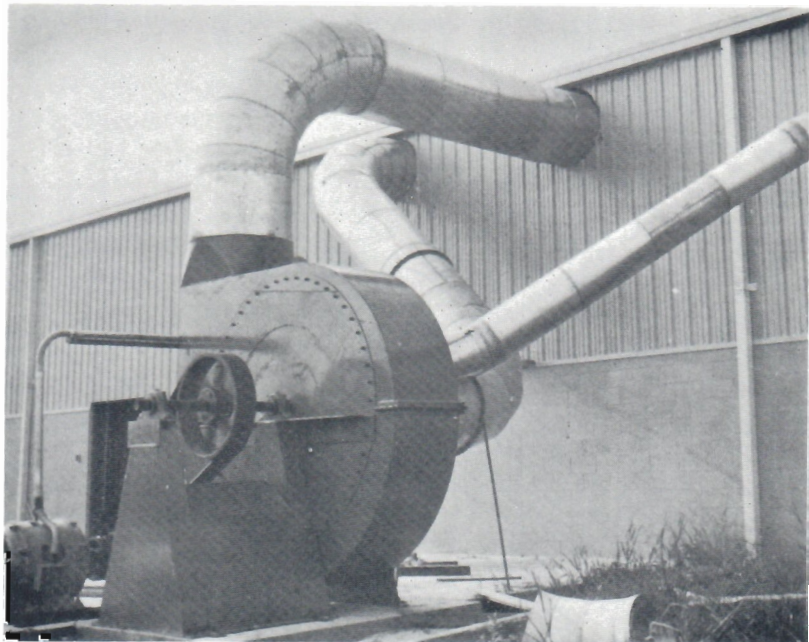


MATERIAL HANDLING FANS

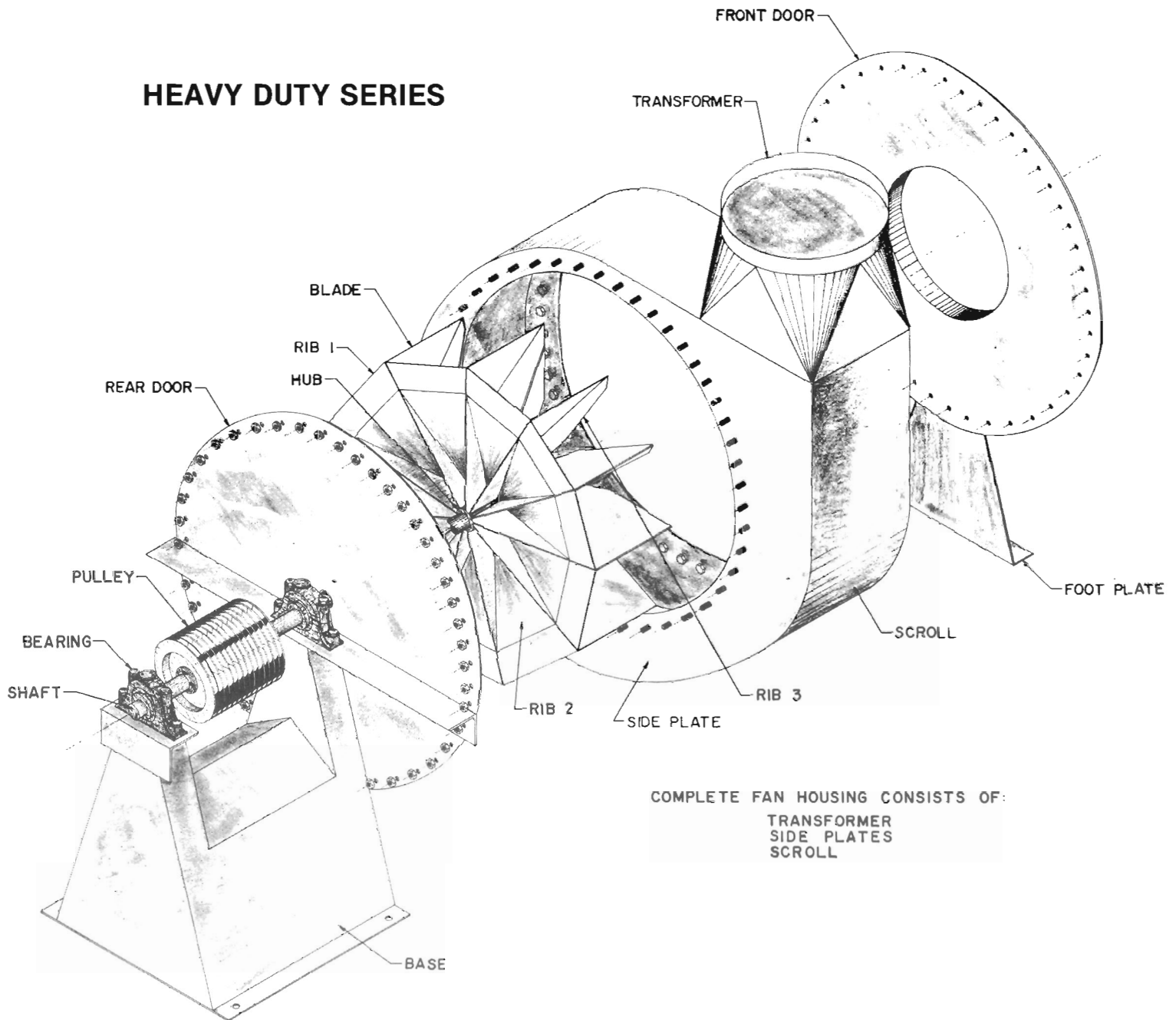
GENERAL INFORMATION

- APPLICATIONS:** The Material Handling Fan is a general purpose centrifugal blower used to convey material such as bark, chips, hoggings, paper, sawdust, shavings, and veneer waste. Capacities vary from 500 CFM to 50,000 CFM. These fans will develop up to 18" static pressure which is more than ample for low pressure fan installations.
- HOUSINGS:** These fans are manufactured from mild steel plate with the sides and scroll welded to provide strength and to prevent material leakage. The doors are bolted to the housing to provide access to the fan interior. The fan base is also completely welded for strength.
- On the Heavy Duty Series the scroll is made from 3/8" mild steel plate and the base is made from 1/4" mild steel plate. The side plates are 3/16" mild steel plate. The doors are made from 11 gauge black iron on the intake side and 3/16" mild steel plate on the drive side. (The housing construction of the Severe Duty Series is shown on Page 9.)
- FANWHEELS:** The Heavy Duty Series has fanwheels made from 1/2" mild steel plate and all parts are welded for maximum strength. The fan hub is made from hot rolled steel and the fan shaft is made from turned, ground, and polished C1020 steel. (The construction of the fanwheel for the Severe Duty Series is shown on Page 9.)
- DISCHARGE POSITIONS:** The fan base is bolted to the fan housing which provides many possible discharge positions. Typical discharge positions are vertical, top horizontal, and bottom horizontal. Both clockwise and counterclockwise rotations are available. The discharge position can be easily changed by unbolting the housing from the base, rotating the housing to the desired position, and then rebolting the housing to the base.
- DRIVES:** The fan bases are designed for mounting the pulley between the fan bearings to reduce the load on the bearings but extended shafts are available if an overhung drive is desirable. All fan shafts are designed for overhung drives so no engineering changes have to be made for this type of installation.



This is a typical Material Handling Fan installation with two sub-mains servicing various woodworking machines in the plant. The discharge line goes to a central collection point where the material is fed into a relay system for final disposition.

HEAVY DUTY SERIES



COMPLETE FAN HOUSING CONSISTS OF:
 TRANSFORMER
 SIDE PLATES
 SCROLL

BEARINGS:

All fans are equipped with Dodge Double Interlock Roller Bearings. These bearings require a medium consistency grease with a soda base, lime base, or lithium base. Frequency of lubrication will depend upon the bearing speed and the type of service but will average once every 3-6 weeks. All bearings are equipped with Alemite plugs with dust caps.

BALANCING:

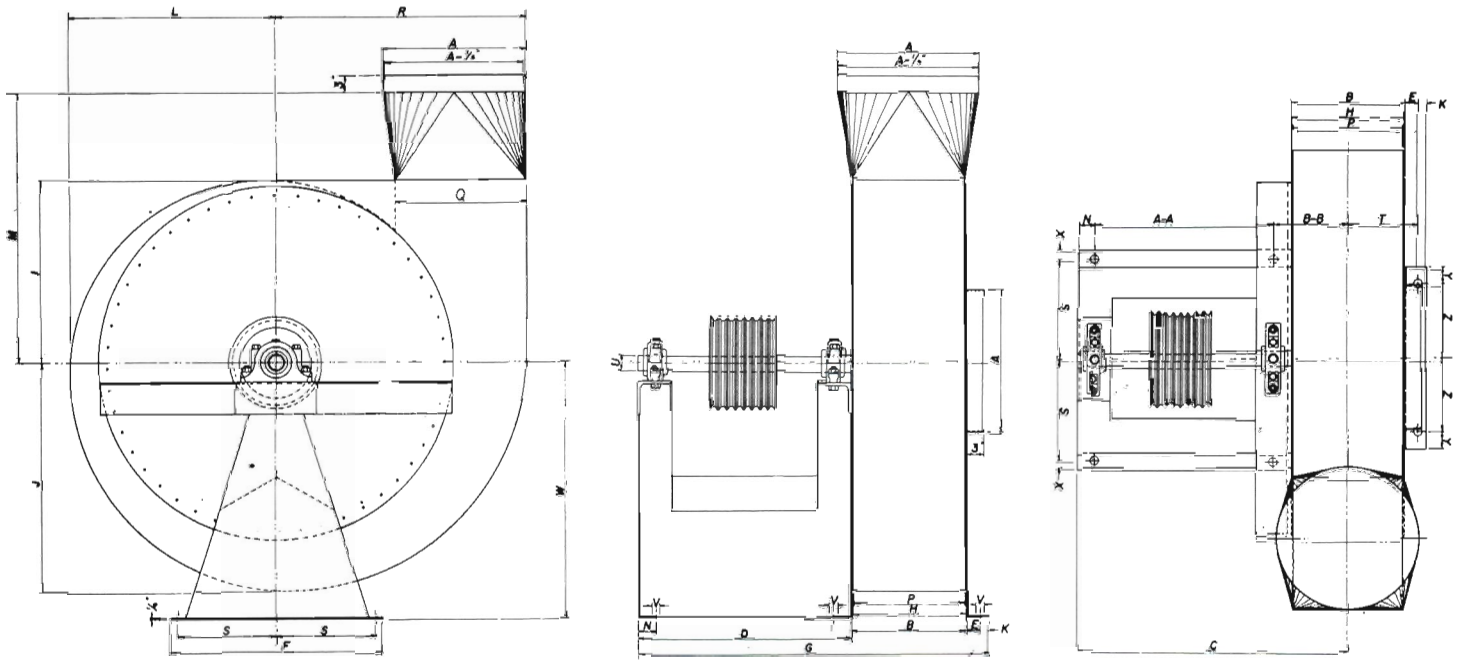
All fans are balanced both statically and dynamically at the factory to assure smooth operation and provide trouble free service.

FOUNDATION REQUIREMENTS:

Because of the heavy duty construction and the static and dynamic balancing, a 4" concrete pad extending 6" beyond the fan base on all sides is more than sufficient. Anchor bolts should extend at least 2" above the concrete slab. These fans can be mounted on wooden or steel platforms if desirable from the user's standpoint.

MATERIAL HANDLING FANS

HEAVY DUTY SERIES



DIMENSIONS

FAN SIZE	A	B	C	D	E	F	G	H	I	J	K
18	4 ¹ / ₈	6 ¹ / ₂	17 ³ / ₈	14 ¹ / ₄	1 ¹ / ₄	16	22 ¹ / ₂	5 ⁷ / ₈	10 ⁵ / ₈	11 ⁵ / ₈	3 ¹ / ₄
20	9	7 ¹ / ₄	18 ¹ / ₂	14 ¹ / ₄	1 ¹ / ₄	16	24	7 ¹ / ₂	12 ¹ / ₄	14	3 ¹ / ₄
25	11	9 ¹ / ₂	23 ³ / ₈	19	1 ³ / ₄	23	31 ¹ / ₂	8 ³ / ₄	13 ³ / ₈	17 ¹ / ₈	1 ¹ / ₄
30	13	10 ¹ / ₄	24 ¹ / ₂	19	1 ³ / ₄	23	32 ¹ / ₂	9 ¹ / ₂	16 ³ / ₈	20 ³ / ₈	1 ¹ / ₄
35	15	12 ¹ / ₄	34 ¹ / ₂	28	1 ³ / ₄	30	43 ¹ / ₂	11 ¹ / ₄	19 ¹ / ₄	23 ³ / ₈	1 ¹ / ₄
40	17	13 ³ / ₈	34 ¹⁵ / ₁₆	28	1 ³ / ₄	30	44 ⁷ / ₈	13 ¹ / ₂	21 ¹ / ₄	27	1 ¹ / ₄
45	19	15 ¹ / ₂	35 ⁵ / ₈	28	1 ³ / ₄	30	46 ³ / ₈	15	24 ¹ / ₂	30 ¹ / ₂	1 ¹ / ₄
50	21	17 ¹ / ₂	45 ⁵ / ₈	37	2 ¹ / ₄	37 ¹ / ₂	58 ³ / ₈	17	27 ³ / ₈	34 ¹ / ₂	1 ³ / ₈
55	23	18 ¹ / ₂	46 ¹ / ₄	37	2 ¹ / ₄	37 ¹ / ₂	59 ¹ / ₂	18 ¹ / ₂	29 ³ / ₈	36 ³ / ₈	1 ³ / ₈
60	25	20 ¹ / ₄	47 ¹ / ₂	37	2 ¹ / ₄	37 ¹ / ₂	61 ¹ / ₄	19 ³ / ₄	32 ¹ / ₂	40	1 ³ / ₈
70	29	23 ¹ / ₄	59 ¹ / ₂	48	2 ³ / ₄	46	75 ¹ / ₂	22 ¹ / ₄	37 ¹ / ₄	46 ¹ / ₂	1 ³ / ₈
80	33	26 ¹ / ₂	61 ¹ / ₄	48	2 ³ / ₄	46	78 ¹ / ₂	26	42 ¹ / ₂	53	1 ³ / ₈
90	37	29 ¹ / ₂	68 ⁵ / ₈	54	2 ³ / ₄	54 ¹ / ₂	87 ¹ / ₂	28 ³ / ₈	47 ¹ / ₂	59 ¹ / ₂	1 ³ / ₈

WHEEL DIA.	BOLT SIZE	K.W. PULLEY	FAN WT. LBS.
18 ¹ / ₂	1/2	3/8 x 3/8	281
22	1/2	"	364
25 ¹ / ₂	3/4	"	603
29	3/4	"	777
32 ¹ / ₂	3/4	"	1113
36	3/4	1/2 x 1/2	1295
39 ¹ / ₂	3/4	"	1565
43	3/4	"	2166
46 ¹ / ₂	1	3/8 x 5/8	2446
54	1	"	2975
62	1	3/4 x 3/4	3938
70	1	"	4601
80	1	"	5884

FAN SIZE	L	M	N	P	Q	R	S	T	U	V	W	X	Y	Z	A-A	B-B
18	10 ¹ / ₂	20 ¹ / ₄	2	5 ¹ / ₂	6	12 ³ / ₈	7 ¹ / ₄	4 ³ / ₈	1 ¹ / ₂	3/16	16 ¹ / ₂	3/4	1 ¹ / ₄	5 ¹ / ₄	10 ¹ / ₄	5 ¹ / ₂
20	13	22 ¹ / ₄	2	7	7 ¹ / ₄	15	7 ¹ / ₄	5 ¹ / ₂	1 ³ / ₈	3/16	16 ¹ / ₂	3/4	1 ¹ / ₄	5 ¹ / ₄	10 ¹ / ₄	5 ¹ / ₂
25	15 ¹ / ₂	28 ¹ / ₄	3	8 ¹ / ₂	9 ¹ / ₂	18 ¹ / ₄	10 ¹ / ₄	6 ¹ / ₈	1 ¹ / ₂	13/16	23 ³ / ₈	1 ¹ / ₄	2	7	13	7 ³ / ₈
30	18 ¹ / ₂	31 ¹ / ₄	3	9 ¹ / ₂	11 ¹ / ₄	22 ³ / ₈	10 ¹ / ₄	6 ¹ / ₂	1 ¹ / ₂	13/16	23 ³ / ₈	1 ¹ / ₄	2	7	13	8 ¹ / ₂
35	21 ¹ / ₂	34 ¹ / ₂	3	11 ¹ / ₂	14 ¹ / ₂	26 ¹ / ₄	13 ³ / ₄	7 ¹ / ₂	1 ¹ / ₂	13/16	34 ¹ / ₂	1 ¹ / ₄	1 ¹ / ₄	10 ¹ / ₄	22	9 ¹ / ₂
40	24 ¹ / ₂	36 ¹ / ₄	3	13 ¹ / ₂	15 ¹ / ₂	29 ¹ / ₂	13 ³ / ₄	8 ¹ / ₂	1 ¹ / ₂	13/16	34 ¹ / ₂	1 ¹ / ₄	1 ¹ / ₄	10 ¹ / ₄	22	9 ¹ / ₂
45	27 ¹ / ₂	39 ¹ / ₂	3	14 ¹ / ₂	17 ¹ / ₂	33 ¹ / ₂	13 ³ / ₄	9 ¹ / ₂	1 ¹ / ₂	13/16	34 ¹ / ₂	1 ¹ / ₄	1 ¹ / ₄	10 ¹ / ₄	22	10 ¹ / ₂
50	30 ¹ / ₂	42 ¹ / ₂	3	16 ¹ / ₂	19 ¹ / ₄	37 ¹ / ₂	17 ¹ / ₄	11 ¹ / ₂	2 ¹ / ₂	1 ¹ / ₂	44 ¹ / ₂	1 ¹ / ₂	3	12 ¹ / ₂	31	11 ¹ / ₂
55	33 ¹ / ₂	44 ¹ / ₂	3	17 ¹ / ₂	21 ¹ / ₂	40 ¹ / ₂	17 ¹ / ₄	11 ³ / ₈	2 ¹ / ₂	1 ¹ / ₂	44 ¹ / ₂	1 ¹ / ₄	3	12 ¹ / ₂	31	12 ¹ / ₂
60	36 ¹ / ₂	47 ¹ / ₂	3	19 ¹ / ₄	23 ¹ / ₄	43 ¹ / ₂	17 ¹ / ₄	12 ¹ / ₂	2 ¹ / ₂	1 ¹ / ₂	44 ¹ / ₂	1 ¹ / ₂	3	12 ¹ / ₂	31	13 ¹ / ₂
70	41 ¹ / ₂	55 ¹ / ₄	3	22 ¹ / ₄	25 ¹ / ₄	51 ¹ / ₂	21 ¹ / ₂	14	2 ¹ / ₂	1 ¹ / ₂	59 ¹ / ₂	1 ¹ / ₂	3	17 ¹ / ₂	42	14 ¹ / ₂
80	47 ¹ / ₂	60 ¹ / ₂	3	25 ¹ / ₂	31 ¹ / ₂	58 ¹ / ₄	21 ¹ / ₂	15 ¹ / ₂	2 ¹ / ₂	1 ¹ / ₂	59 ¹ / ₂	1 ¹ / ₂	3	17 ¹ / ₂	42	16 ¹ / ₂
90	53 ¹ / ₂	65 ¹ / ₂	3	28 ¹ / ₂	34	65 ¹ / ₂	25 ¹ / ₂	16 ¹ / ₂	3 ¹ / ₂	1 ¹ / ₂	66 ¹ / ₂	2	4	19 ¹ / ₄	48	17 ¹ / ₂