



Buß Byproducts GmbH, Bocholt

Since its foundation in **1978** the company Buß Byproducts GmbH is a family owned business situated in Bocholt, which is close to the German-Dutch border.

The company is specialised in production, subsequent processing and refinement of the 5. Quarter of cattles, calves and pigs. Especially the focus on quality and homogeneity of their products in the past 40 years is the basis for the economical success and growth of the company.



Technical data of the combined cold heat and power system:

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|-------------------|--------|
| Electrical power: | 650 kW |
| Thermal power: | 700 kW |
| Cooling capacity: | 315 kW |

The **task** was given in assuring a possibility to supply energy using heat, power and cold for a production operation under the conditions of being environmentally friendly and economically. The innovative solution has been realised in combining a high efficient cogeneration unit, a NH₃-absorption chiller, an ammonia compression refrigeration machine and an economical recooling plant that are connected to an intelligent control system.

A call for flexible plant technology caused by changing operational requirements has been fulfilled with the fully automatic combined heat and power system. Therefore can be reached an overall degree of efficiency of 90%.



savings: the annual emission of CO₂ is reduced by approx. 30 % compared to conventional methods of construction. The foresight of this energy is shown in using ammonia as a natural refrigerant.