

Vapor-liquid-equilibrium Apparatus VLE-602, Fischer

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Principle of Measurement

- The composition of vapor and liquid is determined using the dynamic method, e.g. samples are taken from the circulating vapor and liquid phase
- Normally under isobaric conditions the composition is varied, samples are taken and the boiling temperature is measured. This enables:
 - Representation of VLE behaviour in T-xy-diagramms
 - Determination of the separation factor
 - Regression of NRTL parameters



Equipment and Conditions

- Glas apparatus for measurement in vacuum, 1...1000 mbar
- Mixing chamber for wide boiling mixtures and immersion heater, 350 W
- Measurement and visualization of temperature and pressure
- Resolution: $T \pm 0.01$ K, $p \pm 0.1$ mbar
- PID controller for automatic and exact setting of pressure

Experiences

- VLE of water/ethanol at ambient pressure

