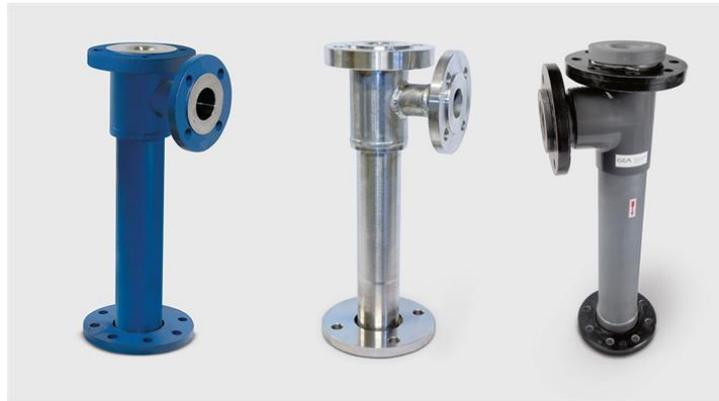


Liquid Jet Gas Compressor

Using a liquid as motive medium, liquid jet gas compressors compress gases or vapors with large pressure differences and simultaneous intensive mixing of the liquid itself. They operate on the ejector principle.



Advantages

- Simple and reliable
- Corrosion and erosion resistant
- Automatic control
- Easy to install
- Low cost
- Wide range of materials such as steel, stainless steel, cast iron, bronze, Teflon and graphite

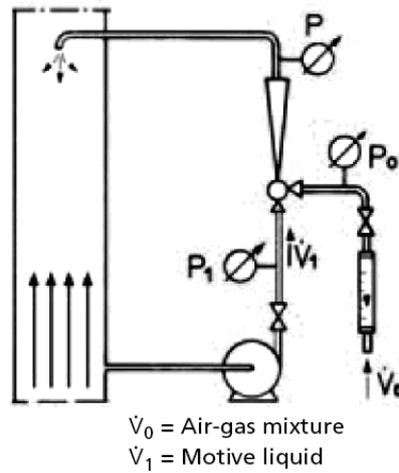
Applications

Liquid jet compressors have numerous applications in many industries and processes such as

- Foodstuffs industry
- Treating drinking water
- Chemical industry
- Biological sewage treatment
- Flotation
- Lake rehabilitation

Specific applications are

- Hydrogenation of edible oils.
- De-acidification of hard water.
- De-nitrification of drinking water with H₂ gas.
- Aeration/nitrification of Waste water
- Activated sludge process.
- Deep water aeration



Schematic diagram of a unit for adding ozone in a drinking water treatment plant

Range of Operation

- Compression of gases or vapors with large pressure differences
- Simultaneous mixing
- High gas/liquid mass transfer rate

Performance graph

The diagram below shows the ratio of the gas volume to the required fluid volume in terms of the suction and discharge pressure difference (vertical axis) and the difference between the driving fluid pressure and the suction pressure (curved lines).

