

Parker Hannifin

Following the evolution of environmental standards

The Parker Hannifin company tackles new technical approaches for cleaning parts. Double advantage: competing assets and respect of obligations.



Cetim - Ch. Barret

OUR CUSTOMER

Corporate name
Parker Hannifin

Localization
Vierzon, France

Workforce
217 people

Activity
The hydraulic vane pumps produced in this unit are intended for following markets: railway, industry, marine, mobile engines (tyres or caterpillars), army or environment

Parker Hannifin's unit of Vierzon is specialized in the manufacturing of hydraulic vane pumps. The internal requirements of the group - solvent emissions below 10 ppm - and the wish to anticipate the legal evolutions related to REACH encouraged the company to carry out an assessment of the emissions of volatile organic compounds. This revealed a nonconformity of the atmospheric emissions of the facilities used for degreasing parts before painting.

"Treating these wastes could be considered in spite of its high cost, declares Sandrine Vigouroux, safety & environment engineer at Parker's. But this does not solve the problem of the safety

of operators working on the production line."

The technical impossibility of implementing simple substitution solutions requires a change of process and purchasing of a new machine. During 2008, Parker called upon Cetim which carried out a complete diagnosis of the cleaning installation and proposed different solutions.

Comparing for choosing

Two approaches, similar in terms of environmental response and safety as in terms of investment, come to the fore. The solution of an hermetic machine with a substitution of solvent makes it possible to solve the emission problem definitively, but requires at first sight

more manual operations for loading and unloading. The second explored way, more innovating, is the dry process which can be performed either with dry vapor or with dry ice. From the economic point of view, both solutions are profitable at medium-term, with a return on investment of approximately four years.

"It is clear that if one of those solutions is finally adopted, we will call upon the engineers of Cetim to work out the specifications and to precise the adaptation of the overhead conveyor", says Sandrine Vigouroux.

Currently confronted with a difficult economic context, Parker revised downwards its ambitions, but decided in the next months further studies and tests, at the same time on the dry technique and on the replacement of solvent by a new organic halocarbon-free product.



Thanks to their economic and technical expertise and their knowledge of industrial degreasing facilities, Cetim's engineers advise companies and provide the elements required for taking decisions.