The Mølleå Plant

Purification
Lundtofte, Denmark

Plant Description
The Lundtofte purification plant was built in the years 1955-1960, as a combined mechanical and biological wastewater treatment plant for the reduction of organic matter. The treatment plant currently has a capacity of 127,000 PE, representing wastewater from 127,000 individuals. 8-12 million m$^3$ of wastewater is received and processed annually. The plant was expanded in 1990-1992 with nutrient salt management, and in 2001 with online- and STAR-management.

The hinterland of the treatment plant utilizes a common sewage system, which means that the treatment plant receives both rainwater and wastewater. The wastewater is treated through a mechanical/biological/chemical process, utilizing the bio-dentro type of biological treatment.

The maximum flow into the treatment plant is 4,800 m$^3$/hr. If the inflow exceeds this limit, an overflow mechanism ensures that the load is kept at 90,000 m$^3$/day.

Incineration
The incinerator burns all solid residuals from the wastewater treatment such as sludge, residual substances, grease, and sand. The odor reduction facility, which is located in the incineration building, cleans the air from the coverings of inlet parts and purification tanks by means of bio filters.
Control and monitoring
The Treatment facility Lundtofte is fully supervised and controlled by IGSS, which registers information in an operations database. The monitoring ensures that an alarm is automatically activated if errors occur at the plant. The plant is supervised 24 hours a day via a home watchman arrangement.

IGSS
The treatment plant’s IGSS is a 5,000 object multi-user system with 7 operator stations, and a 2,000 object multi-user system with 2 operator stations handles the incineration of sludge.

Owner
The Mølleå plant is the communal property of the municipalities of Gladsaxe, Søllerød, Gentofte, and Lyngby-Taarbæk.

System Integrator
Ulrik Holt Automation