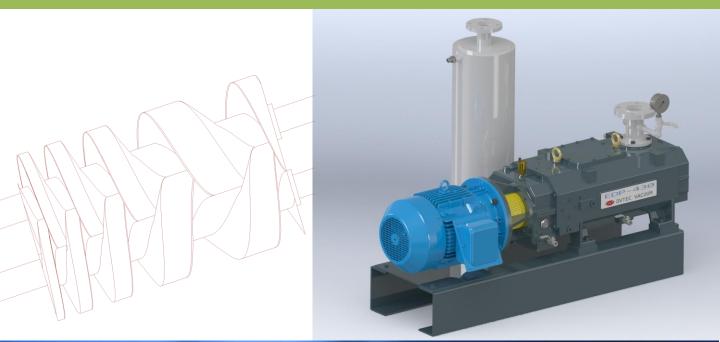
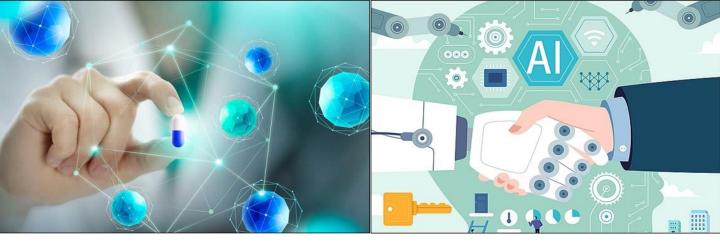
dvtecvacuum.com

# EDP series Dry Screw Vacuum pumps









## **DVTEC** Best Partner with a vacuum solution

DVTEC has a long experience and advanced technologies as a Solution Leader in vacuum industry.

A company specialized in dry vacuum pump & system customized for all industries such as pharmaceutical and chemical.

DVTEC reflects the latest technology based on the vacuum's various processes and extensive experience.

We select and apply the optimal vacuum solution to the customer's requirements to ensure that the customer is fully satisfied.

Our innovative modeling technology and customized system configuration, especially low-cost, high-efficiency pumps prove the limit of performance, and customers will be impressed by using our products.





### **Dry Screw Vacuum Pumps**

The DVTEC EDP-Series Dry vacuum pump is a 3-Stage continuous variable pitch with unique screw rotor adoption, and is a new product designed for process stability, and Industry with power savings, low exhaust temperatures, lower vibration and noise than others, especially with optimal efficiency and durability.

The Structure of the product is very simple and unique, does not use mechanical seals, has no exhaust load, so there is no seal part contamination, is very stable and simple to use for long periods of time without causing trouble, so maintenance and management costs are very low.

### Advantage & Feature

#### Seal

Based on the process, self-developed mechanical seal and lip seal are applied to provide the optimal bearing operation environment, and there are no process contamination, oil leakage, or residual failure.

### Oil lubrication

Oil scattering applied to both sides of the bearing

(Bearing durability improved compared to grease method)

### ♦ Structure

Casing, screw rotor is a non-contact drive. (Simple internal structure, Easy maintenance)

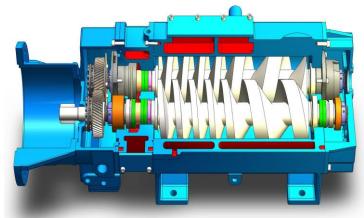
### Coating

Adopting a variety of coating methods (PTFE, PFA, PEEK, Ni+PFA, Hastelloy) to suit the use process (Suitable for treating corrosive gas or condensed gas)

### Sound & Vibration

Use ultra-precise timing gear, optimum Rotor balance, Ice flange motor (Simple installation,Low noise & vibration)





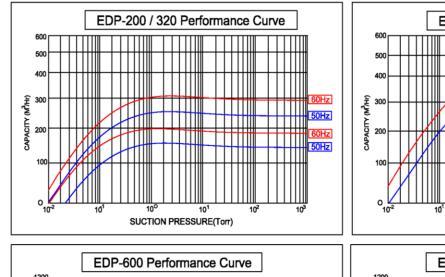
- -3-Step continuous variable pitch Screw
- Increase suction efficiency, Improve exhaust efficiency
- Maximum vacuum: 5 \* 10 <sup>-3</sup> Torr
- Reduce compressed exhaust temperatures by about 50%
- Reduce actual operating power consumption by about 40%

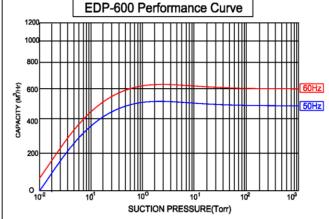
### **Dry Vacuum Pump Technology** (Reliability Durability High-Quality)

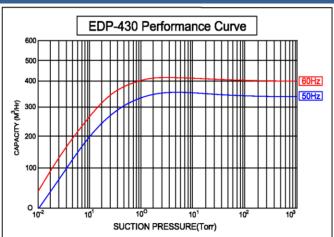
### Technical Specification

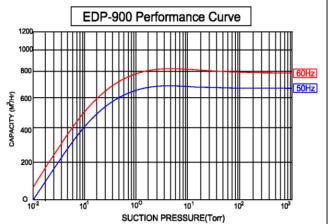
Description		Unit	EDP- 130	EDP- 200	EDP- 320	EDP- 430	EDP- 600	EDP- 800	EDP- 1000
Ultimate Capacity	60Hz	3.4	130	200	320	430	600	800	1,000
	50Hz	m³/hr	108	160	260	360	500	700	830
Ultimate pressure	60Hz	Torr	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	50Hz		0.01	0.01	0.01	0.01	0.01	0.01	0.01
Motor Power (50Hz/60Hz)		кw	3.7	5.5	7.5	11	15	18.5	22
Connection Flange (In)		mm	50	50	50	65	80	100	100
Connection Flange (Out)		mm	40	40	50	50	65	65	80
Cooling water Flow rate		l/min	6	8	10	12	18	20	22
Noise level (60Hz)		dB	78	78	78	80	80	80	80
Weight		Kg	200	250	295	350	470	580	700

### Performance Curve



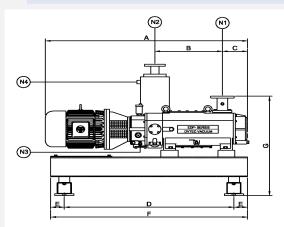


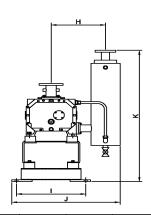




### *Eco-Friendly, Energy Saving, Deep-Reliability* Solution for Customer needs

### Dimension Specification

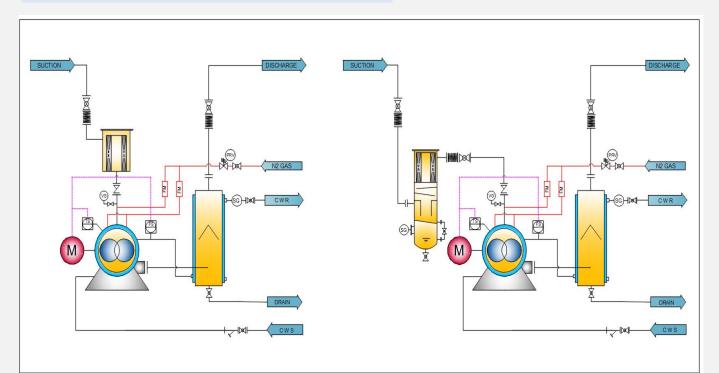






Dim Model	A	В	С	D	E	F	G	Н	I	J	К	N1 / N2	N3 / N4
EDP-200	1350	417	180	1100	100	1300	850	420	520	840	1130	50A/40A	15A/15A
EDP-320	1400	417	180	1150	100	1350	850	420	520	840	1130	50A/50A	15A/15A
EDP-430	1450	490	180	1200	100	1400	850	420	520	840	1130	65A/50A	15A/15A
EDP-600	1630	520	230	1350	100	1500	915	500	640	975	1220	80A/65A	15A/15A
EDP-800	1700	570	230	1400	100	1600	915	500	640	975	1220	100A/65A	15A/15A
EDP-1,000	1760	540	245	1400	100	1600	1015	520	680	1060	1230	100A/80A	20A/20A

### Schematic Diagram





**Dry Screw Vacuum Pumps** 

#### Material Composition

- Body Casing : Ductile Cast Iron (FCD 55)
- Screw Rotor : Ductile Cast Iron (FCD55)
- Plate / Cover / Bearing Holder : Ductile Cast Iron (FCD40)
- Lip Seal : LIP-PTFE & Graphite Mix, Casing SUS316
- Drive Oil seal : Viton
- Seal Sleeve : Stainless Steel (SUS304) + Ceramic Coating, SKD-61
- Timing Gear : Alloy Steel (SCM415)
- Coating Spec. : PTFE, PFA. PEEK, NI+PFA, Hastelloy
- Oil Lubrication : Front / End Oil Lubrication Type

### Standard Accessory

- Base Structure & Safety Cover
- Discharge Silencer & Separator
- Suction port
- Check Valve
- Instrument (Vacuum Gauge)

### Optional Accessory

- Suction Filter
- Discharge Condenser
- Suction Knock-out Separator
- Flow Switch & Temperature Switch
- C–Face Flange Motor

### Application

Material Synthesis, Vacuum Drying of Pharmaceutical & BIO

Vacuum Distillation, Freeze Drying, Refining, Deodorizer

Secondary Battery, Semiconductor, Solar Energy

Fine chemical, Petrochemical, Solvent Recovery

Extrusion of Plastic Resin, Vacuum Exhaust

Industrial Heat Treatment, Coating, Deposition

Environment, Food, Fiber, Electronics, Research and Other Industries









### Whatever the customer wants.... (Customizing Dry Vacuum Systems)

- Customized Engineering, Manufacture, Installation, Commissioning and Service
- > Prioritize Process safety, Energy savings, and Convenience
- > System design optimized for Process and Utility condition

In various processes, if there is not enough vacuum capacity or if pretreatment of process gas or Vapor is required to achieve Max vacuum level (e.g., condensate or dust treatment), a single vacuum system is constructed using Condenser, Receiver, Knock Out Pot, Filter, and Control Panel.

"DV Tech Vacuum Co., Ltd." is a Longterm vacuum pump/system specialist, offering and carrying out a total solution optimized for vacuum according to customer needs based on advanced technology in Design, Fabrication, Installation, Commissioning and Troubleshooting

Optimized vacuum system design of Pre-condenser that meets process gas and Utility conditions

Optimized vacuum system design of after condenser for recovery of solvent and process material

Design of filter, demister, and process material separator for stable operation of pump

Strengths in optimal design experience and ability to stabilize various process.

### Capacity : 320 ~ 2,500m<sup>3</sup>/hr



Capacity : 1,200 ~ 18,000m<sup>3</sup>/hr



## Total Solution Partner of Vacuum pumps & Vacuum systems DVTEC VACUUM



Supply and Service of best Products.

Our values and promise to **Customers**.

# DVTEC Vacuum Co., Ltd

Address : 35 3-gil, Balan Industrial Complex-ro, Hyangnam-eup, Hwaseong-si, Gyeonggi-do, South Korea Tel : +82-10-9660-4085, +82-031-8003-7277, FAX : +82-031-352-7274 E-mail : hsw4085@naver.com, dvtec71@naver.com