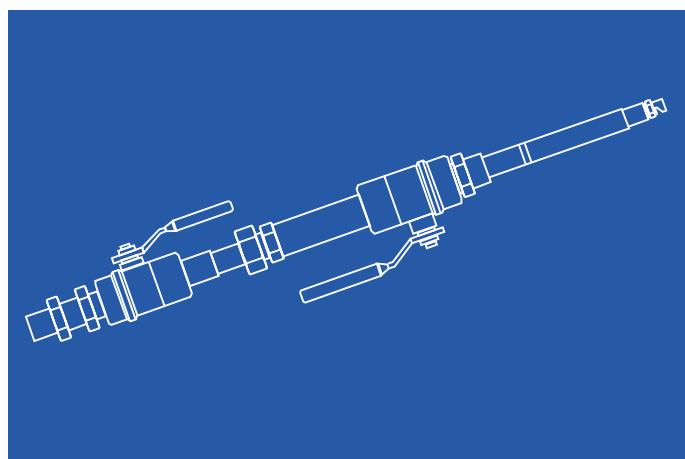


CO₂ INJECTOR-LANCE

- Space-saving design
- Resistant against blocking
- Easy installation and maintenance
- High efficiency



The Concept

An effective gas-injection device designed by Air Liquide the **CO₂ INJECTOR-LANCE** system is well suited for carbon dioxide (CO₂) dissolution in pipelines. With its pressure-driven design, it offers you continuous trouble-free operation.

A nozzle is mounted at its tail end to create pressure drops and generate small gas bubbles, after which the gas is dissolved into the water.

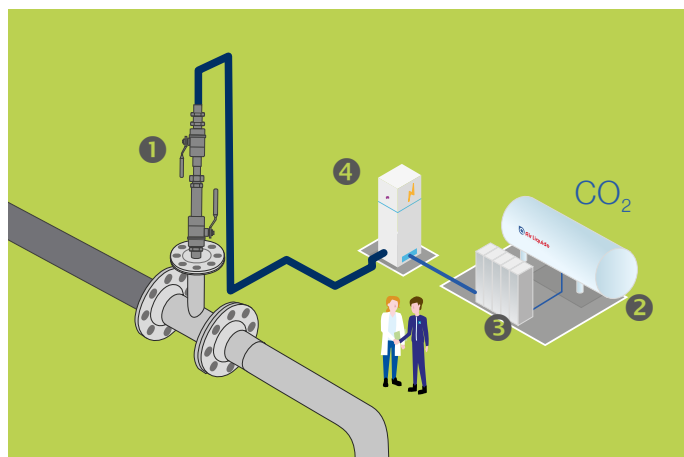
Applicable Industries

The **CO₂ INJECTOR-LANCE** is designed for pressurized streams of water. When controlling alkalinity is critical to your process or effluent quality, this technology is a most viable alternative to strong acids like sulfuric acid, which demand frequent component repair and replacement. Additionally, CO₂ is ecologically safe.

CO₂ INJECTOR-LANCE is ideally adapted to many industries:

- Food and Beverage
- Pharmaceutical
- Petrochemicals and Chemicals
- Pulp and Paper
- Textile
- Municipal water stations
- Desalination plants
- And various others

Special Features



A **CO₂ INJECTOR-LANCE** (1) is typically part of the following installation:

- A liquid-CO₂ storage tank (2) with filling/withdrawal lines and necessary instrumentation for safe operation.
- A vaporizer (3) or vapour heater to vaporize the liquid CO₂ to gaseous state.
- A **GAS CONTROL CABINET** (4) mounted in the gas pipeline after vaporization to feed the **CO₂ INJECTOR-LANCE** with the proper amount of gas at the appropriated pressure.

A ball valve already placed into a pipe (e.g. for sampling or pumping out) is suitable to install a **CO₂ INJECTOR-LANCE** without stopping the water stream.

It can be easily removed for cleaning without emptying the pipe, and equipped with multiple nozzle sizes depending on process requirements.

Our experts supervise the dimensioning, installation and commissioning of **CO₂ INJECTOR-LANCE** with a special focus on gas-transfer efficiency. They can support you with overall process optimization including safety features like CO₂ gas leakage detector.

Technical Data

A **CO₂ INJECTOR-LANCE** is typically suitable for gas flow rates from 1 m³/h to 30 m³/h and large pipelines (> 1.2 m diameter).

We offer a special nozzle to optimize bubble sizes and direct the flow. The whole system design is based on:

- Gas flow and pressure
- Desired scattering angle
- Orifice diameter
- Socket length and diameter

It's available in minimum size DN20

Related Offer

The **CO₂ INJECTOR-LANCE** is part of our **Nexelia for pH Control** and **Nexelia for Remineralization** solutions, which are designed and tailored to meet your specific needs. These comprehensive offers combine the best of our gases, application technologies and expert support. As with all solutions under the **Nexelia** label, we work closely with you to pre-define a concrete set of results, and we commit to delivering them.

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