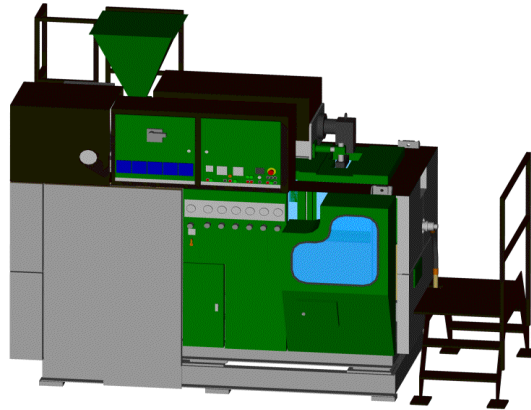


SR 2



Rotative blowing for large mass production of packagings from 0,1 L to 2 L

SR 2



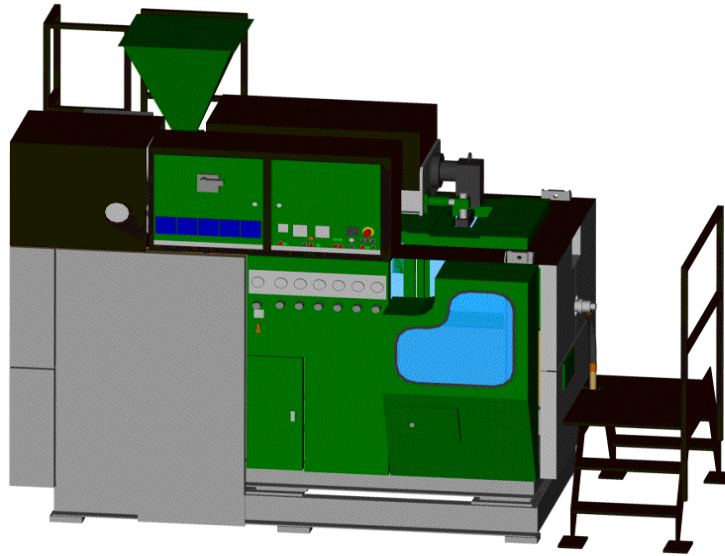
SR2 PRODUCTION :	
Maxi Dimensions :	
Closing force : 1 T	
Volume : 2000 cm ³	
Height : 320 mm	
Diameter : 100 mm	

MAXIMUM USUAL DIMENSIONS

Machine	Moulds	Height	Length	Width	Weight
SR-02	2	1710 mm	4200 mm	1365 mm	3,3 T
ENERGIES					
Electricity:					
Supplied power		kW		53	
Consumed power		kW		29	
Compressed air:					
Flowrate		Nm ³ /h		63	
Pressure		bar		7	
Cooling water:					
Power		kW/h		16,3	
Water temperature		°C		8 to 10	
Pressure		bar		5	
Flowrate		m ³ /h		7	
Delta T		°C		2	
EXTRUDER					
Ø in mm	Lenght in Ø	Supplied power	Max. extrusion capacity	Mat.	
65	20 D	22 kW	80 Kg/h	HDPE	
65	20 D	22 kW	70 Kg/h	PVC	
BLOWER					
PRODUCTION			Capacity	Weight	Inst. Output rate
HDPE pot			0,1 L	13 grs	660 BpH
PVC Bottles			0,25 L	15 grs	1600 BpH
			0,5 L	22 grs	1600 BpH
			0,75 L	30 grs	1400 BpH
			1 L	35 grs	1400 BpH
			1,5 L	44 grs	1200 BpH
			2 L	65 grs	800 BpH
HDPE Pasteurized bottles			0,25 L	10 grs	1600 BpH
			0,5 L	12 grs	1600 BpH
			1 L	18 grs	1400 BpH
			1,5 L	28 grs	1200 BpH
			2 L	38 grs	800 BpH
HDPE Sterilized bottles			0,25 L	14 grs	1500 BpH
			0,5 L	18 grs	1400 BpH
			1 L	30 grs	1100 BpH
			1,5 L	40 grs	850 BpH
			2 L	50 grs	650 BpH

Non exhaustive datas, they could vary following shape, weight and external constraints.

SR 2



BULK :

Height with hopper.....	2,7 m
Length with gangway	4,2 m
Width	1,4 m
Width with neck trimming unit.....	4,2 m

EXTRUDER :

Plasticization screw.	
Diameter / Length	65 mm / 20D
Rotation velocity of the screw:	
◇PVC	15 to 70 tr/min
◇PE	20 to 90 tr /min
Motor power	24 kW
Maximum plasticization capacity	
◇PVC	75 kg/h
◇PE	50 kg/h
Fire chambers number :	
◇On the plasticization screw	3
◇On the bracket head	2
Fire power	16 kW
Fan number (PVC only).....	1
Fan total power	1,5 Kw

BLOW-MOLDER :

Moulds number	2
Moulds closing strength.....	1 t
Motor power.....	1 kW

NECK TRIMMING UNIT :

Sucking unit number.....	2
Fan and motor power.....	7,5 kW

ELECTRICITY :

Total installed power		
◇ PVC.....	53 kW	
◇ PE.....	51 kW	
Voltage (possible adaptation to other voltages by transformer).....		220 / 380 V
		three-phase+earth
Frequency.....	50 / 60 Hz	
Medium consumption		
◇ PVC.....	29 kW /h	
◇ PE.....	28 kW /h	

COMPRESSED AIR (food quality) :

Pressure.....	7 bars
Maximum flow	65 Nm ³ /h

WATER :

Temperature.....	8 to 10° C
Pressure.....	4 to 5 bars
Flow.....	up to 6 m ³ /h
Kcal to eliminate (according to item).....	up to 6000 kcal/h

WEIGHT :

Machine and gangways.....	3,3 t
Neck trimming unit.....	0,4 t

THE EXTRUSION UNIT

The horizontal continuous extruder includes:

- A nitrided steel barrel, with his feed hopper. Electrical resistances controlled by static pyrometers heat this barrel. Thermocouple probes check temperature. Blowing fans remove excess heat.
- An extrusion screw made of special nitrided steel with a shape specifically adapted to the plastic material to be
- A drive unit including a three phase electric motor with its speed variation control unit. This motor drives the screw through a belt and pulley transmission and a gear type reducer.
- A parison head made up of a spider-pin-die-end piece assembly. Like the barrel, resistances heat the head. To inflate the parison, some air is blown through the die-pin. Changing the pin and the die gap makes it possible to modify the parison wall thickness and therefore the weight of the items produced.

THE BLOWING UNIT

The SR machine has moulds fitted on a rotary blow-moulder with a horizontal shaft. This rotary unit, driven by an electric speed variator and motor-reducer, includes two circular plates set in a vertical position: one holds the fixed mould-halves, the other one the sliding units bearing the mobile mould-halves. Compressed air and mould cooling water are supplied through the central shaft. The moulds made of stainless steel can be easily dismantled. A double guiding cam, to provide a smooth and silent mould closing, mechanically controls the opening and closing of the moulds. Compressing steel spring washers performs mould locking. Each mould travels in turn under the die and catches a section of parison cut by a pneumatically actuated tube-cutter. The items are blown by a sliding needle, supplied with compressed air and fastened to the upper part of each mould is equipped with grooved jaws to remove the base tail-scrap, which can be automatically removed from the machine. The machine includes an automatic parison recovery system allowing machine start-up without any manual action in the machine and therefore with the door closed (safety). The collected parisons are automatically removed from the machine.

MAIN ELECTRICAL CABINET AND CONTROL PANEL

The control and monitoring devices are grouped together on a control panel on the machine, within reach of the operator: Extruder motor ammeter, Heating zone pyrometers, Pressure gauge for blowing, Bottle per minute counter of the mould support rotary unit, Warning lights, etc ... Various safety devices are provided: Key-switch, Electro-mechanical protective devices in the mould clamping zone, Emergency stop

PERIPHERAL EQUIPMENTS

Bottle extractor :

Bottle extractor: The SR includes an automatic ejection system, which sucks out the blown container, as the mould opens, and transports it on the automatic neck-trimming unit.

Neck trimming unit :

After positioning on the neck-trimming unit the blown containers are conveyed to a single disk rotary neck trimming which cuts off the neck-scrap. The finished items and the neck-scrap are automatically separated for their respecting conveying (option). The neck-trimming unit can be adjusted to suit any item height and neck types (ring neck, screw neck, etc).

Crushing machine :

The machine can recycle the tail-scrap, neck-scrap and parisons, after being ground.

Feeding Unit - Dosing Unit :

A system can be fitted to allow filling of the extruder with mixing of virgin raw material, recycled and coloring.

ADAPTIVE TECHNOLOGIES ON SR2 MACHINE

Conveying of scraps

The SR machine can also be equipped with conveying systems of items to silo(s) or scraps to the crushing machine.

Parison control

The SR machine can be equipped with a parison control head. This equipment allows to control the thickness of the side of the containers. This system is controlled by a hydraulic servo cylinder. The use of parison control enables to optimize the bottles weight which permits a reducing of this weight and thus, savings.

