

Contra-Rotating Tube Axial Duct Fans

with direct drive motors
and variable pitch, field adjustable impellers



For applications where multiple fans are required to achieve higher pressures and volumes, yet operating costs and sound levels must be kept to minimum.

If your application call for the extra performance beyond that provided by single-stage vane axial fans, Strobic contra-rotating axial fans offer a logical and economical solution. These fans provide significantly higher performance – without proportionate increases in noise levels and operating costs – over the same number of comparable single-stage booster fans installed in a duct system.

Other outstanding advantages of Strobic Air contra-rotating tube axial duct fans:

- ❶ **DUCT MOUNTING ELIMINATES WASTED SPACE.** Installation is fast and simple. No special skills or tools needed.
- ❷ **RUGGED, CONTINUOUSLY WELDED HEAVY GAUGE** carbon steel housings minimize friction losses to enhance performance.
- ❸ **MORE EFFICIENT, MORE ECONOMICAL VOLUME REGULATION** is easier to obtain because downstream motors may be switched off periodically, allowing impeller to free-wheel. Also helps lower operating costs.
- ❹ **FURTHER REDUCTIONS IN OPERATING COSTS** are achieved by free-wheeling the downstream fan prior to start-up. Requires about 40% less initial electrical surge than used for starting comparable single stage fans.
- ❺ **ELIMINATE TOTAL SYSTEM SHUTDOWN** caused by motor failure. The system can operate at reduced capacity until maintenance team can make repairs.
- ❻ **PRESSURES ARE APPROXIMATELY THREE TIMES HIGHER** from two Strobic contra-rotating fans versus comparable single stage tube axial fans, and twice that of comparable single stage axial fans, because the second stage fan is fed by a pre-rotating air supply which dramatically cuts its work load.
- ❼ **LOWER NOISE LEVELS** result from elimination of friction-causing guide vanes, unnecessary in contra-rotating fan design. Slower impeller tip speeds – typically two-thirds less than for comparable single stage fans – also help reduce noise levels.
- ❽ **NON-SPARKING ALUMINUM BLADES** can't ignite volatile atmospheres.
- ❾ **SPECIAL COATINGS AND MATERIALS** are available – plastic, epoxy, rubber and fiberglass to meet unusual environmental applications.
- ❿ **MATERIALS OTHER THAN STEEL** (for housings) and aluminum (for blades) are available including stainless steel, copper, monel, etc.
- ⓫ **MOTOR CONSTRUCTION AVAILABLE** includes drip-proof, totally enclosed air over, fan cooled, or explosion-proof design.
- ⓬ **SIZES RANGE FROM 12" TO 96"**; other sizes are available to meet special needs.
- ⓭ **CAPACITIES TO 250,000 CFM**, and pressures to 20" w.g.

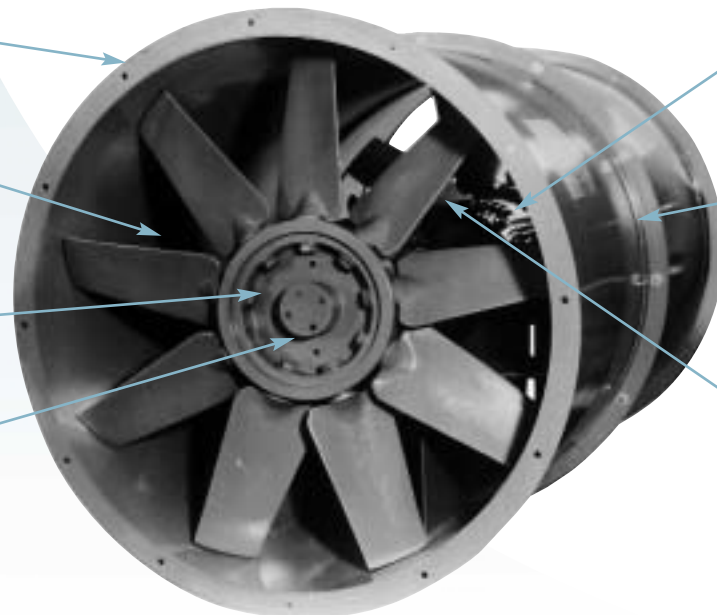
Special features of Strobic Air contra-rotating tube axial duct fans:

Flanged housings permit quick fastening to flexible duct and other accessories without special tools or skills

Cast aluminum axial flow impellers can't spark, use improved airfoil sections for maximum air handling efficiency

Spinner cap (not shown) improves laminar flow of inlet air

Variable pitch, field adjustable impellers maximize performance, minimize horsepower requirements, help reduce operating costs



Identical motors on all fans help to optimize performance

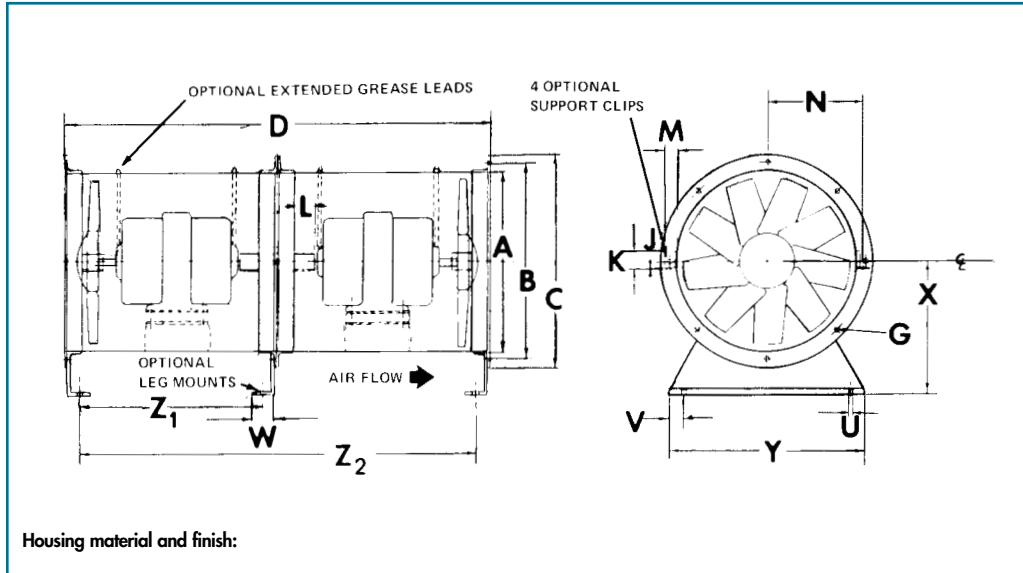
Tube axial design means lower noise levels because guide vanes are not needed

Free-wheeling start-up reduces initial load power consumption by 40%

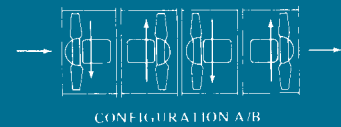
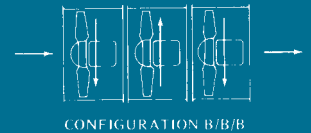
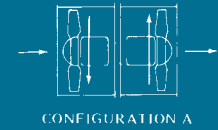
Contra-Rotating Tube Axial Duct Fans with variable pitch impellers

Submittal Data:
 Customer: _____
 Architect/Engineer: _____
 Project: _____

Drawing No.: _____ Date: _____
 Submitted by: _____
 Approved by: _____ Date: _____
 Optional features: _____



Typical multi-stage Configurations



Housing material and finish:

FAN SIZE	BASIC FAN DIMENSIONS						SUPPORT CLIPS					LEG SUPPORTS						
	A	B	C	D	G		J	K	L	M	N	U	V	W	X	Y	Z ₁	Z ₂
					#	Size												
12	12	13.50	14.75	30	8	.312	.125	3	3.50	4.00	8.00	.750	2.50	3	11.50	16	11.75	26.75
15	15	16.50	17.75	30	8	.312	.125	3	3.50	4.00	9.50	.750	2.50	3	13.00	19	11.75	26.75
18	18	19.50	20.75	36	8	.312	.186	3	3.50	4.00	11.00	.750	2.50	3	14.50	22	14.75	32.75
19	19	20.81	22.25	36	8	.312	.186	3	3.50	4.00	11.50	.750	2.50	3	16.00	23	14.62	32.62
21	21	22.81	24.25	42	8	.437	.186	3	3.50	4.00	12.50	.750	2.50	3	17.75	25	17.62	38.62
24	24	25.87	27.25	48	8	.437	.186	3	3.50	4.00	14.00	.750	2.50	3	18.25	28	20.62	44.62
27	27	28.87	30.25	48	8	.437	.186	3	3.50	4.00	15.50	.750	2.50	3	20.75	31	20.62	44.62
30	30	31.87	33.25	48	12	.437	.186	3	3.50	5.00	17.50	.750	2.50	4	23.00	34	19.62	43.62
36	36	38.18	39.75	60	12	.437	.186	3	3.50	5.00	20.50	.750	2.50	4	26.25	41	25.62	55.62
38	38	40.18	41.75	60	12	.437	.186	3	3.50	5.00	21.50	.750	4.50	4	28.25	48	25.62	55.62
42	42	44.25	45.87	60	12	.437	.250	3	3.50	5.00	23.50	.750	4.50	4	29.25	48	25.62	55.62
48	48	50.25	51.87	72	16	.562	.250	4	4.25	5.00	26.75	.750	4.50	4	34.25	48	31.62	67.62
54	54	56.37	57.87	72	16	.562	.250	4	4.25	5.50	29.75	.750	4.50	4	37.25	60	31.62	67.62
60	60	62.75	63.87	72	16	.562	.250	4	4.25	5.50	32.75	.750	4.50	4	40.50	60	31.62	67.62
66	66	68.75	70.50	84	16	.562	.250	4	4.25	5.50	36.25	.750	4.50	4	44.50	66	37.50	79.50
72	72	74.75	76.50	84	16	.562	.250	4	4.25	5.50	39.25	.750	4.50	4	48.50	72	37.50	79.50
78	78	80.75	82.50	96	16	.562	.250	4	4.25	5.50	42.25	.750	4.50	4	53.00	78	43.50	91.50
84	84	86.75	88.50	96	16	.562	.250	4	4.25	5.50	45.25	.750	4.50	4	57.00	84	43.50	91.50
90	90	92.75	94.50	96	16	.562	.250	4	4.25	5.50	48.25	.750	4.50	4	60.75	90	43.50	91.50
96	96	98.75	100.50	96	16	.562	.250	4	4.25	5.50	51.25	.750	4.50	4	64.75	96	43.50	91.50

Note: Dimensions not to be used for construction unless certified.

Performance Data

ITEM #	QTY.	MODEL #	VOLUME CFM	SP/TP	FAN RPM	B.H.P.	H.P.	MOTOR RPM	MOTOR CHAR.	TYPE	OPTIONAL FEATURES	SHIP Wt.



FANS, SILENCERS AND SYSTEMS

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Represented by: