Good for the product, good for the environment, good for the image: the AMONUM reliably cools industrial processes

Using modern ammonia chillers to cool processes

Many industrial processes require precise cooling within an extremely narrow temperature range - an example being the injection moulding process for producing plastic parts. Disturbances or even downtime for the chiller can have fatal consequences for the production process. However, even a functioning chiller can be an ecological and economical strain if it is inefficient and uses refrigerant which is damaging to the environment.

AMONUM chillers from ENGIE Refrigeration are different: completely reliable, extremely efficient and also environmentally friendly due to using ammonia (R-717) as a natural refrigerant. This doesn't just help the company's financial position, but also its "green image" too.

Combining tradition and innovation

The use of ammonia in the cooling process is well-known; NH_3 has an excellent volumetric cooling capacity and high evaporation heat. The range of application covers brine applications at temperatures to -15°C as well as process cooling up to +15°C; heat recovery is an option with a condensation temperature of up to 50°C . The AMONUM from ENGIE Refrigeration combines tried and tested ammonia technology with the latest, high-performance components and an innovative evaporator system in which the advantages of dry expansion and flooded evaporation are intelligently interlinked. The compact design and high energy efficiency at both full and partial load is impressive. All AMONUM chillers are, of course, Smart Grid compatible.

Natural and environmentally friendly cooling using ammonia

The natural refrigerant ammonia (R-717, chemical symbol NH_3) has many benefits: it does not contribute to global warming or cause any damage to the ozone layer. It has an exceptional volumetric cooling capacity as well as a high evaporation heat. Conclusion: Refrigeration with ammonia is efficient and environmentally friendly.

AMONUM chillers are a future-proof technology as whilst the use of halogenated refrigerants is most likely going to be phased out due to environmental protection reasons in the medium-term, there is nothing against the long-term use of the natural refrigerant ammonia.

AMONUM chillers: compact, installed, filled

The AMONUM from ENGIE Refrigeration is the first NH_3 chiller for a power range of 50 to 200 kW and available in four models. AMONUM chillers have an extremely compact design and are delivered from the factory filled up with refrigerant and pre-assembled – they only require connection on site and are ready for use. This means low set up costs and simple installation. And remember: As the AMONUM can be used with less than 10 kg of refrigerant, it can also be used in any machine room provided that it is not accessible to the public.

AMONUM´S benefits

- Sustainable refrigeration with use of the natural and environmentally friendly refrigerant ammonia (NH_3)
- No CO_2 equivalent from direct emission, no contribution to global warming
- High energy efficiency using an innovative evaporator system, intelligent SIMATIC S7 control system and variable speed piston compressor – continuous adaptation to the actual cooling demands
- Smart Grid compatible
- Pre-assembled and compactly designed chiller for simple installation and straightforward setup in every machine room that it is not accessible to the public
- Low refrigerant filling quantity, few detachable connections ensuring minimal leakage and a safe operation
- Four models cover a power range from 50 to 200 kW
- Quality made by ENGIE Refrigeration
- Comprehensive consultation and competent, friendly service on site

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