Ideal for alcopops and sparkling wines, the GEA DICAR-C system has been specifically designed for the continuous high-accuracy carbonation of beverages.

In addition to the pressure tank, the Venturi principle-based saturator comprises an essential component of the system. With the aid of a booster pump, the ready mixed beverage is conveyed to the saturator.

Maintaining a constant flow rate ensures that the pressure within the saturator is kept within narrow tolerances, thus producing the required amount of suction to introduce carbon dioxide (CO2) into the feeding area.

The accurate distribution of CO2 gas into the beverage ensures rapid saturation and produces the desired “fine sparkling” effect. As the CO2 is supplied straight from the pressure tank, the constant overpressure guarantees uniform carbonation.

This procedure enables the loss-free use of CO2 in a continuous operation. The quality of the carbonation depends on a combination of the temperature, which influences the saturating pressure, and the specific features of the product. Set parameters can be stored in product-specific recipes to obtain the required CO2 levels.

Each system is designed to meet the filling capacity needs of the individual application. The DICAR-C can be combined with any type of currently available filling machine. An optional high-precision in-line analyzer to measure product criteria can also be supplied.
DICAR-C
Carbonation system for soft drinks

Features
- Continuous carbonation up to 10 g of CO2 per liter of product
- In-line measurement of product CO2 content (optional)
- Product-specific control of the CO2 content
- Efficient CO2 dissolution
- No loss of CO2 in a continuous operation
- Easy to operate
- Compact factory tested unit
- Compatible with in-line blending (DICON), water deaeration (DIOX) and continuous mixer (DIMIX-C) technology

Technical Data

<table>
<thead>
<tr>
<th>Capacity (l/h)</th>
<th>Nominal width DN (mm)</th>
<th>Length (mm)</th>
<th>Width (mm)</th>
<th>Height (mm)</th>
<th>Electrical power (kW)</th>
<th>Approx. max. weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10,000</td>
<td>50</td>
<td>2,300</td>
<td>1,600</td>
<td>3,850</td>
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<td>80</td>
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<td>4,450</td>
<td>23</td>
<td>2,000</td>
</tr>
</tbody>
</table>

Other flow rates possible on request.

Options
1. Product cooler
2. CO2 measurement
3. Brix measurement
4. O2 measurement
5. Conductivity measurement
6. Booster pump
7. Aseptic design (on request)

Materials
1.4301/EPDM, other materials on request

Product
Soft drinks of a maximum particle size of 0.5 mm and a maximum viscosity of 10 mPas

Carbonation
10 g/l or 5 l/l maximum (at a CO2 content of 0 g/l and a maximum oxygen content of 0.5 mg/l in the beverage at the inlet of the system)

CO2 quality ≥ 99.99 % purity

Control air 6 - 8 bar

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