

CASE STUDY

Data Centre Cooling Water



Mercury Engineering awarded this data centre cooling water contract to EPS in July 2020.

The contract consisted of the design; supply; off-site build and on-site commissioning of 2 No. Pre-packaged Plant Rooms (PPRs) to a data centre in Frankfurt, Germany. EPS has ten years of experience working with Mercury Engineering on data centre projects.

Disinfection Plantroom

We have a duty of care to Mercury and data centre operatives. We have designed a disinfection process specific to the demands and challenges of the data centre market. It's easy to take disinfection for granted until something goes wrong and we have devised a unique method of maintaining safe water quality irrespective of the steep fluctuations in data centre water demand and site challenges.



PROJECT VALUE
€1.5 Million



START DATE
July 2020



DELIVERY TIMEFRAME
30 weeks



HEAT REJECTION
10MW



TOTAL DEMAND
1000m³/day

Rethinking Water

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Project Specifics

The arrangement of the PPRs are Duty/Assist with stored water tank loop disinfection.

Each RO system produces 24m³/hr of RO permeate to meet the Jaeggi cooling water specification.

The project involves 450m³ of treated water storage and the maintenance of a residual disinfection level with the challenges of a varying data centre cooling water demand daily/monthly cycle.

EPS worked very closely with the Mercury site team and consultants Royal HaskoningDHV to deliver the PPRs on time, in specification and on budget.

- Incoming Mains Water Filtering
- 10 micron Disc Filtration
- Break Tank
- Reverse Osmosis Treatment
- Disinfection
- AHU-Side Stream Filters with Mini RO
- PLC/HMI integrated with Client's BMS
- Repressurisation to Jaeggi HDACs
- 3 No. 150m³ Treated Water Storage Tanks