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Use of reclaimed water in industrial cooling systems —

Part 2: Guidelines for cost analysis

Utilisation de l'eau recyclée dans les systèmes de refroidissement industriels —

Partie 2: Lignes directrices relatives à l'analyse des coûts



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Foreword

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This document was prepared by Technical Committee ISO/TC 282, *Water reuse*, Subcommittee SC 4, *Industrial water reuse*.

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Introduction

Large amounts of water resources are used in industrial development. Industrial cooling water use accounts for a high proportion of industrial water use. Industrial water reuse is one of the promising ways to solve water shortages and to provide a new water source for cooling systems. The quality of reclaimed water is of great importance for the design and operation of industrial cooling systems. Industrial wastewater must meet the requirements of the cooling systems before it can be used as make-up water. Consequently, the primary cost consideration is related to the costs of treating industrial wastewater. In addition, for new-built cooling systems based on life-cycle consideration, the capital cost, operating cost and maintenance cost need to be considered.

This document provides a comparative cost analysis method for cooling systems using reclaimed water. It will be conducive to establishing an effective and unified cost analysis method in different countries for further cost comparison. This document is intended to lead the use of reclaimed water in industries worldwide, promoting the reuse of water resources, improving water-use efficiency and putting into practice the concept of the industrial circular economy.