

Machinery
CO₂ Liquid Pump

Super Critical CO₂ Characteristics and Pump Selection



CO₂ Compressibility
Low Viscosity

Rotordynamic
low damping effect

New Impeller Family
density variation up to 25%

Acoustic Resonance
different fluid characteristics

Performance Assessment
validation for liquid and critical CO₂

Benefits

Speed and rotor stability

Maximized Pump Delta P

Wet and Dry seals available

Water vs CO₂ correlation laws

Customer Value

Efficiency and footprint

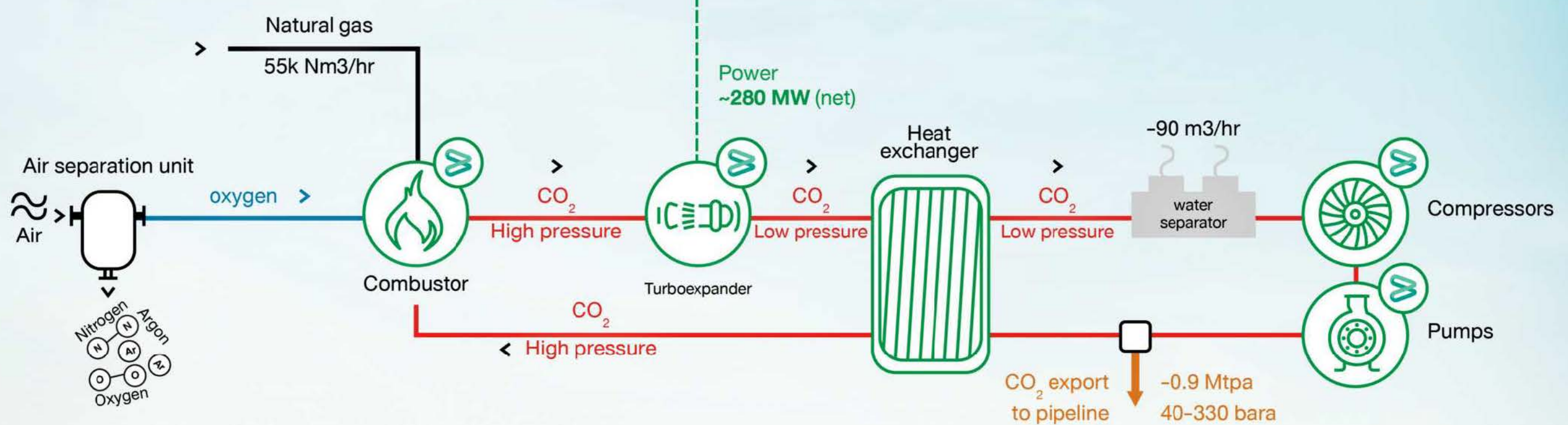
Optimized seal technology selection

Accuracy of the performance prediction

System

NET Power Technology

How its Work



- Traditional plants burn nature gas in air, producing diluted CO₂ and NO_x, which make CO₂ separation expensive and efficiency-robbing.
- NET Power plants use **oxy-fuel combustion**, combusting pure O₂ with methane, and continuously recycle a stream of CO₂ in a loop.
- By eliminating the N₂ NET Power platform makes **CO₂ separation as easy as simply spilling it** already at high pressure and high purity, ready for transportation and storage.
- In addition, an intimate heat integration network reduces waste and increases all-in ISO **efficiency above 50%.**

Machinery

CO₂ Gas Compressor

Modular integration CO₂ system for easier installation & operation



UNIQUE BH CAPABILITY Advantages & Compressor only

- 10% Less Power
- Operational Flexibility
- Common Controls & Auxiliaries
- Reduced CAPEX/OPEX
- Smaller Footprint

