

## BIO-MONITORING AND AUTOMATIC MICROBIOLOGICAL CONTAMINATION CONTROL SYSTEM OF INDUSTRIAL HYDRAULIC CIRCUITS

Duration: 36 month – Initial Date: January -2013 – End date: December-2015

The principal aim of the project is to validate and demonstrate a new technology that allows the real time monitoring and quantifying of aerobic microorganisms present in the water of a hydraulic system, and the subsequent correct dosage and constant optimization of an adequate biocide to minimize these microorganisms. To this end, an industrial-scale prototype of the plant will be constructed and put into operation to demonstrate the technique in two representative Spanish textile companies with very different hydraulic systems, both of whom require disinfection systems: the cooling towers of a finishing company and the air-conditioning system of a weaving company.

This system significantly improves the disinfection management in hydraulic systems and air conditioning systems making the processes more effective, due to the fact that detection is continuous and can be carried out at several installation points (where the concentration and type of biocide is variable, so the disinfection can be customized).

The new method proposed in this project will optimize the biocide amounts to be dosed at any given moment, so extra amounts or extra residual of biocide are reduced (as well as packaging), making the process cheaper and more environmentally-friendly.

More information: <http://biomomi.eu>

