

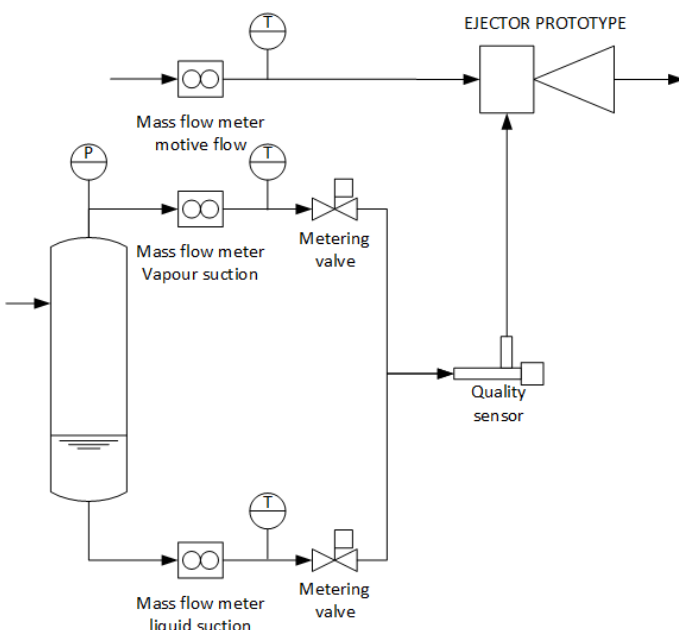
JetTest-Rack

CO₂ compressor rack to characterize ejectors that will help push-away the so-called CO₂-equator

JetTest-Rack is an experimental setup based on a CO₂ compressor rack (picture in the right), which is fully instrumented to accurately characterize prototypes or off-the-shelf ejectors. This setup was successfully utilized for the development of ejector designs that are currently on the market, and was recently upgraded within the HighEFFLab infrastructure project to improve its capabilities and provide more possibilities to industrial costumers or research projects.

Main **features** of JetTest-Rack:

- 3 x reciprocating compressors equipped with variable speed drives that adjust the ejector suction and discharge pressure levels.
- Maximum cooling capacity at design point of 50 kW.
- Brazed plate gas coolers connected to auxiliary loops to regulate ejector motive flow temperature.
- Brazed plate evaporator and connection to auxiliary loop to adjust cooling demand.
- Ejector and/or high pressure valve to control the ejector motive pressure up to 100 bar.
- Extensive instrumentation to characterize ejector performance.



The **latest upgrades** in JetTest-Rack include:

- New Coriolis mass flow meters for accurate measurement of the ejector streams.
- PT1000 temperature sensors and absolute pressure transducers.
- Precise control on the suction flow quality with active mixing of liquid and vapour from separator and vapour quality sensor.

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