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### Conventional way of compression

- 5 compressor stages
- Corrosion due to decompression in packing and sealing elements (stage 4 + 5)
- Increase on electrical power demand and stages due to high suction temperature
- 3 MW shaft power

### Combined way of compression

- 3 compressor stages + triplex diaphragm pump
- Subcooling to liquid phase
- 2.5 MW shaft power

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**Advantages**

- Electrical power saving ~15%
- Flexible operation
  - Part load
  - Energy efficiency in part load
  - Gas composition
  - Discharge pressure
- Combined solution offered in cooperation by Burckhardt Compression and LEWA

**Limitations**

- Mass flow ≤ 150 t/h
- Suction pressure: ≥ ambient pressure
- Discharge pressure: ≤ 500 bar
- Cooling requirement depending on mixture (~25°C pure CO₂)