

Typical Ejector control options

It is not uncommon for the flow rate of flare gas to vary and, if not controlled, the suction pressure created by the Gas Ejector will also vary.

In order to maintain the desired flare gas operating pressure, a number of control strategies are available.

These include:-

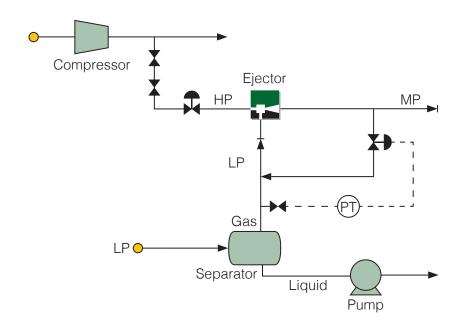
- Recycling of gas from the discharge side of the Gas Ejector back into the suction (low pressure) side
- Incorporation of an integral HP gas regulating valve which varies the motive fluid consumed.



Flare Gas Ejector (complete with motive gas regulation) to recover condensate off-gas, for Conoco-Phillips, Indonesia



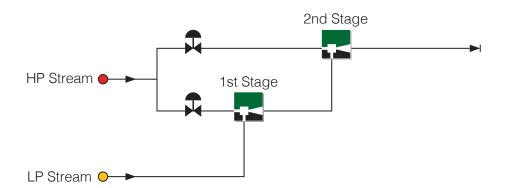
Super Duplex Flare Gas Ejector for Cairn, Offshore India





Multi-Ejector Solutions

If the required compressions ratio (discharge pressure / LP pressure) is too high to achieve in a single Ejector, then they can be connected in series to achieve the required discharge pressure. The total flow from the first stage Ejector becomes the LP flow for the 2nd stage Ejector. The consideration with this approach, however, is that the second Ejector may require a higher motive pressure or flow rate.



Where high turndown is expected on the LP (flare gas) flow rate, Ejectors can be placed in parallel. This allows switching one Ejector on or off, depending on the duty demand, thereby allowing motive gas to be saved. This is important in some applications, particularly where HP fluid usage has an associated cost. In some applications, more than two Ejectors have been used in parallel.

