

Reduction of Waste Water in the Vacuum System

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The basic idea for the design of **STEAM JET EJECTORS** has to be considered in that way that the available raw materials and available energy (in which ever form they occur) should be converted with the least possible waste and therefore the best possible efficiency.

For the present and near future we have to live with the fact that we can only fulfil part of this general requirement. In all transformation processes we are not only limited by the physical constraints but we also have to observe the financial aspects.

The environment should be protected as far as possible by minimizing the environmental pollution.

All process systems should be designed for and operated with

- **Lowest possible energy input**
- **Best possible energy conversion**
- **Lowest possible output of waste water and waste gas**

This statement is also true for the vacuum systems that will be presented in this paper. With regard to this topic the application of these systems in the edible oil industry will be shown.

In the past steam ejectors were - and sometimes they are still today - reputed of being "steam guzzlers". This may be true in the case where ejectors are misdesigned or misoperated.

But if they are well designed and properly operated, ejectors are a simple and robust equipment being capable to convey large mass flows from low pressure to a higher pressure level.