

## ***Automatic Six Head Vial Filling & Stoppering Machine NKLFRS-150***



Automatic Six Head Vial Filling & Stoppering Machine Works On Volumetric Liquid Dispensing Principle With Diving Nozzles. The Unit Is Made Compact, Versatile And Enclosed In Stainless Steel Elegantly Matt Finish Body, Consists Of Delrina Conveyor, Reciprocating Nozzle With Self-centering Devices & SS Syringe.

### **Salient Features**

- $\pm 1\%$  Filling accuracy on single dose.
- Suitable for 1 ml to 100 ml filling range.
- Immediately stopper closing on vial after filling.
- Inbuilt scrambler and Unscrambler.
- No Vial No Filling System.
- "No Rubber Stopper machines stop" system.
- Rigid vibration free construction for trouble free performance.
- S.S. Elegantly matt finished body.
- Minimum change overtime, from one size to another container or fill size.
- Self-lubricating UHMW-PE guide profile for S.S. slat chain provides low friction wear surface, smooth and noiseless conveying.
- Vial Stopping arrangement through Pneumatic system.
- Separate A/c drives for main motor & conveyor belt.
- Safety guard for conveyor gearbox, motor and pneumatic cylinders.
- Inbuilt protection against over current, voltage fluctuation, short circuit in A/c frequency drive

## Operation

- NKLFRS-150 Automatic Six Head vial filling with Rubber Stoppering Machine is a compact model used for filling and rubber Stoppering of injectable liquid into vials.
- The incoming dry vial (sterilized and siliconised) are fed through unscrambler and suitably guided on the moving delrin slat conveyor belt at the required speed of the correct placement below filling unit.
- The filling unit consists of Filling Head, Syringes & Nozzles which are used for liquid filling. The syringes are made of S.S. 316 construction and both glass as well as S.S. syringes can be used (Customer can choose any on between them).
- A Star Wheel is provided which holds vial during filling operation. A sensor is provided for "No Vial, No Filling" operation. Syringes are mounted on eccentric block and driving through bottom main gear box. Volume can be either increased or decreased by increasing or decreasing stroke length of piston as per filling size. Syringes is having non return valve for sucking and delivering situation to avoid volume variation. Liquid will reach to filling nozzles through silicon transparent pipe. Nozzle will be having Up and Down movement with help of cam mechanism and it will come down when vial will be hold by star wheel for filling operation and starts filling when it starts to move up and after completion of filling operation, star wheel delivers six vials together on conveyor for rubber Stoppering operation.
- Stoppering unit consist of Star wheel, Vibrator unit and Bowl. The sterilized and siliconised rubber stoppers stored in the vibrator bowl moves vertically to the rubber stopper chute. The vial is hold firmly by star wheel, which will be in continuous rotary motion and vial which is coming from filling unit get in to star wheel and move in rotary direction along with star wheel, during movement it will pick up the rubber stopper from the exit end of the chute and rubber stopper will be pressed by fix single pressing roller, which is spring loaded.
- Then vial further move on conveyor and collected on out feed star wheel for next sealing operation.

## Technical Specifications

Model		NKLFRS-150
Output/Hour*		Up to 9000 *
Direction of Movement		Left to Right
Number of head/Syringe		6 Nos.
Fill Size***		1 ml to 100 ml
Power Consumption**	Main Machine	1.50 HP / 415 Volts / 50 Hz.
	Conveyor	0.25 HP / 415 Volts / 50 Hz.
	Unscrambler	0.25 HP / 415 Volts / 50 Hz.
	Scrambler	0.25 HP / 415 Volts / 50 Hz.
	Stopper feeding bowl	300 watt magnetic coil
Height of Conveyor**		850 mm to 900 mm Adjustable.
Machine Dimension		3000 mm (L) x 1155 mm (W) x 1450 mm (H)
Shipping box Dimensions		3200 mm (L) x 1350 mm (W) x 1600mm (H)
Net Weight		1200 kgs
Gross Weight		1700 kgs.