

## MARKETING INFORMATION

Applications in the FOOD sector

*Beverages Department***CARBONATED, SUGARED OR LIGHT BEVERAGES**

In carbonated beverage production plants, the chemical-physical analysis carried out by continuous "ON LINE" analyzers are aimed at automatic regulation of the parameters analyzed.

In the last few years, we have developed different "ON LINE" analyzers that concern different points of the production processes of the carbonated beverages sector, both sweetened with sugar and light or diet.

A carbonated beverages production plant can be represented as shown in the figure below.

**PROCESSES INVOLVED:*****Treatment of water***

The automatic **AT-02** titrator is used for the control and dosing of the softening and chlorination product.

The analyses currently inserted are:

**pH, alkalinity (2P-M), hardness and residual chlorine.**

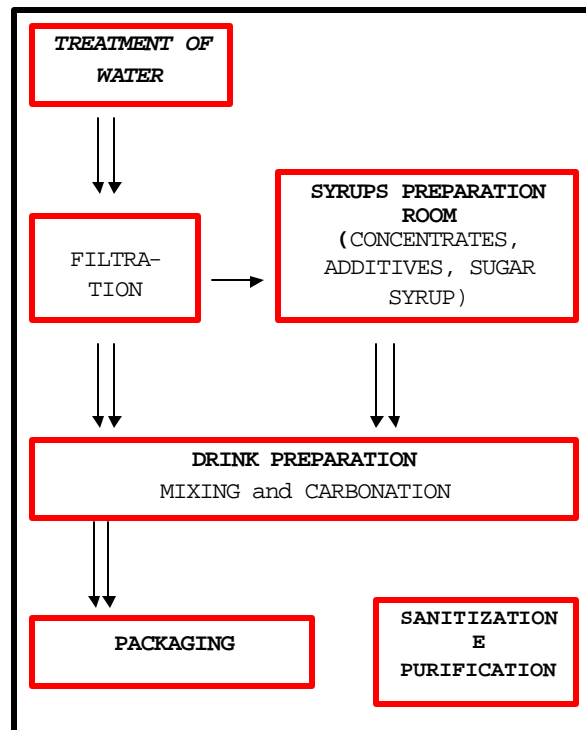
***Syrups preparation room***

In automatic regulation of the continuous dissolution of sugar and in the preparation of the "concentrate", to measure the **brix degree**, the **UR20** refractometer is used.

***Drink preparation plant***

The **BAS-01** system is used to control the mixing of the ingredients in the preparation:

- the **IB-04 analyzer**, to measure the **brix**, degree and the **% light** and **V/V of CO<sub>2</sub>**
- the **automatic regulation** system, for dosing of the concentrated syrup and the CO<sub>2</sub>
- the remote control and data acquisition systems called **MULTILAB** and **DATAMAS**.

***Sanitization plant and purification plant***

- to measure the % of soda in the sanitizer and rinse water: the mod. **RM-00** conductivity and pH transmitter indicator receiver, with automatic calibration of sensors by means of automatic recognition of standard solutions;

**measuring the conductivity (mS):** multi-electrode probe, antifouling, suitable for operating at a temperature of 120 °C and pressure of 6 bar.

**Measuring the pH:** pneumatically removable probe holder, combined electrode, programmer for measuring and washing phases.

- In the separation of the wastes that contain high sugary residues, a **monobloc refractometer system** is used, that handles the deviation of the flows towards drainage, to optimize the purification phases.