

EVEREST

An Ingersoll Rand Business



MECHANICAL VACUUM BOOSTER



VACUUM

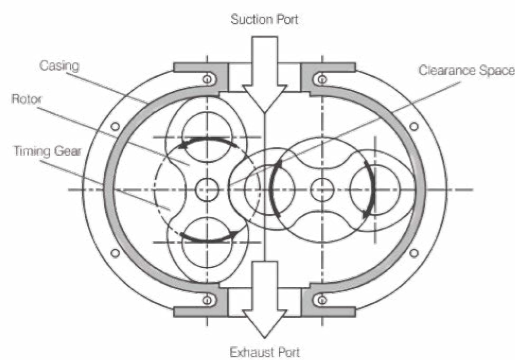


EVB

OIL FREE VACUUM BOOSTER



Everest Mechanical Vacuum Boosters (EVB) are used in a growing number of applications where fast pump down times are required and environment or energy usage concerns rule out any alternative pump selection. Mechanical Vacuum Booster enhances the Performance, Ultimate Vacuum and Pumping Speed of Oil-Sealed, Water Ring, Dry Screw and any other vacuum pumps by increasing the throughput pumping and improving the staging ratios. As these pumps are completely dry, the process vapours can pass through the pump without any contamination and be collected at the discharge of the system by a vent condenser. This offers the customers a very efficient vapour recovery management system and an environment friendly vacuum ecosystem.



OPERATING PRINCIPLE

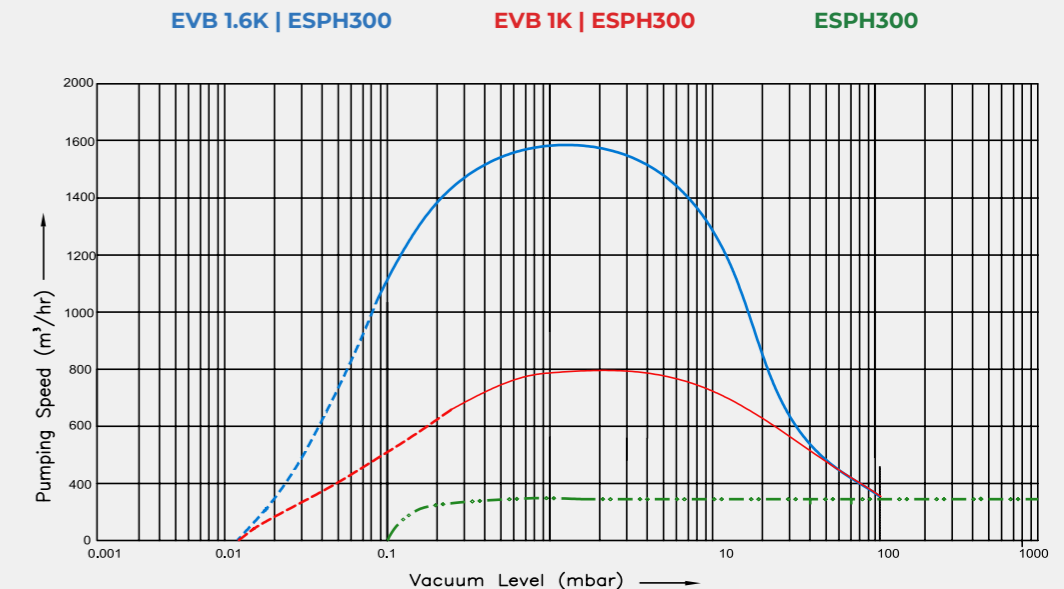
Everest Vacuum Boosters are positive displacement pumps with two figure-eight shaped impellers that rotate in the opposite direction inside the casing. As each lobe of an impeller passes the booster inlet, it traps a defined quantity of air equal to one-fourth of the displacement of the booster.

This entrapment occurs four times per revolution. The entrained air is forced around the casing to the booster outlet. Timing gears accurately position the impeller relative to each other to maintain the vital pre-defined clearance resulting in high volumetric efficiency of the pump.

ADVANTAGES

- ▶ 100% OIL-FREE, DRY PUMPING
- ▶ HIGH VOLUMETRIC EFFICIENCY RESULTING IN HIGH PUMP SPEED AT LOW PRESSURE. CAPACITY BOOSTING OF 8 TO 10 TIMES
- ▶ VERY LOW POWER CONSUMPTION RATIO (M3/KW) AS OPPOSED TO OTHER VACUUM PUMPS
- ▶ CONSIDERABLE REDUCTION IN PUMP DOWNTIME BY THE USE OF SUCH MACHINES
- ▶ DRY PUMPING MOST APPRECIATED FOR GAS/VAPOUR LOADS
- ▶ PROVEN RELIABLE DESIGN WITH MORE THAN 10,000 PUMP INSTALLATIONS
- ▶ DYNAMICALLY BALANCED ROTORS RESULTING IN VERY LOW VIBRATION LEVELS

TECHNICAL OVERVIEW



SPECIFICATIONS-STD EVB

		EVB 0.5K	EVB 1K	EVB 1.6K	EVB 3K	EVB 6K	EVB 8K	EVB 10K
Nominal Capacity	m ³ /h	400	800	1600	3340	5800	7800	10000
Max. Differential Pressure*	mbar	80	65	65	65	50	40	65
Motor Rating*	kW	2.2	3.7	5.5	7.5	11	15	22
Speed	RPM	1450	2900	2900	2900	2900	2900	2900
Average Noise Level	dB(A)	<85	<85	<85	<85	<85	<85	<85
Maximum Weight (Bare Shaft)	kg	129	129	190	345	449	500	605
Oil Capacity	L	1.5	1.5	3	5	16	16	16

*may vary from Air Cooled to Water Cooled variants.

MOC	Rotor	SG IRON 450/10 (INTEGRATED SHAFT)
	Gear	20MnCr5
	Body	CI FG260

Seal Type: Viton | PTFE | Piston Ring / Labyrinth options available.



EVEREST PRODUCT LINEUP



VACUUM

- ▶ MECHANICAL VACUUM BOOSTERS
- ▶ DRY SCREW VACUUM PUMPS & SYSTEMS
- ▶ DRY CLAW VACUUM PUMPS
- ▶ ROTARY VANE VACUUM PUMPS
- ▶ LIQUID RING VACUUM SYSTEMS
- ▶ ENGINEERED VACUUM SYSTEMS



BLOWERS

- ▶ TWIN/TRI LOBE ROOTS BLOWERS
- ▶ HELI HYBRID BLOWERS
- ▶ GAS BLOWERS
- ▶ SIDE CHANNEL / CENTRIFUGAL
- ▶ TURBO BLOWERS
- ▶ MECHANICAL VAPOUR RECOMPRESSOR (MVR)

CONTACT US



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