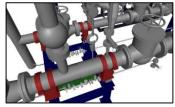
Plantvare

Black Utility Design Jarma: Design of Black Utilities for Life Science, Pharmaceutical, Biotech, Life-Science and API-plants:

- Raw Steam (Superheated & Saturated) & Condensate
- Heating Production & Distribution
- Water Distribution (Raw Water and Building Utility)
- Kill Plants Batch and Continuous System
- Sewage Collection
- Technical Water Hot & Cold
- Utility Make-up System
- Ethanol/Methanol Waste
- Gasses Nitrogen etc.
- Lye and Acid Industrial Grade
- Air Industrial Equipment Spec. and Distribution
- Process Exhaust System

Design of above system with full process design package (Process, PID, 3D & Detail Design) or a Detail Design Package for manufacturing of Piping and Support including design/ specification of Tanks, Vessels and Equipment.









Pictures for various Pharma projects for Heating, Steam & Condensate, Acid, and Hot Tap Water Production.

P-Engineering has references from e.g., <u>GE HealthCare</u> (DK, SE & NO), pK Chemicals (DK), <u>NovoNordisk</u> (DK), <u>AGC Biologics</u> (DK), <u>Bavarian Nordic</u> (DK), <u>Arla Foods</u> (DK), <u>DuPont</u> (DK) and <u>Gentofte Hospital</u> (DK)

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