

Automotive industry

Protecting plate heat exchangers in smelting plants

Daimler Benz AG

Background:

Daimler Benz AG operates a Mannheim-based engine plant for commercial vehicles, where it produces cast parts for its heavy, medium and light engine series. The engines produced in Mannheim are used in ships, trains, construction machinery and agricultural equipment. Following the modernisation of the cooling system in the smelting plant, the newly developed aquaBoll® automatic filter has been installed to replace the old BOLLFILTER filters, which were in use for more than 20 years.

The water for cooling the smelting, holding and casting furnaces is extracted from a 50 m³ equalisation basin.

Description of the solution:

A total of 3 aquaBoll® filter the cold water in the primary cooling system with a fineness of 100 and 200 µm. They protect the plate heat exchangers and other system components from becoming dirty, thereby preventing the failure of the entire smelting plant at the Mannheim engine factory.

Advantages and added value for customers:

The aquaBoll® filters are fail-safe and reliably intercept harmful dirt particles. This "reliability" in the cooling process makes a significant contribution to maximizing the total efficiency of the Mannheim smelting plant, which has increased since the installation of the new filters.

"We have been using BOLLFILTER for years and have always had a very positive experience. We are also very satisfied with the new aquaBoll® automatic filters", said Mr Schäfer, maintenance technician at the casting plant.

System in application:

Customer: Daimler Benz AG
Filter: 2x aquaBoll® 419 DN200 and 1x aquaBoll® 273 DN80
Housing: EN-GJS-400-18U-LT
Internal parts: CrNi steel
Filter fineness: 100 & 200 µm
Capacity: 35 m³/h, 200 m³/h & 300 m³/h



Smelting plant



Evaporative cooler



aquaBoll® automatic filter in the cooling process