

# Vacuum Coater

MODEL: 15F6 (For Laboratory & Industrial Use)



Produces thin, homogenous, uniform, pure film coatings of various metals to achieve controlled effects in applications like optics, electronics, materials, thin film coating, etc.

**HINDHIVAC** offers Vacuum Coating Unit Model 15F6 with facilities for thermal evaporation, Ion cleaning (bombardment), etc. with accessories for substrate heating, rotation, film thickness monitoring etc. This is a versatile unit both for production as well as research. Optional accessories increase the versatility of the unit making it suitable for a variety of applications, including optical thin film deposition, semiconductors, microelectronics. A high speed vacuum pumping system fully integrated with necessary piping and valves and operated manually, is rated for high gas through- put handling and to produce clean and high vacuum in the chamber. The system is wired to operate on 230 V AC, 50Hz single phase power supply / 415 V AC 3phase power supply.

To achieve specified and continuous performance over a period of time, special facilities, instruments and quality control measures are adopted, apart from manufacturing the vacuum coating unit & chamber gadgetories using high vacuum compatible materials. The surfaces exposed to vacuum are electrochemically polished and the complete unit is leak tested using helium mass spectrometer leak detector.

### Salient Features

- Compact & Elegant
- Easy to service
- Fast Vacuum Cycle due to high pumping speed
- Low ultimate pressure
- Simple handling and dependable operation by front panel control system
- Cabinet mounted with hydraulic lifting facility for beljar

### Optional Accessories:

Rotary Drive, Planetary Drive, Radiant Heater, Thickness Monitor, Flash evaporation, multi filament turret, quartz tube heater, Cold fingers, Substrate Heaters 300°C and 900°C, Flipping arrangement, rotary cage drive, 3kw or 8kw Electron Beam Gun with single source or 4 Source, Liquid Nitrogen Trap.

### TECHNICAL SPECIFICATIONS

|            |                                    | Model  |
|------------|------------------------------------|--|
| Parameters |                                    | 15-F6  |
| 1.         | Vacuum chamber                     | Beljar   |
| 2.         | Chamber                            | SS 304 400 mm Dia x 465 mm Height. (nominal)   |
| 3.         | Base Plate                         | SS 304 425mm dia, with 14 nos for various feed throughs  |
| 4.         | Chamber Lifting                    | Hydraulic cylinder with power pack   |
| 5.         | CHAMBER GADGETORIES: (std)         |  |
|            | a. LT Evaporation                  | 3 sets x 200 Amps, 10 V or 100A 20V AC   |
|            | b. Ion Bombardment                 | 1 set, 3.5 KV, 200 MA  |
|            | c. Work holder size (flat)         | 340mm dia (nominal)  |
| 6.         | VACUUM PUMPING SYSTEM              |  |
|            | a. Diffusion pump type & speed     | OD-150, 1000 Lit/Sec.  |
|            | b. Rotary Vacuum Pump type & speed | ED-21, 350 Lit/Min.  |
|            | c. High Vacuum Valve               | 150mm Butterfly Valve (Manual)   |
|            | d. Roughing, Backing Valve         | 25mm size(CV-25)   |
|            | e. Vacuum Gauge                    | Analog, Pirani, Penning Gauge with sensor to measure Vacuum in the range of 0.5 Mbar to $1 \times 10^{-3}$ Mbar and $10^{-3}$ to $10^{-6}$ Mbar) |
| 7.         | Ultimate Vacuum                    | $<5 \times 10^{-6}$ M.bar. without LNT, $1 \times 10^{-6}$ M.bar. wth LNT  |
| 8.         | Utilities Required                 |  |
|            | a. Power                           | 230V AC, 50Hz, 1 Phase/415 V AC, 50Hz, 3 phase   |
|            | b. Water at 25° C                  | 10 Lit/min at a pressure of 1-2 Kg/cm2   |

HIND HIGH VACUUM CO. PVT. LTD.

Site No.17, Phase 1, Peenya Industrial Area, Bangalore - 560 058, India. Ph: 080-8394518, 8394615, 8394617, 8394640. Fax: 080-8394874. E.Mail : info@hindhivac.com

### SALES OFFICE

Baroda: Ph: 33178, 359039. Fax: 0265-331505. Calcutta: Ph: 4661462, 4649182. Fax: 033-4662830. Chennai: Ph: 4891061. Fax: 044-4891061. Hyderabad: Ph: 3235504, 3234609. Fax: 040-3235504. Mumbai: Ph: 5550003, 5587219. Fax: 022-5563724. New Delhi: Ph: 6282410, 6282411. Fax: 011-6282412. Pune: Ph: 5466095, 5442426. Fax: 020-5466095.