

## Liquid Jet Compressors

Transvac has been supplying Liquid Jet Compressors to the water, effluent, oil & gas and process industries for 45 years. Liquid Jet Compressors (LJCs) utilise a high pressure liquid stream to entrain and mix a gas or air.

In operation a high velocity jet of pressurised liquid discharged from the motive nozzle produces a region of low pressure in the suction chamber to entrain the secondary gas. The two streams then thoroughly mix in the throat before the resulting mixture flows through the diverging cone to regain pressure in order to overcome system discharge heads.

### Typical Applications

#### Water Treatment

- Entraining ozone or chlorine gas for disinfection of water used for swimming pools, cooling towers, bottling plants etc.
- Entraining atmospheric air to transfer oxygen to remove irons and manganese from borehole water.
- Entraining atmospheric air for filter backwashing / scouring of filter media

#### Oil & Gas

- Entraining vent or flare gas
- De-aeration of seawater
- Entraining header gas for oil / water separation

#### Effluent Treatment

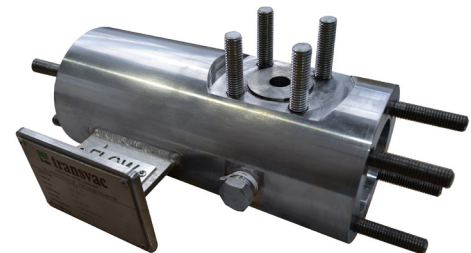
- Entraining atmospheric air to transfer oxygen for sewage treatment.
- Entraining atmospheric air to transfer oxygen for chemical oxidising.
- Entraining atmospheric air for aerating and mixing balance tanks.
- Entraining pressurised air for producing 'white water' on DAF (Dissolved Air Flotation) plants.

#### Process

- Entraining CO<sub>2</sub> for carbonating soft drinks.
- Simultaneous scrubbing and pumping of corrosive gases.
- Recycling and mixing off-gas with motive liquor to increase contact time and enhance the process reaction



LJC in carbon steel



Block body LJC



LJC in stainless steel



LJC in uPVC