→→→ CQM



Date:

10,10,2000

To:

WHOM IT MAY CONCERNED

Subject:

C.Q.M. units in operation in Nestlé factory in Portugal

The Nestlé, Factory in Avanca (Portugal), had choose the Automatic Condenser Tube Cleaning System - C.Q.M. system for the maintenance of a condenser.

The condenser, where we install the C.Q.M. system, works permanently all the year, and belongs to the coffee succedaneum production line.

When the thermal exchange was not in best conditions the evaporation need to the production of the coffee decrease until the complete stop, need to do the pipe cleaning by the usual methods (brushes with water flush). The main problem was organic growth and mud sedimentation inside of the pipes that difficult the thermal exchange between the fluids.

The installation of C.Q.M. system was made in August 1999 and, after a 6 months trial period, we could check that the evaporation levels were the same that in the beginning and there were no need to stop the condenser to do the pipe cleaning. During the Factory break in the summer of 2000 the condenser were opened and we could check that the pipes were clean.

Nestlé believes that the C.Q.M. technology is a good technical and economical solution because it becomes a very valid condenser preventive maintenance and also makes possible to win time and money when finish the condenser breaks that was needed to do the pipe cleaning.

For all this Nestlé will purchase another C.Q.M. System.

Sincerely

Luis Sousa

