

MECHANICAL VACUUM BOOSTERS

Outstanding Advantages

- High vacuum of the order of 0.001 Torr or better
- High pumping speeds at low pressures, capacity is boosted by 8 to 10 times or more
- Relatively low power consumption for such performance boosting
- Considerable reduction in pump down time of vacuum machine
- Prevents Oil back streaming from Rotary pumps
- Dry Pumping suitable for Gas/Vapour Loads

Outstanding Features

- Entirely mechanical, light weight and compact design
- High operating speeds because of dynamically balanced rotors and helical ground gears for long life and quiet operation
- Can be mounted separately from the backing pump or directly on the inlet of the backing pump
- ISO Flanges
- Unique impeller design for high volumetric efficiency
- Compatible with all vacuum systems
- Efficient air-cooled design
- Simple to maintain



Extensively Used For

Evaporative Concentration, Vacuum Distillation, Polymerization, Crystallization, Vacuum Impregnation, Vacuum Drying, Sterilization, Vacuum Cooling, Object Metallising, Roll Metallisation, Semi-conductor Processing, Manufacture of Vacuum & Microwave Tubes, Manufacture of GLS Automotive & Miniature Lamps, Tube Light Production, Sintering, Brazing, Electron Beam Welding, Heat Treatment, Ionic Nitriding, Tool Coating, Vacuum Casting, Degassing & Refining, Plasma Welding, Evaporation, Sputtering, Space Research and Development Applications.

Major Industries Served

Chemical and Pharmaceutical, Food Processing, Industrial Processing, Vacuum Furnace, Semi-conductor, Electrical and Lighting Industries.



EVEREST is the only manufacturer of Canned Motor Mechanical Vacuum Boosters in India.

All models available in Canned Motor design configuration. 100% leak proof design.



National Award Winner
2012 & 2013

MSME



For Energy Efficient Pumps and
Research & Development



We don't just offer **Blowers, Boosters and Systems** we offer **SOLUTIONS !!**

Our technology is so flexible, we can custom manufacture **Special Boosters** by alloying and cross linking diverse designs to suit individual requirements and import substitutes.



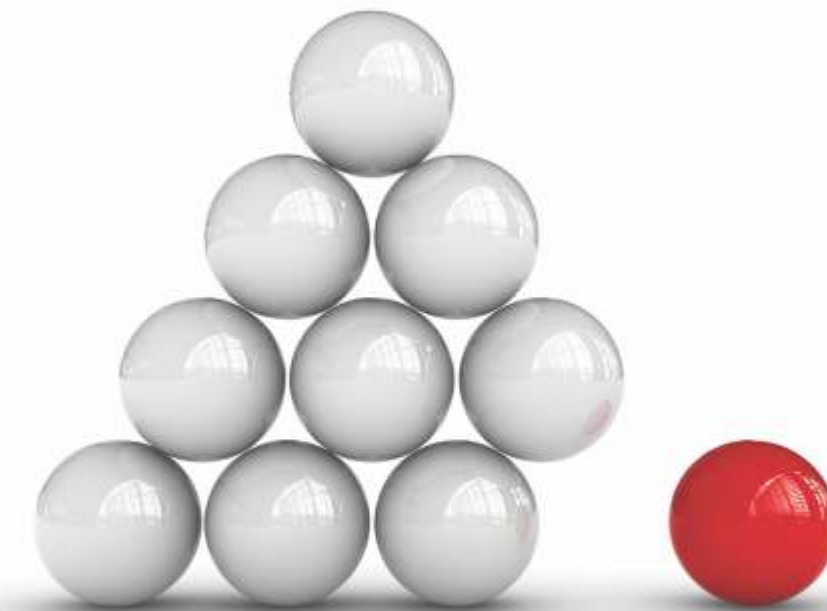
EVEREST PRODUCT RANGE Roots Blowers | Mechanical Vacuum Boosters | Dry Screw Vacuum Pumps | Acoustic Hoods | Industrial Vacuum Systems

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Innovative Engineering Solutions

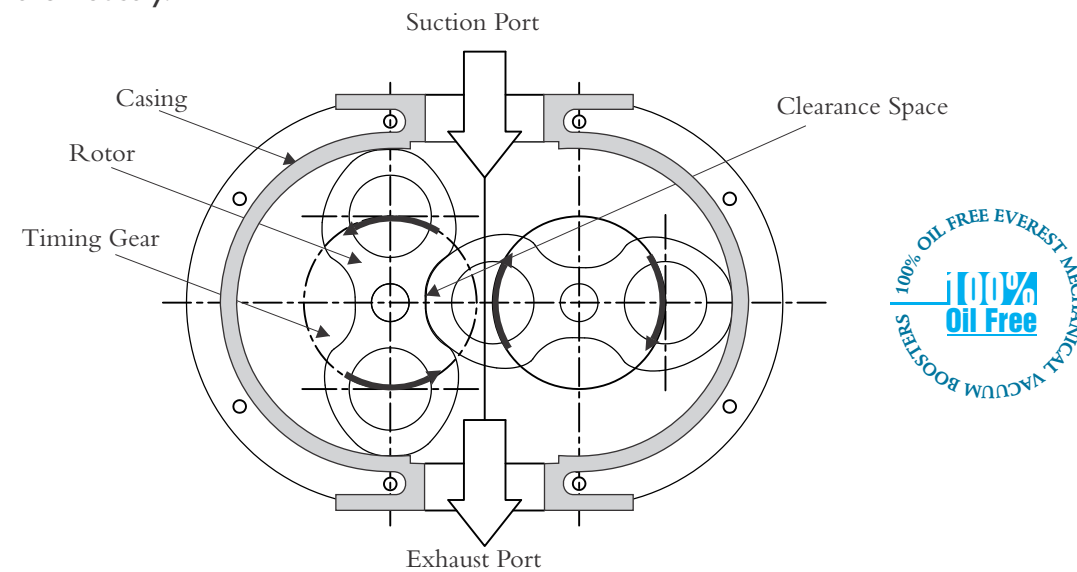
EVEREST BLOWER SYSTEMS PVT. LTD.

ENGINEERING
EVALUATION
DESIGNING
MANUFACTURING
TESTING
EXECUTION
POST SALES & SERVICE



MECHANICAL VACUUM BOOSTERS

EVEREST Mechanical Vacuum Booster Pumps, import substitutes, are used in growing number of applications where fast pump down times are required, and environment or energy usage concerns, rule out any alternative pump selection. Everest Booster Pumps enhance the performance, ultimate vacuum and pumping speed of oil-sealed/water-ring/dry vacuum type of mechanical pumps, which are widely used in the industry.



OPERATING PRINCIPLE

EVEREST Vacuum Boosters are positive displacement pumps with two figure eight shaped impellers rotating in opposite directions inside the casing. As each lobe of an impeller passes the blower inlet, it traps a quantity of air equal to exactly one fourth the displacement of the blower.

This entrapment occurs four times per revolution. The entrained air is forced around the case to the blower outlet. Timing gears accurately position the impellers in relation to each other to maintain the minute clearances so vital to the high volumetric efficiency of the pump.

KEY FEATURES

- Boosts vacuum levels of backing pumps, thereby reducing process temperature
- Boosts volumetric displacement, thereby reducing process time



FIRST OF ITS KIND
CANNED MOTOR MECHANICAL VACUUM BOOSTER | APPROVED BY BARC, INDIA

SPECIFICATIONS FOR EVEREST MECHANICAL VACUUM BOOSTERS (LIP SEAL DESIGN)

Model	Capacity Speed (m ³ /hr)	Recommended Motor (KW) 4 Pole/1500 rpm	Maximum Differential Pressure (mbar)	Recommended Line Size (mm)
EVB 01	260	1.1	90	65
EVB 05	400	2.2	120	65
EVB 15	800	3.7	90	80
EVB 30	1670	5.5	70	125
EVB 50	2930	7.5	50	125
EVB 60	3900	11.0	65	200
EVB 70	5250	11.0	45	200

Note: Specification are subject to change without notice.

- Rotors CI FG260 IS210; Shaft Alloy Steel
- Recommended for applications having presence of volatile solvents
- Best suited for coarse, medium and high range vacuum applications

SPECIFICATIONS FOR EVEREST MECHANICAL VACUUM BOOSTERS (SEAL LESS DESIGN)

Model	Capacity Speed (m ³ /hr)	Recommended Motor (KW) 4 Pole/1500 rpm	Maximum Differential Pressure (mbar)	Recommended Line Size (mm)
EVB 01 SL	260	1.1	90	65
EVB 05 SL	400	2.2	120	65
EVB 15 SL	800	3.7	90	80
EVB 30 SL	1670	5.5	70	125
EVB 50 SL	2930	7.5	50	125
EVB 60 SL	3900	11.0	65	200
EVB 70 SL	5250	11.0	45	200
EVB 200 SL (1500 RPM)	10400	18.75	50	250
EVB 200 SL (1800 RPM)	12500	22	50	300
EVB 300 SL (1500 RPM)	15100	22	45	300
EVB 300 SL (1800 RPM)	18200	30	45	350

Note: Specification are subject to change without notice.

- Integral Rotor shaft design (MOC: SG Iron)
- Recommended for applications having process vapours of oils/hydrocarbons and organic solvents
- Best suited for heavy duty applications involving high temperature processing

SPECIFICATIONS FOR EVEREST MECHANICAL VACUUM BOOSTERS (HIGH SPEED SEAL LESS DESIGN)

Model	Capacity Speed (m ³ /hr)	Recommended Motor (KW) 2 Pole/2900 rpm	Maximum Differential Pressure (mbar)	Recommended Line Size (mm)
EVB SL HS 800	800	2.2	50	80
EVB SL HS 1500	1500	3.7	50	100
EVB SL HS 3200	3200	7.5	50	150
EVB SL HS 5600	5600	11.2	50	150
EVB SL HS 7500	7500	11.2	40	225
EVB SL HS 10000	10000	15.0	40	225

Note: Specification are subject to change without notice.

- Integral Rotor shaft design (MOC: SG Iron)
- Recommended for applications having process vapours of oils/hydrocarbons and organic solvents
- Supplied with 2 Pole motors and VFDs (operating @ 2900 rpm)
- Best suited for all high vacuum applications

EVEREST ADVANTAGE

EVEREST HAS THE SKILL, EXPERIENCE AND CAPABILITY TO CUSTOM DESIGN VACUUM SYSTEMS FOR ALL SPECIFIC REQUIREMENTS AND DELIVER GUARANTEED RESULTS