

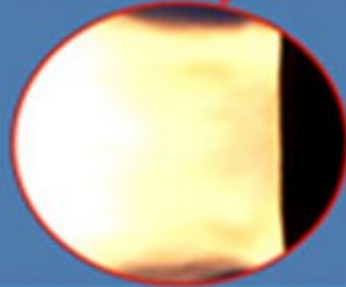
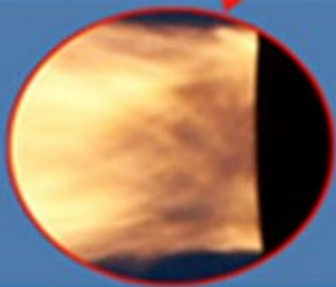


## Boiler Auxiliary Series



Our Brown's Gas machines produce a rich oxygen and hydrogen gas from water and electricity. Our machines output ten or twenty thousand liters of gas per hour using only several liters of water. Brown's gas acts as a combustion catalyst to improve the fuel efficiency of a boiler's existing fuel. The gas is inserted into a boiler's air intake without modifications. The results, for example, coal burns at least 10% more efficiently with Brown's Gas. CV is 3 Kcal per liter of gas.

### Normal combustion



### Improved efficiency

Brown's Gas assisted boiler combustion.

### Application Flexibility

Our machines work in a wide range of applications. Thanks to fuel flexibility our machines can be installed with any type of boiler due to the universal use of air intakes that make boiler combustion possible for all types of fuel.

The multi-fuel operation capability offers new fuel saving opportunities for biomass, coal, oil and natural gas boilers.

Our machines are typically installed as auxiliary boiler room equipment as a generating set next to existing machinery.

The machines connect to existing power supply. Typical installations are single or three phase power. The compact and light machines fit perfectly also for smaller 1 to 10TPH steam boilers.

Smaller applications, such as factories use one to ten thousand liter machines.

Multiple 10000 and 20000 liter per hour machines are connected in a bank for an unlimited range of gas output.

### Key Benefits

- z Fuel efficiency
- z Application flexibility
- z Proven and reliable dual-fuel technology
- z Long overhaul intervals
- z Low exhaust gas emissions
- z Long life minimum eight years
- z Embedded automation system



## Technology and Operation Advantages

One of the main features of the proven dual-fuel technology is that a boiler can be switched from fossil to dual gas operation or vice-versa. Transfer takes place automatically after the operator's command without operational interruption. Furthermore, the separate fossil fuel system makes it possible to switch over from Brown's Gas without combustion stoppage. The fuel switch from coal, biomass, oil to dual gas operation mode can be made as described above. This operation flexibility is a real advantage with the system.

The Brown's Gas is supplied to the boiler through an air intake unit, where the gas is controlled by the machine. The system includes the necessary anti-flashback and shut-off valves to ensure safe and trouble-free low pressure gas supply. On the air intake, the gas is supplied through a Flange mounting inserted in the air intake and has an individual feed pipe from the gas generator to the air intake. Gas piping is of double wall design as standard.

Brown's Gas to Air ratio for biomass, coal, and oil combustion is 5 cubic meters Brown's Gas to 10000 cubic meters Air and for petroleum gas 3 cubic meters Brown's Gas to 10000 cubic meters Air.

The advanced automation system provides complete boiler safety system and local monitoring. Thanks to built-on complete automation integration the machine and digitized Control system has a small footprint saving space.

## Environmental Friendliness

Brown's Gas combustion tech brings outstanding benefits to boiler owners.

- \* Brown's Gas kills smoke and soot.
- \* Brown's Gas applications reduces SO<sub>x</sub> and CO<sub>2</sub> emissions.
- \* Brown's Gas applications save fuel costs.



Model L/hr	Water	Electricity	Dimensions L*W*H
1000	0.6 L/hr	4.85 KVA	965x620x1000
2000	1.1 L/hr	6.00 KVA	1140*730*1110
5000	2.7 L/hr	15.00 KVA	1250*830*1720
7500	3.8 L/hr	28.00 KVA	1300*930*1820
10000	5.8 L/hr	38.00 KVA	1500*930*1940
20000	11.6 L/hr	76.00 KVA	2000*1000*1500
Single phase		50/60 Hz	
Three phase		50/60 Hz	

