Piston compressor based steam production

Accelerating the industrial decarbonisation with the REPower EU: Heat pump and paper industries' networking event, Brussels

Andreas Mück
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Case 1
(direct low pressure steam)

Felix Schoeller, production side Weißenborn

Water-glycol circuit

45°C
537 kW
40°C

840 kW (~ 1300 kg/h)
Steam at 2.2 bar absolut

Condensate

321 kW electrical

Butane COP ~ 2.6

Heat Source availability: ~ 3.000 h/a
~ 2.520 MWh thermal savings, ~ 3.900 t steam per year
need for ~ 963 MWh electricity

All data is provisional and will be continuously updated

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Case 2 (+MVR, main line support)

Felix Schoeller, production side Weißenborn

- Heat Source availability: ~ 3.000 h/a
  ~ 2.880 MWh thermal savings, ~ 4.600 t steam per year
  need for ~ 1.371 MWh electricity

All data is provisional and will be continuously updated
Thank you!

Andreas Mück
Managing Director SPH Sustainable Process Heat GmbH
Andreas.Mueck@spheat.de