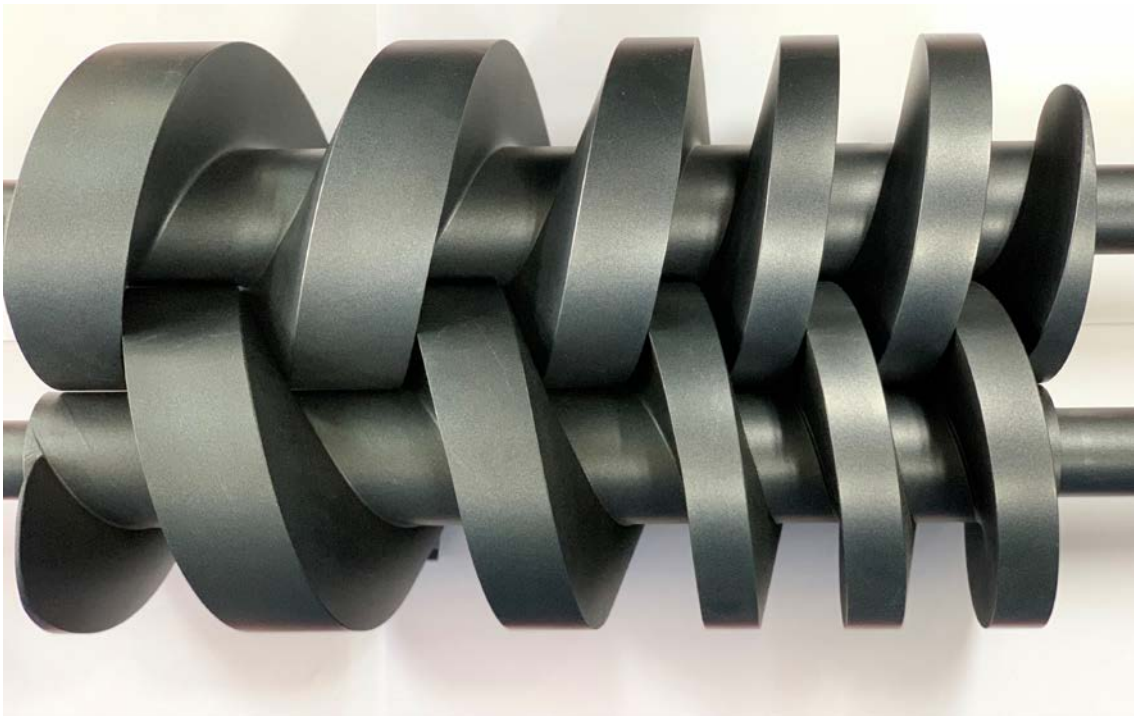


www.dvtecvacuum.com

IDP series for Industrial **Dry Screw Vacuum** **Pump & Systems**



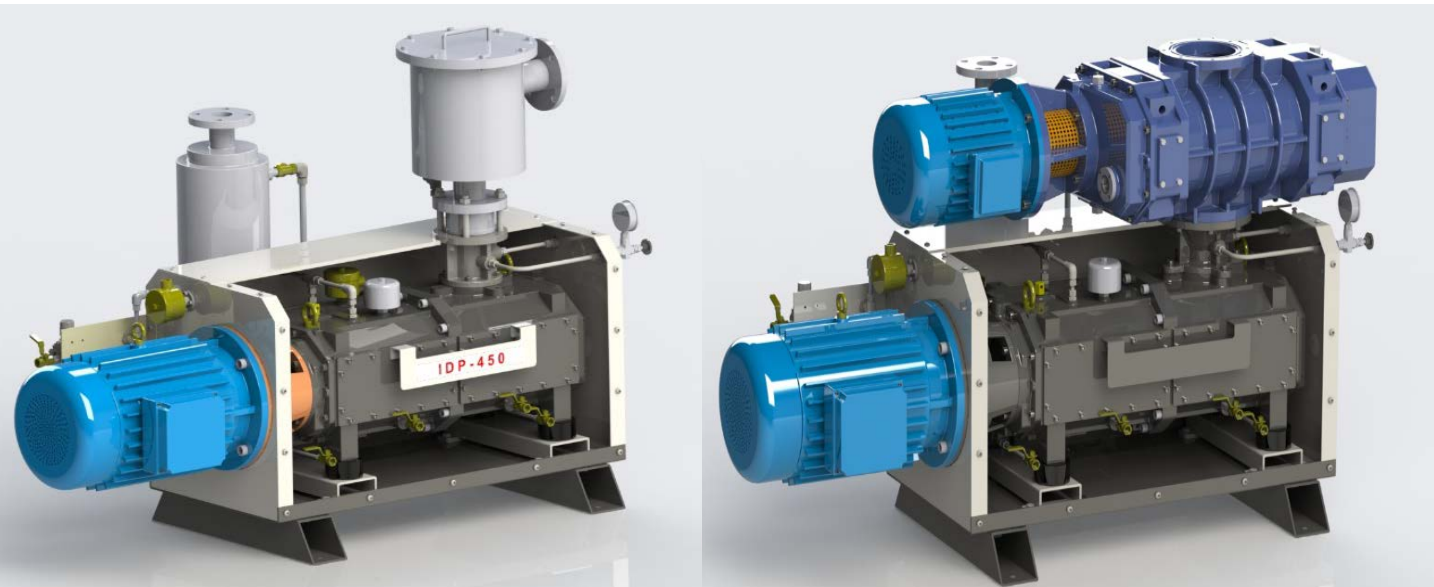
Best Partner with a Vacuum Solution



DVTEC Vacuum

NEW DRY SCREW VACUUM PUMP

DV TEC's new product for High-tech industries



As a Total Solution Leader in the vacuum pump industry, DVTEC opens the future of high-tech industry with long experience and advanced technology.

DVTEC applies the latest technology based on pump durability and extensive experience.

Our innovative modeling technology, customer-customized system, and low-cost, high-efficiency model prove the limits of performance.

The new 2 STAGE dry system has been improved with a modular design, providing user convenience and easy maintenance.

Dry Screw Vacuum Pump Systems

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

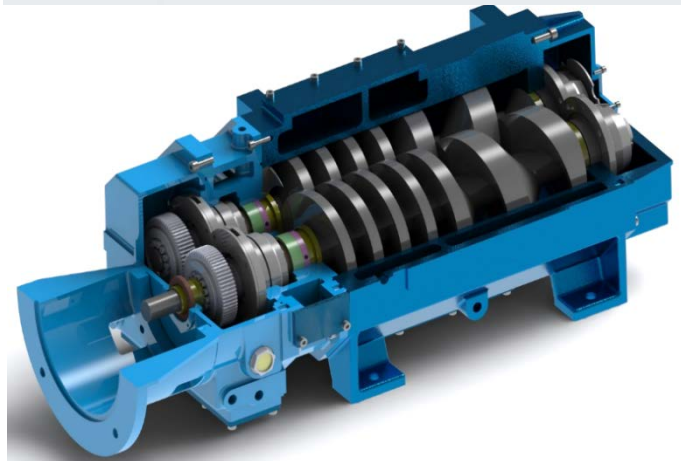
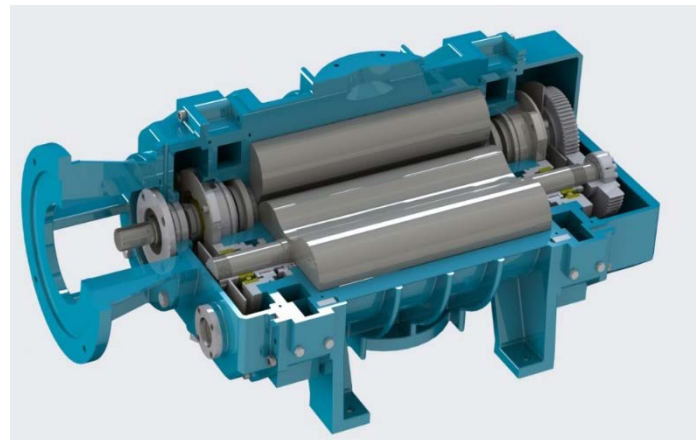
Casing, screw rotor is a non-contact drive. (Simple internal structure, Easy maintenance)

◆ 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: $5 * 10^{-3}$ Torr
- Reduce compressed exhaust temperatures by about 50%
- Reduce actual operating power consumption by about 40%

Dry Vacuum Pump Technology

(Reliability Durability High-Quality)

◆ General Advantage & Features

- ◆ Easy to use space with compact design
- ◆ Smart control box, Automatic system configuration
- ◆ Cost reduction (High energy efficiency)
- ◆ Inverter motor, Variable continuous control method
- ◆ Eco-friendly, High-efficiency (No oil discharge)
- ◆ Driving stability, Suction efficiency improvement
- ◆ Excellent vacuum efficiency and performance
- ◆ Exhaust speed (200 m3/hr ~ 7000 m3/hr)
- ◆ N2 Gas Seal Purge System
- ◆ Adoption of cooling water motor

◆ Technical Specification

Description		Unit	IDP-200	IDP-320	IDP-430	IDP-600	IDP-900
Displacement	60Hz	m ³ /hr	160	260	360	500	700
	50Hz		200	320	430	600	830
Ultimate pressure	60Hz	Torr	$5 * 10^{-2}$	$5 * 10^{-2}$	$5 * 10^{-2}$	$5 * 10^{-2}$	$5 * 10^{-2}$
	50Hz		$1 * 10^{-2}$	$1 * 10^{-3}$	$1 * 10^{-3}$	$1 * 10^{-3}$	$1 * 10^{-3}$
Motor Power	(50Hz / 60Hz)	KW	4 / 5.5	5.5 / 7.5	9 / 11	11 / 15	15 / 18.5
Motor Rotating speed	(50Hz / 60Hz)	RPM	2,900 / 3,500				
Connection Flange (In)		mm	50	50	65	80	100
Connection Flange (Out)		mm	50	50	50	65	65
Cooling water Flow rate		L/min	10	10	12	20	20
Noise level (60Hz)		dB	76	76	76	78	78
Weight		Kg	290	320	380	520	600

Description		Unit	DVS-1500	DVS-2400	DVS-4000	DVS-5000	DVS-7000
Displacement	50Hz	m ³ /hr	1200	2000	3500	4500	5800
	60Hz		1500	2400	4000	5500	7000
Ultimate pressure	50Hz	Torr	$7.5 * 10^{-4}$	$7.5 * 10^{-4}$	$7.5 * 10^{-4}$	$7.5 * 10^{-4}$	$7.5 * 10^{-4}$
	60Hz		$3 * 10^{-4}$	$3 * 10^{-4}$	$3 * 10^{-4}$	$3 * 10^{-4}$	$3 * 10^{-4}$
Motor Power	(50Hz / 60Hz)	KW	4 / 5.5	5.5 / 7.5	7.5 / 11	9 / 15	11 / 18.5
Motor Rotating speed	(50Hz / 60Hz)	RPM	2,900 / 3,500				
Connection Flange (In)		mm	100	150	200	200	250
Connection Flange (Out)		mm	50	50	50	65	65
Cooling water Flow rate		L/min	10	10	12	20	20
Noise level (60Hz)		dB	76	76	76	78	78
Weight		Kg	550	620	780	950	1200

Dry Screw Vacuum Pump Systems

◆ Material Composition

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

◆ Standard Accessory

- Base Structure & Safety Cover
- Discharge Silencer
- Suction pot
- Flow Switch & Temperature Switch

◆ Optional Accessory

- Suction Filter
- Suction Auto Valve
- Local panel & Vacuum Sensor
- Water-cooled motor/inverter motor

◆ Application

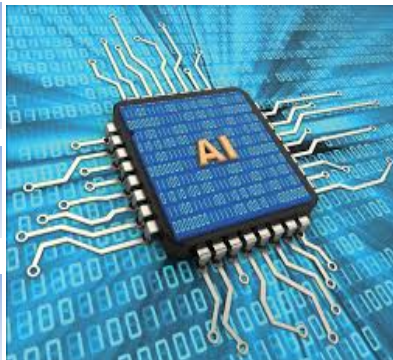
Secondary Battery,
Semiconductor, Solar Energy

Vacuum Freeze Drying, Display

Material Synthesis,
Pharmaceutical, BIO

Industrial Heat Treatment, Coating,
Deposition

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



Total Solution Partner of Vacuum pumps
& Vacuum systems

DVTEC VACUUM



Repay with the best product,

Promise with the customer



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