

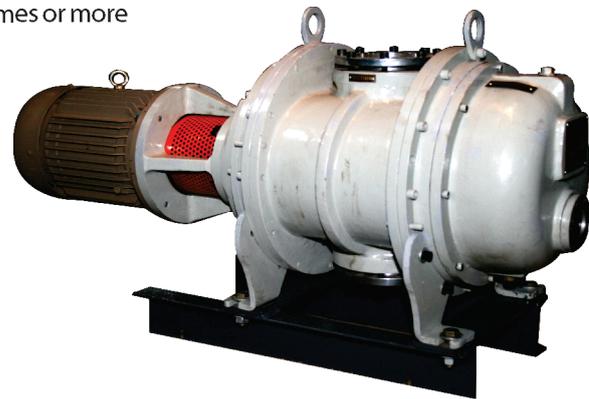
A1 VACCUM SYSTEMS
Blowers & Vacuum Boosters
An ISO 9001 : 2008 Certified Company

Mechanical Vacuum Booster Pumps

- ▲ 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. A1 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.
- ▲ Vacuum boosters are used to "supercharge" vacuum pumps to greatly extend pump performance. This allows for much faster pumping speeds and deeper vacuum levels. Vacuum boosters from Vacuum & Blower Systems are utilized worldwide in the manufacture of chemicals, petrochemicals, plastics, semiconductors and wood composites as well as food processing, vacuum furnace applications and many other general applications in industry.
- ▲ Vacuum Boosters also known as Mechanical Boosters are dry pumps that meet most of the ideal Vacuum Pumping requirements. These are Positive Displacement type & are designed to handle large quantity of gases under low working pressures and are manufactured keeping close tolerances and ensuring complete air tightness. These are available in V-Belt / Direct Driven versions wherein the capacity can be varied as per choice. A Vacuum Booster can be backed by various types of Vacuum Pumps such as Rotary Oil Sealed, Water-ring Vacuum Pump, Rotary Piston, Reciprocating Piston Pump, Dry Screw Pumps, Water / Steam Ejectors etc.

Outsourcing Advantages :

- ▲ High vacuum of the order of 0.001 Torr or better
- ▲ High pumping speeds at low pressures. Speed is boosted by 3 to 10 times or more
- ▲ Relatively lower power consumption for such performance boosting
- ▲ Considerable reduction in pump down t
- ▲ Every vacuum booster is designed to operate at 82 dB (A) or less at blank-off (open field; motor and background noise excluded).



Typical Applications

- ▲ Supercharging vacuum pumps for better system performance
- ▲ Increasing vacuum system capacities
- ▲ Reducing system ultimate pressures
- ▲ Vacuum Casting, Coating, Degassing, Distillation, Transformer Oil Purification, Food & Edible Oil Processing, Drying, Freezing, Furnaces, Impregnation, Automotive Fluid Filling, Metallizing, Polymerisation, Crystallisation, Sintering, Electron Beam Welding, Heat Treatment, Plasma Welding, Sputtering, Creating Low Density Wind Tunnels, Space Simulation and also in Industries like Pharmaceutical, Chemical, Fertilizer, Electric Bulb & Tube Manufacturing, Semi-Conductors & Petrochemicals.

TECHNICAL SPECIFICATIONS FOR A1 MECHANICAL VACUUM BOOSTERS

Model	In/Out (MM)	Capacity Speed (m ³ /hr)	Rec. Motor (1500 rpm)	Maximum Differential Pressure (mbar)
A1-VB 01	65	260	1.5 HP	90
A1-VB 05	65	400	3 HP	120
A1-VB 15	80	800	5 HP	90
A1-VB 30	125	1670	7 HP	70
A1-VB 50	125	2930	10 HP	50
A1-VB 60	200	3900	15 HP	65
A1-VB 70	200	5250	15 HP	45



DRY SCREW VACUUM PUMP

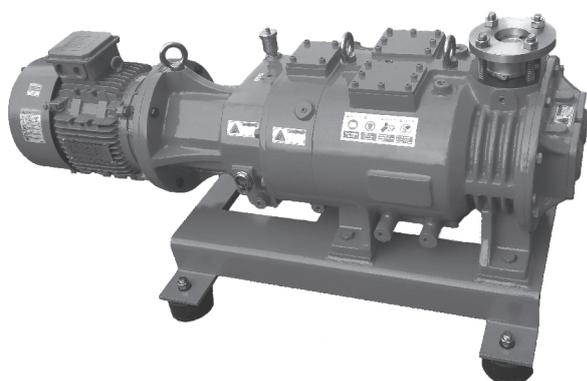
Manufactures high-quality vacuum systems for various needs of multiple industries. Just like Rotary Vane Vacuum Pumps, these are among the newest addition to the pumping industry. As the name suggests, dry screw vacuum pumps work on a no oil, no water principle that makes them extremely reliable for environment-friendly applications. The pumping capacity of the blower ranges from 120m³/hour to 3,000m³/hour depending on the model. These products are available in several models and configurations to match a wide variety of requirements. Further, these pumps can be used in combination with other vacuum



Applications

- ★ Reaction
- ★ Evaporation
- ★ Distillation
- ★ Refinery
- ★ Vapor Recovery
- ★ Drying
- ★ Degassing
- ★ House Vacuum
- ★ Freeze Drying
- ★ Filtration
- ★ Pervaporation
- ★ Impregnation

Model	A1S150	A1S300	A1S400	A1S800	A1S1500	A1S3000
Displacement(m ³ /hr, 50/60Hz)	110/130	250/300	330/400	660/800	1,250/1,500	2,250/2,700
Ultimate Pressure (Torr)	5 X 10 ⁻²	7.5 X 10 ⁻³	7.5 X 10 ⁻³	7.5 X 10 ⁻³	5 X 10 ⁻²	5 X 10 ⁻²
Standard Motor (Kw, 50Hz/60Hz)	2.2/3.7	7.5/7.5	7.5/11	15/15	30/37	37/55
Power Consumption (kW, 50Hz/60Hz)	1.8/3.3	4.8/5.9	6.2/6.9	10.4/12.4	24.7/30.4	30.6/45.2
Rotation(max. rpm, 50Hz/60Hz)	2,900/3,500	2,900/3,500	2,900/3,500	2,900/3,500	1,450/1,750	1,450/1,750
Connection(Inlet/Outlet)	40/40 nb	50/40 nb	65/50 nb	100/65 nb	5"/3"	6"/4"
Cooling Water Flow(l/min)	5~10	10~15	10~15	15~20	30~40	40~50
Seal Purge Consumption(l/min)	5 ~ 15				15 ~ 25	
Apprx. Weight(Bare Shaft, Kg)	200	300	380	600	1,200	1,500



OIL SEALED ROTARY VANE VACUUME PUMP



Applications

- ★ Thin Flim Coating
- ★ Vacuum Flask
- ★ Refrigeration
- ★ Distillation
- ★ Capacitor
- ★ Transformer Oil Filtration
- ★ Filament Bulb
- ★ Packaging
- ★ Thermoforming
- ★ Jewllery Casting
- ★ Lube Oil Re'nery
- ★ Cryogenic Vessel
- ★ Freeze Drying
- ★ Cable Drying
- ★ Vacuum Impregnation
- ★ Transformer Drying
- ★ Break Line Evacuation
- ★ Annealing

AIR COOLED VACUUM PUMP SINGLE & DOUBLE 200 LPM TO 1000 LPM



Model	Pumping Speed	No. of Stage	Vacuum at Pump Inlet (By McLeod Gauge)	Motor H.P.	Oil Capacity	Inlet Port
A1 200 S	200 LPM	Single	.05 mm or Hg	.5 H.P.	3 Liters	1/2" BSP
A1 21 S	350 LPM	Single	.05 mm or Hg	1 H.P.	3.5 Liters	1/2" BSP
A1 30 S	500 LPM	Single	.05 mm or Hg	1 H.P.	3.5 Liters	3/4" BSP
A1 600 S	600 LPM	Single	.05 mm or Hg	1.5 H.P.	5 Liters	3/4" BSP
A1 50 S	800 LPM	Single	.05 mm or Hg	2 H.P.	5 Liters	1" BSP
A1 1000 S	1000 LPM	Single	.05 mm or Hg	2 H.P.	8.5 Liters	1" BSP
A1 200 D	200 LPM	Double	.001 mm or Hg	1 H.P.	3.5 Liters	1/2" BSP
A1 325 D	325 LPM	Double	.001 mm or Hg	1 H.P.	3.5 Liters	1/2" BSP
A1 21 D	350 LPM	Double	.001 mm or Hg	1 H.P.	3.5 Liters	1/2" BSP
A1 30 D	500 LPM	Double	.001 mm or Hg	1 H.P.	3.5 Liters	3/4" BSP
A1 600 D	600 LPM	Double	.001 mm or Hg	1.5 H.P.	5 Liters	3/4" BSP
A1 50 D	800 LPM	Double	.001 mm or Hg	2 H.P.	6 Liters	1" BSP
A1 1000 D	1000 LPM	Double	.001 mm or Hg	2 H.P.	6.5 Liters	1" BSP

WATER COOLED VACUUM PUMP 1500 LPM TO 7500 LPM

Model	Pumping Speed (LPM)	No. Of Stage	Oil Capacity (Litre)	Pump (RPM)	Motor H.P.	Inlet Connection	
						Flange Size	Rating
A1 1500D	1500	2	8	525	3	1.5"	ANSI 150
A1 2510D	2500	2	16	525	5	2"	ANSI 150
A1 3510D	3500	2	20	525	7.5	2"	ANSI 150
A1 5010D	5000	2	26	525	10	4"	ANSI 150
A1 7510D	7500	2	31	525	12.5	4"	ANSI 150

Ultimate Vacuum : 0.001 mm of hg in Double Stage Pump (By McLeod Gauge)
 Single Stage Pumps are also available
 Ultimate Vacuum in Single Stage pump : .05 mm of Hg (By McLeod Gauge)



OIL LUBRICATED VACUUM PUMP



Applications

- ★ Jewellery Casting
- ★ Shoe Moulding
- ★ Printing
- ★ CNC Router
- ★ Packaging
- ★ Thermo Forming
- ★ Vacuum Lamination
- ★ Vacuum
- ★ Rubber Moulding
- ★ Impregnation
- ★ Distillation
- ★ Wood Working Mechanism
- ★ Bottling Plant
- ★ Wind Turbine Blade
- ★ Laboratories
- ★ Glass Lamination
- ★ Food Processing
- ★ Pick & Place



TECHNICAL SPECIFICATIONS

Model	Capacity	Vacuum In HV Version (mbar)	Motor (H.P.) Three Phase	Motor (H.P.) Single Phase	Oil Capacity (Liters)	Water Vapour Tolerance (mbar)	Water Vapour Capacity (Kg./Hr.)
A1 20 OL	20 M/Hr	.5	1	1	1	30	.250
A1 25 OL	25 M/Hr	.5	1	1	1	30	.300
A1 30 OL	30 M/Hr	.5	1.5	1.5	1	30	.400
A1 40 OL	40 M/Hr	.5	2	2	2	30	.600
A1 65 OL	65 M/Hr	.5	2	N/A	2	30	1.4
A1 100 OL	100 M/Hr	.5	3	N/A	3	30	2
A1 160 OL	160 M/Hr	.5	5	N/A	5	30	3
A1 220 OL	220 M/Hr	.5	7.5	N/A	5	30	4
A1 300 OL	300 M/Hr	.5	10	N/A	7	30	6

OIL LUBRICATED VACUUM PUMP FOR PASTA PRODUCTION

Model	Pasta Production Capacity Up to	Capacity In M ³ /Hr	Ultimate Vacuum (Closed Gas Ballast)	Ultimate Vacuum Open Gas Ballast)	Water Vapour Capacity	Oil Capacity	Motor HP	Motor RPM
A1 50 HF	150 Kg/Hr	50 M ³ /Hr	0.5 mbar	4 mbar	1.2 Kg/Hr	2.5 Liters	2 HP	1440
A1 65 HF	200 Kg/Hr	65 M ³ /Hr	0.5 mbar	4 mbar	1.5 Kg/Hr	2.5 Liters	2 HP	1440
A1 100 HF	350 Kg/Hr	100 M ³ /Hr	0.5 mbar	4 mbar	2.5 Kg/Hr	3 Liters	3 HP	1440

FEATURES

- ★ High water Vapour tolerance
- ★ Built in anti suck back system
- ★ Quiet Operation
- ★ Compact & Simple Design
- ★ High Pumping speed at complete vacuum range

CHEMICAL SERIES VACUUM PUMP

For Distillation & drying Application

Model	A1 12 CS	A1 40 CS	A1 60 CS	A1 90 CS	A1 300 CS	A1 500 CS
Type	Direct Drive	Belt Drive	Belt Drive	Belt Drive	Belt Drive	Belt Drive
Cooling	Air Cooled	Air Cooled	Air Cooled	Water Cooled	Water Cooled	Water Cooled
Pumping Speed (M3/hr)	12 M3/Hr	40 M3/Hr	60 M3/Hr	90 M3/Hr	300 M3/Hr	500 M3/Hr
Pumping Speed (LPM)	200 LPM	650 LPM	1000 LPM	1500 LPM	5000 LPM	8500 LPM
Ultimate Vacuum (Closed Gas Ballast)	1 mbar	1 mbar	1 mbar	1 mbar	1 mbar	1 mbar
Ultimate Vacuum (Open Gas Ballast)	2 mbar	1 mbar	1 mbar	1 mbar	1 mbar	1 mbar
Water Vapour Tolerance	40 mbar	40 mbar	40 mbar	40 mbar	40 mbar	40 mbar
Water Vapour Capacity (Open Ballast)	2 Kg/Hr	6 Kg/Hr	1 Kg/Hr	3.5 Kg/Hr	5 Kg/Hr	8 Kg/Hr
Pump Speed (RPM)	1440	960	960	960	960	960
Oil Capacity	1 Liter	5 Liter	6 Liter	10 Liter	24 Liter	26 Liter
Motor H.P.	.5 H.P.	1.5 H.P.	2 H.P.	3 H.P.	10 H.P.	15 H.P.



DIRECT DRIVE VACUUM PUMP

AIR COOLED DOUBLE STAGE VACUUM PUMP UP TO 1500 LPM



Applications

- ★ Filament Bulb
- ★ Vacuum Flask
- ★ Thin film coating
- ★ Epoxy Degassing
- ★ Multi Vanes
- ★ Electron Microscopes
- ★ Freeze Drying
- ★ Distillation
- ★ Rotary Vane Vacuum Pump
- ★ Sputtering
- ★ Chemistry Laboratories
- ★ Gas Charging in Air Conditioner & Refrigerator
- ★ T.V. Aluminizer
- ★ Leak Detection
- ★ Mass Spectrometry

Model	Pumping Speed (LPM)	Oil Capacity (Liter)	Motor H.P.	Inlet Connection	Weight With Motor
				Nozzle	
A1 200 DD	200	1	0.5	3/4" BSP OD 32mm	30
A1 350 DD	350	2.5	1	3/4" BSP OD 32mm	52
A1 600 DD	600	2.5	1.5	"BSP 3/4 OD 32mm	56
A1 1000 DD	1000	3.5	2	1" BSP OD 40mm	75

Ultimate Vacuum : 0.001 mm Hg in Double Stage Pump(McLeod Gauge)



We are also manufacturing high vacuum pumping system (combination of backing vacuum pump + boosters) available in 2 stage & 3 stage configuration achieved ultimate vacuum < .001 torr



Dry Screw Vacuum Pump & Boosters
Vacuum Pumping Systems.
Capacity Available :
600 m3/h -18,000 m3/h.

Rotary Vane Vacuum Pump & Boosters
Pumping Systems
capacity available :
260 m3/h -10,000 m3/h.



Water Ring Vacuum Pump & Boosters
Vacuum Pumping Systems.
Capacity Available :
400 m3/h - 10,000 m3/h.

Reciprocating Piston Vacuum Pump & Boosters
Vacuum pumping systems
Capacity Available :
260 m3/h -10,000 m3/h .



We are engineering solutions provider company. We can also offer customised vacuum systems to the customers.

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