

Digital Platform  
**Environment | Social | Governance**

L E A D E R O F T E C H N O L O G Y V A C U U M



환경사회의 조화로운 발전을 추구하는 기업

# LOT VACUUM

Leader Of Technology vacuum

**Leader Of Technology Vacuum for  
all Semiconductor &  
FPD, Solar, General Industry Applications**



**Ihr Händler und Servicepartner:  
Infraserv Vakuumservice GmbH**

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**Lotvacuum**  
Leader Of Technology Vacuum

Digital Platform

**Environment | Social | Governance**

Sustainability Management,

**LOT VACUUM** is already practicing it.

# ESG

지속가능경영(ESG),  
엘오티베큘이 앞서 실천하고 있습니다.

환경사회의 조화로운 발전을 추구하는 기업

# LOT VACUUM

Leader Of Technology vacuum

**THE BEST PARTNER** For  
Your Business

Receiving  
Credits From  
Customers

Leading  
The Best Tech  
& Quality

Customer  
Satisfaction



## Message

It is my pleasure to welcome you to LOT Vacuum.

I am very glad to have the opportunity to greet our global customers and shareholders. We are truly grateful for the confidence you have placed in our products and services.

Having purchased the dry vacuum pump division of Leybold Vacuum Germany in 2002, LOT Vacuum was founded with the vision of supplying our products to the global semiconductor and display industries.

We have accomplished this vision in our 1st business leap by introducing 5 new series of dry screw pumps, installing over 8,500 units, and establishing LOT Vacuum as the leading dry screw vacuum pump supplier to the semiconductor and display industries.

Our accumulated technology development and expertise made us to prepare our 2nd leap. Since 2013, LOT Vacuum has been aggressively moving forward into the global market. We are combining our development, manufacturing, sales and customer service experience with strategic global alliances to enter new geographic markets. Additionally, we are launching our next generation products into the display, semiconductor, industrial, and general vacuum markets.

Through the constant innovation, we are creating an excellent foundation to mature and become a truly global vacuum solution company. We are continuously and aggressively making investments to prepare for future markets and are developing flexibility to respond to the demands of a rapidly changing market.

By taking this 2nd leap, LOT Vacuum will supply critical value to our customers and higher returns to our shareholders.

Again, we are grateful to all those who support LOT Vacuum with their investment capital, counsel, and expertise. We ask your continual support as we develop the vacuum technology and products that bring the highest level of competitiveness into the global market.

To your success,  
CEO, **Hank Oh**

반갑습니다. 환영합니다.

이 자리를 빌어 (주)엘오티베쿰을 아껴주시는 고객 여러분께 인사를 드리게 되어 매우 기쁘게 생각합니다.

(주)엘오티베쿰은 대한민국 반도체 및 Display산업의 기반기술 확보라는 기치 아래 설립하였으며, 150년의 역사와 전통을 자랑하는 독일의 Leybold Vacuum사로부터 진공 Dry Pump 사업부문을 인수하면서 그동안 축적된 모든 기술과 노하우에 대한 사업제휴를 통하여 첫 걸음을 내디뎠습니다.

여러분께 생소하실지 모르지만 에디슨이 백열전구를 발명 할 때 진공펌프가 없었으면 불가능 했을 것입니다.

아주 오래 전부터 진공은 우리 생활주변에서 쉽게 접하고 만나실 수 있습니다.

(주)엘오티베쿰은 특화된 기술력으로 많은 산업현장이나 작업공정에 필수적으로 사용되는 진공펌프를 개발, 제조, 판매, A/S까지 전 영역에 걸쳐 서비스를 하고 있으며 세계 유수의 기업들과 경쟁하는 국내 유일의 진공기업입니다.

급변하는 시장의 요구에 대한 탄력적인 대응과 미래의 시장에 대한 한 발 앞선 대비를 위하여 지속적이고 공격적인 투자가 진행되고 있으며 다양한 고객의 Needs를 반영한 당사의 차세대 제품이 시장에 출시되고 있습니다. 특히 기존의 매출의 상당부분을 차지하였던 반도체용 진공펌프 외에 Display, 태양광, LED 및 일반산업용 진공펌프를 개발하여 매출을 실현하고 있으며, 제 2의 도약을 위해 끊임없는 전사혁신활동을 통해 한 단계 성숙할 수 있는 토대를 만들고 있습니다.

(주)엘오티베쿰의 발전을 위하여 물심양면으로 성원해주시는 여러분께 다시한번 깊은 감사의 말씀을 드리며, 전 세계시장에서 최고의 경쟁력을 갖춘 진공기업으로 부상할 수 있도록 앞으로도 지속적인 관심과 격려 부탁드립니다.

감사합니다.

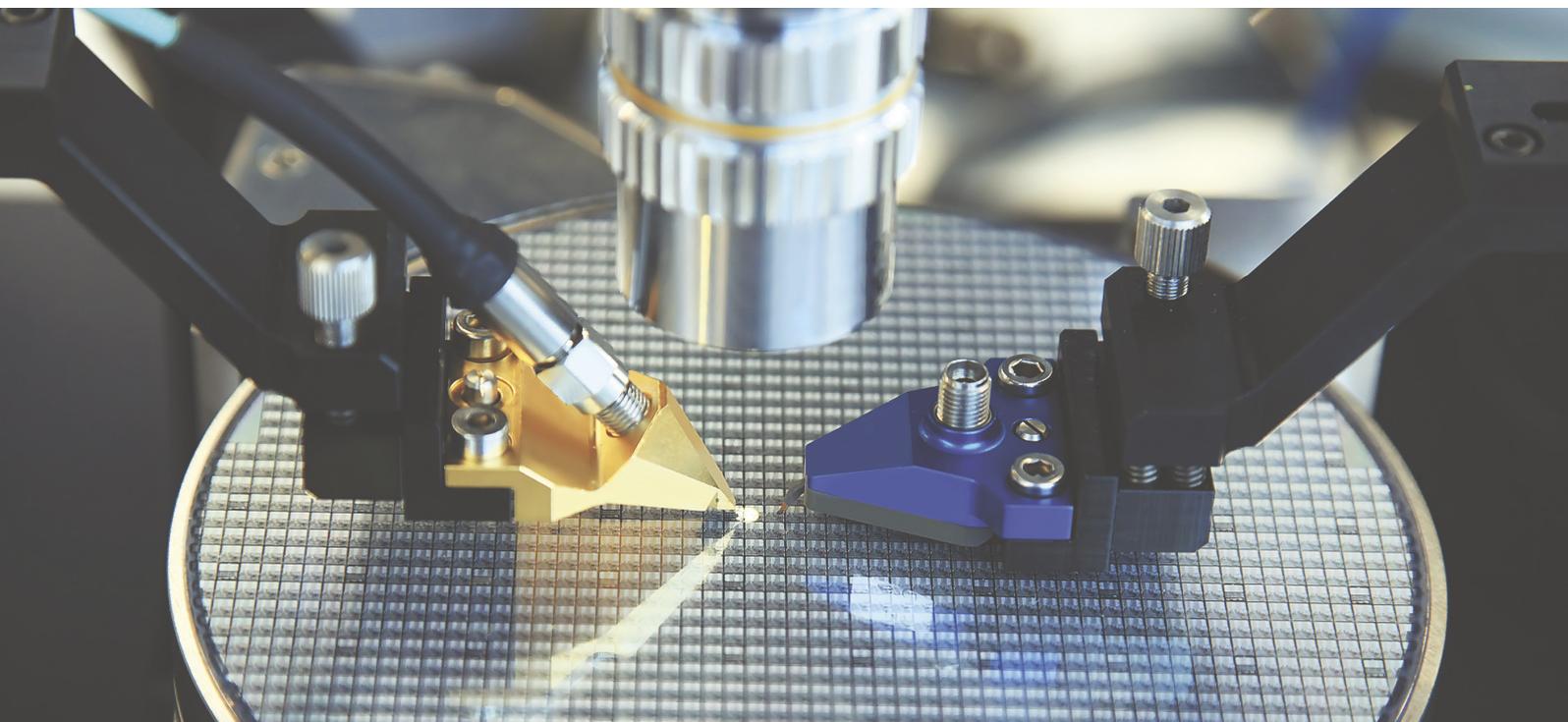
(주)엘오티베쿰 대표이사 **오 흥 식**

## Since establishment in 2002,

LOT Vacuum has been trying to be a leader in Vacuum industry worldwide developing new technologies and innovation.

## Company History

- 2002.** MAR. Business Registration of LOT Vacuum Co., Ltd.  
JUL. Established LOT Vacuum Co., Ltd.  
DEC. Relocated Leybold Pittsburg production line in US to Korea (Cheonan)
- 2003.** JAN. DuraDry No.1 at Cheonan Plant, delivered 16 units to Samsung Electronics for the first time  
MAR. Established affiliated technology research center  
JUN. Acquired Quality Management Certification (ISO 9001:2000)  
NOV. Completed implementation of ERP system
- 2004.** JAN. Completed implementation of ERP system  
MAR. Designated as venture business by Small & Medium Business Administration (R&D Corporation)  
OCT. Patent Application (Dry Vacuum Pump, etc.)  
DEC. Relocated affiliated technology research center (Ansung)
- 2005.** JAN. Acquired Environment Management System (ISO 14001:1996)  
FEB. Acquired CE Certificate Mark (Dry Vacuum Pump)  
MAR. Acquired Excellent Quality Certificate EM  
OCT. Listed on Kosdaq  
NOV. Relocated head office building (Cheonan → Ansung)
- 2006.** FEB. Established US branch office (Austin, Texas)  
AUG. Established Hwaseong Service Center
- 2007.** APR. Entered into OEM contract with Leybold Vacuum(Germany)  
AUG. Entered solar cell market (Exported to Germany)  
SEP. Won Minister of Science and Technology Award at Korea Semiconductor Technology Awards  
OCT. Acquired Information Security Certification (ISO 27001)  
DEC. Certified as a Technology Innovation Small & Medium Business (INNO-BIZ)  
DEC. Awarded the Presidential Citation at the New Technology Commercialization Promotion Competition
- 2008.** FEB. Patent Application (All-in-one vacuum generating device)  
FEB. Received commendation from the Commissioner of Customs for Exemplary tax payment on Taxpayer's Day  
APR. Designated as excellent corporation for consignment trade by Gyeonggi Small & Medium Business Administration
- 2009.** DEC. Awarded 10 Million Dollar Export Tower on Trade Day  
APR. Registered trademark (EcoSL, EcoScrew)  
JUL. Designated as a business practicing yielding negotiation for winwin approach between labor and management
- 2010.** JUN. Designated as promising export small & medium business  
DEC. Awarded excellence award for 10 year joint growth (Samsung Electronics)



- 2011.** JUN. Enhanced infrastructure through the re-implementation of BPR/ERP  
 NOV. Designated as KB Hidden Star 500 by KB Bank  
 DEC. Re-certified as Venture Business ( Korea Technology Finance Corporation(KIBO))
- 2012.** JUN. Designated as Compromise Trade Company of National Defense Industry  
 AUG. Designated as Advanced Technology Product by The Ministry of Knowledge Economy  
 SEP. Selected Excellent Enterprise for G-Labor and Management  
 SEP. Relocated R&D Center to The Silicon Park (Anseong → Pangyo)  
 OCT. Won Ministry of Knowledge and Economy Award at Korea Semiconductor Association (R&D Center)
- 2013.** JAN. Relocated and Built a Service Center (Gyeonggi-do, Dongtan)  
 MAY. Applied for an Europe Patent (Roots & Screw Rotor)  
 SEP. Established LOT China Branch (Shaanxi, Xi'an)  
 NOV. Designated as Excellent Enterprise to Work at Gyeonggi-do  
 DEC. Certificated by Safety and Health Management System (KOSHA18001, OHSAS18001)
- 2014.** MAY. Designated as World Class 300
- 2015.** AUG. Designated as World Class 300 Project R&D
- 2016.** JUL. Designated as \$100Mil Venture Enterprise (Small and Middle Business Administration)  
 AUG. Certificated as Excellent Enterprise for labor and management win-win approach  
 NOV. Awarded the Entrepreneur of the Year Award (CEO, Hank Oh)
- 2017.** OCT. Awarded the Prime Minister Award - Industry Field (CEO, Jeff Kim)  
 DEC. Awarded the Presidential Award - Industry Field (CEO, Hank Oh)
- 2018.** JUN. Selected for a government project of Smart Factory  
 JUL. Established LOT Vietnam Branch  
 OCT. Established LOT China Chengdu Branch
- 2019.** JUN. Established Osan Headquarter with Opening Ceremony  
 OCT. Awarded Ministry of Trade, Industry and Energy award-Semiconductor Field  
 NOV. Established LOT China Changzhou Branch  
 DEC. Awarded Leading Work Innovation Company award-Ministry of Employment and Labor
- 2020.** NOV. Selection of the best employer for the disabled
- 2021.** MAR. Established H Investment Co., Ltd. "Stepping stone community service" was launched  
 SEP. Establishment of LOT TS Co., Ltd. as a repair subsidiary  
 OCT. Awarded Social Contribution Commendation (Gyeonggi-do Governor)  
 DEC. Awarded for Outstanding Win-Win Companies (Minister of SMEs and Startups)  
 Awarded for the Performance of Fair Trade (Fair Trade Commission)
- 2022.** JAN. Acquisition of JU YOUNG Co., Ltd. (by LOT CES)  
 MAY. Award of outstanding partner companies in fair trade (Samsung Electronics Co., Ltd.)  
 SEP. Certification of excellent human resource development institutions (Minister of Employment and Labor)  
 OCT. The presidential award for Korea's safety grand prize (Ministry of the Interior and Safety)
- 2023.** JAN. Excellent grade for fair trade agreement implementation evaluation (Fair Trade Commission)  
 NOV. Greenhouse gas reduction commendation award (Minister of Trade, Industry and Energy)  
 DEC. Family friendly certificate (Minister of Gender Equality and Family)
- 2024.** MAR. Industrial service medal (Ministry of the Interior and Safety)  
 DEC. Award for outstanding enterprise in energy efficiency target system (Korea Energy Agency)



대한민국 유일의 진공펌프 전문기업

# LOT VACUUM

SAVE THE EARTH...  
Promise, practice and the Future



엘오티베큘은 지속성장을 위한  
ESG경영/윤리경영/상생협력 등 투명하고 공정한  
기업문화 정착을 적극 실천합니다.

LOT VACUUM actively practices establishing a transparent and fair corporate culture, such as ESG management / ethics management / win-win cooperation for sustainable growth.



## Visions

LOT Vacuum  
Be the world's best company pursuing the customer's satisfaction.

- 01 Lower Power Consumption Pump for Green Environment
- 02 Global Market Leadership
- 03 Component Localization for Cost Reduction
- 04 Total Solution Provider for Vacuum Technology Market

# Business Area

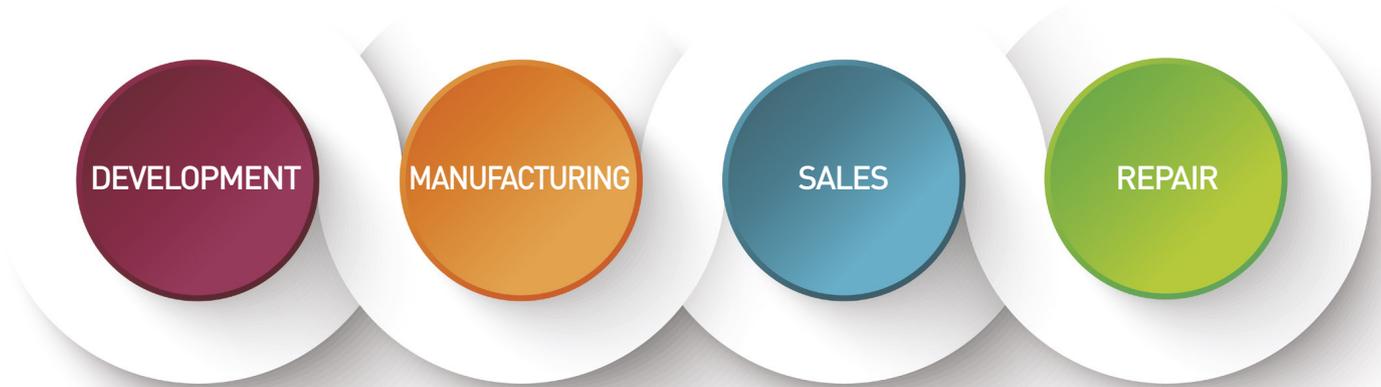
LOT Vacuum is selling Dry vacuum pumps and providing repair service.

## DEVELOPMENT

- New Product Development
- New Technology Development
- Technical Government Joint Project

## SALES

- World Wide Pump Sales
- Accessory Sales (Valve, Rack, Bellows, etc.)



## MANUFACTURING

- Major Part Machining (Housing, Rotor)
- Product Manufacturing
- Quality Management

## REPAIR

- Dura Dry Repair Service
- On-site Trouble Shooting
- Product Life Cycle Management

## Patents

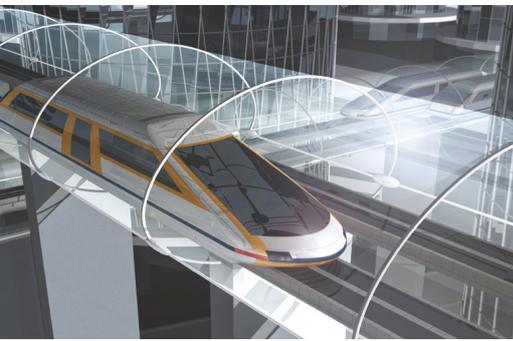
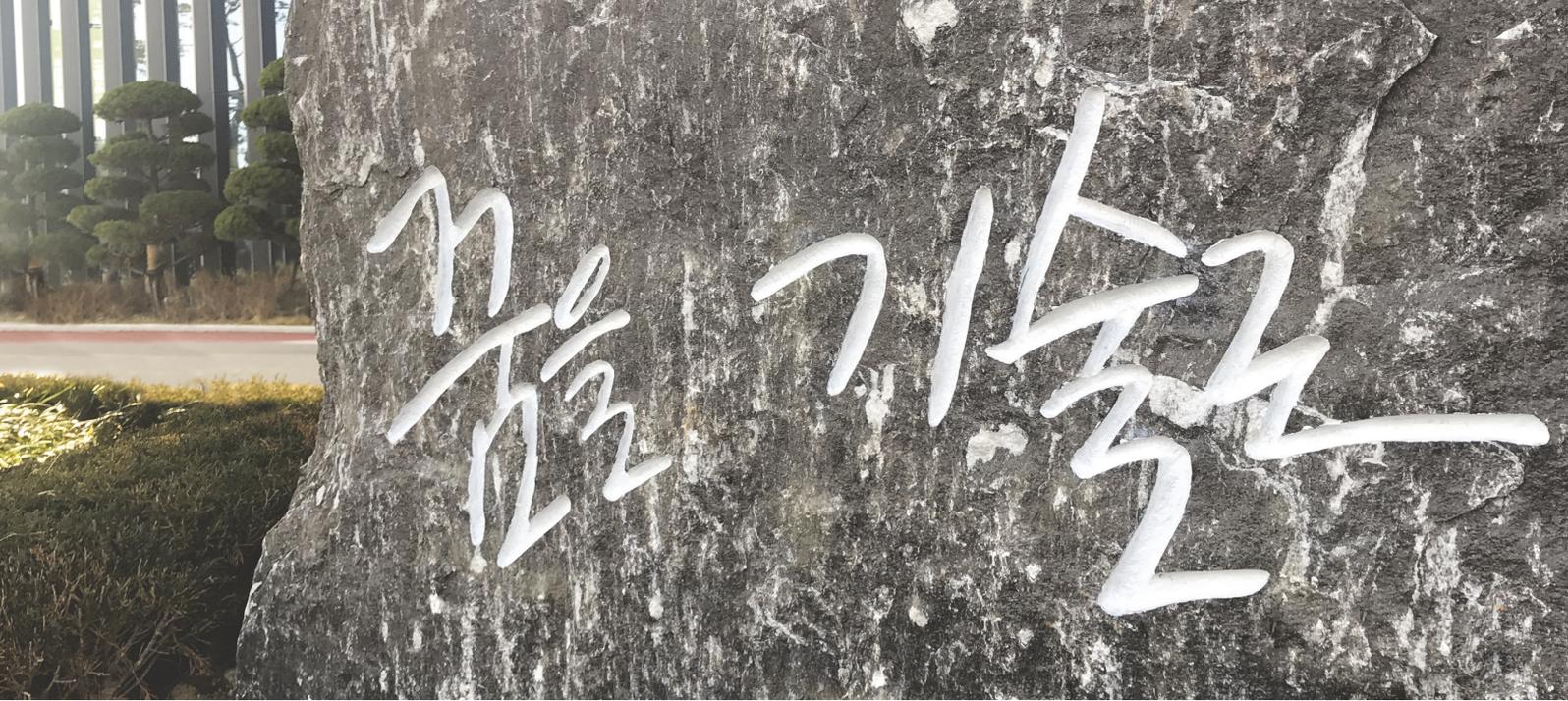
LOT Vacuum, a company leading innovative technology in Korea, has 24 Patents world wide. Focusing on Continuous Investment to R&D Group.



## Certification

- ISO9001 (Quality Management Certification)
- ISO14001 (Environmental Management System)
- ISO27001 (Information Security Management System)
- KOSHA18001, OHASA18001 (Safety and Health Management System)





# Revolution<sup>2</sup>

## Simple

Less complexity over conventional dry pumps

## Low CoO Technology

Extended service intervals in all semiconductor and display processes

## Robust

10 times stronger particle handling efficiency than conventional designs

## Reliable

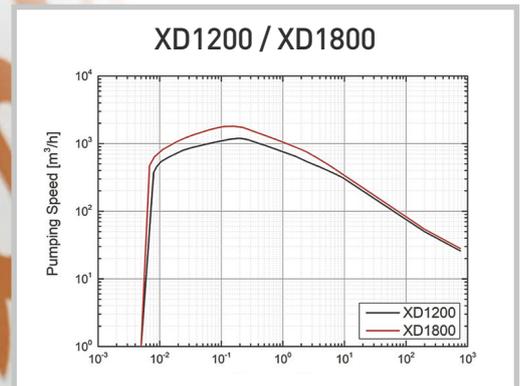
Designed for the highest reliability standards





# XD

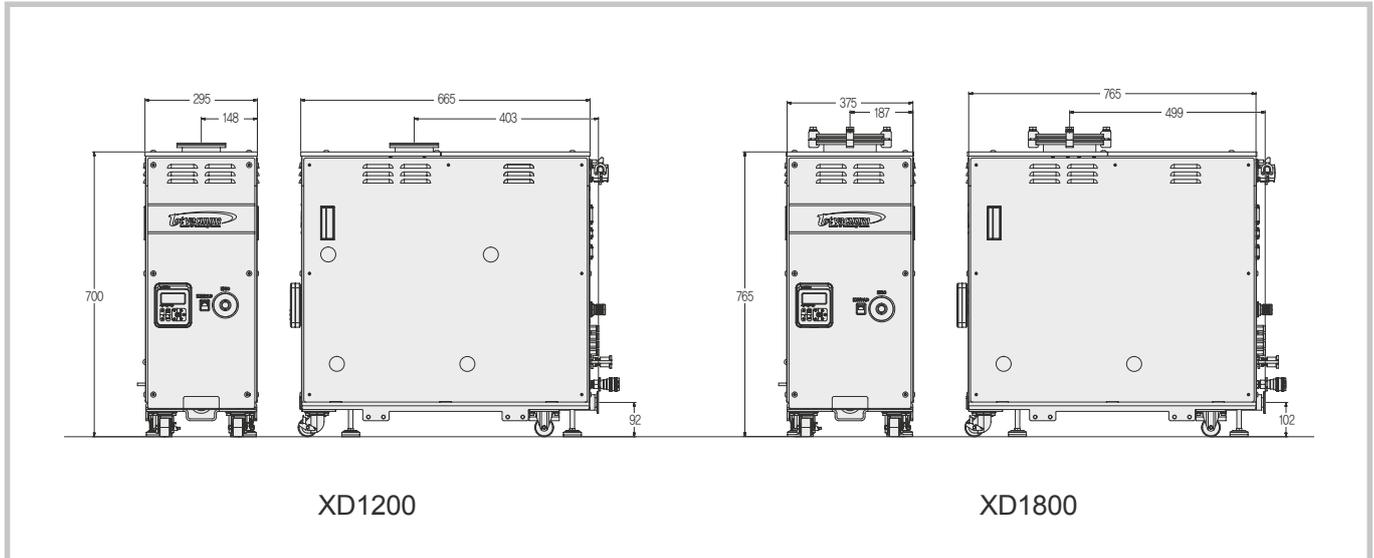
## Series



# XD Series

**MODEL | XD1200 / XD1800**

## PLAN



## TECHNICAL DATA

	Unit	XD1200	XD1800
Pumping speed	m <sup>3</sup> /hr	1,200	1,800
	ℓ/min	20,000	30,000
Ultimate pressure with module purge	Torr	≤ 5.0 × 10 <sup>-3</sup>	≤ 7.5 × 10 <sup>-3</sup>
	Pa	≤ 6.6 × 10 <sup>-1</sup>	≤ 9.9 × 10 <sup>-1</sup>
Maximum exhaust pressure	bar (psig)	1.5 (7.2)	
Nitrogen supply pressure	bar (psig)	4 ~ 8 (43 ~ 100)	
Internal purge-gas pressure	bar (psig)	3 (29)	
Nitrogen consumption (ETCH)	slm	40 ~ 44	
Nitrogen consumption (CVD)	slm	40 ~ 44	
Nitrogen connection	inch	1/4" Lok Fitting	
Cooling water consumption	ℓ/min	2 ~ 11.4	
Cooling water supply temp	°C (°F)	15 ~ 25 (59 ~ 77)	
Cooling water supply pressure (with ΔP ≥ 1bar)	bar (psig)	3.5 ~ 6 (36 ~ 73)	
Cooling water connection	inch	3/8" Quick Connector	
Intake port	mm	DN 100 ISO-K	DN 160 ISO-K
Exhaust port	mm	NW40	
Dimension (W×L×H)	mm <sup>3</sup>	295 × 665 × 700	375 × 765 × 765
Weight	kg (lbs)	190	248
Maximum ambient temperature	°C (°F)	40 (104)	
Minimum ambient temperature	°C (°F)	10 (50)	
Power consumption at ultimate pressure (DP+BP)	kW	1.5	2.0
Rated motor power (DP+BP)	kW	6.0	7.0
Supply voltage-Multi-Voltage motor	V/∅/Hz	200~230, 380~480V (±10%) / 3∅ / 60Hz 200~230, 380~460V (±5%) / 3∅ / 50Hz	
Oil charge volume (DP+BP)	ℓ	0.65	

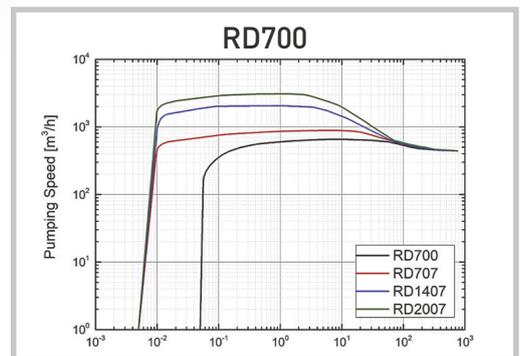
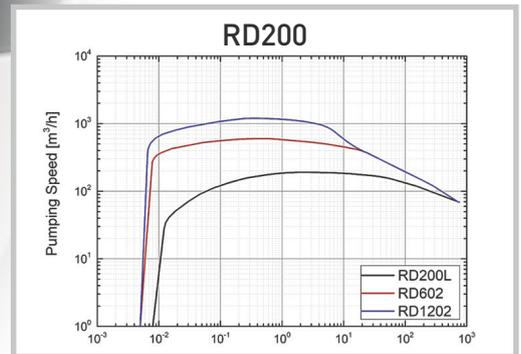
※ Option can be set, power consumption → average

※ Ultimate pressure with module purge – based on normal concept, varies by each temperature concept

# RD

## Series

The Perfect Solutions  
for Your Application



### FEATURES

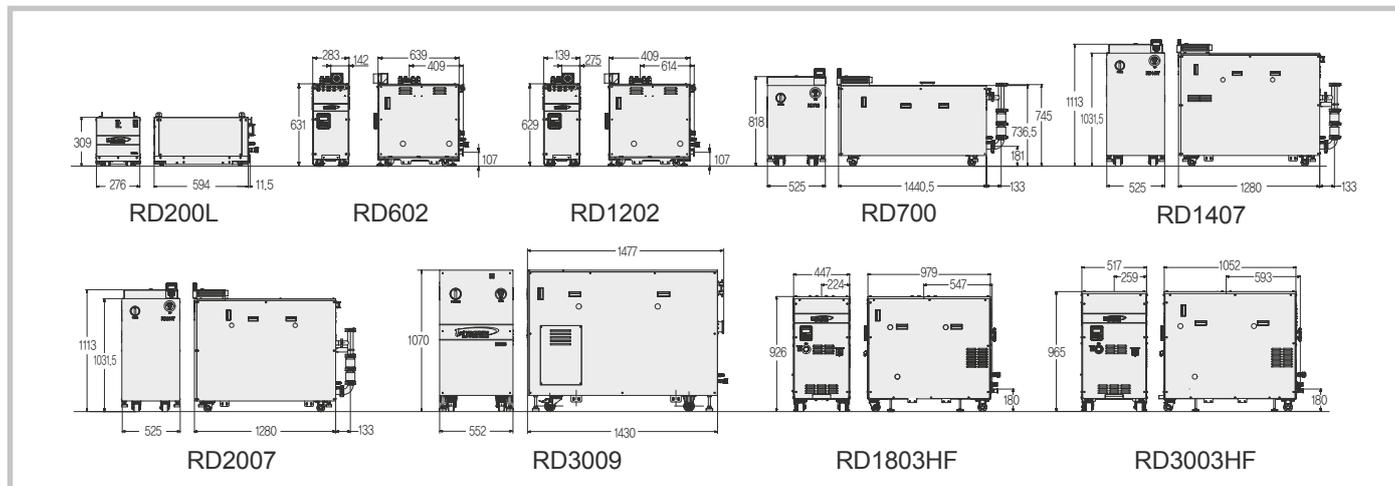
- Multi-Stage Roots Type
- Large-Volume LoadLock Model for FPD/Solar Business
- High Exhausting Speed in Atm. Zone  
- Improved Tact time and Throughput
- Low Cost of Ownership  
- N<sub>2</sub>, Power, Water, Footprint, Volume, Weight
- Designed for Less Noise and Less Vibration



# RD Series

MODEL | RD200L / RD602 / RD700 / RD707 / RD1202 / RD1407 / RD2007 / RD3009 / RD3010 / RD1803 / RD1803HF / RD3003HF

## PLAN



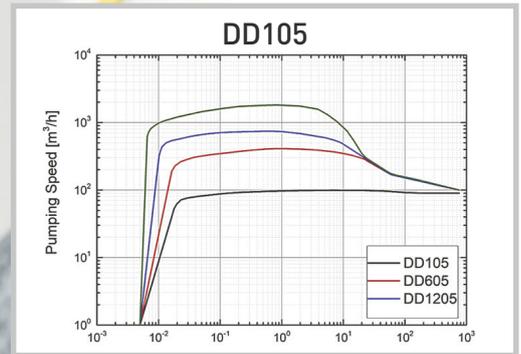
## TECHNICAL DATA

	Unit	RD200L	RD602	RD700	RD707	RD1407	RD2007	RD3009	RD3010	RD1803	RD1803HF	RD3003HF	
Pumping speed	m <sup>3</sup> /hr	180	600	650	900	2,000	3,000	3,500	3,600	1,800	1,800	3,000	
	ℓ/min	3,000	10,000	11,000	15,000	33,000	50,000	58,000	60,000	30,000	30,000	50,000	
Ultimate pressure	Torr	≤ 9.9×10 <sup>-3</sup>	≤ 5.0×10 <sup>-3</sup>	≤ 5.0×10 <sup>-2</sup>		≤ 5.0×10 <sup>-3</sup>		≤ 5.0×10 <sup>-3</sup>		≤ 7.5×10 <sup>-3</sup>	≤ 7.5×10 <sup>-3</sup>	≤ 7.5×10 <sup>-3</sup>	
	Pa	≤ 1.33×10 <sup>+0</sup>	≤ 6.6×10 <sup>-1</sup>	≤ 6.6×10 <sup>+0</sup>		≤ 6.6×10 <sup>-1</sup>		≤ 6.6×10 <sup>-1</sup>		≤ 1.0×10 <sup>+0</sup>	≤ 1.0×10 <sup>+0</sup>	≤ 1.0×10 <sup>+0</sup>	
Maximum exhaust pressure	bar (psig)	1.5 (7.2)											
Nitrogen supply pressure (Option)	bar (psig)									4 ~ 8 (43 ~ 100)			
Internal purge-gas pressure (Option)	bar (psig)									3 (29)			
Nitrogen consumption (ETCH)(Option)	slm									50			
Nitrogen consumption (CVD)(Option)	slm									50 ~ 100			
Nitrogen connection (Option)	inch									1/4" Lok Fitting			
Cooling water consumption	ℓ/min	≥ 3							≥ 6		6 ~ 12		
Cooling water supply temp	°C (°F)									15 ~ 25 (59 ~ 77)			
Cooling water supply pressure (with ΔP≥1bar)	bar (psig)									3.5 ~ 6 (36 ~ 73)			
Cooling water connection	inch	1/4" Quick Connector		3/8" Quick Connector									
Intake port	mm	50 ISO-K	100 ISO-K			160 ISO-F	200 ISO-F	250 ISO-F		DN 160 ISO-K		DN 250 ISO-K	
Exhaust port	mm	25 ISO-KF	40 ISO-KF	50 ISO-KF				63 ISO-KF	63 ISO-K	40 ISO-KF			
Dimension (W×L×H)	mm <sup>3</sup>	276×594×308	283×639×631	525×1,440×818	525×1,280×1,113			552×1,428×1,070		450×980×840	450×980×930	518×1,168×960	
Weight	kg (lbs)	95 (209)	165 (364)	570 (1,257)	700 (1,543)	810 (1,786)	850 (1,874)	1,200 (2,645)		450 (992)	490 (1,080)	600 (1,322)	
Maximum ambient temperature	°C (°F)	40 (104)											
Minimum ambient temperature	°C (°F)	10 (50)											
Power consumption at ultimate pressure	kW	0.5	0.7	7.0	7.6	7.8	8.0	12.0		4.0	4.5	4.9	
Rated motor power	kW	3.0	6.0	15.0	19.0			44.0		8.0	9.0	12.0	
Supply voltage-Multi-Voltage motor	V/∅/Hz	220, 380, 440V / 3Phase / 50, 60Hz											
Oil charge volume	ℓ	0.28	0.55	2.70	3.60	4.50		5.40		0.65	2.20	2.80	

※ Process Version – Adding N<sub>2</sub> Purge

# DD105

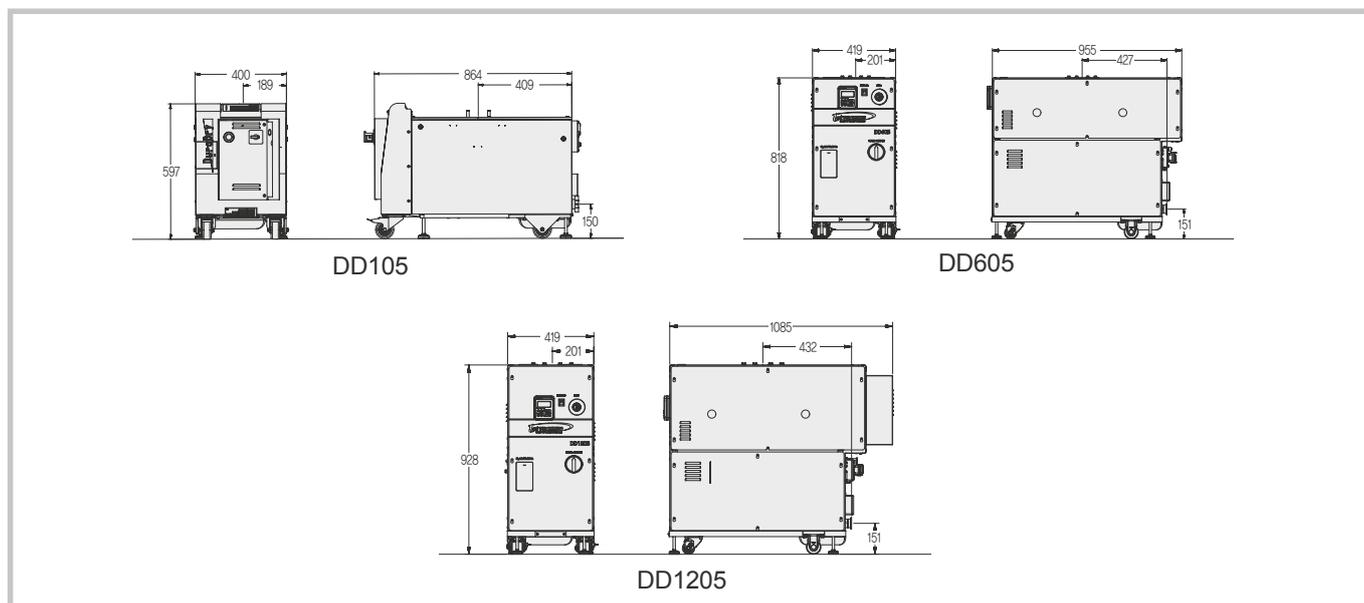
## Series



# DD105 Series

MODEL | DD105 / DD605 / DD1205

## PLAN



## TECHNICAL DATA

	Unit	DD105	DD605	DD1205
Pumping speed	m <sup>3</sup> /hr	100	480	900
	ℓ/min	1,700	8,000	15,000
Ultimate pressure with module purge	Torr		≤ 5.0 × 10 <sup>-3</sup>	
	Pa		≤ 6.6 × 10 <sup>-3</sup>	
Maximum exhaust pressure	bar (psig)		1.5 (7.2)	
Nitrogen supply pressure	bar (psig)		4 ~ 8 (43 ~ 100)	
Internal purge-gas pressure	bar (psig)		3 (29)	
Nitrogen consumption (ETCH)	slm		13	
Nitrogen consumption (CVD)	slm		50	
Nitrogen connection	inch		1/4" Lok Fitting	
Cooling water consumption	ℓ/min		1.8 ~ 7.6	
Cooling water supply temp	°C (°F)		15 ~ 30 (59 ~ 86)	
Cooling water supply pressure (with ΔP ≥ 1bar)	bar (psig)		3.5 ~ 9 (36 ~ 116)	
Cooling water connection	inch		3/8" Lok Fitting	
Intake port	mm	DN 63 ISO-K	DN 100 ISO-K	DN 160 ISO-K
Exhaust port	mm		DN 40 KF	
Dimension (W × L × H)	mm <sup>3</sup>	400 × 864 × 597	419 × 955 × 818	419 × 1,085 × 928
Weight	kg (lbs)	278 (613)	435 (959)	578 (1,274)
Maximum ambient temperature	°C (°F)		40 (104)	
Minimum ambient temperature	°C (°F)		10 (50)	
Power consumption at ultimate pressure (DP+BP)	kW	5.0	5.4	5.6
Rated motor power (DP+BP)	kW	5.0	7.0	9.0
Supply voltage-Multi-Voltage motor	V/∅/Hz	200, 208, 230, 460, 480V (±10%) / 3∅ / 60Hz 200, 208, 380, 415V (±5%) / 3∅ / 50Hz		
Oil charge volume (DP+BP)	ℓ	1.10	1.90	2.80

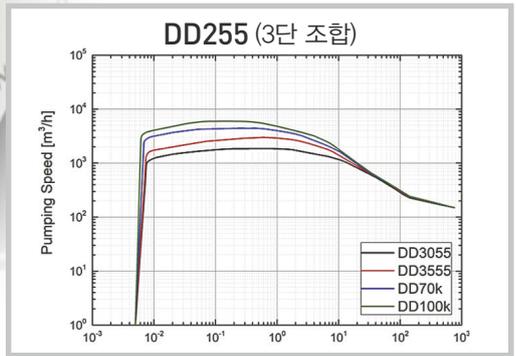
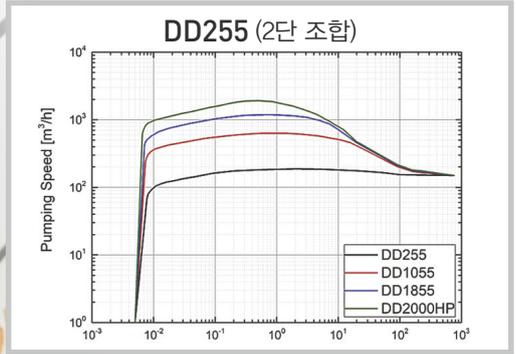
※ Option can be set, power consumption → average

※ Ultimate pressure with module purge – based on normal concept, varies by each temperature concept

# DD255 Series



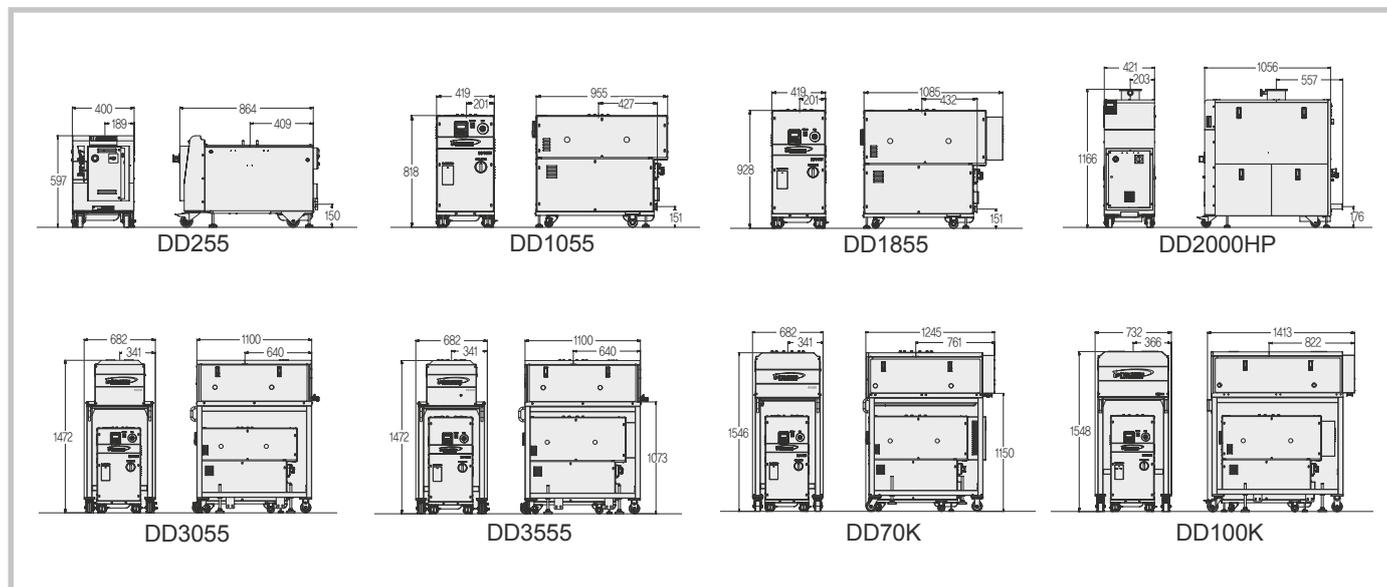
**Lot vacuum**  
Leader Of Technology Vacuum



# DD255 Series

**MODEL | DD255 / DD1055 / DD1855 / DD2000HP / DD3055 / DD3555 / DD70K / DD100K**

## PLAN



## TECHNICAL DATA

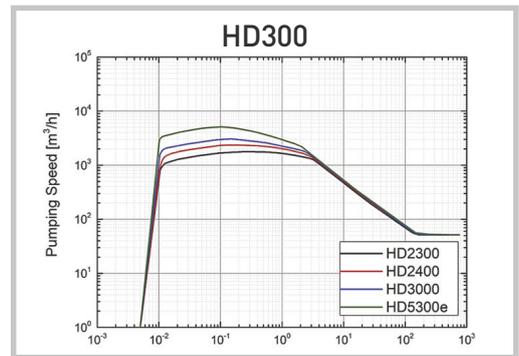
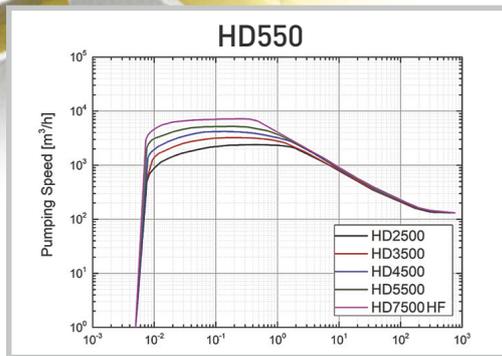
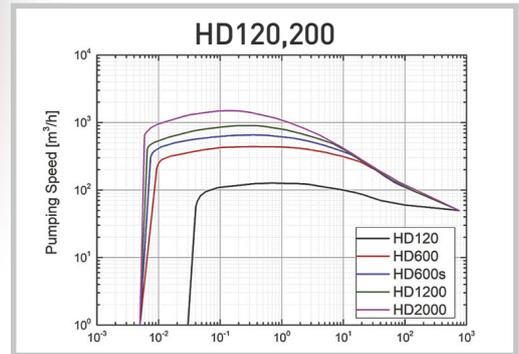
	Unit	DD255	DD1055	DD1855	DD2000HP	DD3055	DD3555	DD70K	DD100K
Pumping speed	m <sup>3</sup> /hr	200	600	1,200	1,800	1,800	3,000	4,250	6,000
	ℓ/min	3,400	10,000	20,000	30,000	30,000	50,000	70,000	100,000
Ultimate pressure with module purge	Torr	≤ 5.0 × 10 <sup>-3</sup>							
	Pa	≤ 6.6 × 10 <sup>-1</sup>							
Maximum exhaust pressure	bar (psig)	1.5 (7.2)							
Nitrogen supply pressure	bar (psig)	4 ~ 8 (43 ~ 100)							
Internal purge-gas pressure	bar (psig)	3 (29)							
Nitrogen consumption (ETCH)	slm	13							
Nitrogen consumption (CVD)	slm	50							
Nitrogen connection	inch	1/4" Lok Fitting							
Cooling water consumption	ℓ/min	1.8 ~ 7.6							
Cooling water supply temp	°C (°F)	15 ~ 30 (59 ~ 86)							
Cooling water supply pressure (with ΔP ≥ 1bar)	bar (psig)	3.5 ~ 9 (36 ~ 116)							
Cooling water connection	inch	3/8" Lok Fitting							
Intake port	mm	DN 63 ISO-K	DN 100 ISO-K	DN 160 ISO-K	DN 200 ISO-K		DN 250 ISO-K	DN 320 ISO-K	
Exhaust port	mm	DN 40 KF							
Dimension (W×L×H)	mm <sup>3</sup>	400×864×597	419×955×818	419×1085×928	421×1056×1166	682×1100×1472	682×1100×1472	682×1245×1546	732×1413×1548
Weight	kg (lbs)	278 (613)	435 (959)	577 (1272)	612 (1349)	870 (1918)	1012 (2231)	1357 (2992)	1457 (3212)
Maximum ambient temperature	°C (°F)	40 (104)							
Minimum ambient temperature	°C (°F)	10 (50)							
Power consumption at ultimate pressure (DP+BP)	kW	5.0	5.3	5.5	5.8	6.0	6.2	7.0	7.2
Rated motor power (DP+BP)	kW	5.0	7.0	9.0		14.0	16.0	20.0	
Supply voltage-Multi-Voltage motor	V/∅/Hz	200, 208, 230, 460, 480V (±10%) / 3∅ / 60Hz 200, 208, 380, 415V (±5%) / 3∅ / 50Hz							
Oil charge volume (DP+BP)	ℓ	1.10	1.90	2.80	3.70	4.60	6.80		

\* Option can be set, power consumption → average

\* Ultimate pressure with module purge – based on normal concept, varies by each temperature concept



# HD Series



## FEATURES

### HYBRID SCREW ROTOR

- Easy Powder Handling
- Low compression ratio  
= Low gas temperature  
= Low deposition in pump

### SHORT GAS PATH

- Low reaction rate in pump

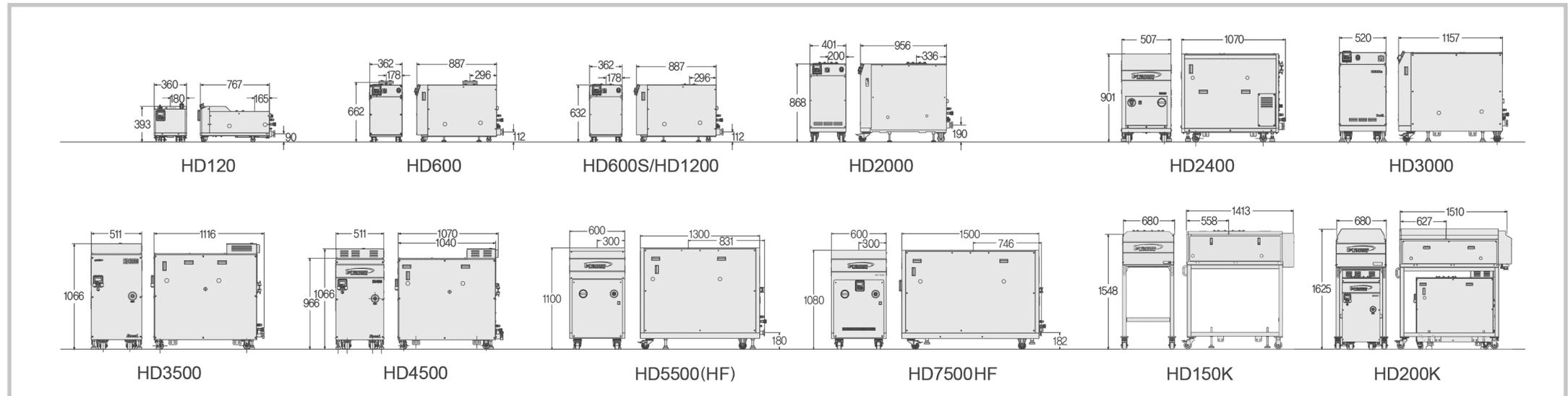
### COMPACT SIZE / ENERGY SAVING

# HD Series



MODEL | HD120 / HD600 / HD600S / HD1200 / HD2000 / HD2400 / HD3000 / HD3500 / HD4500 / HD5500(HF) / HD7500HF / HD150K / HD200K

## PLAN



## TECHNICAL DATA

	Unit	HD120	HD600	HD600S	HD1200	HD2000	HD2400	HD3000	HD3500	HD4500	HD5500(HF)	HD7500HF	HD150K	HD200K	
Pumping speed	m <sup>3</sup> /hr	120	450	600	1,200	1,800	2,400	3,000	3,200	4,200	5,200	7,200	9,000	12,000	
	ℓ/min	2,000	7,500	10,000	20,000	30,000	40,000	50,000	53,000	70,000	86,000	125,000	150,000	200,000	
Ultimate pressure with module purge	Torr	≤ 3.0 × 10 <sup>-2</sup>										≤ 1.0 × 10 <sup>-3</sup>			
	Pa	≤ 3.9 × 10 <sup>+0</sup>										≤ 1.3 × 10 <sup>-1</sup>			
Maximum exhaust pressure	bar(psig)									1.5 (7.2)					
Nitrogen supply pressure	bar(psig)									4 ~ 8 (43 ~ 100)					
Internal purge-gas pressure	bar(psig)									3 (29)					
Nitrogen consumption (ETCH)	slm									-					
Nitrogen consumption (CVD)	slm									50		100			
Nitrogen connection	inch									1/4" Lok Fitting					
Cooling water consumption	ℓ/min									2 ~ 11.4				6 ~ 8	
Cooling water supply temp	°C (°F)									15 ~ 25 (59 ~ 77)					
Cooling water supply pressure (with ΔP ≥ 1bar)	bar(psig)									3.5 ~ 6 (36 ~ 73)					
Cooling water connection	inch									3/8" Quick Connector					
Intake port	mm	DN 63 KF		DN 100 ISO-K		DN 160 ISO-K		DN 200 ISO-K		DN 250 ISO-K		DN 320 ISO-K			
Exhaust port	mm	DN 40 KF								DN 40 KF / DN 50 KF					
Dimension (W×L×H)	mm <sup>3</sup>	360×767 ×393	362×887 ×662	362×887 ×632		401×956 ×868	507×999 ×902	520×1157 ×992	510×1040 ×1065	511×1040 ×1066	600×1300 ×1100	600×1500 ×1080	680×1413 ×1548	680×1510 ×1625	
Weight	kg (lbs)	160 (353)	317 (699)	300 (661)		500 (1102)	650 (1433)	750 (1653)	816 (1803)	912 (2011)	1080 (2381)	1200 (2645)	1612 (3546)	1800 (3960)	
Maximum ambient temperature	°C (°F)									40 (104)					
Minimum ambient temperature	°C (°F)									10 (50)					
Power consumption at ultimate pressure (DP+BP)	kW	2.6 / 2.3	3.3 / 3.0	2.8 / 2.5	2.9 / 2.6	3.3 / 2.9	3.2	3.3	6.3	6.8	8.0	7.75	7.45		
Rated motor power (DP+BP)	kW	4.0	6.6	8.0		9.0		17.0		21.0		28	32		
Supply voltage-Multi-Voltage motor	V/∅/Hz	200 ~ 230, 380 ~ 480V (±10%) / 3∅ / 60Hz 200 ~ 230, 380 ~ 460V (±5%) / 3∅ / 50Hz						200 ~ 230V / 3∅ / 50, 60 Hz		380 ~ 460V / 3∅ / 50, 60 Hz					
Oil charge volume (DP+BP)	ℓ	0.39	1.19	1.29		2.20		3.32	3.92	5.32	5.50	8.1	9.6		

※ Option can be set, power consumption → average

※ Ultimate pressure with module purge – based on normal concept, varies by each temperature concept

