



# ROBUST SERIES

THE NEW GENERATION WOOD  
GASIFICATION BOILERS

 AUTONOM

# THE MOST WANTED WOOD BOILERS!

Designed for efficiency, economy and environmental conservation.

With 92% efficiency, below-standard emissions, adaptable to wood with up to 33% moisture content, superior safety features and easy-to-use electronic controls, this gasifier is a pledge of quality and perfection.



## SEE IT ON THE WEB

By reading the QR code, you can access this product page on our website.



## 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



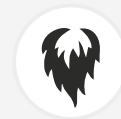
To have the best combustion, primary and secondary air adjustments are very easy to do, even while the boiler is operating



Interchangeable overheat discharge assembly



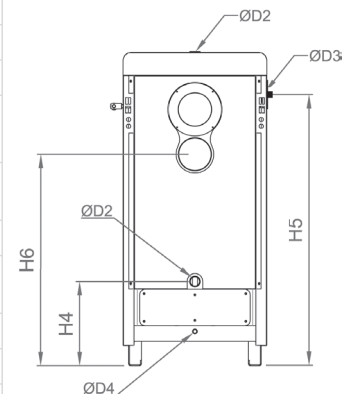
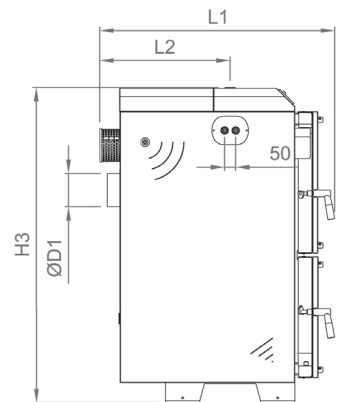
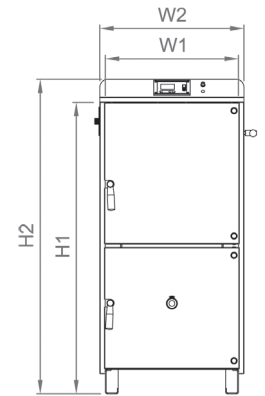
Induced draft fan keeps the system in constant vacuum eliminating the possibility of a smoke leakage to the ambient



Faster and longer gasification for more burning duration

# TECHNICAL SPECIFICATIONS

Technical specifications of the ROBUST type wood gasification boilers			Unit	Boiler model					
				AR70	AR100	AR135	AR200	AR270	AR340
CAPACITY	Nominal heat output	kW	20	30	40	60	80	100	
	Net heat output	btu/h	70000	107000	139000	197000	277000	342000	
	Maximum efficiency (EU test method)	%	90,1	90,4	91,2	91,7	91,5	91,3	
OPERATING CONDITIONS	Certifications	-	CSA B415.1-10* CSA B366.1-11 ANSI/UL 2523						
	Safety limit temperature	°C/°F	92 / 203						
	Operating temperature	°C/°F	55-85 / 130-185						
	Minimum water return temperature	°C/°F	55 / 130						
	Operating pressure	Psi	10			0, atmospheric			
	Maximum pressure	Psi	30			0, atmospheric			
	Electrical connection	-	120 Vac , 60 Hz						
	Recommended fuel type	-	Ø4po x 16 po		Ø4po x 24po		Ø4po x 36po 2x Ø4po x 18po		
		Hard wood, 15 to 25% humidity							
	Minimum required stack draught	po C.E	0.02- 0.05						
	Pressure drop	PSI	0,2	0,1	0,1	0,4	0,4	0,4	
	Combustion chamber volume	Pi³	3,1	4	4,8	7,1	13,6		
		kg	30	40	50	70	135		
	Approx. combustion duration **	h	6-8						
Minimum required buffer tank size	lt / g-us	300 / 79			454 / 119				
Noise level	dB	< 60 dB							
DIMENSIONS (±0.25 po)	Boiler width, W1	po	23,5			25,5			
	Overall boiler width, W2	po	25,5			27,5			
	Overall boiler lenght, L1	po	41,75		53,5	64,5	71		
	Boiler height, H1	po	41,75	47,75	51,5	53,5	63,5		
	Total boiler height, H2	po	46	51,75	55,75	57,75	67,75		
	Flue pipe ØD1 / Chimney Ø ***	po	6 / 7			6 / 8			
	Flue pipe height, H6	po	28	34	37,5	39,5	48,25		
	Water content	L / gal.US	90/23,75	104/27,5	114/30,1	168/44,5	285/75,3	345/91,2	
	Approx. empty weight	kg	385	425	450	600	860	960	
	Hot water outlet connection	Diameter, ØD2	po	1 1/2" mpt			2" mpt		
		Position, H3	po	44,75	50,5	54,5	56,5	69,5	
		Position, L2	po	23,25		35	45	51,75	
	Cold water return connection	Diameter, ØD2	po	1 1/2" mpt			2" mpt		
		Position, H4	po	15			17		
Safety cooling heat exchanger min 15 °C, 30psi of domestic cold water	Diameter, ØD3	po	3/4" fpt						
	Position, H5	po	38,25	44,25	48,25	50,25	60		
Fill & drain valve	Diameter, ØD4	po	1/2" mpt						
EMISSIONS	Flue gas temperature	°C / °F	145-165 / 295-330						
	Average solid emissions	g/h	1,8	2,3	2,9	4,6	9	10	
CLEARANCES		po	Front : 48" Rear : 24" Left : 24" Right : 6"						
POWER CONSUMPTIONS	Average electricity consumption	in stand by	3						
		in full load	W	57	64	70	79	85	90



\* CSA B415.1-10 applies to AR70/100/200 models only

\*\* Combustion duration depend of many factors and is informative only

\*\*\* Flue pipe and chimney joints need to be sealed to prevent any smoke leakage



# R-DRAGON SERIES

## WOOD FIRED MOBILE HEATING PLATFORM

**"A mobile platform with independant heating capacities"**

With an internal closed water system, using one with circulation pump, expansion tank, automated air discharge valve and an optional wifi connectivity, the R-Dragon Series is a fully capable, independent heat venting system designed for a multitude of spaces and heat requirements.


### **"Plug and Play" concept**


R-Dragon series is fully factory built and ready to use. Simply power it and add some wood!




### **LES CHAUDIÈRES AUTONOM / AUTONOM BOILERS**

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