# **Beverage Industry**

## Carbo-Coolers & Carbo-Mixing Flow Meters and Controls

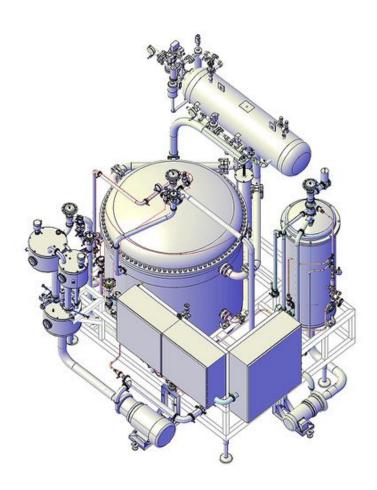




#### Beverages- How it's made....

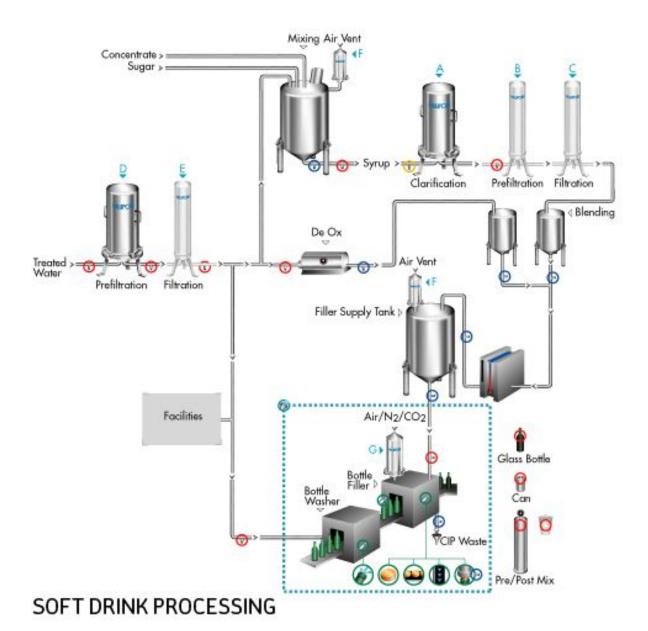
Beverage production processes requires a precision monitoring system to ensure accurate mixing and blending of proprietary ingredients. This process includes water, syrup and Air / N2 / CO2 to complete the blending process.

- The first step in the production process is to treat the water which goes through a two step filtration process and then deoxygenated process.
- Concentrate and sugar go into a reservoir tank creating syrup which then goes through a clarification and filtration process.
- Water purity is an important process in soft drink preparation along with proprietary ingredient. Automated monitoring systems plays an important role in the production process.
- The purified water and syrup concentrate merge into a filler tank. CO2 is injected into the blend and bottled as it moves down a conveyer belt prior to packaging.



3D Cad Drawing of a Carbo-Cooler Equipment

### **Basic Blending and Mixing Diagram**



#### **Metering and Flow Control**

Flow meters play an important roll in improving process yields. Many of the leading soft drink manufacturers use the RCM flow meter to meet the demanding requirements of the blending process. RCM has been supplying flow measurement product in the beverage industry for many years. The series 7000 flow meter offers minimal installation cost and reduced maintenance.



Sodium hydroxide is used to wash down the equipment, RCM flow meters are constructed of a durable super ABS material that can stand up to the harsh chemicals used to clean the equipment. Aluminum enclosures that are powder coated do not stand up to these chemicals. Our flow meters have a NEMA 4X rating which protects the flow meters in a variety of conditions. Quick and easy access to the dial can be made with just a twist of the lens. The wetted parts of the flow meter are constructed of 316 stainless steel.

Automating the entire blending process makes the RCM flow meter the right choice when installation cost, low maintenance and reliability are important factors.

RCM flow meters can be fitted with a digital display which provides a flow rate and totalization that allows monitoring from a remote location. Soft drink manufacturers use the RCM flow meter on critical equipment throughout the manufacturing process.