

# CO, 4U-System

### **General Information**

Nowadays, there is a very rapid development of technology. A technology is replaced even before equipment has been depreciated economically. That is why the demand for upgrading solutions and products is increasing. In recent years, much attention is paid to the purity of CO<sub>2</sub> gas, as currently CO<sub>2</sub> is often regarded as a critical ingredient. The purity requirements are "as pure as possible".

## CO, 4U-System

The CO<sub>2</sub> 4U - System provides very pure CO<sub>2</sub> for high - quality demands. The configuration of the CO<sub>2</sub> 4U System offers you a system that is:

Unique: in design, operation,

performance and efficiency

Universal: applicable at various kinds

of CO, plants

**Upgrading:** improving CO<sub>2</sub> quality

Unifying: being a compact plug-and-play

unit, easy to install and commission

## Principle of operation

The CO<sub>2</sub> 4U is fed with liquid CO<sub>2</sub> by means of gravity from the CO, condenser. The liquid CO<sub>2</sub> is collected in a buffer, and supplied to the stripper in a controlled way. Start and stop effects are avoided in this design. In the stripper, O<sub>2</sub> is separated from the liquid CO<sub>2</sub> by means of CO, stripping gas. The purified CO, is collected in the re-boiler. A CO, liquid pump transfers the CO, to the CO, storage tank. The system is energy neutral.

Beverage CO, Systems





## **Technical information**

## **Features**

Short stripper column,

Horizontal re-boiler which reduces total height,

Electrical heating element for correction purposes,

Buffer vessel for minimizing start/stop effects,

Completely piped and wired,

All necessary valves and controls for fully automatic operation,

Plug-and-play, skid-mounted.

#### **Advantages**

Improves CO<sub>2</sub> purity,
Reduces O<sub>2</sub> level,
Full automatic operation,
Low maintenance.

Energy neutral.

#### **Benefits**

Unique: in design, operation, performance and efficiency, Universal: applicable at various kinds of CO<sub>2</sub> plants,

Upgrading: improving CO<sub>2</sub> quality,

Unifying: being compact plug-and-play unit, easy to install and commission.

## Scope of supply

Stripper Re-boiler Buffer

Correction heating element

CO<sub>2</sub> pump

Control Panel

Valves and controls for fully automatic operation

All mounted, completely piped and wired on a base-frame

Insulation (optional)

Continuous automated purge gas controller for CO<sub>2</sub> condenser (optional)

### **Technical data**

 $CO_2$  at outlet > 99.998 % vol.  $O_2$  at outlet < 5 ppm vol.

Haffmans B.V. reserve the right to make changes in the technical specifications at any time.



## Haffmans B.V.

P.O. Box 3150 NL-5902 RD Venlo, The Netherlands **T**: (+31) (0)77 323 23 00 **F**: (+31) (0)77 323 23

E: info@haffmans.nl I: www.haffmans.nl



