GEA COMPACRYST

Up to 10% investment savings on your evaporation & crystallization process units and much more…

The GEA COMPACRYST is a compact and monobloc forced circulation crystallizer composed of:
- The crystallizer itself (a wide pressure vessel for the residence time of the crystals)
- A circulation loop (high size piping due to high flow rate circulation)
- A shell & tube heat exchanger
- An axial pump
- An elutriation leg (optional)

Mechanical & Process Innovation

Compared with regular crystallizers, GEA COMPACRYST is innovative in terms of process and mechanical concept. The strategic position of the heat exchanger connected to the crystallizer body reduces the height of the unit. With its specifically designed internals, fouling in the crystallizer is reduced which means that washing is less frequent.

Your main benefits

- It ensures the smallest foot print as well as significant reduction in the height of the building
- Maintenance costs are reduced
- Increase in production times as fouling and cleaning times are reduced.
- Over 10% savings on investment can be earned
SUCCESS STORY

A significant increase in the price of gas and tight European rules on CO2 emission has led a well-known French salt producing company to upgrade its evapo-crystallization plants. As the plants were functioning with high pressure steam produced by cogeneration with natural gas, they were naturally very high in energy consumption.

GEA Kestner responded to the challenge of finding an innovative solution, both in terms of process and mechanical concept. An energy efficient evapo-crystallization plant with mechanical vapor recompression using electricity was proposed.

The major challenges were linked to:
- Reduction in energy consumption,
- Floor space reduction
- Respecting tight schedules.

The GEA Compacryst solution was readily welcomed by the client for more than one reason:
- Height of the building by more than 8 meters
- Minimized floor space
- The use of 3 fans in series gives more flexibility and enables easier maintenance than a single compressor
- OPEX and CAPEX optimization

The success of GEA COMPACRYST is a proof of our commitment to putting our clients at the very forefront of our innovation!