# Nuclear power plants

feature numerous major systems and subsystems in which flows of liquids and gases must be cooled, heated, cleaned and separated – efficiently and reliably.

A comprehensive range of Alfa Laval systems makes this possible, with exceptional performance and a minimum of energy. One of the world's very first commercial nuclear plants, Wylfa in the UK, selected Alfa Laval plate heat exchangers for its central cooling system in 1964. This was a breakthrough for plate heat exchanger technology in an industry that is exceptionally demanding and safety-focused.

Since then, Alfa Laval has supplied in excess of 3,000 heat exchangers to the nuclear power industry. More than 150 nuclear reactors in over 20 countries currently use Alfa Laval equipment in processes critical to safety and efficiency – inside the nuclear island, in the turbine island and in the auxiliary systems.

Our extensive end-to-end technical know-how, combined with solid long-term experience in the power business, ensures you maximum benefits from new systems as well as from updating and retrofit projects.

### Alfa Laval in brief

Alfa Laval is a leading global provider of specialized products and engineered solutions.

Our equipment, systems and services are dedicated to helping customers optimize the performance of their processes. Time and time again.

We help our customers to heat, cool, separate and transport products such as oil, water, chemicals, beverages, foodstuffs, starch and pharmaceuticals.

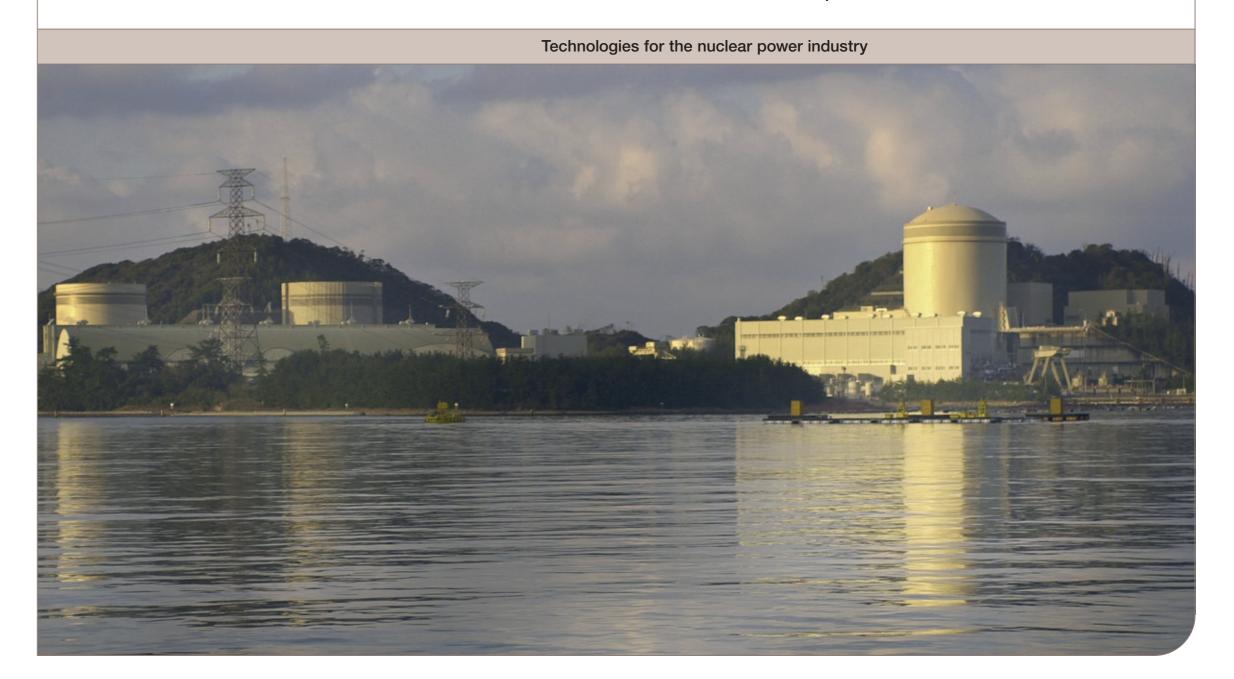
Our worldwide organization works closely with customers in almost 100 countries to help them stay ahead.

#### How to contact Alfa Laval

Up-to-date contact details for all countries are available on our website at www.alfalaval.com

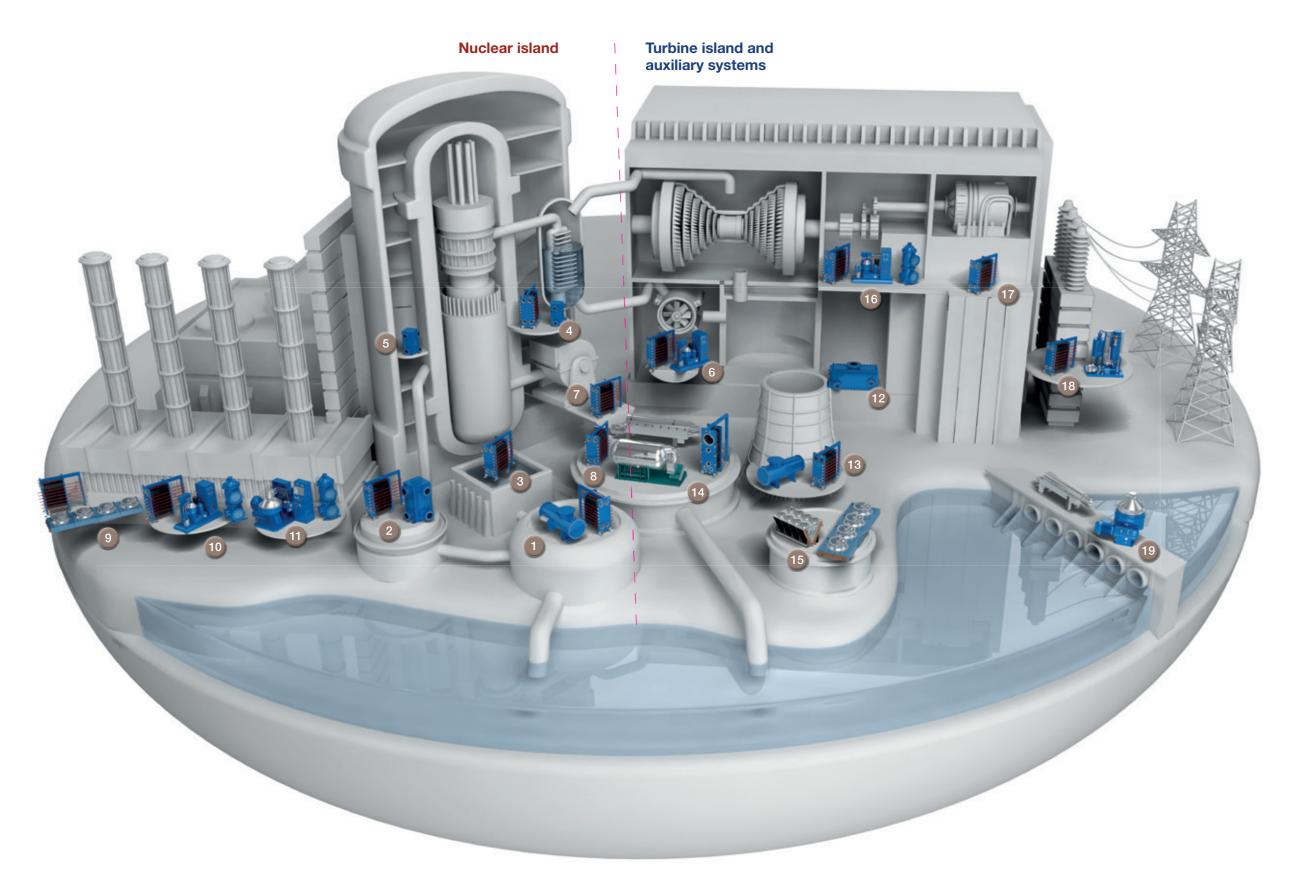


# Alfa Laval in nuclear power



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# Key products for nuclear positions



## **Nuclear island**

- Coolers and filters for closed-loop cooling for reactor
- Residual heat removal, emergency sprinkler water cooling and condensation pool cooling
- 3 Spent fuel pond cooling
- 4 Steam generator blow-down system
- 6 Hydrogen incineration and gas cooling system
- 6 Feed pump oil cooling and cleaning

- 7 Lube oil cooling for main pump
- 8 Make-up water system for reactor
- Air or water coolers for closed-loop cooling in emergency diesel generator
- Lube oil cooling and cleaning in emergency diesel generator
- Fuel oil treatment in emergency diesel generator

# Turbine island and auxiliary systems

- 12 District heaters
- Closed-loop coolers and filters for turbine island
- Make-up water system
- 15 Dry coolers

- Cooling and cleaning turbine lube oil
- 17 Generator cooling
- (18) Cooling and cleaning insulating oil
- 19 Waste water treatment

Alfa Laval complies with international and national nuclear codes that include

- ISO 9001 and ISO 14001
- ASME Section III, N Stamp
- ASME Section III, NPT Stamp
- RCC-M
- KTA 1401
- ASME Section VIII U Stamp
- PED
- HAF
- PNAE-G