

Hybrid condensers in «Ozeaneum Stralsund»

Marine museum «Ozeaneum Stralsund»

The German Marine Museum (Deutsches Meeresmuseum) concentrates on marine science and fishing. As an addition to the original museum in the historic centre of Stralsund, the OZEANEUM was opened in summer of 2008, a museum showing the underwater world of the northern seas as well as exhibits of marine research. Walking through the aquariums, the visitors are taken on a journey from the harbour of Stralsund through the North Sea and all the way to the Arctic Ocean.



The visitors are introduced to different marine habitats from the bottom of the sea to the open Atlantic.

> Behind the scenes, complex technology makes sure that all animals can be kept in the appropriate conditions: mechanical and biological water treatment, protein skimmers, huge filter units and largely PVC-free pipes. All this makes for a constantly high water quality.



> Green electricity, recycled paper, adequate animal-keeping: In close collaboration with the environmental organisation Greenpeace, the German Marine Museum has set high ecological standards for the construction and operation of the OZEANEUM.

From the very beginning, Greenpeace has been playing an integral part in the large OZEANEUM project and thus was able to make a major contribution to the museum's environment-friendly construction and operation.

Technical details of the hybrid condensers

> In the beginning of 2010, JAEGGI has supplied the Ozeaneum Stralsund with two hybrid ammonia condensers with an overall condensing capacity of 1,700 kW.

Zero ozone depletion potential and zero global warming potential make the natural refrigerant ammonia (R717, NH₃) very environment-friendly. Due to their low energy and water consumption, the hybrid condensers contribute to the environment-friendliness and efficiency of the entire construction.

A crucial requirement for the unit is low acoustic emission. For this reason, the condensers have been equipped with «Super Low Noise Fans» (SLNF) and fan silencers on the pressure side. This makes for a sound pressure level of 42 dB(A) at a distance of 15 m.

The following table lists some essential characteristics of the hybrid condensers:

Condenser type	HTV 2.4/4.8-2S-P6-VA-SLNF
Condensing capacity per unit	850 kW
Refrigerant	R717(NH ₃)
Hot gas temperature	75°C
Condensing temperature	35°C
Floor space / overall height of one condenser	5.5 m x 2.6 m/3.7 m
Operating weight of the condenser	6,824 kg



Ammonia refrigeration unit in the machine room



Additional air outlet silencers meet the very high demands for noise control

> JAEGGI – the original

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