

COMBINED HEAT AND POWER & ABSORPTION CHILLERS FOR DECARBONISATION



Combined heat and power CHP with cogeneration plants can play a key role in industrial decarbonisation and should be supported and adopted. Free of carbon as soon as "green hydrogen" is commercially available. This is expected by the end of the decade. Our industry has a massive energy consumption with huge CO₂ emissions. CHP plants provide very efficient and stable 24/7 power and process heat and offsetting some of today's natural gas consumption. The heat extracted can be used to produce steam and hot water, and even to provide cooling with absorption chillers based on natural refrigerants. These neither deplete the ozone layer nor contribute to global warming. Such a system for supplying electricity, heating and cooling is called combined cold, heat and power CCHP or trigeneration.

CCHP projects are very efficient if the heat is used for productive purposes, e.g., for heating in winter and cooling in summer by means of an absorption chiller. Or if refrigeration is needed all year round, for production and storage of food, processes, chemicals and medicines.

A CCHP plant significantly reduces energy consumption and CO₂ emissions! Operated with hydrogen produced without carbon, it is climate-neutral. Companies can already generate this from surplus electricity with their own electrolyser. It is therefore a proven transitional and future technology as well as a safe investment in decentralised energy supply. It increases the demand for green hydrogen and ends the discussion about surplus renewable energy. CHP is already economical and available today. Therefore, an appropriate motto could be:

"Who waits loses, who invests wins!"

A handwritten signature in black ink, appearing to read 'W. Stürzebecher', is positioned above the name of the CEO.

Dr. Wolfgang Stürzebecher
CEO

A handwritten signature in black ink, appearing to read 'C. Heyse', is positioned above the name of the CEO.

Christoph Heyse, B.Sc.
CEO

If you are interested in a solution for your company, we look forward to hearing from you.

www.akm-industrieanlagen.de

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