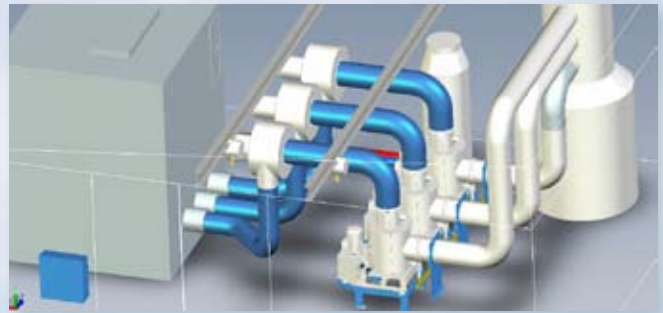


New solution for Energy Recovery on Industrial Frying

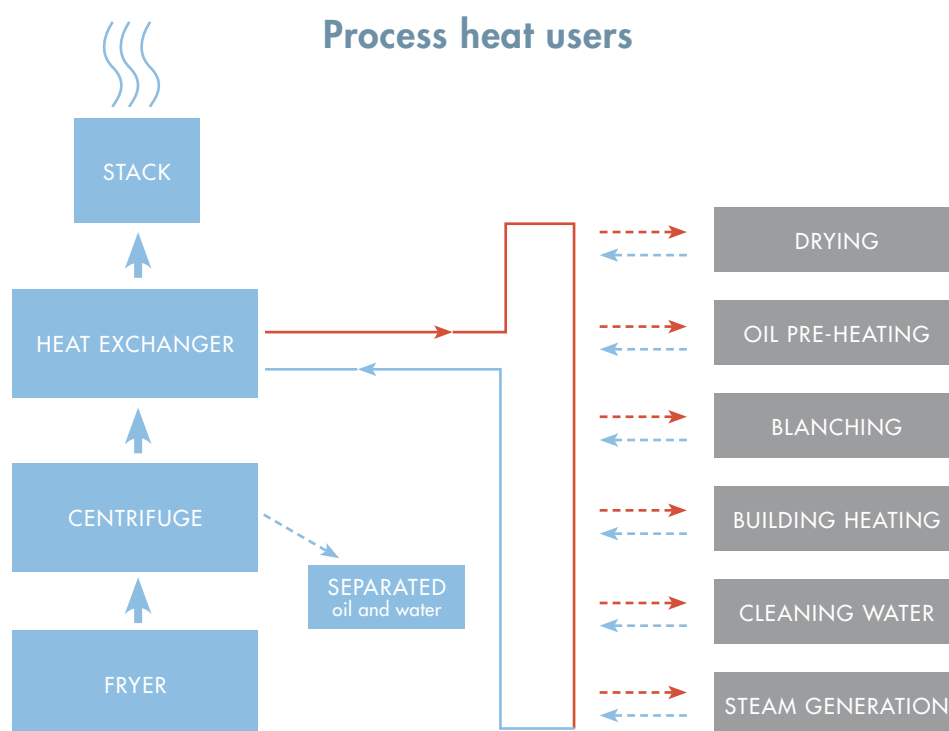
The Centriair Energy Recovery System is based on using highly efficient centrifugal separators for particle separation and combining this with compact and efficient heat exchangers. This reduces equipment cost and installation footprint, making Energy Recovery more cost efficient on Industrial Frying.



Heat exchanger maintenance is also reduced and its efficiency is increased due to the effective cleaning of the process gas from liquid and solid particles by the centrifugal separators. The complete installation typically has a payback of less than three years.

This is the way we recover your energy

Centriair has specific, practical and proven experience of using the recovered heat within different process stages in industrial frying. An Energy recovery project normally starts with a focused task-group of Client and Centriair personnel working to identify heat users in the process and at the plant. Provided an interesting case can be found, we proceed to propose a technical solution and a process flowsheet for the installation.



Application areas

Energy recovery installations are today operating within vegetable frying, but we have installations within many fields of industrial frying. When it comes to Energy and industrial frying, we have the needed experience and knowledge.

Typical fryer factory energy recovery areas

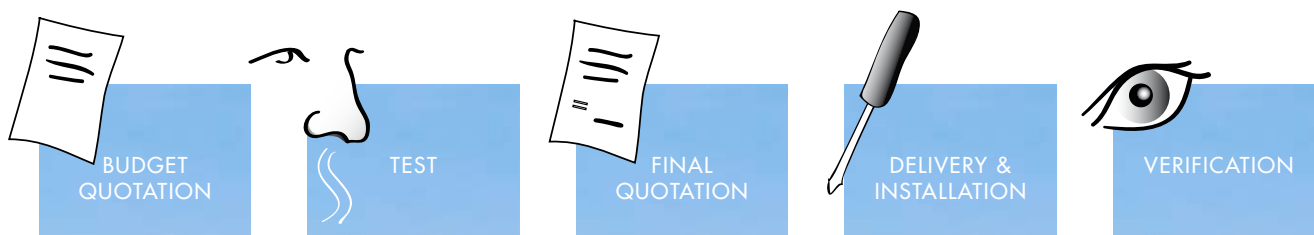
| Heat user | Energy saving/year (kWh) | Saving in |
|---|--------------------------|-----------|
| Heating of building and tap water | 900 000 | Oil |
| Heating of water for blanching of the potato | 500 000 | Gas |
| Heating of dilution water to boiler | 80 000 | Gas |
| Preheating of dilution air to burner (fryer) | 1 700 000 | Gas |
| Total (kWh/annum) | 3 180 000 | |
| Total saving (Euro) | 200 000 | |
| Investment including Centriair equipment, building, new design for heat users etc (Euro) | 580 000 | |
| ROI (years) | 2,9 | |

References

Potato crisps – Norway

Potato crisps – Sweden

Our process



Our process builds on an early verification of the system performance at the customer site and a follow-up after installation to ensure performance and reliability. A performance test rig for the complete odour removal process mounted on a trailer is available.

ODOUR CONTROL • ENERGY SAVINGS • LIFE CYCLE COSTS

centriair