

GARN® EMISSIONS AND EFFICIENCY DATA

The test results below are certified by an independent lab using the ASTM 2816 Appendix 1 test method (for units with full thermal storage), market available cordwood fuel, and production equipment. Full test reports are found at garn.com.

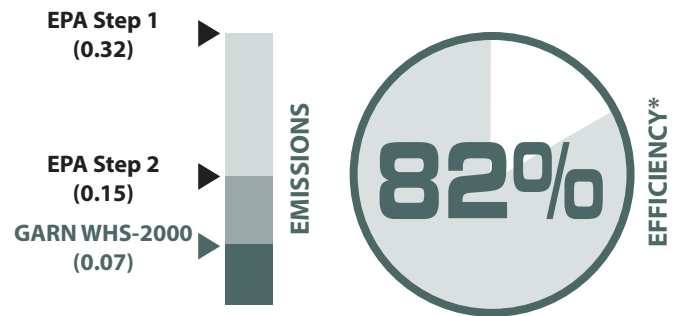
UNIT PROFILE: WHS-3200

The WHS-3200 is the largest model offered. A large thermal storage volume coupled with a 5 pass, multiple heat exchanger and large combustion chamber means high efficiency and high heat output. Robust construction means long life. Although there is no EPA emissions limit for commercial and industrial, etc wood heating units with less than 10 million BTUH output, this unit performs much like the WHS-2000 unit. Perfect for commercial, industrial, institutional, farm and larger projects.

UNIT PROFILE: WHS-2000

The WHS-2000 is our middle sized unit. It is one of the cleanest cord wood units available in the market today. It's emissions level is less than half of EPA's 2020 Step 2 limit. A large thermal storage volume and extensive 5 pass heat exchanger area means high efficiency and high heat output. Perfect for many commercial, institutional, farm, and residential projects.

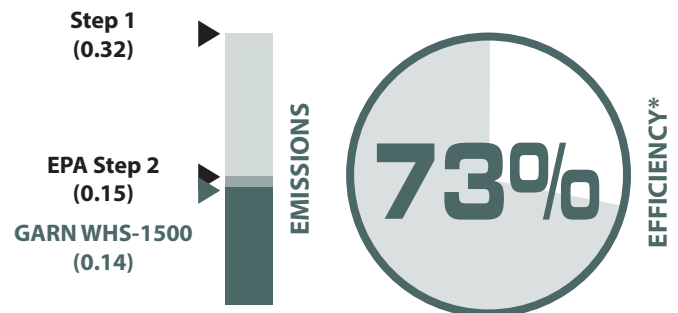
GARN® WHS-2000		
FIRING/BURN RATE†	425,000	btuh
MAX. OUTPUT	200,000	btuh
8-HOUR OUTPUT	105,050	btuh
8-HOUR EFFICIENCY*	76 %	HHV
	82 %	LHV
EMISSIONS	1.69	grams/hr
	0.07	lbm/mmbtu



UNIT PROFILE: WHS-1500

The WHS-1500 is a slightly smaller version of the WHS-2000, tailored for spaces that cannot accommodate a WHS-2000. WHS-1500 emissions also are lower than EPA's 2020 Step 2 limit. This model has slightly less thermal storage. A good fit for commercial, farm, and residential.

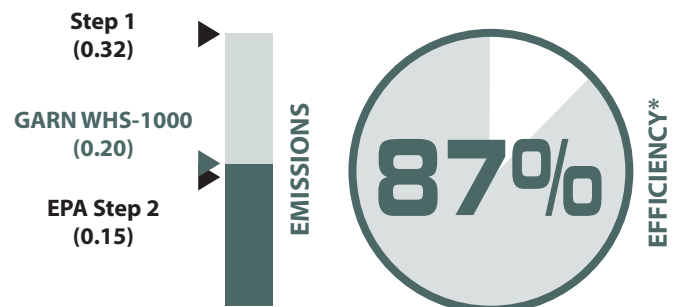
GARN® WHS-1500		
FIRING/BURN RATE†	350,000	btuh
MAX. OUTPUT	177,000	btuh
8-HOUR OUTPUT	87,200	btuh
8-HOUR EFFICIENCY*	68 %	HHV
	73 %	LHV
EMISSIONS	2.88	grams/hr
	0.14	lbm/mmbtu



UNIT PROFILE: WHS-1000

The WHS-1000 model is the smallest model in the GARN lineup, nevertheless is a feature filled unit. This unit incorporates almost 1000 gallons of built-in thermal storage, a water cooled air collar and easily cleanable primary air nozzle. WHS-1000 emissions are lower than EPA's 2020 Step 1 limit, but higher than EPA's Step 2 limit. Perfect size for residential and hobby farm projects.

GARN® WHS-1000		
FIRING/BURN RATE†	275,000	btuh
MAX. OUTPUT	160,000	btuh
8-HOUR OUTPUT	77,433	btuh
8-HOUR EFFICIENCY*	81 %	HHV
	87 %	LHV
EMISSIONS	3.81	grams/hr
	0.20	lbm/mmbtu



† Firing Rate: the rate at which heat is added to the thermal storage from the process of wood combustion and the efficiency of the heat exchanger.