

51.- Memstill, membrane distillation

<b>Title and name of product or technology</b>	
Memstill, membrane distillation	
<b>Abstract</b>	
The technology produces high quality water in one step from polluted water and/or salt water, using (waste) heat as driving force.	
<b>Description including main features/advantages</b>	
The technology is based on membrane distillation. New improvements has made the technology competitive with other desalination techniques, like reversed osmosis. The best results are found for influents below approx. 60 C and waste heat at. 80 C or higher.	
<b>Innovative aspects</b>	
Energy losses inside the module have been reduced (leading to higher energy yields) and the technology have been scaled up to modules of 1 m by 2 m. Salt can be rejected by at least a factor 10,000 when compared to the salt concentration in the influent .	
<b>Current and potential industrial users/domains of application</b>	
Very useful technology in any situation where process water of (very) high quality is required and where waste heat (around 100 C) is readily available. Less useful for some organically polluted streams, especially when membrane wetting may be expected.	
<b>Current state of development</b>	
The technology has been demonstrated for desalination on sea water and brackish water in three location (Singapore, E.ON, AVR) at 2 m <sup>3</sup> /h level. First full scale, commercial plants are expected in 2010.	

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