

# 100% Ozone-treatment System for Bath and Swimming Pool Water - CERAZONE -

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## Abstract

100% ozone-treatment system was very effective to purify bath and swimming pool water. Almost no bacteria were observed after the ozone-treatment. The other analytical data were within permitted limits. This system was an excellent ecodesign model. Water charges and fuel expenses were calculated to be one-fortieth and one-forth compared with those of a usual 10% ozone-treatment system, respectively.

## 1. Introduction

Ozone is a powerful oxidizing reagent. Therefore,

ozone has been used for the disinfecting of drinking water, wastewater treatment, and purification of water [1]. The accident comes from *legionella*, the destruction of environment caused by trihalomethane, and the necessity for the recycling of materials are important problems in our life. A 100% ozone-treatment system, SERAZONE, could overcome these problems. In the case of usual ozone-treatment system for bath and swimming pool water, only 10% of the water are ozonized. It is reasonable that the 100% ozone-treatment system is more effective than the 10% ozone-treatment system. We report herein the 100% ozone-treatment system of bath and swimming pool water.

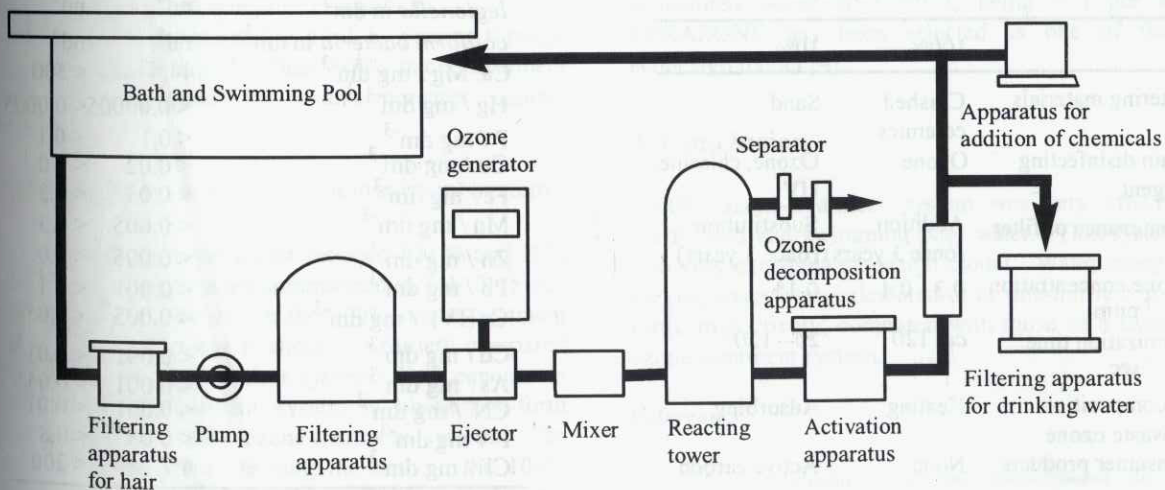


Figure 1 Flowchart of 100% ozone-treatment system