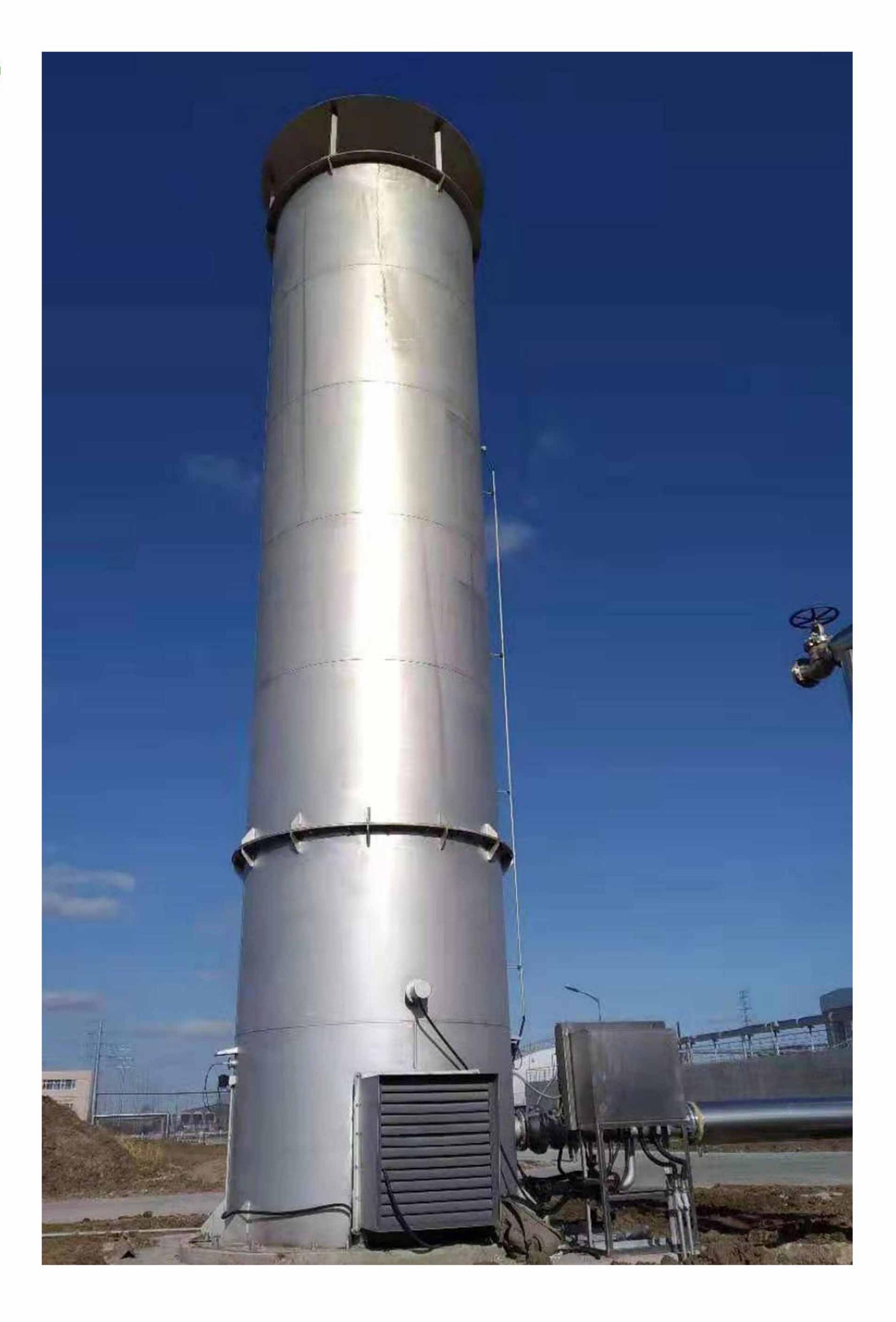


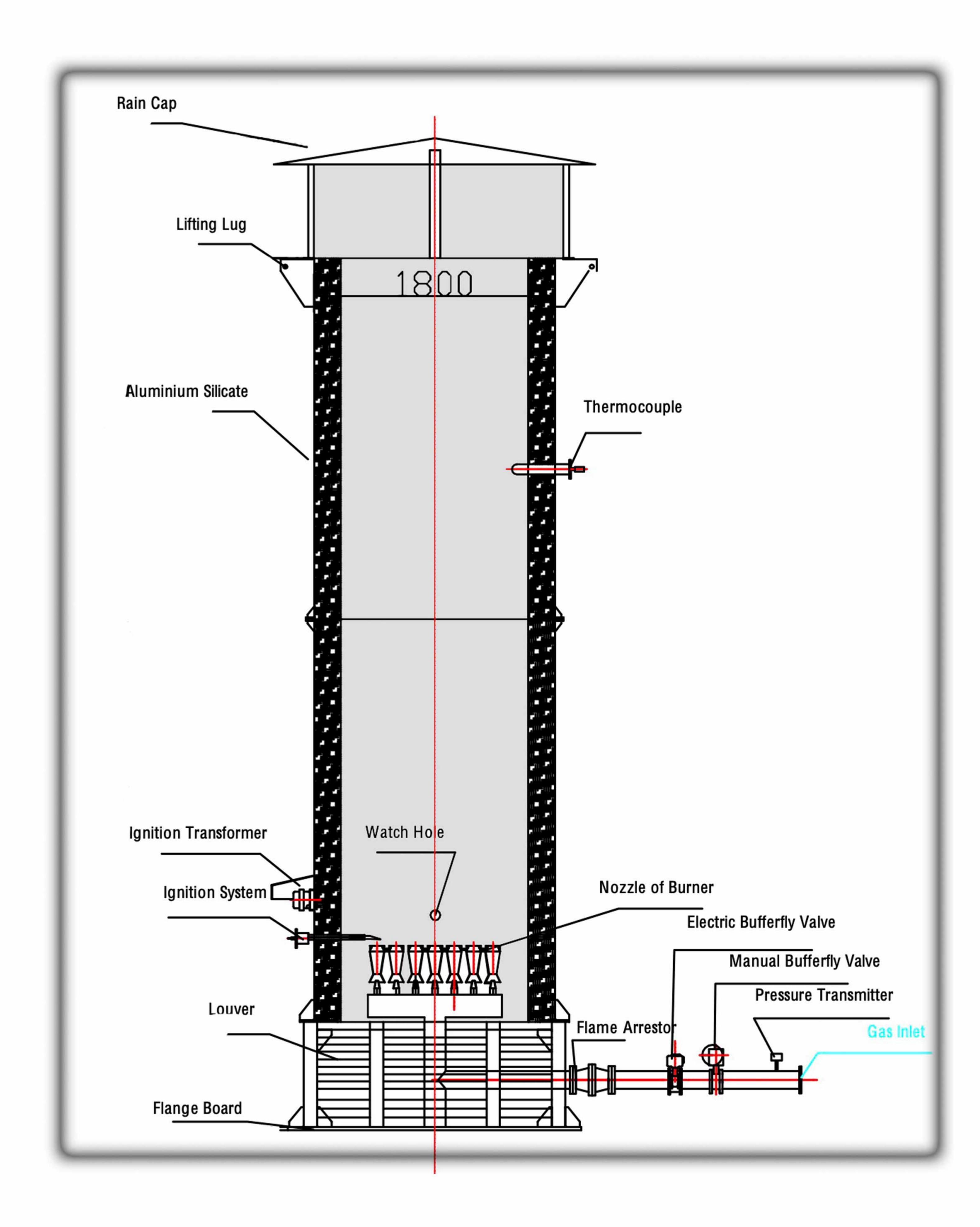
Structure of Along biogas flare(internal combustion type)

Structure of internal combustion type biogas flare(torch) with mechanical ventilation

The flare body adopts a double-layer sleeve structure.

- 1 The inner cylinder is an independent gas combustion space, and the combustion temperature adjustment control performance is good. The combustion temperature of the combustion space (combustion chamber) is set according to the nature of the fuel and the physical and chemical indicators, so that the combustion gas has a suitable combustion environment to ensure the equipment's performance. Fully burn.
- 2. The outer cylinder is the forced air passage of the flare, which has two functions:
- (1) Provide sufficient combustion-supporting air for the combustion gas
- (2) Adjust the temperature and cooling of the inner tube (combustion chamber) of the flare so that it will not be oxidized by high temperature. Reduce service life. The flare is equipped with pressure, temperature, gas distribution, air blowing, ignition and other automatic control devices and deployment systems.





Description of internal combustion type biogas flare with mechanical ventilation

- 1 The torch tower body adopts a double-layer metal sleeve structure
- 2. Adopt multi-hole gas nozzle, cup-type flame stabilizing air distribution method.
- 3. The temperature control system is used to detect and control the ambient temperature in the combustion tower to achieve reasonable theoretical conditions (800-1000°C) for full combustion of tail gas and biogas and oxidation treatment of other harmful gases.
- 4. The system adopts fully automatic control combustion. Forced blast, automatic ignition, automatic flame tracking detection, automatic flameout protection, biogas pressure high pressure and low pressure sampling automatically control the start and stop of the torch combustion.
- 5. The torch is designed for outdoor internal combustion and runs around the clock.



Model selection table:

Model	Capacity(m3/h)	Max.(m3/h)	Height(mm)	Diameter(mm)	Connection size	Main material
AF100	100	150	3870	300	DN60	Stainless steel
AF200	200	250	4270	500	DN80	Stainless steel
AF300	300	400	5020	720	DN100	Stainless steel
AF500	500	600	6310	950	DN125	Stainless steel
AF600	600	750	6520	1100	DN150	Stainless steel
AF800	800	950	7200	1260	DN150	Stainless steel
AF1000	1000	1150	7750	1300	DN200	Stainless steel
AF1200	1200	1400	9250	1500	DN200	Stainless steel
AF1500	1500	1800	9500	1800	DN250	Stainless steel
AF2000	2000	2200	11500	2000	DN300	Stainless steel
AF2500	2500	2600	12500	2200	DN350	Stainless steel
AF3000	3000	3200	12800	2400	DN350	Stainless steel
AF4000	4000	4200	13200	2500	DN350	Stainless steel
AF5000	5000	5200	13200	2500	DN350	Stainless steel

Performance characteristics:

The Flare has microcomputer programmed automatic control, automatic ignition, automatic flame tracking, automatic flameout protection, and temperature detection in the combustion tower.

Biogas, industrial exhaust gas is fully burned, no flame radiation, and low NOx.

All-metal double-layer structure, light weight, simple operation and convenient installation



Sewage waste treatment plant biogas flare



Food waste treatment plant biogas flare



Foodl waste treatment plant biogas flare

The scope of application:

Animal farm biogas combustion
landfill plant biogas combustion
Food waste biogas combustion
Petrochemical exhaust gas combustion
Organic waste water biogas combustion
Sewage treatment biogas combustion
Other gas combustion



Combustion principle

Combustion principle

- 1. The structure of this biogas torch is an internal combustion closed type, windproof and rainproof. The flame is extinguished by the fault, and the torch is in the under-voltage protection state. When the combustion conditions are reached, the biogas torch will automatically run and ignite again.
- 2. Automatic detection of torch pressure: The flame control system is equipped with a set of pressure detectors on the gas supply pipeline, and the two parameters of low pressure and high pressure are respectively set according to the on-site gas supply pressure.
- 1) When the pressure in the gas supply system reaches a high pressure, the torch will automatically start to realize automatic ignition and start the torch combustion.
- 2) When the pressure in the gas supply system drops to a low pressure value, the torch will automatically stop.

Landfill gas flare and extraction system





PID drawing of landfill gas flare and the gas extraction system

