



## Reactor temperature controller in green chemicals production

Green chemicals plant, France

Case story



A green chemicals plant in France endured longstanding problems with a heat exchanger used for controlling reactor temperature. Sudden steam injections in the reactor resulted in rapid temperature and pressure changes, which in turn caused fatigue in the heat exchanger. The company's engineers decided to replace the failed heat exchanger with Alfa Laval DuroShell.

With its unique design, DuroShell secures fatigue resistance up to five times higher than other plate-and-shell heat exchangers.

The high thermal transfer and low hold-up volume let DuroShell regulate temperatures quickly and accurately, which is important for both product quality and process yield.

### Results

- Highly resistant to fatigue
- Quick and accurate temperature control thanks to low hold-up volume



**DuroShell RollerCoaster**  
Robust and efficient performance.

Learn more at [www.alfalaval.com/duroshell](http://www.alfalaval.com/duroshell)



**DuroShell PowerPack**  
Optimized flow distribution and fatigue resistance.

### Why Alfa Laval DuroShell

#### Maximize uptime

- High reliability and fatigue resistance
- Minimal maintenance

#### Cut costs

- Low investment cost
- Minimal energy consumption
- Reduced maintenance costs

#### Increase capacity

- DuroShell's compact size and high thermal efficiency make it easy to increase capacity to solve heating and cooling limitations

#### How to contact Alfa Laval

Up-to-date Alfa Laval contact details for all countries are always available on our website at [www.alfalaval.com](http://www.alfalaval.com).

Alfa Laval reserves the right to change specifications without prior notification.

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