



PROMIX

CONTINUOUS BEVERAGE BLANDING AND CARBONATION UNIT



WORKING PRINCIPLE:

PROMIX is a continuous mixing unit for the automatic production of carbonated and non-carbonated beverages.

The system is based on stage of Water degassing, by vacuum pump, combined with the latest technologies of mixing and carbonation field. Static and dynamic mixer guarantees high quality standards of the final product

Free-foam filling is guaranteed by water deaeration.

The system processes 3 components (Syrup, Water & Co2) that are dosed by a high-precision flow meter. The different ingredients are mixed on line and at the end stored in a final buffer tank. The buffer tank is designed, manufactured and tested according to applicable provisions of the PED Code

(standard). All components are assembled and pre-piped at the factory.

The system consists of:

- Water deaeration unit under high vacuum atmosphere;
- Water dosage unit using magnetic flowmeter;
- Characteristic syrup buffering tank;
- Characteristic syrup dosage unit using magnetic flowmeter;
- Carbon dioxide dosage unit

using mass flowmeter.

- Finished drink buffer tank.

APPLICATIONS:

Production of Carbonated Soft Drinks, Carbonated water & Fruit juice Drinks

OUTPUT RANGE:

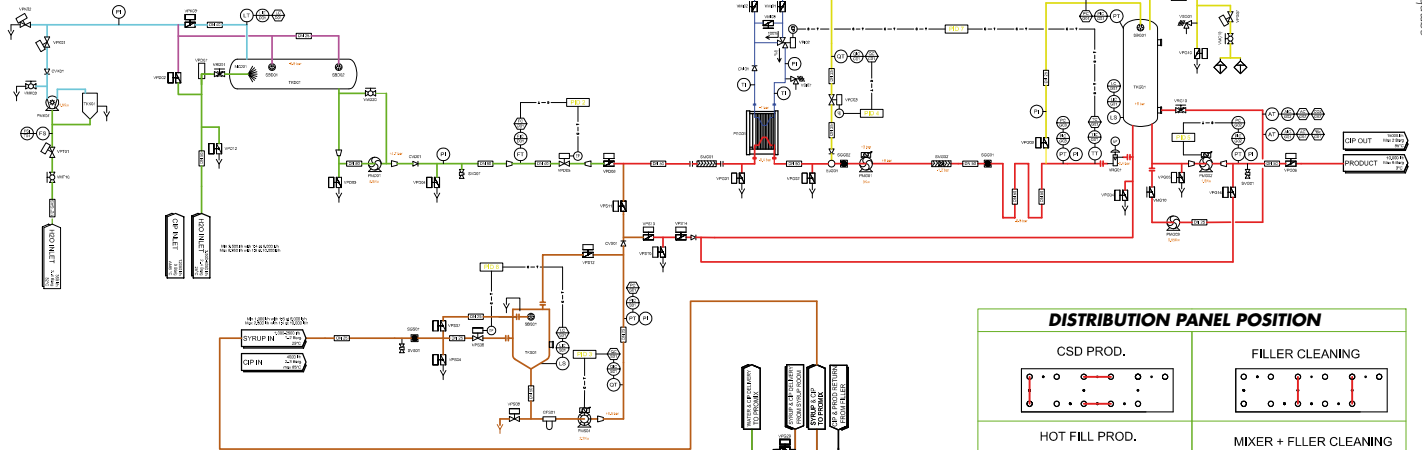
Various models are available from 2.500 up to 40.000 lt/h.

PROMIX

www.matrix-srl.com

CONTINUOUS BEVERAGE BLANDING AND CARBONATION UNIT

P&I Promix ADS



DESIGN FEATURES:

- All components mounted on a rigid, stainless-steel base plate;
- PLC controlled adjustment of the mixing ratio;
- Advanced flowmeter system for blending and carbonation;
- Complete product recipe management;
- Frequency-controlled pumps;
- All parts contacting product or gas are made of stainless steel Aisi 304 or higher grade;
- Cleaning in the closed circuit via CIP;
- Spray Balls into filler tank for optimal cleaning and fast product change-over;
- Vacuum pump with water saving system that can be cleaned during CIP;
- Easy & intuitive touch-screen operation.

MODELS:

- PROMIX DS (Deaeration and Storage)**
Standard Solution with magnetic flow meter on water and Syrup and mass flow meter on CO₂.
- PROMIX ADS (Automatic, Deaeration and Storage)**
High Performance Solution with MASS flow meter on Syrup, magnetic flow meter on water and mass flow meter on CO₂. The solution ADS guarantees high CO₂ Accuracy and full automatic synchronization with Filler and CIP.
- USER BENEFITS:**
- Starting the mixer without syrup loss.
 - Product flow control by means of level regulation in the buffer tank.
 - Flexibility change over of different product is done quickly, easily and it is reproducible by working recipes stored on PLC.
 - Easy maintenance. The machine

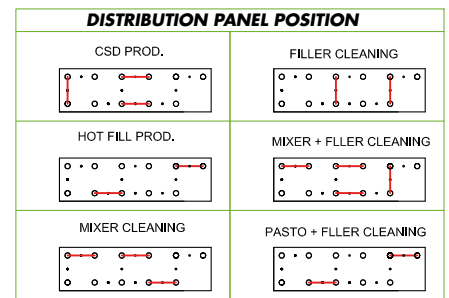
is well accessible so that all maintenance and service job can be done easily.

- **Product Quality.** Low oxygen pick up ensures high product quality during the S.L.
- **Reduced gas consumption** through flow control according to the level in the buffer tank.

ADDITIONAL EQUIPMENT:

- Completely automated rapid product changeover;
- PHE Plate heat exchanger for product cooling with chilled water;
- Monitoring and adjustment of the °Brix and the CO₂ volumes in the

- product;
- Automatic correction of the end product °Brix stored in the buffer tank;
- Product Distribution panel for CIP & PRODUCTION;
- Double deaeration in one tank;
- Energy saving insulation of the final buffer tank for cold filling;
- Product contact part made of AISI 316;
- Brix monitoring at the syrup infeed;
- Connection to flash pasteurizer;
- Special mixing ratios.
- **MODEM.** Upon request, remote maintenance possibility.



Model	MIN*** flow rate (lt/h)	MAX flow rate (lt/h)	MAX RATIO** Water-Syrup	MIN RATIO Water-Syrup	Carbonation Range (gr./lt)	CO ₂ Accuracy* for DS version (gr./lt)	CO ₂ Accuracy* for ADS version (gr./lt)	Brix Accuracy* for DS version (°Bx)	Brix Accuracy* for ADS version (°Bx)
PROMIX 4	2.500	4.500	1:6	1:3	Min. 3 Max. 9	+/- 0,15	+/- 0,1	+/- 0,15	+/- 0,05
PROMIX 6	3.000	6.000							
PROMIX 10	5.000	10.000							
PROMIX 12	6.000	12.000							
PROMIX 15	7.500	15.000							
PROMIX 20	10.000	20.000							
PROMIX 25	12.500	25.000							
PROMIX 30	15.000	30.000							
PROMIX 35	17.500	35.000							
PROMIX 40	20.000	40.000							

* During steady state conditions only for sugar based CSD - ** Other ratios possible upon request - *** Other rangeability possible upon request



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