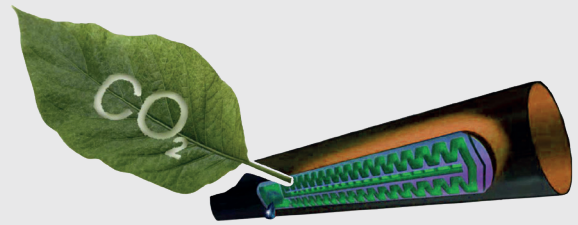


# Aries™ Dose-line CO<sub>2</sub> dosing line



The Netafim labyrinths have a high mutual accuracy and unique properties. As a result, the labyrinth is also very suitable for use in emission systems for gases. The Aries Dose-line emission line is an inline dripline from Netafim specially selected for use with gas CO<sub>2</sub>.

## APPLICATION

Central CO<sub>2</sub> supply, uniform distribution of gas CO<sub>2</sub>

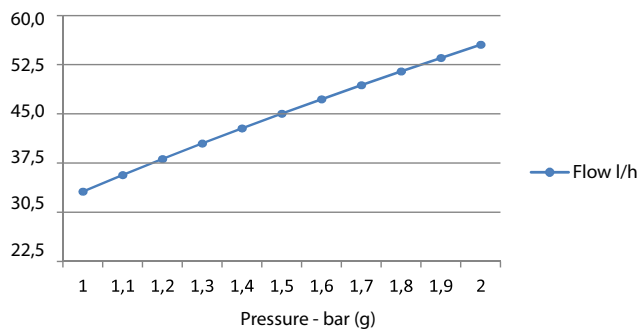
## CHARACTERISTICS

- ✓ Very uniform flow (emission) rate
- ✓ Thin emission lines and distribution lines
- ✓ Good meterability compared with conventional systems with bored pipe

## TECHNICAL DATA

Flow rate : dependent on the supply pressure, see chart below  
 Wall thickness : 1.0 mm  
 Emission interval : 100 / 150 / 200 cm

### Flow rate CO<sub>2</sub> (l/h) per emission point at defined (atmospheric) pressure



## Starting points

With the data below, Netafim can provide you with a recommendation for the appropriate emission point spacing for your situation:

- ✓ Desired emission standard (in kg CO<sub>2</sub>/h/ha)
- ✓ Number of emission lines per roof
- ✓ Number of roofs and length of the roof (m)
- ✓ Available supply pressure (bar), from 1 to 2 bar, 1,5 bar on average

## Calculation factors

With regard to the dosing standard, the following factors can be assumed during the calculation:

Pure CO<sub>2</sub>: 1 litre liquid CO<sub>2</sub> (at -20 °C) = 560 litres gaseous CO<sub>2</sub> (at 15 °C and 1 bar)

Boiler (natural gas) CO<sub>2</sub>: 1,825 kg CO<sub>2</sub> per m<sup>3</sup> natural gas, vice versa 555.6 litres of natural gas per kg CO<sub>2</sub>

Rule of thumb: 1 m<sup>3</sup> natural gas = 1 m<sup>3</sup> pure CO<sub>2</sub>, at 1 bar" (at 15 °C).

1 m<sup>3</sup> of natural gas for boiler heating corresponds to 15 m<sup>3</sup> of air/flue gas. So dosing standard of 1200 m<sup>3</sup>/ha/hour (flue gas) = the same as 80 m<sup>3</sup>/ha/hour (natural gas), for the sake of convenience it is the same 80 m<sup>3</sup>/ha/hour (pure) for pure CO<sub>2</sub>.

## INSTALLATION & MAINTENANCE

- ✓ The Aries Dose-line (formerly RevaDos-Plus) has a slightly different flow rate than its predecessor, the RevaDos. We therefore recommend that the lines are not installed together in the same section.
- ✓ The Aries Dose-line can be installed with barb connectors, Nutlock and compression joints. With compression joints, use an insert bush (Art. No. 77300-116483 for 16 mm dia.).