EUROPEAN HEAT PUMP SUMMIT
POWERED BY CHILLVENTA

CONGRESS + EXPO
NUREMBERG, 24–25.10.2017
Industrial | Commercial | Residential
Heating & Cooling | Components & Equipment

hp-summit.de
IEA HPT TP Annex (35 +) 48 : Commercial and Industrial Heat Pump Application

IZW e.V.
Information centre on heat pumps and refrigeration

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IEA HEAT PUMPING TECHNOLOGIES
Research, Development, Demonstration and Promotion of Heat Pumping Technology
Welcome to the IEA Technology Collaboration Programme on Heat Pumping Technologies, HPT TCP, and Heat Pump Centre, the central information activity of the programme.

– http://heatpumpingtechnologies.org

The goal is to accelerate the implementation of heat pumps and related heat pumping technologies, including air conditioning and refrigeration.
• HPT TCP is member of IEA International Energy Agency (IEA) and the programme was founded in 1978. We have been active in almost 40 years.

• There are 16 member countries: Austria, Belgium, Canada, Denmark, Finland, France, Italy, Germany, Japan, the Netherlands, Norway, South Korea, Sweden, Switzerland, United Kingdom and the United States.
Annexes = Projects
One of the main activities within the programme is to run collaborative research, development, demonstration and deployment projects. It is called annexes and they are conducted on a combination of cost sharing and task-sharing basis by the participating countries. One person/organization is appointed to manage the Annex, to be the Operating Agent of the Annex.
IEA HPP - IETS Annex 35/13: Application of Industrial Heat Pumps

- As a joint venture of the IEA Implementing Agreements Industrial Energy-related Technologies and Systems (IETS) and Heat Pump Programme (HPP)

- 9 IEA countries: A CDN D DK F JAP Korea NL S
  15 participating organizations

- Operating agent: IZW e.V. Germany

- Start date: 01\textsuperscript{st} May 2010   End date: 30\textsuperscript{th} April 2014

- Report: 31\textsuperscript{st} October 2014   689 pages
  39 R&D projects   115 applications
  85 publications of the participants


Background
IEA HPT TCP Annex 48: Industrial Heat Pumps, Second Phase

- IEA countries: A, CH, DK, F, JAP, UK
- Operating agent: IZW e.V., Germany
- Start date: 01st April 2016
- End date: 31st March 2019
Heat Source and Heat Sink in Industrial Heat Pumps

- Heat Source: Ground-Air-Water, Cooling Tower, Excess Waste Exhaust, Heat, Others
- Heat Sink: Condenser

European Heat Pump Summit 2017

Background
Outlook

• Main Goal of the HPT TCP-Annex 48 is to overcome difficulties and barriers for the market introduction of industrial heat pumps.
• Collected cases studies of industrial branches with a large potential, should be analyzed
• Development of a web based information platform for heat pumps in industrial and commercial application
• Creating information material for IHP (training) courses
• The IHP potential for more efficient use of energy and reduction of greenhouse gas emission should be prepared for policy makers
European Heat Pump Summit 2017

Presentations


• [4] Austria: Industrial heat pumps in Austria - Applications and Research

• [5] Switzerland: Methods for estimating heat pump potential in industrial processes
Presentations


• [8] Denmark: Higher Heat Pump COP through better temperature match
Presentations

• [9] Industrial Heat Pumps in India - Unlocking the potential

• [14] Heat Pumps in District heating and Cooling Systems

• [16] Heat Pump Integration with Zeotropic Working Fluid Mixtures
Many thanks for your kind attention

Herzlichen Dank für Ihre freundliche Aufmerksamkeit