

Automatic

SPARKLING / CARBONATED EQUIPMENTS



25 YEARS
OF COMPLETE LINE SOLUTION

SEPPA Solution Private Limited., is one of the Leading manufactured in Soda Processing Equipments. SEPPA incorporate the state of art technology in design engineering of the systems being manufactured.

Soda Process

The purified drinking water from the water treatment system is sent to the water chilling system. The chiller consist of PHE where glycol circulates at -2°C to -8°C temperature. The purified water at ambient temperature of 28°C to 35°C passes through PHE and comes out at 2°C to 4°C. This is done to achieve CO₂gas and water meshing. The cold water is then taken to carbonator storage tank which consist of a high level and low level switch. The low level switch ensures protection to the carbonator high pressure pump from running dry. The carbonator is provided with CO₂gas from a CO₂Cylinder. The carbonator system reduces the CO₂gas pressure in the cylinder to 9.5 kg/cm² by means of a jumbo regulator. Prior to the gas passing to the jumbo regulator the CO₂gas which is at -10°C to -32°C in the cylinder is heated by immersed copper tubes in a hot water bath. The temperature of CO₂gas is brought to 2°C to 4°C. The gas after passing through jumbo regulator is injected into the carbonator ventury system after once again passing through a stainless steel, gas volume regulator. The gas volume regulator determines the strength of the soda in the final product. General gas volume for pet soda is set at 4.2 to 4.8 to a maximum of 5 gas volume. The glass bottles can be filled with soda even as high as 5.5 gas volume. The high pressure pump of the carbonator pumps the water through the injection system i.e.,Ventury to the carbonator diffusion tank. During this process CO₂gas mixes along with the water and enters the diffusion chamber. In the diffusion chamber plate diffusers are used to achieve total dissolution of CO₂gas into water forming soda. A counter pressure system is provided in diffusion chamber to ensure dissolved gas is not released from the water. The diffusion chamber has a high level low level control system which starts the high pressure pump as well as CO₂gas supply as and when needed. The soda stored in the diffusion tank can automatically raise and be transferred to the filling machine tank. All liquid transfers after soda production are done by umbrella effect to ensure minimum agitation to the liquid. This ensures required gas volume in final packaged container. Example Pet or Glass.

The filling machine for soda is a specialized system working with counter pressure filling methodology. The counter pressure valve in filling machine is critical to the Quality of Soda packed. The Machine exclusively designed for Carbonated Liquids only.

Optional Features :-

- a.) Shrink Labeler is provided on the output conveyor.
- b.) Ozone Jets to disinfect caps.

Equipment Overview

Description	250 LPH	500 LPH
Chiller	5 TR	10 TR
Carbonator Pump	250 LPH	500 LPH
Heater for Carbonator	0 - 90°C	0 - 90°C
Soda Filling Machine	6 - 10 Bottle Per Minute	20 - 30 Bottle Per Minute
Shrink Tunnel	Optional	Optional
Power (HP)	27	31.5

* Plant capacity from 1000 to 20000 LPH available on request

SEPPA SOLUTIONS PRIVATE LIMITED

No. 149, Poonamallee High Road, Kilpauk, Chennai - 600 010, India.

Ph : +91-44-2836 9900 - 71, Fax : +91- 44 - 2836 2470, Toll Free : 1800 425 20000

E-mail : info@seppasolutions.com, Web: www.seppasolutions.com