



# CAPSULE POLISHING MACHINE

## General

The capsule inspection and polishing machine is designed basically to inspect and polish capsules after powder filling operation prior to final packing. The rotary spiral principal of polishing ensures a high gloss finish even with Hygroscopic powder.

Filled capsules travel from the hopper to the Vibrating tray and passes through the Inspection belt, which is provided with Light arrangement for visual inspection of damaged or rejected capsules prior to polishing.

The capsules travel in a zigzag way on the inspection belt. While traveling on the Inspection belt S.S. Strips provided on the inspection belt rotate the capsules. This helps the operator to inspect and sort out the rejected capsules from the Inspection belt.

After passing through the inspection belt, the filled capsules are

fed to the spiral brush through a funnel. Filled capsules pass through spiral brush. The powder is sucked by the vacuum blower attached to the polishing brush.

## Interchangeability

It is recommended to use separate polishing brushes for different products to avoid contamination. Separate polishing brushes can be supplied for different types of powder. Polishing brushes can be interchanged easily.

## Unique features

- Low investment, High output.
- Simple to operate. Can be handled by semi-skilled operator.
- Easily removable parts. Spares readily available.
- Sturdy Fabrication -- assured durability and long service.
- Designed to polish all sizes of capsules.
- Excellent cost benefit ratio.



Output  
35,000 - 40,000  
capsules / hour

## Technical Specifications

### Conveyor Belt Drive

0.25 HP, 440 Volts, 3 Phase, 50 Cycles, 1400 RPM

### Polishing Brush Drive

1.0 HP DC Motor, 220/180 Volts, 50 Cycles, 1500/1800 RPM

### Vacuum Blower

2.0 HP, 440 Volts, 3 Phase, 50 Cycles, 2800 RPM

Vacuum - 150 mm Hg, Pressure-2.5 PSI, Capacity-100 CFM

### Motor for Empty Capsule Attachment

1.0 HP, 440 Volts, 3 Phase, 50 Cycles, 2800 RPM

### Love joy Coupling

L-50

### Timer Pulley

16 Teeth, 1/2" Pitch

### Timer Belt

Opti belt ZR300H

### Floor Space

2250 mm (L) x 1220 mm (W) x 1850 mm (H)

### Weight

495 kgs.

Machines can be supplied for 380 Volts, 3 Phase, 50 Hz or 220 Volts, 3 Phase, 60 Hz as per customer's requirements.

Pharma Chem Industries offers comprehensive technical consultancy advisory assistance to all genuinely interested parties. Personnel training and follow-up servicing promptly provided as sales back-up.

As the design and manufacture of PHARMA CHEM INDUSTRIES machines are subject to improvement, the product supplied may differ in some details from the specifications and illustrations given.

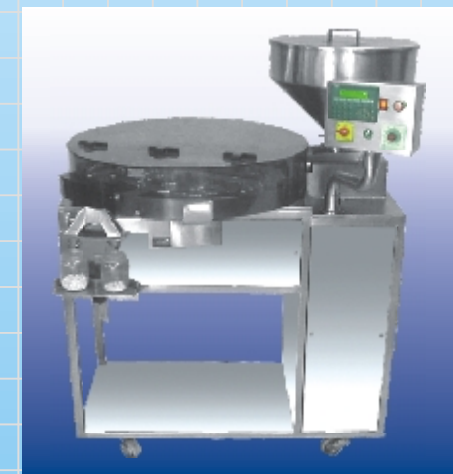
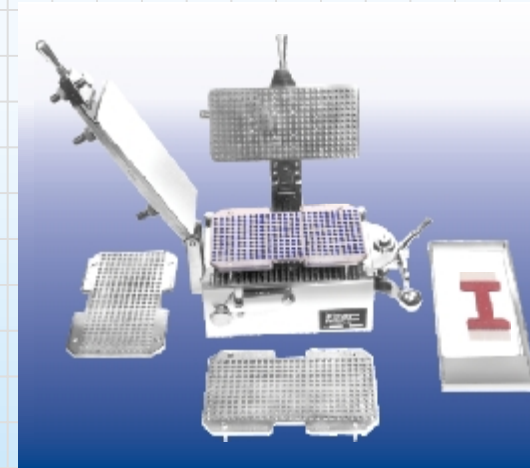


Unit No. 25, 'A' Building, Gr. Floor, Virwani Industrial Estate,  
Western Express Highway, Goregaon (East), Mumbai - 400 063  
Tel : 022-28764073, 28764074, TeleFax : 91-22-28764074  
E-mail : phamachem@vsnl.net



# CAPSULE FILLING, LOADING, POLISHING & COUNTING MACHINES

## DEPENDABLE, EASY TO OPERATE, COST EFFECTIVE & WIDELY USED IN THE PHARMACEUTICAL INDUSTRY





## AUTOMATIC CAPSULE LOADERS

### General

This equipment has been rated as ideal for small / medium scale Pharmaceutical Units. The design is unique and extremely functional. The equipment is simple to operate, is time and labour-saving.

The Automatic Capsule Loader is compact, occupies minimal space, is easily movable and is simple to operate. It gives higher production at a lower cost, and with much better standards of accuracy than the earlier semi-automatic machines, which are being phased out gradually in most units.

Pharma Chem's AUTOMATIC CAPSULE LOADER can make a significant difference in your production Department.

### MODEL PCL V-28 (VERTICAL)

#### Output

Fills 300-hole plate in 28 seconds. The vertical loader can fill 2 or 3 manual capsule filling machine trays depending on the quality of the capsule and the skill of the operator.

Drive : 0.25 HP 3-Phase 50 Cycles  
 Dimensions : 630 mm (L) x 490 mm (W) x 985 mm (H)  
 Weight : 100 kg.

The base and the covering of the machine is fabricated from stainless steel 304 quality duly polished. GMP model.

### Operation

- Fill hopper with empty capsules.
- Place hand-filler loading tray with guide on the sliding base plate.



## AUTOMATIC CAPSULE LOADERS

- Switch on. The capsules automatically get nested in the tray, cap up and body down. Time taken for loading 300 capsules in 300-hole tray is 28 seconds in vertical loader (Model PCL V-28) and 14 seconds in horizontal loader (Model PCL H-14).



### Interchangeability

Interchangeable parts can be supplied for all size : 00, 0, 1, 2, 3, 4

### Unique Features

- Low investment, High output.
- Simple to operate. Can be handled by semi-skilled personnel.
- Easily removable parts. Spares readily available.
- Sturdy Fabrication -- assured durability and long service.
- Designed to fill all standard-size capsules.
- Excellent cost benefit ratio.

### MODEL PCL H-14 (HORIZONTAL)

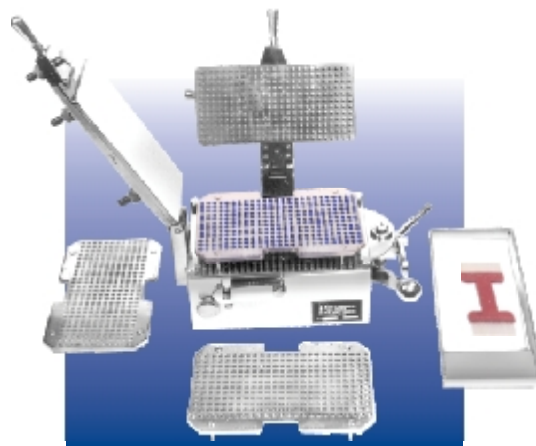
#### Output

Fills 300-hole plate in 14 seconds. The horizontal loader can fill 4 to 5 manual capsule filling machine trays depending on the quality of the capsule and the skill of the operator.

Drive : 0.25 HP 3-Phase 50 Cycles  
 Dimension : 685 mm (L) x 600 mm (W) x 1015 mm (H)  
 Weight : 120 kg.

The base and the covering of the machine is fabricated from stainless steel 304 quality duly polished. GMP model.

## CAPSULE FILLING MACHINE



### General

This is a most VERSATILE capsule filling machine, suitable for all classes of Pharmaceutical Manufacturers. Additionally, it has also established its value in the R & D section of large scale Pharmaceutical Companies where it may be used for smaller batches, trial runs and as a standby. The equipment is simple to operate, and gives negligible rejections, with no weight variations.

### Operation

- Fill loading tray with empty capsules.
- Place tray in bed.
- Operate cam handle to separate capsules cap from body.
- Place powder tray in position, fill with accurate quantity of powder and spread with scraper.
- Operate pin plate to compress and fill.
- Operate lever to lock capsules cap and body.
- Remove tray and empty filled capsules.

## CAPSULE FILLING MACHINE

### Model

PCF- 300SS/PCF-300 STD -- 300 holes

The SS -- Stainless Steel Model is fabricated completely from Stainless Steel 304 quality.

In the STD -- Standard Model all contact parts are made out of Stainless Steel 304 quality and non-contact parts are made out of non-corrosive metal duly plated or painted.

### Interchangeability

Interchangeable parts can be supplied for all standard size capsules. Recommended interchangeability for optimum output : 0/00-0/1/2--3/4/5.

### Special features

- Functional design for simplified operation - giving precise results with negligible rejection.
- Sturdy, easily movable.
- Easily dismantled and reassembled, even by unskilled labour.
- All contact parts SS 304 quality and all other parts hard chrome plated
- Excellent cost-benefit ratio.

### Output

55,000 - 60,000 capsules per 8-hour shift

### Technical specifications

300-holes  
 Dimensions : 410 mm (L) x 450 mm (W) x 500 mm (H)  
 Weight : 45 kgs.

## SEMI AUTOMATIC CAPSULE / TABLET COUNTING AND FILLING MACHINE



### Model: PCI 1500

Semi Automatic capsules/tablets counting and filling machine Model PCI 1500 is ideal for small/large scale pharmaceutical units. The machine is compact, occupies minimum space, simple to operate and easy to maintain.

### Operation

Filled capsules/tablets are fed into the hopper. The amplitude of vibration can be controlled to synchronize and achieve the required counting speed. The capsules/tablets move along the periphery and are aligned to enter the adjustable guide channel in single file along the track to pass through the through beam Photoelectric Fibre Optical Sensor/Scanner at the filling station. The photoelectric scanner counts the pre-determined quantity of the capsules/tablets and stops automatically until the next container is placed at the filling station. The machine is incorporated with two filling nozzles for continuous counting and filling. One bottle is

always in place for filling. The operator simply picks up a filled bottle and replaces it with an empty bottle. A no-bottle-no-fill sensor is provided at the bottle holding station. Once the bottle is filled, the machine stops automatically.

### Special Features

- Stainless Steel construction meet GMP standards. All contact parts SS 304 quality.
- Unique Photoelectric Fibre Optical Sensor/Scanner for sensing capsules/tablets.
- Counting speed is adjustable through Variable Frequency Drive.
- Amplitude of vibrator is adjustable to meet counting speed.
- Control panel of the machine is equipped with Programmable Logic Control (PLC) system enabling visual display of the

operating parameters besides ensuring accuracy, reliability and reduced operator fatigue.

- No Change parts required.
- Excellent cost benefit ratio.
- Rotary table is manufactured of glass.
- No-bottle-no-fill arrangement.

### Output

Tablets - approx. 1000 to 1800 per minute.  
 Capsules - approx. 1200 to 1500 per minute.

### Technical Specifications

Main Drive : 0.25 HP, 220volts, 3 Phase, 50 Cycles, 1400 RPM  
 Floor Space : 1150mm (L) x 950mm (W) x 1600mm (H)  
 Approx Weight : 1050 kgs.