



Would you like to save 44% on the power consumption of your air conditioning plant?

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Some refrigerants and systems are more efficient than others. The air conditioning systems installed today cannot be based on old refrigerants like R22, because they deplete the ozone layer and contribute to global warming. The substances substituting R22 are either energy inefficient, or the cooling effect is smaller. But there is another much more efficient solution involving ammonia - an "old" industrial refrigerant.

Compared with a standard water-cooled commercial R407C chiller with a capacity of 400 kW the ammonia chiller will reduce the power consumption by 44% for air conditioning! The initial cost of the ammonia chiller is high, but the typical break-even point is reached after only 2 or 3 years. After 10 years the total savings are more than 30% in spite of the high first cost. The situation can be compared to buying a car. You can either buy a relatively cheap petrol model or pay some more to get a more economical diesel model.

Some years ago a refrigeration system working with ammonia was a heavy and large plant built direct on the site. Nowadays you can buy a factory-built and fully tested ammonia unit which is even smaller than an HFC chiller. Despite the compact size the ammonia chillers are industrial products suited for heavy duty use for at least 20 years.

Ammonia is toxic and more dangerous than the HFC refrigerants, but serious improvements have been made, and the charge has been considerably reduced. The ammonia is kept in the machine room and does not create any problems in practical life.

Today's political trend is to reduce the use of HFC gases, either by imposing taxes like in Norway, Denmark and Austria, or by stopping the production (CFC gases). Ammonia is a natural refrigerant which does not have any impact on the environment and it will not be subject to taxation or price increases.

One of the most efficient and compact ammonia chillers on the market is the Sabroe ChillPAC. It is basically an industrial chiller, but due to the very compact design it is well-suited for air conditioning and other chilling applications. You can read more about the product and its possibilities on www.sabroe.com, or you may contact your local YORK dealer for more information.