

exhaust gas flows down,
heating incoming air shell

preheated air enters
gasification zone

(not shown) tight lid on top of plenum
interconnecting intake air and
combustion gas duct shells

air/gas mixing zone
details not shown

Fuel hopper

hot air
meets fuel

14.0

13.8

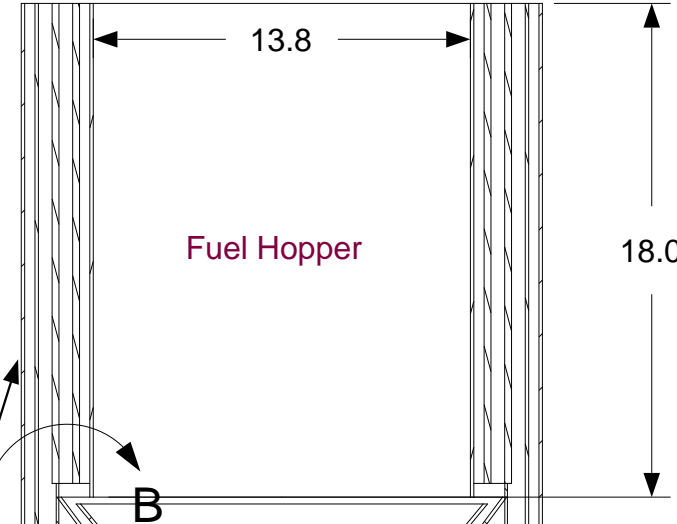
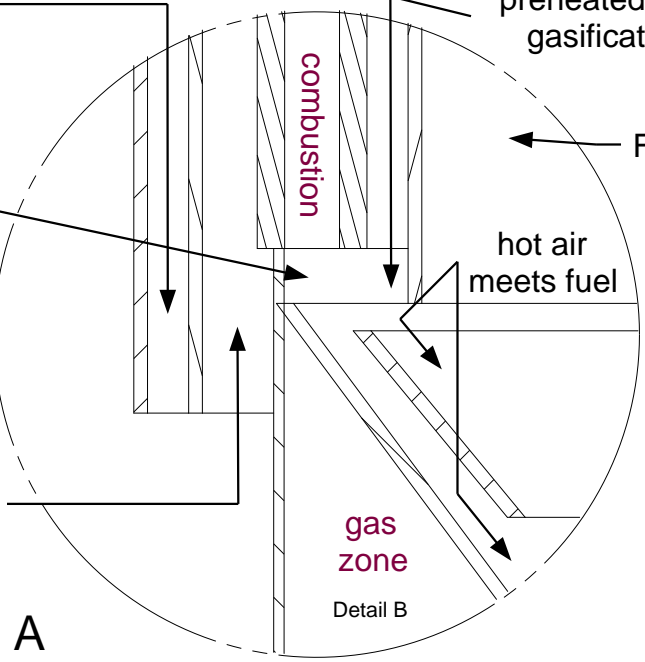
18.0

Fuel Hopper

air intake flows up between
combustor & exhaust shells

gas
zone

Detail B



(not shown)
3" thick insulation shell
surrounds entire gasifier

Ø 4.000 gas exit

Ø 8.5" grate cone

Ø 14.0" inner air shell

Ø 15.3

Ø 16.3
ceramic combustion shell

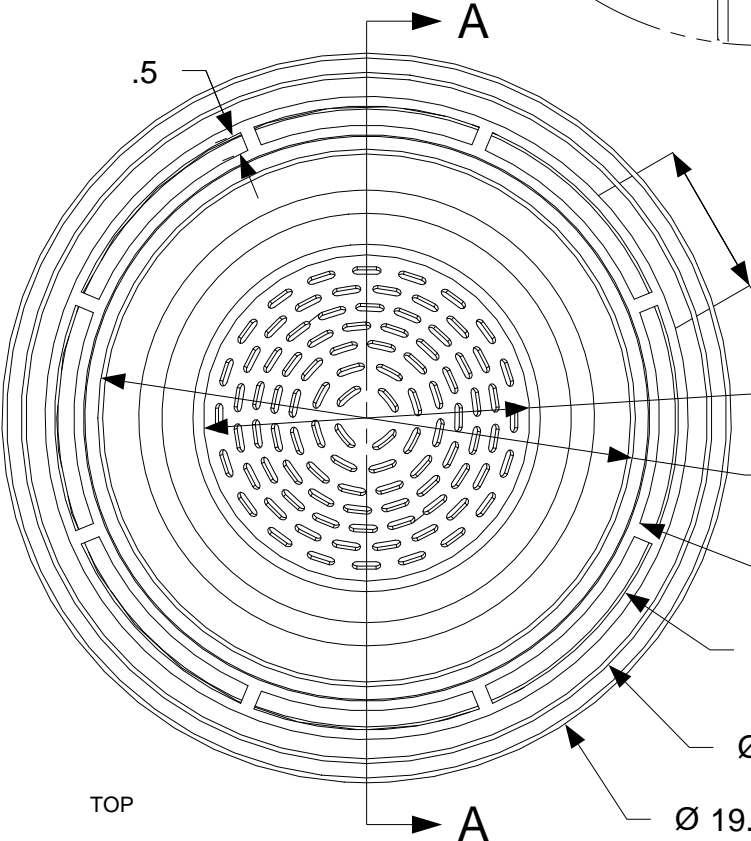
Ø 18.0 air shell

Ø 19.0 exhaust shell

1/4 - 3/8" gap

9.0

rotating grate



TOP

DESCRIPTION - NOTES			
Gasifier with internal preheat combustor - concept drawing build test model of 304 stainless.			
SIZE	DATE	DWG NAME	REV
A	12/13/08	Homey-1.icd	
designed & drawn by Larry Dobson			SHEET #1