

„ZIM“-Research project „Wärmer“



Wärmeübertrager mechanisch effizient reinigen

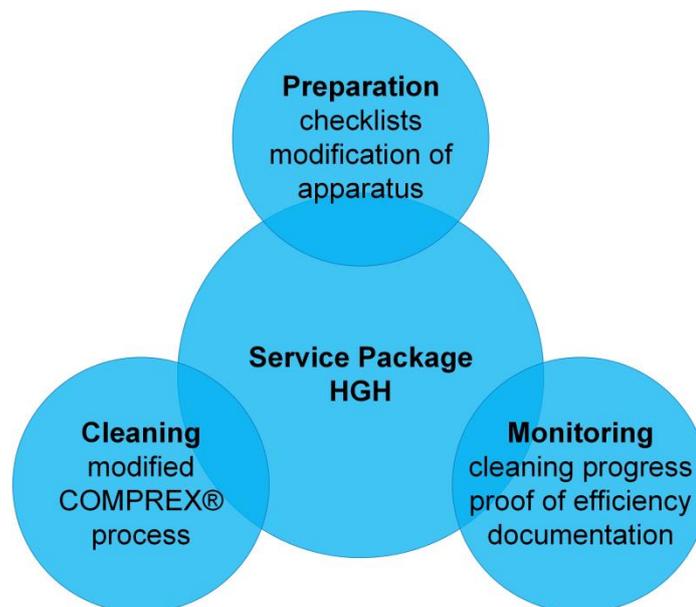
(Efficient mechanical cleaning of heat exchangers)

Development and validation of an innovative service package for the effective and chemical-free cleaning of heat exchangers

Period: 01.07.2014 till 30.06.2016

Project volume: approx. 540.000 Euro

„WÄRMER“ is a research project which is done by Hammann in cooperation with two research institutions. Hammann is planning to develop a highly innovative and efficient cleaning in place process for heat exchangers, that would lead a new service package on the market.



The service package will contain preparative actions, the cleaning procedure and the monitoring. It will be based on Hammann's COMPREX®-Process which should be extended to the cleaning of heat exchangers. The process is just based of water and air and does not require additional chemicals. It will provide a more efficient cleaning procedure than other methods e.g. for plate heat exchanger.

The heat exchanger does not need to be dismantled for the cleaning process which results in significantly shorter shutdown times There won't be a costly disposal of critical waste water, due to a chemical-free process. Another innovative feature is the monitoring of the cleaning process which is a prerequisite for automatic control of that process.

The IWW water center develops model fouling layers, characterizes and quantifies fouling material and analyses the cleanability of biofilms and mixed fouling layers. It provides assistance in case studies and experiments in the pilot plant and validates the performance of the COMPREX[®]-process. The TUBS (ICTV) evaluates possible applications and the specifications of the apparatus which has to be cleaned. Furthermore, it evaluates the heat transfer characteristics of the process.

Cooperation partners

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