# Ventum Series

Next
Generation
Gasification
Boilers



### "Europe's Fastest Selling Gasification Boiler!"

It is designed for efficiency, economy and conservation of the environment. With 92% efficiency, emissions way below European and German regulations, adaptable to wood fuel moistures up to 33%, superior health and safety features and easy to use electronic controls, this gasification boiler is a testament of quality and perfection.



#### **Features**



Large loading door at waist level



Special air ducts inside the doors allows pre-heating combustion air via natural air flow



Cleaning made easier by a simple swing of an external lever



Electronic Management with Smart Control panel is able to check flue gas temperature and regulate the fan for optimal heat production output.



To have the best combustion, primary and secondary air adjustments are very easy to do, even while the boiler is operating.



Interchangable Overheat Discharge Assembly



Induced draft fan keeps the system in constant vacuum eliminating the possibility of a smoke leakage to the ambient



Faster and longer gasification









VG80

80

68.800

VG100

100

86.000

Ø80x1000 mm 2xØ80x500mm

385

135

650

700

250

28,0

5500

115

240

25,0

4500

3000

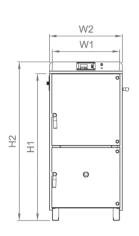
< 60 dB

3

65



## **Technical Specifications**



TECHNICAL SPECIFICATION OF VENTUM TYPE WOOD			BOILER TYPE						
GASIFICATION	BOILERS		Unit	VG20	VG30	VG40	VG60	VG8	
CAPACITY	Nominal Heat Output		kW	20	30	40	60	80	
			kcal/h	17.200	25.800	34.400	51.600	68.8	
	Direct Efficiency		%	90,1	90,4	91,2	91,7	91,	
OPERATING			-	CLASS 4 acc. To EN 303-5					
CONDITIONS	Safety Limit Temperature		°C	97					
	Setting Range of Oper	°C	85 - 55						
	Min. Water Return Ten	°C	55						
	Operating Pressure		bar	3					
	Boiler Test Pressure		bar	4,5					
	Electrical Connection		-	230 Vac , 50 Hz					
	Recommended Fuel Types		-	Ø80x500 mm Ø80x700 mm				Ø8 2x	
				Hard Wood, 15% < Humidity < 30% *					
	Minimum Required Stack Draught		Pa	10					
	Boiler Gas Side Resistance		Pa	125	110	140	230	24	
	Boiler Water Side Pressure Drop	DT = 20 °C	mbar	11,0	3,2	5,5	23,0	25,	
	Fuel Filling Volume		lt	89	113	137	200		
			kg	30	40	50	70		

h

lt

dB

mm

mm

1000

1500

2000

600

650

Approximatelly Combustion Period

Required Accumulation Tank Volume

Total Width with Cover Plates, W2

Airborne Noise Level

Boiler Width, W1

Average Electricity

Consumption

in stand-by

in full load, 100%

W

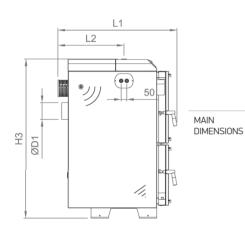
66

69

EMISSION RATES

CONSUMPTIONS

**POWER** 



Boiler Lenght, L1		mm	1060		1360	1635	1805		
Boiler Height, H1		mm	1060 1210 1310 1360		1610				
Total Height, H2		mm	1165	1315	1415	1465	1715		
Stack Diameter, ØD1 (inner-outer)		mm	125-130		146-150	176-180			
Height of Stack Connection, H6		mm	715 865 955 1005		1	1225			
Water Content		lt	90	104	114	168	285	345	
Approx. Empty Weight		kg	385	425	450	600	860	960	
Hot Water Outlet Connection	Diameter, ØD2	inch	1 1/2"				2"		
	Position, H3	mm	1137 1287 1387 1437		1766				
	Position, L2	mm	590 890		1147	1317			
Water Inlet Connection	Diameter, ØD2	inch	1 1/2" 2"					2''	
	Position, H4	mm	380				435		
Safety Cooling Heat Exchanger 15 °C, 2 bar cold water	Diameter, ØD3	inch	3/4"						
	Position, H5	mm	975	1125	1225	1275	1525		
Filling ® Drain Connection	Diameter, ØD4	mm	1/2"						
Flue Gas Temperature		°C	135	157	126	132	142	137	
Average Mass Flow Rate of Solid Pollutants (dust)		mg/m³	13	18	26	34	54	66	

