

# Vacuum Boosters

Models 1800, 2200, 2900, 3600, 4500

Bi-directional Rotation

Series Options:

Vertical Flow, Mechanical Seals, Integral Pressure Lubrication

Horizontal Flow, Mechanical Seals, Integral Pressure

Lubrication

Vertical Flow, Mechanical Seals

Horizontal Flow, Mechanical Seals

Vacuum boosters are used to “supercharge” vacuum pumps to greatly extend pump performance. This allows for much faster pumping speeds and deeper vacuum levels. M-D Pneumatics vacuum boosters from Tuthill 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.

### Mechanical Seals, Integral Pressure

These series incorporate mechanical seals on the rotor shafts and the drive shaft, flanged port fittings, water cooled drive shaft seal, integral pressure lubrication system with water cooled heat exchanger, and cooling coils in the end covers.

Water cooled drive shaft seal not included with optional motor mounting flange versions.

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### Optional Materials and Coatings Available

Standard construction materials include cast iron housing, end plates and port fittings with ductile iron rotors and shafts. In addition to standard construction, the following materials are available:

#### Special Materials

Ductile Iron

Carbon Steel\*

Stainless Steel\*

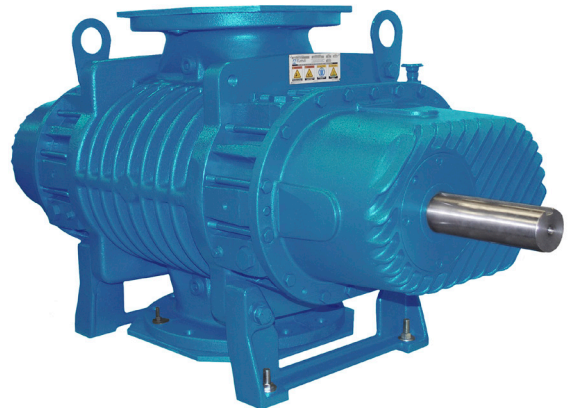
\*2200, 2900 only

#### Special Coatings

Bi-Protec® (Nickel/Armoly®)

### Low Mechanical Noise

Every M-D Pneumatics vacuum booster is designed to operate at 82 dB(A) or less at blank-off (open field; motor and background noise excluded).



### Optional Motor Mounting Flanges

All models are available with flange adapters for mounting either a NEMA C-face motor (up to 75 HP) or an IEC D-flange motor (up to 55 kW) directly to the vacuum booster, eliminating the need for a separate base mounted assembly and coupling guard for the vacuum booster.

### Metric Availability

All M-D Pneumatics vacuum boosters are available with metric drive shaft and process connections.

### Material Specifications:

**Housing:** Cast iron

**End Plates:** Cast iron

**End Covers:** Cast iron

**Rotors:** Ductile iron

**Shafts:** Ductile iron cast integrally with rotors

**Drive Shaft:** SAE 4140 forged alloy steel

**Bearings:** Gear end - Double row ball, both rotors

Back end - Cylindrical roller

**Drive Shaft:** Cylindrical roller

**Gears:** Heat-treated alloy steel, helical cut and precision ground

**Seals:** Drive shaft - Mechanical

Rotor shafts - Mechanical

**Lubrication:** Oil splash system or integral pressure lube

MODEL	Net Wgt. (lbs.)*
1800	1150
2200	1255
2900	1390

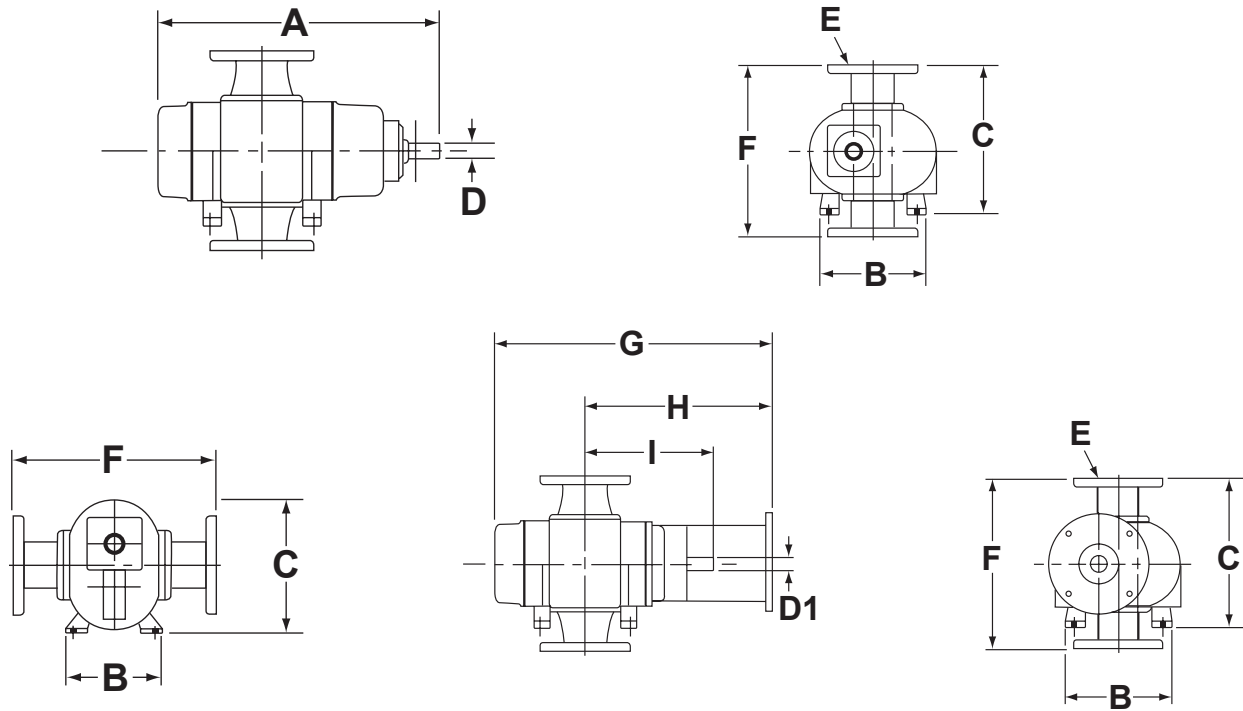
MODEL	Net Wgt. (lbs.)*
3600	1540
4500	1720

\*Approximate shipping weight.

## Dimensions

Values shown are approximate and should not be used for construction.

Certified drawings are available through your local Tuthill Vacuum & Blower Systems Sales Professional.



MODEL	SERIES	DISPL. CFM	A	B	C	D Ø	D1 Ø	E	F	G	H	I
1800	V	680-1800	44.94	17.50	25.63	2.375	1.875	6" FLG	23.50	38.56	16.56	20.00
	H				25.75							
2200	V	860-2300	47.69	17.50	25.63	2.375	1.875	8" FLG	23.50	41.31	17.94	21.38
	H				25.75							
2900	V	1130-3000	51.69	17.50	25.63	2.375	1.875	10" FLG	23.50	45.31	19.94	23.38
	H				25.75							
3600	V	1400-3600	55.69	17.50	25.63	2.375	1.875	12" FLG	23.50	49.31	21.94	25.38
	H				25.75							
4500	V	1730-4500	60.69	17.50	25.63	3.125	1.875	12" FLG	23.50	54.31	24.44	27.88
	H				25.75							

\* The shaft diameters identified as "D1" apply only to C-Face vacuum boosters.

Your Local Tuthill Vacuum Blower Systems Sales Professional:



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