

Removal Nitrogen and Phosphorus using Intelligent auto control system

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Abstract

Automatic monitoring and controlling system, especially DO and MLSS was facilitated for the nitrogen and phosphorus removal efficiencies. Removal efficiency of nitrogen and phosphorus by automatic monitoring and controlling system, especially DO and SRT was have well adopted. and so it will be possible to use artificial intelligence logic control software such as fuzzy or neuro logic control system for WWT Plant.

Introduction

The aim of this study was to evaluate on the removal effect of total nitrogen and phosphorus with municipal wastewater in ultrasonic nutrient removal (UNR) process using ultrasonic sludge carbon source.

Material and Method

Instrumentation and control software in WWT Plant using LAN, Web and Telephone of Envinet cooperation for organic matter, nitrogen and phosphorus removal efficiency was evaluated. Automatic monitoring and controlling system, especially DO and MLSS was facilitated for the nitrogen and phosphorus removal efficiencies In order to evaluate typical kinetic coefficient of nitrifiers, denitrifiers, and anaerobic heterotrophs for sewage wastewater, respectively,

Results and Discussion

Using i-MACs software increase your nutrient removal efficiency in water and wastewater treatment Plant(WWT) and automatic control solutions through data analysis, database. i-MACs software is a leading supplier of instrumentation and control software in areas such as automatic control, process control, WWT Plant automation, and research and analysis. Remote Control system using LAN, Web and Telephone of Envinet cooperation for organic matter, nitrogen and phosphorus removal efficiency was evaluated. The removal efficiency for

BOD was 89.3%, total nitrogen was 70.5%, total phosphorus was 52.4%. The removal of nitrogen was effectively influenced by ultrasonic sludge carbon source.

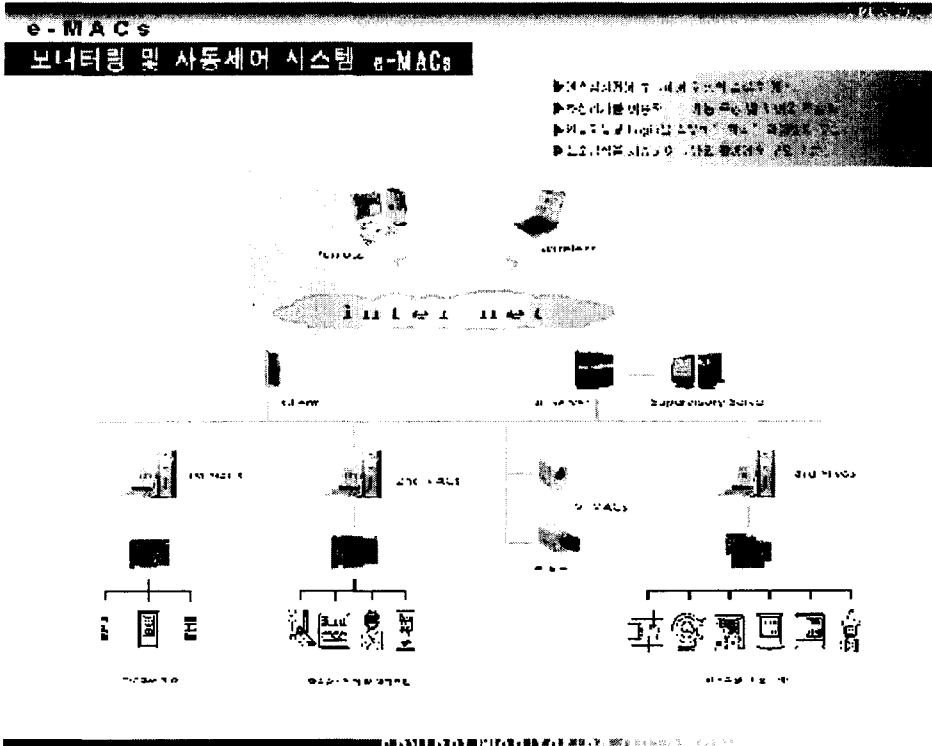


Fig. 1. LAN, Web and Telephone system

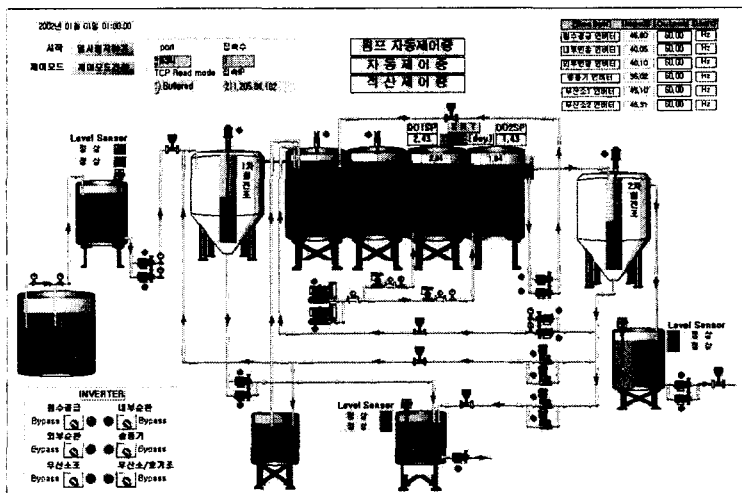


Fig. 2. Remote autocontrol system

Conclusion

Removal efficiency of nitrogen and phosphorus by automatic monitoring and controlling system, especially DO and SRT was have well adopted. and so it will be possible to use artificial intelligence logic control software such as fuzzy or neuro logic control system for WWT Plant.

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