



AGS GASIFIER PRODUCT DATA SHEET

	Boiler Model Number	Units	6 Auger	12 Auger	18 Auger	Comment
Waste Treatment	Nominal Through-put Capacity	kg/h	90-110	180-220	270-330	Assuming 100% destruction of organic content. Higher through puts can be utilised for production of biochar materials
	Min / Max Through-put	kg/h	60/120	120/240	180/360	
	Nominal Operating Moisture Content	%H2O	30-50	30-50	30-50	
	Min / Max Moisture content	%H2O	10/70*	10/70*	10/70*	*subject to calorific value
	Nominal (min) Calorific Value	MJ/kg	18 (12)	18 (12)	18 (12)	
Gasifier Dimensions	Weight (nominal)	kgs	7,000	11,000	15,000	
	Length	mm	6,000	6,000	6,000	
	Width	mm	2,450	3,550	4,650	
	Height	mm	1,800	1,800	1,800	
Electrical	Nominal Parasitic load	kWe	1.6	3.2	4.8	
	Voltage	V	230/400	230/400	230/400	Specified on Order
	Current Requirement	A	40/20	40/20	40/20	
Control	Automated Control	PLC	Yes	Yes	Yes	
	Data Logging	PLC	Yes	Yes	Yes	
	HMI Touch Screen	HMI	Yes	Yes	Yes	
	Remote Viewing		Yes	Yes	Yes	
Operational and Safety Features	Automated self-diagnostics Control system	PLC	Yes	Yes	Yes	
	Automated alarms and alerts messaging system	PLC	Yes	Yes	Yes	SMS Text alerts for feed and ash hopper level indicators and for general operational non-conformity alerts
	Automated safety by-pass and shut-down system	PLC	Yes	Yes	Yes	
	Automated fire suppression system		Option**			**available for sensitive site locations and applications



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Operational Energy Output Scenarios [¥]	Hot Water / thermal oil	kWt	225-275	450-550	675-825	Nominal values based on average through-put not less than 100kg/h of waste with minimum average Cv not less than 14.0 MJ/kg
	Steam*	Kg/h	N/A	800-1000	1200-1500	*Saturated steam in the range of 2 to 16bar
	Electrical Output	kWe	20-30	40-100	60-135	Electrical output performance depends on the optional power generation technology adopted: ORC: can be run off hot water / thermal oil but conversion efficiencies are typically 9-11% Steam Engine: powered with 15bar steam - typically 16-20% efficient
	Chilling	RT**	64-71	128-142	192-213	**Refrigeration Tonnes - Output as chilled water in the range of 7-9°C utilising an absorption chiller device. Caution: outputs may vary widely dependent on the quality of the absorption chiller device and the geographical parameters (ambient temperature, relative humidity, altitude)
	Biochar	Kg/h	20-30	40-60	60-90	Note: Biochar (or good quality biochar) is not always achievable. Performance and quality depend entirely on the nature of the input material: particle size, Cv and particle size.

¥ Not all Energy output scenarios may be suitable or appropriate for the site / project circumstances: values are subject to on-site commissioning and optimisation process to determine the maximum / optimal energy output performance based on the prevailing site conditions, the material(s) composition, the Cv and moisture content