

Semi - Auto PET

Stretch Blow Moulding Equipment



 $25_{\,\text{Years}}$ of Complete Line Solution

[SEMI- AUTO PET BLOWING]

SEPPA has conceptualized the most innovative concepts to produce affordable low cost PET Blowing Machine for small and medium speed production.

SEPPA's focus is on sustainable production of the PET bottle creating solutions for enhancing productivity, low investment and bottle cost.

SEPPA designs are driven towards maximum uptime and reduced cost of production.

System Overview

SEPPA produces a complete range of Semi-auto PET Blowing machines to produce PET bottles from 0.1ml to 20 liters. The series are broken up into SSB 05A, B and C. apart from this the latest most optimized auto drop system with options of preform unscrambler and auto preform loader to the heating system is incorporated in the SSB D series.

The SSB -05 and SSB 20C series needed more human involvement in the process of producing PET bottles. The SSB – D series had reduced the human involvement or dependency by 90%. This has increased production speed optimized efficiency and reduced production cost.

Preform loading and heating system

The SSB 05 and SSB 20C series has a infra red heating system which needs the operator to load and unload performs on and from the preform holder or mantel.

The SSB –D series does not need loading of performs as the loading is done automatically by a preform unscrambler. Its only once in couple of hours that performs has to be filled into the preform hopper. The unloading of performs is done by the operator.

Preform loading onto mould

In the SSB 05 and SSB 20C series performs have to be loaded by the operator into the mould neck area. This is strenuous and time consuming compare to the SSB – D series which requires the operator to drop the preform into preform carriers or neck slots. The pneumatically operated neck slot or preform carrier transfer the preform into the mould and come back during blowing cycle to be replenished, there by saving valuable cycle time.

The preform discharge track as well as the preform loading carriers is designed in such a way they are in the same level so as to support easy and comfortable working for the operator.



Preform blowing and discharge

In the SSB 05 and SSB 20C series the operator needs to press a button to activate the mould close and blowing cycle once the bottles are blown the operator needs to remove the bottle form the mould manually.

The SSB –D series the operator needs only to drop the performs into the preform carrier. A sensor senses the perform and starts the loading and mould closing and blowing cycle. Once the bottle is produced the mould opens automatically and ejects the bottle below into a exit channel where bottles can be collected in a box or bag.

Multipurpose Infra Red Heater

Six to Eight Horizontally and angularly adjustable infra red lamps can be fine-tuned to allow a more uniform heating of any type of preforms before blowing. Preheating is achieved by lamps and the system automatically adjusts to changes in the ambient temperature.

An oven with ten lamps (optional permits the heating of thicker preforms.

An oven with 24 lamps permits the heating of 20 liter bottle preform.

Alternative Raw Materials

Blow more than PET on SEPPA Smart Blow TM machines

To be competitive, you have to offer more than containers of ordinary PET.

Some packaging solutions are more cost competitive in polypropylene (PP). Others are better in polylactic acid (PLA). And some products require the high oxygen resistance of certain mono- and multi-layer barrier resin preforms.

Applications

- Water and milk bottles (PP + PLA)
- Hot-fill fruit juice bottles (PP)
- Compostable bottles (PLA)
- Beer (Barrier PET)



The Control Cabinet

The control cabinet is equipped with a PLC (Programable Logic Controller) with a HMI and Graphic Visualization. The PLC allows easy programming and Multiple parameter entry for all prefroms, bottle shapes and size. A in built auto correction system and error status indicator is also provided.

Advantages Of Flexible System

- A System of small modular units has many advantages over large machine.
- You can begin small with the minimum investment.
- As business grows, additional units can be acquired.
- Production volume can easily and economically be adjusted to market fluctuations.
- Bottles of different sizes and weights can be produced simultaneously on different units.
- Change- over from one production to another can be rapidly effected.
- The SEPPA PET blowing system is well known for its simplicity, compactness, reliability and flexibility according to international standards.
- A simple system to operate means short training for operators.
- As the machine requires very little maintenance, costs related to non operating machines are negligible.

Equipment Overview

PET model	Output bottle per hour	Max. bottle/*jar volume	Power (kw)	Blowing Heads (No's)	Compressor Power (HP)	Air Pressure (bar)
SSB-05A	600 - 800	100ml - 1500ml	6	2	15	7 - 20
SSB-05B	600 - 800	100ml - 2000ml	6	2	15	7 - 20
SSB-05C	300 - 500	2.5 Ltrs - 6 Ltrs	6 - 9	1	20	7 - 24
SSB-20C	60 - 90	10Ltrs - 25Ltrs	12 - 24	1	25	7 - 30
	300 - 400	3Ltrs - 6Ltrs	12 - 24	2	20	7 - 12
SSB- 2D	1000 - 1400	100ml - 2000ml	6 - 9	2	20	7 - 20
SSB-2D(AL)	1000 - 1400	100ml - 2000ml	6 - 9	2	20	7 - 20
SSB-4D	2000 - 2800	100ml - 2000ml	12 - 15	4	25	7 - 30
SSB-4D(AL)	2000 - 2800	100ml - 2000ml	12 - 18	4	25	7 - 30

Note:-

- Output Bottles / Hour production is theoretical and will vary with size, shape, design, volume and preform grammage.
- AL With Preform Unscrambler and Auto loader
- Due to Continuous improvements, specifications are subject to change without notice.

LOW INVESTMENT **MAXIMIZED** PRODUCTION SPEED **MULTIPLE PRODUCTS**



SEPPA SOLUTIONS PRIVATE LIMTED

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.company Website: www.seppasolutions.com







(f) (iii) (i