

# CASE STORY

## Cooling tower Alps Electric Malaysia

Alps Electric Malaysia is situated in Nilai, just south of Kuala Lumpur. This fast growing town, with its international flare and buzzing shopping centres, seems well chosen for a company that specialises in the manufacturing of small electronic parts. The plant has been here for about 30 years but the company is owned by the Japanese multinational corporation Alps Electric Co., Ltd. The focus of the corporation is production of electronic devices, such as switches, potentiometers, sensors, encoders and touchpads.

In order to secure a smooth running manufacturing process, Alps Electric Malaysia requires clean water that contains next to no particles. This would turn out to be somewhat of a problem as waste water from cooling towers was being used in the production. The water needed to be properly filtered and the company's choice fell on Bernoulli, as in their opinion only Bernoulli's filter technology would be good enough.



### Facts and figures

**Customer:** Alps Electric Malaysia

**Location:** Nilai, Malaysia

**Application:** Filtration of waste water from cooling tower

**Filter model:** 2 x BSG 150

**Operating flow:** 150 m<sup>3</sup>/h and max 200 m<sup>3</sup>/h (from cooling tower)

**Operating pressure:** 3 bar to 4 bar

**Filtration:** 1,0 mm

**Centrifugal Separator:** CRWV 150

**Separation:** 70 microns

Alps Electric Malaysia wished to have an automatic backwash system with removal of particles reaching down to 70 microns and Bernoulli was up to the task. Two filters and a centrifugal separator were installed. The water now flows through the filters and onwards to the centrifugal separator in order to successfully remove particles. Pressure gauges were installed on both the inlet and the outlet pipes, to ensure that the pressure is being maintained. As the filter system needed to be placed on a roof top with narrow access there were also lots of piping modifications to be done during the installation process. The installation was made possible thanks to the flexible mounting and connection capability of the filters and the cyclone.

Well filtrated water is now being used for the production process line in Nilai. As if by chance, the word *nilai* means value in Malay and Alps Electric Malaysia sure got its value back when choosing a filtering system from Bernoulli.

**BERNOULLI**  
SYSTEM