   Pressurized and Pressure less
- Condensate Boxes and Return Pump Arrangements









Pictures from the Waste
Incineration plant "I/S
Vestforbrændingen" for a
Heat Recovery project, where
Steam was used to
regenerate salt in Heat
Pumps.

P-Engineering uses e.g.,

- AVEVA PDMS Software for 3D design
- DXT EN13480 Software for Detail Calculations
- ROHR2 software for Pipe Flexibility Calculations
- LISEGA Pipe Support Design Software

### **Contact Information:**

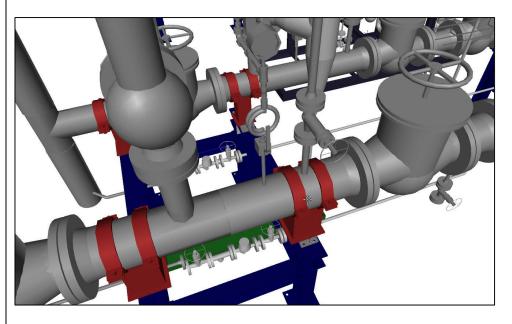
Christian Pallesen; +45 2526 8805; cp@p-engineering.dk

## Plantware

# Steam: Piping acc. to EN13480 P-316



Example of a Steam Drain with Thermostatic Steam Trap. From Steam distribution on an API – Active Pharmaceutical Ingredient – factory in Denmark.



Example of 3D Design of Main Steam Line

