

AUTOMATIC LIQUID FILLING AND CAP SEALING MACHINES



Quality that excels in global markets

TURNTABLE

The Turntable works on rotary principle and is available in sizes of 30", 36" and 48" diameter. The Turntable consists of an aluminium rotary plate clad with S.S. sheets, S.S. structure, bottle guide rail with spring strip, reduction gear with motor and variable frequency drive arrangement.

TECHNICAL SPECIFICATIONS:

Model	Turntable 30"	Turntable 36"	Turntable 48"
Connected Load	0.5 HP	0.5 HP	1 HP
Overall Dimensions (Approx) in mm	760 (L) x 760 (W) x 1150 (H)	950 (L) x 950 (W) x 1150 (H)	1250 (L) x 1250 (W) x 1200 (H)
Net Weight (Approx)	110 kg	120 kg	130 kg

*Input Power Supply is 415 V / 3 Phase / 50 Hz

AUTOMATIC ROTARY BOTTLE WASHING MACHINE

The Automatic Rotary Bottle Washing Machine is suitable for rinsing bottles with pressurized water and air wash. It ensures contamination free water wash from one cycle to another. It can be used for washing glass, PET, plastic bottles - round, flat or square shaped.

The machine is provided with two water wash sequences and one air wash sequence.

SALIENT FEATURES:

- Programmable Logic Control and Human Machine Interface provided to identify fault or malfunctioning of the machine
 - Variable Frequency Drive provided for machine speed regulation
 - No Bottle No Wash Arrangement
 - Contact Parts – SS 304 / SS 316 based on user requirement
 - Polycarbonate Safety Hood provided
 - Door Interlocks provided
- Production counter provided
 - Specially designed Block and Piston arrangement for ejecting water for washing process
 - 2 nos. of High Pressurised Pumps along with Water Holding Tanks provided with Liquid Level Sensors and Spillage Trays

The machine is suitable for rinsing bottles with compressed air and vacuum for dust collection for glass, PET, plastic bottles - round, flat or square shaped.

TECHNICAL SPECIFICATIONS:

Model	No. of Heads	Main Motor	Conveyor Motor	Vacuum Pump	Tank Capacity (2 no. tanks)	Overall Dimensions (L x W x H) in mm	Weight (kgs.)
RW 120	20	1.5 HP	0.5 HP	2 HP	40 ltrs each	3050 x 1665 x 2100	2300
RW 180	24	2 HP	0.5 HP	2 HP	80 ltrs each	3050 x 2025 x 2100	2850
RW 240	32	2 HP	0.5 HP	2 HP	80 ltrs each	3250 x 2160 x 2100	3550
RW 300	40	3 HP	0.5 HP	2 HP	80 ltrs each	3825 x 3025 x 2100	4350

*All motors are 415 Volts, 3 phase, 50 cycles, 1440 RPM

EMPTY BOTTLE INSPECTION UNIT

The bottles are inspected for cracks or foreign particles while they are conveyed from the washing machine to the filling machine. S.S. canopy can be provided as an option to prevent the dust particles from entering the washed bottles.

TECHNICAL SPECIFICATIONS:

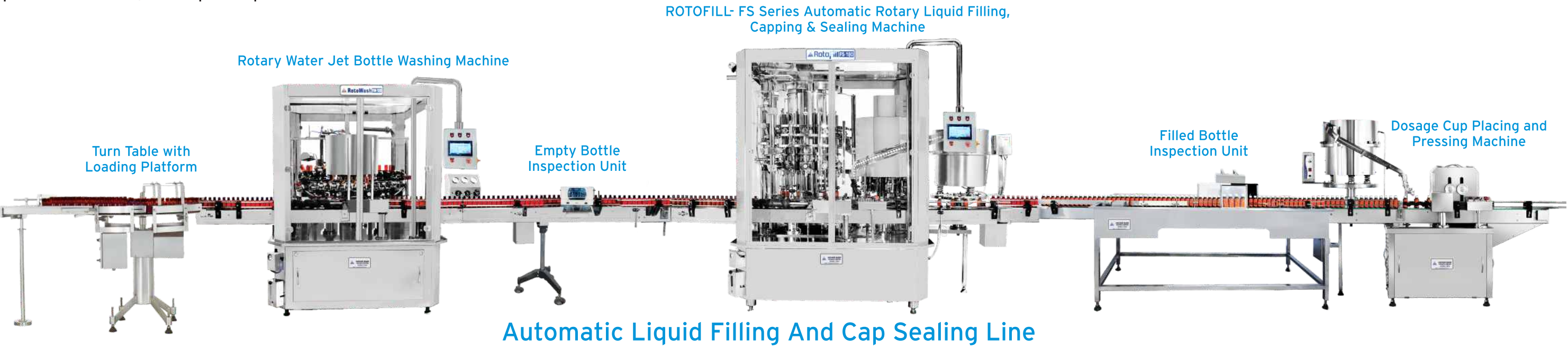
Connected Load	0.5 HP
CFL (Illumination)	11 Watt
Overall Dimensions (Approx) in mm	(Length can vary as per Room Layout) x 400 (W) x 1300 (H)
Net Weight (Approx)	100 kg

ROTOFILL FS SERIES - AUTOMATIC ROTARY LIQUID FILLING, CAPPING AND SEALING MACHINES

ROTOFILL-FS series works on the volumetric positive displacement principle. The Machine is a combination of Rotary type Volumetric Filling and ROPP/Screw/CRC Cap sealing arrangement that can be used for filling glass, PET, plastic bottles, etc. It has been designed for easy changeover and cleaning.

ROTOFILL-FS series are manufactured in 4x4, 6x6, 8x8, 12x8, 16x12, 20x12 and 24x12 (Filling x Sealing) head configurations.

ROTOFILL-FS series conform to cGMP requirements. The capping takes place immediately after filling. Thus there is no exposure of the liquid ensuring contamination-free filling.



OPERATION :

ROTOFILL-FS series works on the basis of a continuous process of filling and sealing.

Washed empty bottles are conveyed to the machine through SS slat conveyor. The infeed worm moves the bottles and feeds them into the starwheel which in turn, leads the bottles to the lifting platform of the filling section. The bottles are lifted and centred below the filling nozzles by a bottle centering cup which orients the bottles below the nozzle.

The sensor provided actuates the pneumatic cylinder to rotate the valve in the discharge position to dispense the pre-determined volume of the liquid into the bottles. A stainless steel container is fitted in the centre of the machine to transfer the liquid into syringes mounted on rotor blocks. The liquid is transferred from the storage tank through a stainless steel pipeline connected to solenoid valve. This enables immediate filling of the liquid tank as soon as the level decreases.

Pistons of the syringes move up and down on a cam track while they suck and dispense liquid from the filler tank into the syringes through rotary valves. After the liquid fills into the bottles, the bottle-holding platform lowers the bottles and transfers them to the sealing head through the intermediate star wheel. The bottle picks up the cap from the shoe of the chute which is connected to the vibrator of the capping section.

Caps can be loaded to the hopper either manually or through an automatic cap loading unit.

As the bottles move below the sealing head, it seals the bottles and later conveys them to the slat conveyor for onward transfer to the inspection machine.



Cap Loading Unit (Optional)



SALIENT FEATURES:

- Can be operated by a single operator.
- All contact parts in SS 316 or SS 316L as per user's requirement.
- Non-contact parts covered with SS 304.
- Acrylic safety hood provided.
- Machine is designed to seal ROPP / Screw / CRC caps by changing the sealing head.
- No bottle - no fill arrangement to avoid spillage of liquid.
- No bottle – no cap system to avoid wastage of cap.
- Solenoid valve with liquid level sensor to control the level of the liquid in the filler tank.
- The production counter facilitates estimation of the exact production at the end of the shift/ day.
- Programmable Logic Control and Human Machine Interface with display and hooter system to identify fault or malfunctioning of the machine.
- ROPP Capping Head designed to enable precise head setting in less time compared to conventional heads.
- Vibratory Cap Feeder provided for ease of use for ROPP / Screw / CRC caps.
- Automatic dosage adjustment arrangement through servo motor controls can be provided as an option.
- Automatic Cap Loading Unit can be provided as an option.
- Polycarbonate hood available as an option.

Filling Range : 15 ml to 500 ml (Appropriate change parts with syringes are required for different fill volumes and bottle sizes)

Accuracy : Within $\pm 2\%$ of fill volume depending on liquid characteristics, fill volume, neck diameter and speed.

Direction of Movement : Left to Right

Bottle Specifications

Body Diameter	: 28 mm to 75 mm
Bottle Neck Diameter	: 22 mm, 25 mm, 28 mm & 32 mm
Height	: 55 mm to 175 mm +/- 1 mm

SS Syringe Filling Range

15 to 30 ml
30 to 100 ml
60 to 200 ml
200 to 500 ml

TECHNICAL SPECIFICATIONS:

Model	FS-80	FS-100	FS-120	FS-180	FS-240	FS-300	FS-360
Main Drive Motor	2 HP	2 HP	3 HP	3 HP	5 HP	5 HP	5 HP
Sealing Head Lifting Motor	0.5 HP	0.5 HP	0.5 HP	0.5 HP	0.5 HP	0.5 HP	0.5 HP
Conveyor Drive Motor	0.5 HP	0.5 HP	0.5 HP	0.5 HP	0.5 HP	0.5 HP	0.5 HP
No. of Filling Heads	4	6	8	12	16	20	24
No. of Sealing Heads	4	6	8	8	12	12	12
Output	40 to 80 BPM	60 to 100 BPM	80 to 120 BPM	100 to 180 BPM	150 to 240 BPM	180 to 300 BPM	240 to 360 BPM
Overall Dimensions (Approx) in mm (L x W x H)	2750 x 1300 x 2500	2750 x 1300 x 2500	2750 x 1400 x 2500	3200 x 1625 x 2500	3850 x 2050 x 2650	4250 x 2300 x 2650	4700 x 2630 x 2650
Weight (Approx in kg)	2150	2250	3000	3250	4250	5000	6000

* All motors are supplied in 415 V / 3 phase / 50 Hz / 1440 RPM

FILLED BOTTLE TILTING TYPE INSPECTION UNIT

The filled bottles pass through the inspection unit in a tilted position and are made to rotate through the specially designed conveyor track. The unit is provided with magnifying glass and lighting arrangement. Since the bottles are rotating in a tilted position, the operator can easily identify foreign particles, cap rejections and cracks in the bottles. The rejected bottles are picked up and kept in a separate rejection tray provided at the side of the inspection table.

TECHNICAL SPECIFICATIONS:

Model	Single Track Inspection Table for FS80, FS 100 and FS 120 machines	Four Track Inspection Table for FS180, FS 240, FS 300 and FS 360 machines
Connected Load	0.5 HP	1 HP
CFL (Illumination)	11 Watt	11 Watt
Overall Dimensions (Approx) in mm	(Length can vary as per Room Layout) x 700 (W) x 1300 (H)	(Length can vary as per Room Layout) x 915 (W) x 1350 (H)
Net Weight (Approx)	250 kg	275 kg

*Input Power Supply is 415 V / 3 Phase / 50 H

AUTOMATIC DOSAGE CUP PLACING AND PRESSING MACHINE

TECHNICAL SPECIFICATIONS:

Connected Load	1 HP
Overall Dimensions (Approx)	2150 mm (L) x 1000 mm (W) x 1800 mm (H)
Net Weight (Approx)	1250 kg

*Input Power Supply is 415 V / 3 Phase / 50 Hz

The Dosage Cup Placing machine consists of S.S. Slat conveyor, vibratory cap feeder with chute and shoe, bottle feeding worm, cup pressing roller and variable speed arrangement. After inspection, the sealed bottles are conveyed to the Dosage Cup Placing and Pressing Machine where dosage cups are placed on the sealed bottles and pressed by the pressing rollers. The bottles are then conveyed to onward packing line.

AIR JET BOTTLE CLEANING MACHINE - VERTICAL CARROUSEL DESIGN

The Air Jet Bottle cleaning machine is suitable for rinsing bottles with compressed air and vacuum for dust collection. The machine is fully covered with an acrylic cover and is provided with a dust collection chamber with filter bag and an inbuilt suction blower unit. Speed of the machine can be regulated through the variable frequency drive unit provided. Online Ionizer can be provided for removal of static charge as an option. Safety Clutch can be provided for the carousel wheel as an option. Polycarbonate hood available as an option.

TECHNICAL SPECIFICATIONS:

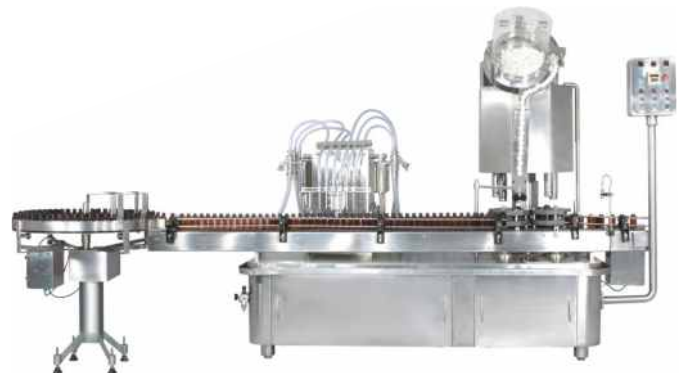
Model	AJBC120	AJBC240 (Twin Track)
Output	80 to 120 BPM	160 to 240 BPM
Connected Load	3.5 HP	7 HP
Overall Dimensions (Approx in mm)	1830 (L) x 1150 (W) x 1760 (H)	3750 (L) x 1500 (W) x 1760 (H)
Net Weight (Approx)	650 kg	1800 kg
No. of Cups	24	48

* The output depends on size, shape, diameter and type of bottles.



AUTOMATIC VOLUMETRIC LINEAR LIQUID FILLING WITH CAPPING & SEALING MACHINE

The LINOFill series machines are available in 2, 4 and 6-Head Filling unit with corresponding 1, 4 and 6-head sealing unit. The machine can fill a minimum volume of 10 ml and maximum of 1000 ml by changing the syringes. It can be used for ROPP / Screw / CRC caps by changing the sealing head. Vibratory cap feeder provided. Machine provided with No Bottle - No fill arrangement and No Cap - No seal arrangement. Machine can be supplied with acrylic hood as an option.



TECHNICAL SPECIFICATIONS:

Model	Connected Load				Overall Dimensions (L x W x H) in mm
	Filling Unit Drive	Sealing Unit Drive	Sealing Head Lifting Motor	Conveyor Drive	
2 Head Fill & 1 Head Seal	0.5 HP	1 HP	-	0.5 HP	3000 x 1000 x 2200
4 Head Fill & 4 Head Seal	1 HP	1.5 HP	0.5 HP	0.5 HP	3200 x 1150 x 2600
6 Head Fill & 6 Head Seal	1.5 HP	1.5 HP	0.5 HP	0.5 HP	3200 x 1150 x 2600

*Input Power Supply is 415 V / 3 Phase / 50 cycles

MACHINES CAN BE SUPPLIED FOR 380 VOLTS / 3 PHASE / 50 Hz OR 220 VOLTS / 3 PHASE 60 Hz AS PER CLIENT'S REQUIREMENTS

Anchor Mark Private Limited offers comprehensive technical consultancy and advisory assistance if required. Necessary personnel training and assistance are provided as after-sales support.

As the design and manufacture of ANCHOR MARK PRIVATE LIMITED machines are subject to continual improvement, the product supplied may differ in some details from the specifications and illustrations given herein.



Plot No. 101 A, Kandivli Co-op. Industrial Estate Ltd.,
Charkop, Kandivli (W), Mumbai - 400 067. INDIA.
Tel. : 91-22-4097 2000 / 2868 2001 | Fax : 91-22-2868 2250

E-mail : marketing2@anchormark.com, exports@anchormark.com
Website : www.anchormark.com