

Dawn Cast Iron Pressure Blowers

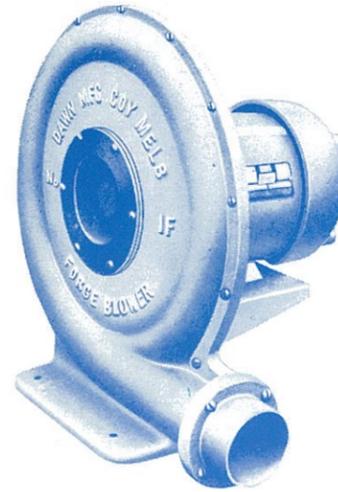
1F & 2F FORGE BLOWERS

DESIGN DUTY:

1F 120 C.F.M. (Std. Air) against 7" wg. Static Resistance at 2850 R.P.M.

2F 220 C.F.M. (Std. Air) against 14" wg. Static Resistance at 2850 R.P.M.

TESTED: In accordance with British Standard Specification BS-848, 1963. Performances converted to Standard Air Conditions as per BS-848 i.e. Air at 68°F. Temperature, 30" Hg Barometric Pressure, 62% Relative Humidity and having a Density equal to .075 lb./cu.ft. Performance Curves of Tests for every Fan are available if required.



"DAWN" 1F MOTORIZED FORGE BLOWER

CONSTRUCTION:

Both Blowers, 1F and 2F, are available as either Direct Coupled Motorised, or Belt Driven Units. **MOTORISED:** Cast iron case with mild steel shrouded Impellor mounted on cast iron centre directly coupled to 2 Pole (2850 R.P.M.), 50 Cycle T.E.F.C., Electric Motor, 3 Phase or Single Phase, mounted on a cast iron cantilever motor stand bolted to the Fan case. (Other makes of motor may be used if specifically requested.) 1F has 1/2 H.P. Motor. 2F has 1 1/2 H.P. Motor.

BELT DRIVEN: Cast iron case with mild steel shrouded Impellor mounted on cast iron centre fitted to steel spindle carried by 2 single row Ball Races in a cast iron Bearing Housing attached to the Fan case. (Bearings are grease lubricated.)

WEIGHTS: 1F Belt Driven 58 lb., 1F Motorised 93lb. 2F Belt Driven 113lb., 2F Motorised 139lb.

DISCHARGE & DRIVE

The standard Forge Blower is designated "Right Hand Under cast", i.e. when facing outlet of Fan, motor or drive is on the Right Hand side with Outlet at bottom, horizontal to floor. This discharge is designated "RO" according to BS-848 and F.M.A. Code 3, and "Clockwise Bottom Horizontal" according to N.A.F.M. Standard designation of Discharge Bulletin No. 105.

GAS BOOSTER:

Both 1F and 2F, Motorised or Belt Driven, are available as Gas Boosters. These are sealed to convey Gas and tested at double the rated air pressure. Inlets and Outlets are threaded for pipe connection (see dimension chart). Every Gas Booster is tested for sealing and performance before delivery. **CAUTION:** Care must be taken when ordering to specify Gas Booster, as Standard Forge Blowers are NOT Gas sealed.

MANUFACTURED BY:

DAWN TOOLS & VICES

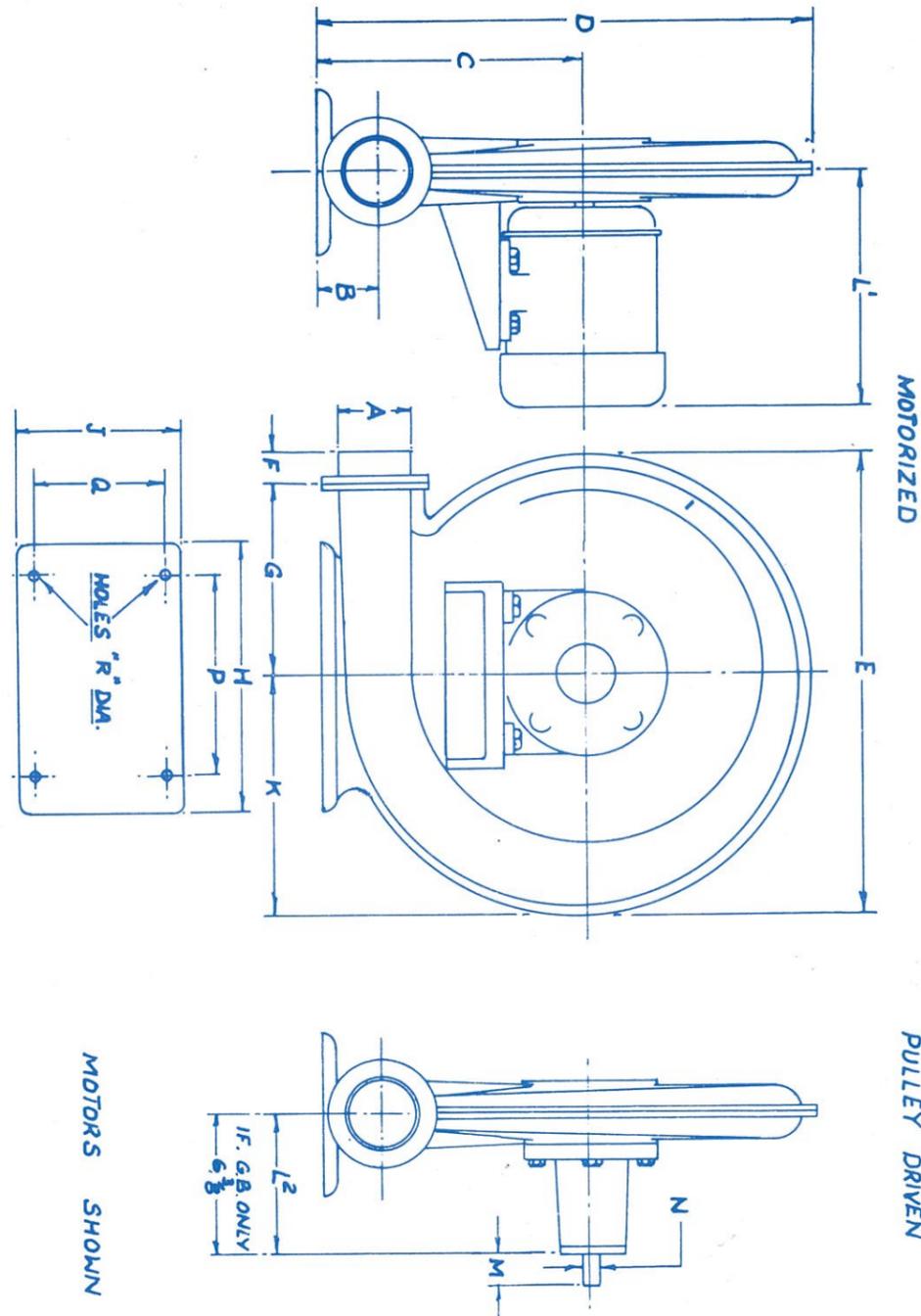
1 NORRIS STREET, NORTH COBURG, VIC., 3058, AUSTRALIA —

PHONE:
350 3811
(6 Lines)



OBTAINABLE FROM:

DAWN CAST IRON PRESSURE FANS NOS. 1F & 2F



FAN NO.	A	B	C	D	E	F	G	H	J	K	L ¹	L ²	M	N	P	Q	R
1F	3	2 1/4	9 5/8	17 3/4	17	1 1/2	8 1/2	10	6	8 7/8	10 1/2	4 1/2	1 1/4	5/8	6 1/2	4 1/4	3/8
2F	3 1/2	2 1/8	12 1/8	23 3/4	22 1/4	1 1/2	9 3/8	13	8	11 5/8	11 3/4	6 3/4	2	3/4	9 3/4	6 1/2	1/2

MOTORS SHOWN G.M.F. T.F.F.C.

GAS BOOSTER

INLET & OUTLET
2" BSP FEMALE
3" BSP FEMALE

ACCESSORIES:

Blast Gates are available for Standard 1F and 2F Forge Blowers — NOT FOR GAS BOOSTERS.

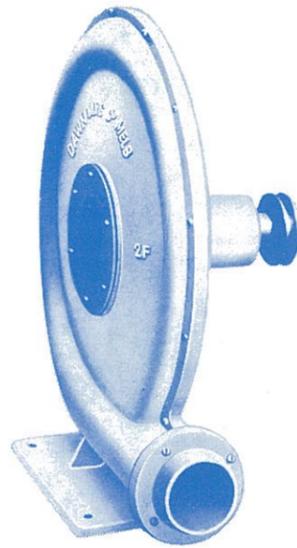
Air Filters can be fitted to inlets if required.

Heat Diffusers can be fitted to Belt Driven units where excessively hot air is being handled.

- 1A x 3" P.C.D. Vee-Pulley for 1F
- 1A x 3½" P.C.D. Vee-Pulley for 2F

APPLICATIONS:

These Forge Blowers are designed to provide relatively small Air Volume and medium pressures for Oil, Gas or Coke Fired Forges, Furnaces or Ovens. They are particularly suited to Blacksmiths Hearths, Pre-heating Furnaces, Crucible Furnaces, Gas Brazing Torches, Oil Fired Pit Furnaces for Non-ferrous Foundries and numerous similar Air Pressure applications within the capacities shown on performance graphs opposite.



"DAWN" 2F PULLEY DRIVEN FORGE BLOWER WITH VEE-PULLEY

PERFORMANCE GRAPHS:

The Performance Curves shown on the opposite page are taken from actual factory tests. They show performance at speeds from 2000 R.P.M. to 4500 R.P.M. for the 1F Forge Blower, and 970 R.P.M. to 4500 R.P.M. for the 2F. We do not recommend that they be run at speeds higher than 3500 R.P.M., as these performances can be more economically obtained from other Fans in the "DAWN" range. Please consult our Technical Representatives.

To read Performance Graphs:

1. Select Speed Curves required. (Black for Volume against Pressure, Red for Horsepower at volume.)
2. Read up from Volume (C.F.M.) to where Black Speed Curve is met, then read off to left for Pressure.
3. Read up from Volume (C.F.M.) to where Red Speed Curve is met, then read off to right for Horsepower.

Note: Allowance must be made for Transmission loss in Drive.



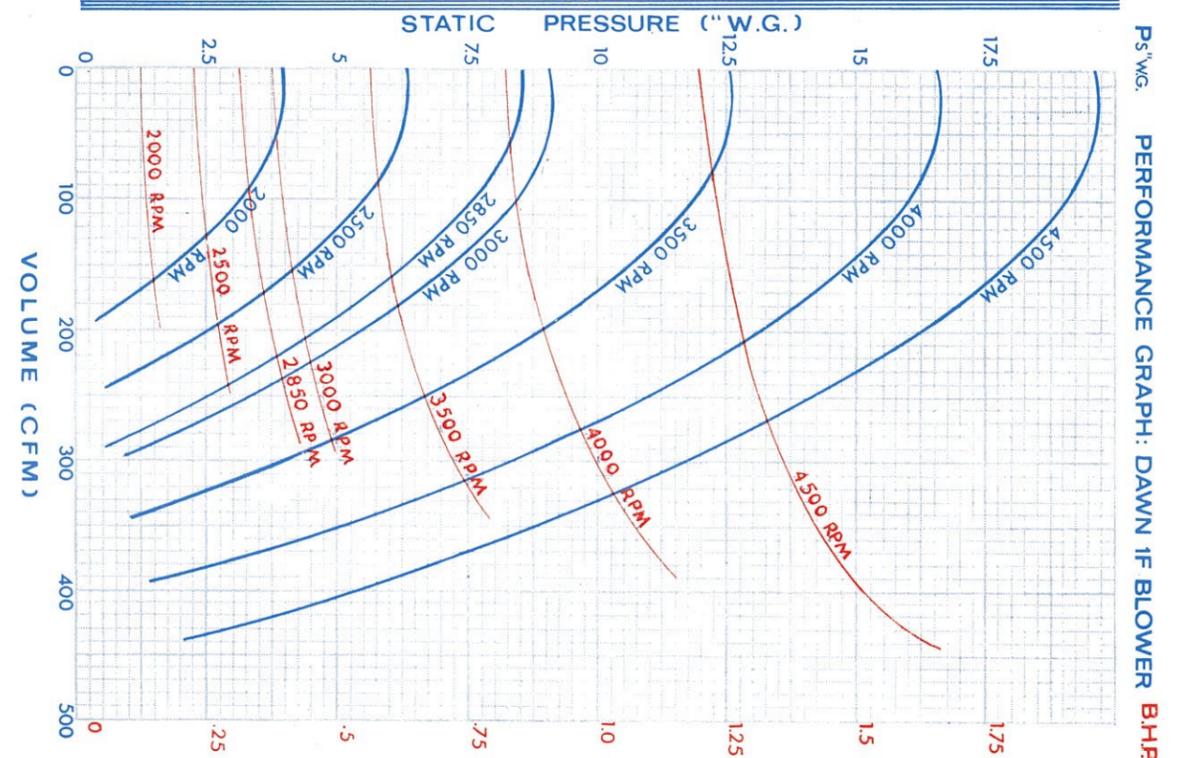
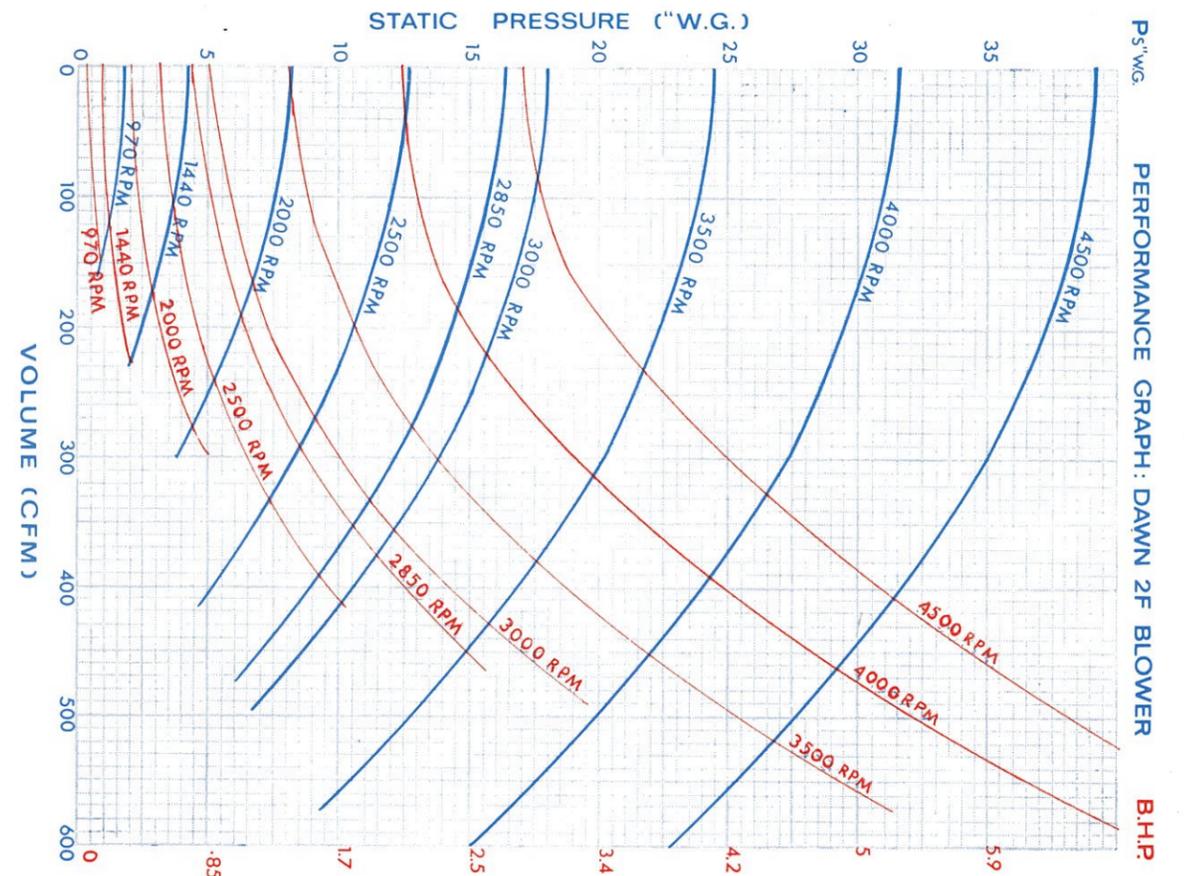
DAWN 2F MOTORISED BLOWER

MULTI - STAGE:

Two or more of these Forge Blowers may be staged to obtain Higher Pressure. Technical advice should be obtained from our representatives before attempting staging as Higher Pressure Blowers are available from the "DAWN" range of Fans and these are generally more economical and efficient than staging. However, in some applications, staging may be more desirable.

DAWN HIGH PRESSURE BLOWERS

Where Fans are required for higher pressure duties, reference to the following "DAWN" FANS is recommended:
 (a) "DAWN" Oil Burner Blowers. A range of Fabricated Steel Fans, ½, ¾ and 1 p.s.i. Pressures with Volume duties from 150 to 525 C.F.M.
 (b) "DAWN" Cupola Blowers. A range of Fabricated Steel Fans having capacities from 600 C.F.M. @ 12" wg. to 2650 C.F.M. @ 22" wg.
 (c) "DAWN" High Pressure Blowers. A range of Fabricated Steel Fans having capacities up to 5000 C.F.M. @ 5 p.s.i.



P.S.\"WG. PERFORMANCE GRAPH: DAWN 2F BLOWER B.H.P. P.S.\"WG. PERFORMANCE GRAPH: DAWN 1F BLOWER B.H.P.