



Oxygen

Oxygen service requires special cleaning processes during manufacturing of the compression equipment. Ariel does not provide compression for oxygen service.

Oxygen in a hydrocarbon based gas stream can be a concern for combustion. Ariel limits the oxygen content in a hydrocarbon service to 5% to ensure the lower explosion limit is not reached.

Oxygen can be introduced into the gas stream when suction pressures are near or below atmospheric pressure. When considering suction pressures near atmospheric pressure, an oxygen sensor downstream of the first stage of compression is recommended. Oxygen content will be limited by either the 5% listed above, or the limits by the gas composition requirements by the client, whichever is lower.

In inert gas based compositions, such as nitrogen, oxygen content will impact the auto ignition temperature and pressure for the lubricating oil. Any composition of inert gas and oxygen above the oxygen content of air (21% oxygen) should be reviewed for auto ignition temperature and pressure, and lubricating oil selection.