

## Silencing + Energy Conservation

### APPLICATIONS:

- Power plants
- Water purification plants
- Sewage treatment plants

### CODE COMPLIANCE

All Maxim heat recovery equipment is designed and fabricated in compliance with Section VIII, Division I, ASME Code.

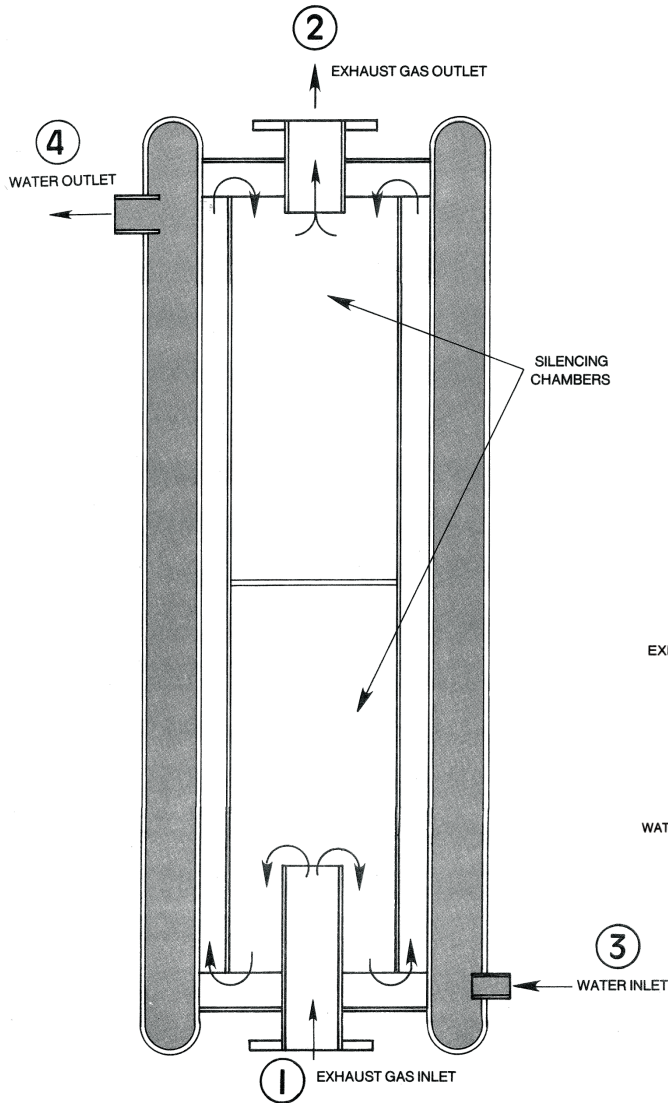
**Size Range:** Exhaust connections from 3" through 30" in diameter

**Construction:** The unique, tubeless construction of the WVS/WHS gives extraordinary service life with a minimum of attention. The annular jacket type heat exchanger eliminates problems with tube sheet joints and differential expansion among tubes associated with conventional tube type construction. Large volume attenuation chambers enclosed by a double wall of heavy steel plate assure highly effective silencing of engine exhaust noise. The standard WVS/WHS is designed for a maximum working pressure of 50 psig but is available at higher pressure ratings.

The Maxim models WVS (vertical) and WHS (horizontal) units are efficient heat recovery silencers that combine effective exhaust silencing with the conservation of exhaust heat to produce hot water.

### Features

- Longitudinal fins are continuously welded to the inner wall of the water jacket to increase the heat transfer efficiency of the unit and permit design flexibility as to recovery rate and material selection
- Removable cover plates on each end of the unit allow access to the gas flow passages and heat transfer surfaces
- The WVS/WHS can be supplied with the standard bottom inlet, top outlet connections or a variety of optional inlet and outlet configurations
- Factory applied insulation is offered as an option
- Unique design and rugged construction make these units the choice for applications requiring maximum equipment life and minimum maintenance
- Increased corrosion resistance may be achieved economically with low alloy weathering steel used in non-pressurized parts exposed to the exhaust gases (this feature is especially beneficial in sewage treatment plant applications)

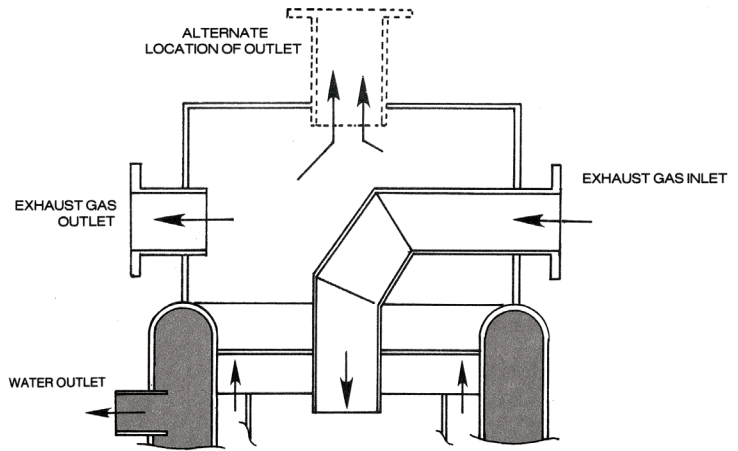


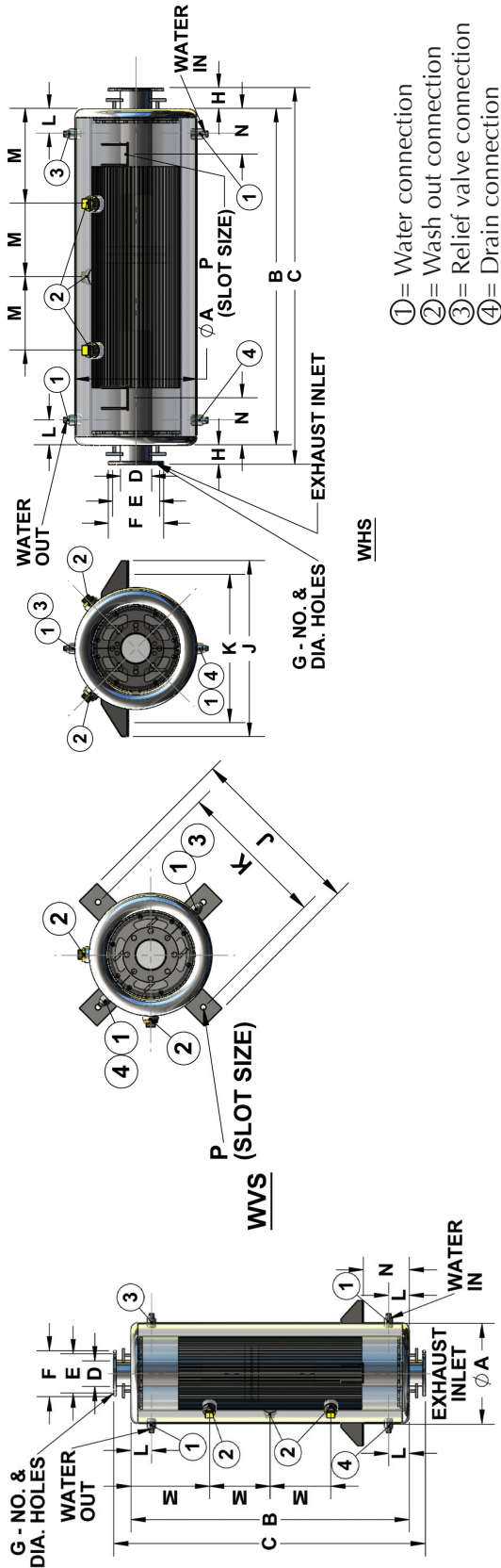
**Flow Diagram**

Exhaust gas enters the heat recovery silencer through connection (1), makes two reversals, then flows through a longitudinally finned annular passageway where heat is transferred to the water in the surrounding jacket. The gas exits from the exhaust connection (2).

**OPERATION**

Water enters the annular jacket through connection (3) and absorbs heat from the exhaust gas. The heated water exits from connection (4).





MODEL SIZE	DIMENSIONS IN INCHES																WEIGHTS - LBS	
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	DRY	WET		
25-3	18	48 7/8	51 7/8	3	6	7 1/2	(4) 3/4	1 1/2	30	28	4 1/4	12 1/4	9 3/4	3/4 - 1	650	790		
35-4	22	52 7/8	55 7/8	4	7 1/2	9	(8) 3/4	1 1/2	34	32	4 1/4	13 1/4	10 1/2	3/4 - 1	860	1050		
75-5	27 1/8	65 1/2	69	5	8 1/2	10	(8) 7/8	1 3/4	39 1/8	37	4 1/2	16 1/2	13	7/8 - 1 1/4	1360	1750		
130-6	31 1/8	77 1/2	81	6	9 1/2	11	(8) 7/8	1 3/4	43 1/8	40 3/4	4 1/2	19 1/2	15 1/2	7/8 - 1 1/4	1850	2410		
240-8	35 1/4	87 1/2	91	8	11 3/4	13 1/2	(8) 7/8	1 3/4	47 1/8	44 3/4	5 1/4	22 1/4	17	7/8 - 1 1/4	3160	3920		
380-10	41 1/4	101 1/2	105	10	14 1/4	16	(12) 1	1 3/4	57 1/4	54 3/4	5 1/4	25 1/4	20 1/4	1 - 1 1/2	4750	5790		
585-12	46 1/4	114	119	12	17	19	(12) 1	2 1/2	62 1/4	60	5 1/2	28 1/2	22 3/4	1 - 1 1/2	6400	7900		
885-14	52 1/2	126	131	14	18 3/4	21	(12) 1 1/8	2 1/2	72 1/2	70	6 1/4	31 1/2	25 1/4	1 1/8 - 1 3/4	9530	11320		
1070-16	56 3/8	138	143	16	21 1/4	23 1/2	(16) 1 1/8	2 1/2	76 3/8	74	6 1/4	34 1/2	27 1/2	1 1/8 - 1 3/4	11840	14100		
1500-18	60 5/8	154	159	18	22 3/4	25	(16) 1 1/4	2 1/2	80 3/8	78 1/4	6 1/4	39 1/2	30 3/4	1 1/4 - 2	15680	18460		
2040-20	65 3/8	170 1/2	178	20	25	27 1/2	(20) 1 1/4	3 3/4	85 3/8	83	7 1/2	42 1/2	34 1/4	1 1/4 - 2	20810	24540		
2900-22	71 3/4	186 1/2	193	22	27 1/4	29 1/2	(20) 1 3/8	3 3/4	95 3/4	93	7 1/2	46 1/2	37 1/4	1 3/8 - 2 1/4	27979	35509		
3365-24	77 7/8	202 1/2	210	24	29 1/2	32	(20) 1 7/8	3 3/4	101 7/8	99	7 1/2	50 1/2	40 1/2	1 3/8 - 2 1/4	31175	36535		
4230-26	86	219 1/2	227	26	31 3/4	34 1/4	(24) 1 3/4	3 3/4	110	107	9 1/2	55	44	1 3/8 - 2 1/4	43974	52044		
4920-28	92 1/8	235 1/2	243	28	34	36 1/2	(28) 1 7/8	3 3/4	116 1/8	113	9 1/2	63	47	1 3/8 - 2 1/4	47776	57106		
5550-30	98 1/4	251 1/2	259	30	36	38 3/4	(28) 1 5/8	3 3/4	122 1/4	119	9 1/2	69	50 1/2	1 3/8 - 2 1/4	54865	65565		

- NOTES:
- All bolt holes straddle C.L. (exhaust flanges are identical)
  - Horizontal & vertical mounting arrangements shown may be varied to suit customer requirements
  - Exhaust piping must be supported independently of silencer with expansion joints as required
  - Unit must be insulated with minimum of 2" insulation for maximum efficiency
  - Responsibility of installation is assumed by purchaser
  - Dimensions not guaranteed unless certified
  - Units designed for hot water service, ASME VIII, Division I, max pressure 50 psig @ 500 °F
  - End plates removable to provide access for cleaning
  - For either configuration the water flow should be from bottom to top
  - Connection sizes subject to change to suit application