

# AXEMAN-ANDERSON ANTHRATUBE



**BURNS ANTHRACITE AUTOMATICALLY** Anthracite is a clean and plentiful fuel and when automatically burned (no shoveling, no late checking) in an Axeman-Anderson Anthratube, provides the most service-free and lowest cost heat available.

**ELIMINATES ASH DUST** Interior of Unit is under partial vacuum so dust is drawn into it just like a vacuum cleaner. An ingenious "cyclone separator" extracts the fly ash depositing it in an ash container. No dust in the heater room, and no fly ash in the boiler.

**SAVES UP TO 50%** Many owners are saving more, particularly if they have replaced more expensive fuels such as oil or gas. Axeman-Anderson savings will pay for next summer's vacation or make the difference between profit or loss to an apartment house owner.

## **YEAR 'ROUND HOT WATER**

Provides abundant supply of domestic hot water for kitchen, bath and laundry and at very little cost.

**FACTORY ASSEMBLED** Every Axeman-Anderson Anthratube is test run before shipment.

## **QUALITY WORKMANSHIP**

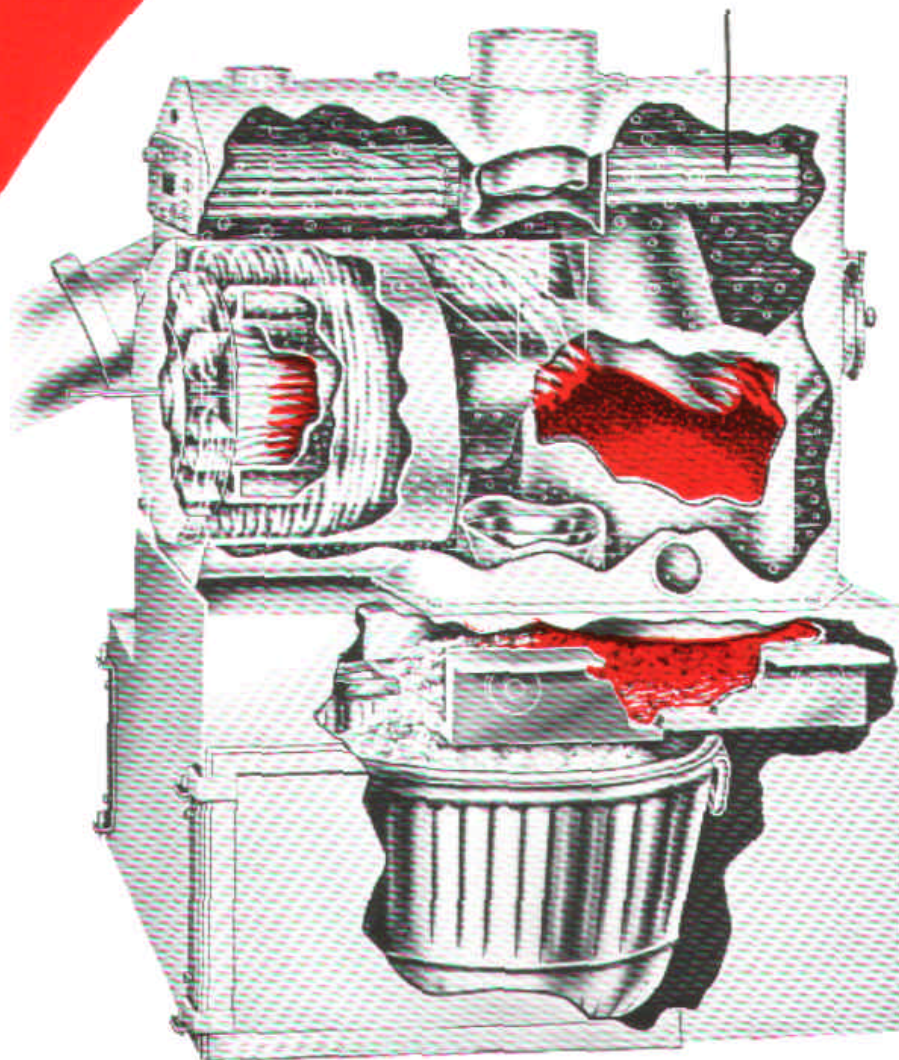
Designed and constructed in accordance with A.S.M.E. Boiler Code. Ratings approved by A.I. Code. Every boiler carries a national insurance company stamp of inspection with a registered number.

**LOW MAINTENANCE COST** Few moving parts and no cleaning required assures lowest possible maintenance cost.

**LIFE TIME GUARANTEE** Grate is unconditionally guaranteed for a lifetime.

**COMPANY INTEGRITY** Axeman-Anderson have for nearly one-half a century enjoyed an enviable reputation in the heating industry for designing and manufacturing high quality products and for fair dealing. There is no greater guarantee than this reputation.

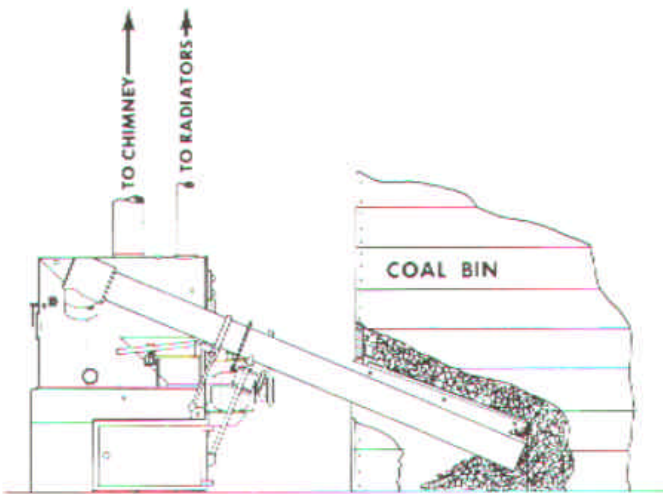
TANKLESS DOMESTIC  
HOT WATER COIL



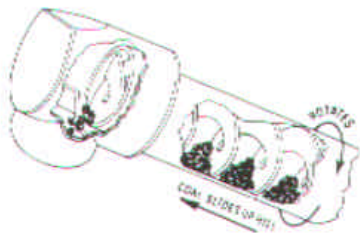
The Axeman-Anderson Anthratube's fuel bed is arranged so that anthracite is almost completely burned with an absolute minimum of excess air. Roughly, the average ton of anthracite (2000 lbs.) contains 240 lbs. of useless ash. Of the remaining 1760 lbs. of usable fuel, when burned in the Axeman-Anderson Anthratube, 60 lbs. goes out with the ash, 200 lbs. goes up the chimney as wasted heat and 1500 lbs. heats the house. On the average coal fired job, of the remaining 1760 lbs. of usable coal, 60 lbs. goes out with the ash, 800 lbs. goes up the chimney as waste heat, and 900 lbs. heats the house.



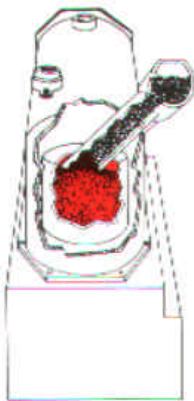
# HOW IT WORKS



The room thermostat controls the temperature. When heat is required, motor which operates induced draft fan, coal tube and reciprocating grate is automatically started.

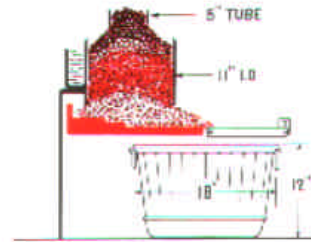
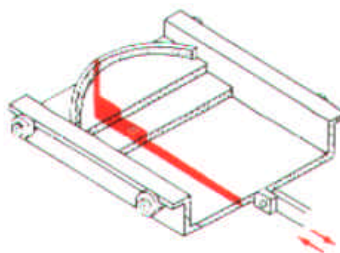


Coal flows up the spiral path formed by helicoidal ribbon welded inside coal tube. Coal actually "falls uphill" and flows only when coal tube rotates. The coal tube can not overfeed and can not jam like the conventional screw feed coal conveyor. This is a completely new method of feeding coal.

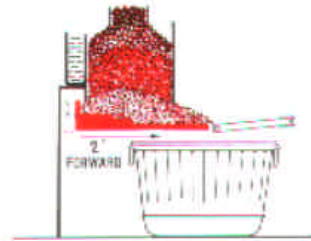


Coal gets only as high in transfer head as shown. No excess coal is delivered because coal merely slips back through hollow center when there's enough in the transfer head.

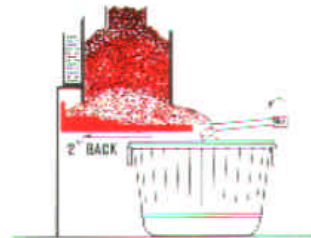
The grate with a LIFE-TIME GUARANTEE is made of heavy solid steel ( $\frac{1}{2}$ " and  $\frac{3}{4}$ " thick) of stepped type moving 2" forward and 2" to the rear. Quiet and simple in operation.



Weight of fire bed forces ash onto grate.



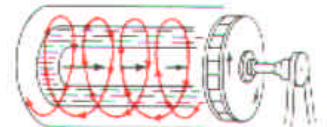
As grate moves slowly forward, steps on grate cut ash from bottom of fire bed and push it toward container.



As grate moves slowly back, ash at end of grate falls off into container or pit. Grate operates only when fan is running which accounts for clean operation.

**NOTE:** Grate is set in motion or stopped by heat sensitive switch (Anthrastat<sup>®</sup>) which is actuated by radiant heat in ash.

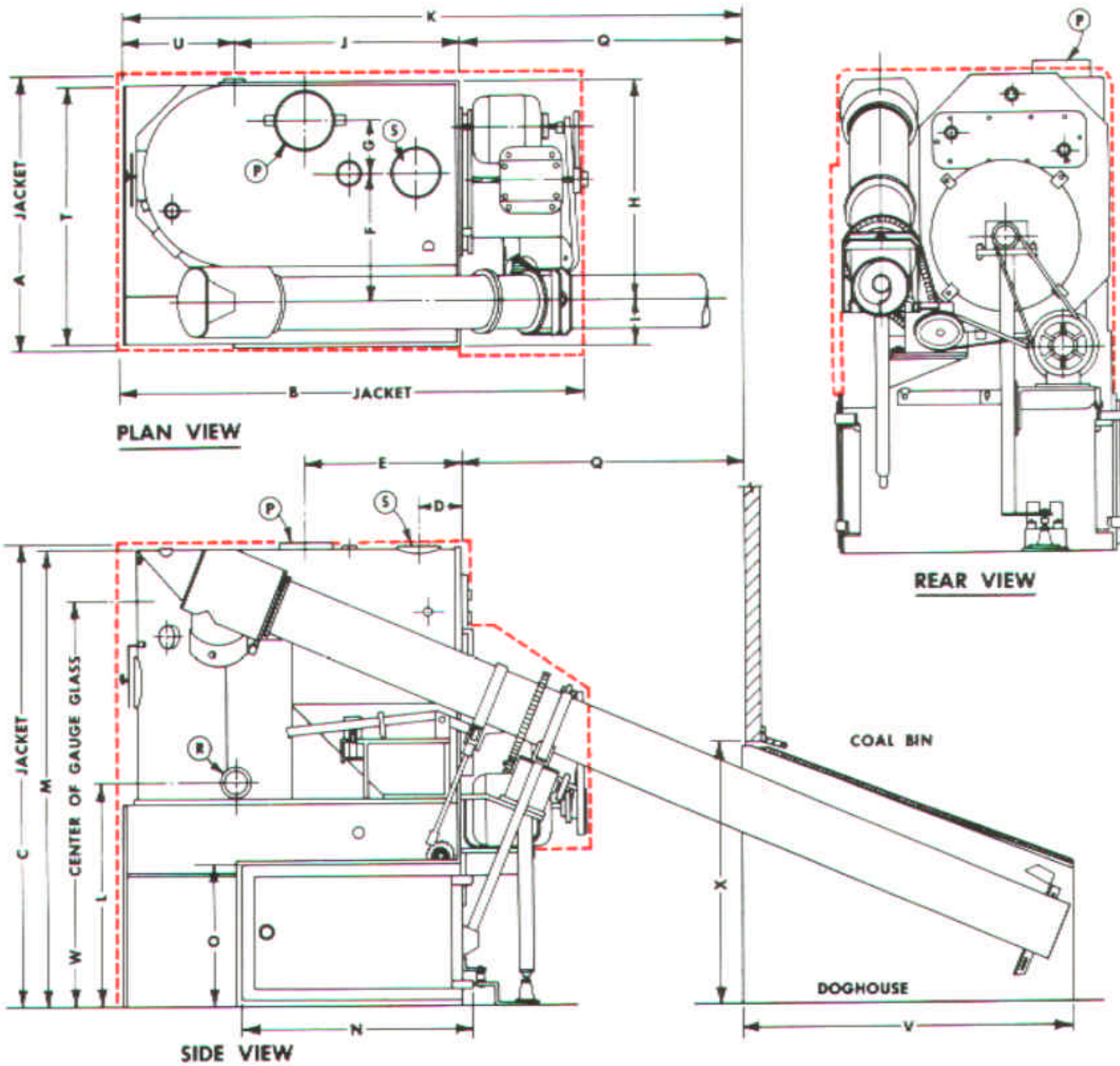
The flue gases are whirled at great velocity in the centrifugal heat absorber. This repeated whirling with its intense scrubbing action results in a very high rate of heat transfer from the flue gases to the boiler water.



Fly ash always results from burning anthracite at high rates. In the Axeman-Anderson Anthratube it is whirled through the centrifugal heat absorber along with the gases, creating a self-cleaning action. At the end of the centrifugal heat absorber, the whirling gases and fly ash are led into a special adaptation of the cyclone separator. This cyclone separator not only further absorbs heat from the flue gases but it also extracts nearly all of the fly ash formed and drops it down through a cone to the grate. Flue gas leaves the upper part of the cyclone going from there to the chimney.



# CAPACITIES AND DIMENSIONS 130M/260M AXEMAN-ANDERSON ANTHRATUBE



DIMENSIONS	UNIT SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
	130-M	24	44 1/4	42	4	14 1/4	11 1/2	4 1/4	20 1/4	3 7/8	20 1/2	56 1/4	20 1/4	41	21 1/4	12	5	25 1/2	2-2	1-3	23 1/2	10 1/4	30	36 1/4	23 1/2
260-M	28	58 1/4	46 1/4	6	19 3/4	12 1/2	5 1/4	23 1/4	2 1/2	27	66 1/4	21 1/2	45 1/4	28	12 3/4	6	25 1/2	2-2	1-4	21 1/2	14 1/4	30	40	23 1/2	

CAPACITIES	A-A Anthratube Size	Output Rating			Chimney Size				Shipping Weight Pounds	
		BTU	Steam Rad. at 240 BTU	Hot Water Rad. at 150 BTU	Chimney Size				Unjacketed	Jacketed
					One Unit	Two Units	Three Units	Four Units		
130-M	130000	540	865	8"x8"x15'	8"x12"x20'	12"x12"x20'	16"x16"x25'	930	1000	
260-M	260000	1080	1730	12"x12"x15'	16"x16"x20'	18"x18"x20'	20"x20"x25'	1410	1530	

BILT IN COILS FOR HEATING DOMESTIC HOT WATER	Storage Tank Coil Number	Rated Capacity Gals. Heated 40° to 140° in 3 Hours Boiler Water 180°	Number of Baths	Service Water Connection	Tankless Coil Number	Rated Capacity Gals. Heated 40° to 140° in 1 Min. Boiler Water 180°	Number of Baths	Service Water Connection
	TK 24	70	1-2	1"	IN 117	3.5	1-3	1/2"
	TK 50	150	1-5	1 1/4"	IN 162	5.0	1-11	3/4"

ALL COILS MAY BE USED IN 260-M TK-50 AND IN-162 COILS CANNOT BE USED IN 130-M



**AXEMAN-ANDERSON COMPANY**

ENGINEERS AND MANUFACTURERS OF HEATING EQUIPMENT

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